

ALASKA LEGISLATURE

HOUSE and SENATE FINANCE COMMITTEE FILES, 2005-2006 3014



Health Reimbursement Accounts

Comparison of tax advantaged health care accounts

	Health Savings Account (HSA)	Health Reimbursement Account (HRA)	Flexible Spending Account (FSA)
Account requirements	Funds must be held in trust or custodial account	No requirement; often unfunded	No requirement; often unfunded
Qualifying expenses	Miscellaneous IRC 213(d) expenses, limited health premium reimbursements*	Miscellaneous IRC 213(d) expenses, unlimited premium reimbursements, subject to plan design	Miscellaneous IRC 213(d) expenses, no health premium reimbursements
Non-qualified withdrawals	Yes, but taxable, plus 10% penalty. No penalty after age 65, disability, or death (no penalty or tax after death if HSA goes to spouse)	Not allowed	Not allowed
Rollover of unused funds	Unused funds roll over indefinitely	Allowed, although employer can establish limits	Not allowed
Nonforfeitable	Yes and fully portable, can take to new employer	No, but COBRA rights apply	No, but limited COBRA rights apply

*COBRA, long-term care insurance and premiums for account holders at least 65 or receiving unemployment compensation.



Health Reimbursement Accounts

Comparison of tax advantaged health care accounts

	Health Savings Account (HSA)	Health Reimbursement Account (HRA)	Flexible Spending Account (FSA)
Eligibility	Individuals (employees) with high deductible plan (HDHP)	Employees whose employers make available	Employees whose employers make available
Health insurance requirement	Qualified high deductible health plan required	None, although employer typically requires high deductible coverage	None
Contributions - Source	Employer, employee, or both	Employer only	Employer, employee or both
Taxability of employee contributions	Tax-free	Employee contribution not allowed	Tax-free
Taxability of employer contributions	Tax-free to employee; tax deductible to employer	Tax-free to employee; tax deductible to employer	Tax-free to employee; tax deductible to employer
Annual contribution limits (employee+employer)	Lesser of 100% of deductible or fixed amount (established by law)	None legally required, employer sets its contribution amounts	None legally required, employer sets employee contribution limits



Health Reimbursement Accounts

Projection scenarios

- ⇒ Illustrate the HRA fund value at retirement, the total costs expected to be borne by the retiree during the pre-Medicare period of retirement and the retiree's expected net cost after HRA reimbursements
- ⇒ Four scenarios
 - Early hire, 1.0% funding - hire at 25, retire at 55
 - Early hire, 1.5% funding - hire at 25, retire at 55
 - Late hire, 1.0% funding - hire at 40, retire at 60
 - Late hire, 1.5% funding - hire at 40, retire at 60
- ⇒ Key assumptions
 - Hire date of 7/1/2004
 - Normal retirement at 25 years or age 60
 - Funded as percent of average salary for group
 - Average salary for group of \$35,000
 - Wage inflation 4.0%



Health Reimbursement Accounts

Projection scenarios

⇒ Key assumptions (continued)

- HRA accumulation rate 8.25%
- Early retirement access-only plan as described in the proposed medical program
- Normal retirement to Medicare eligibility defined dollar subsidy as described in the proposed medical program
- Benefit costs increase at proposed valuation trend
- Retirees transition to defined health benefit plan at Medicare eligibility

⇒ Other assumptions

- Participant retires from system and is receiving system-sponsored benefits
- Demographic composition of future pre-Medicare retiree group remains constant
- No spend down of HRA during active benefit period



Health Reimbursement Accounts

Projection scenarios

	Gross Retiree Cost	HRA at Retirement	Net Retiree Cost
Early Hire, 1.0%	\$153,721	\$64,622	\$72,348
Early Hire, 1.5%	\$153,721	\$96,933	\$12,714
Late Hire, 1.0%	\$ 68,993	\$23,052	\$44,543
Late Hire, 1.5%	\$ 68,993	\$34,579	\$30,580

- ⇒ Gross retiree cost is the total medical premium cost expected to be paid by the retiree less any System-sponsored subsidy. Does not include retiree cost sharing via plan design elements such as deductibles and co-insurance.
- ⇒ HRA at retirement is the beginning fund balance at the year of retirement.
- ⇒ Net retiree cost is the gross retiree cost less expected reimbursements from the HRA. HRA balance continues to earn interest after medical expenses are reimbursed each year.



State of Alaska
Public Employees' Retirement System

Actuarial Valuation Report as of June 30, 2003

MERCER

Human Resource Consulting

April 30, 2004

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

Dear Members of the Board:

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Public Employees' Retirement System has been prepared as of June 30, 2003 by Mercer Human Resource Consulting. The purposes of the report include:

- (1) a review of experience under the Plan for the year ended June 30, 2003;
- (2) a determination of the appropriate contribution rate for each employer in the System which will be applied for the fiscal year ending June 30, 2006; and
- (3) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(d) and (f))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(p) and 2.2(q))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)

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 by the audited report from KPMG LLP, to determine a sound value for the System liability. This data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. Actuarial assumptions are based on the results of an experience study presented to the Board in October 2000 and adopted in December 2000. Actuarial methods, medical cost trend, and assumed blended medical premiums were reviewed and revised in January 2003.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY04 and a fixed 25-year level percentage of payroll amortization 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. Over time, the contribution rate is expected to remain relatively constant as a percentage of payroll. The ratio of assets to liabilities changed from 75.2% to 72.8% during the year primarily due to lower than expected equity market returns. Over the years, progress has been made toward achieving the funding objectives of the System.

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

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

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

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries and are fully qualified to provide actuarial services to the State of Alaska.

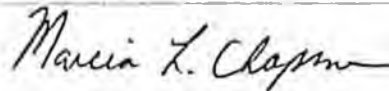
We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement Nos. 25 and 27.

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,



Robert M. Reynolds, ASA, MAAA



Marcia L. Chapman, FSA, EA, MAAA

Report Highlights

This report has been prepared by Mercer Human Resource Consulting for the State of Alaska Public Employees' Retirement System to:

- (1) Present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 2003;
- (2) Review experience under the plan for the year ended June 30, 2003;
- (3) Determine the appropriate contribution rate for each employer in the System; and
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

This report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2003 Fiscal Year, the current annual costs, and reporting and disclosure information.

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

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

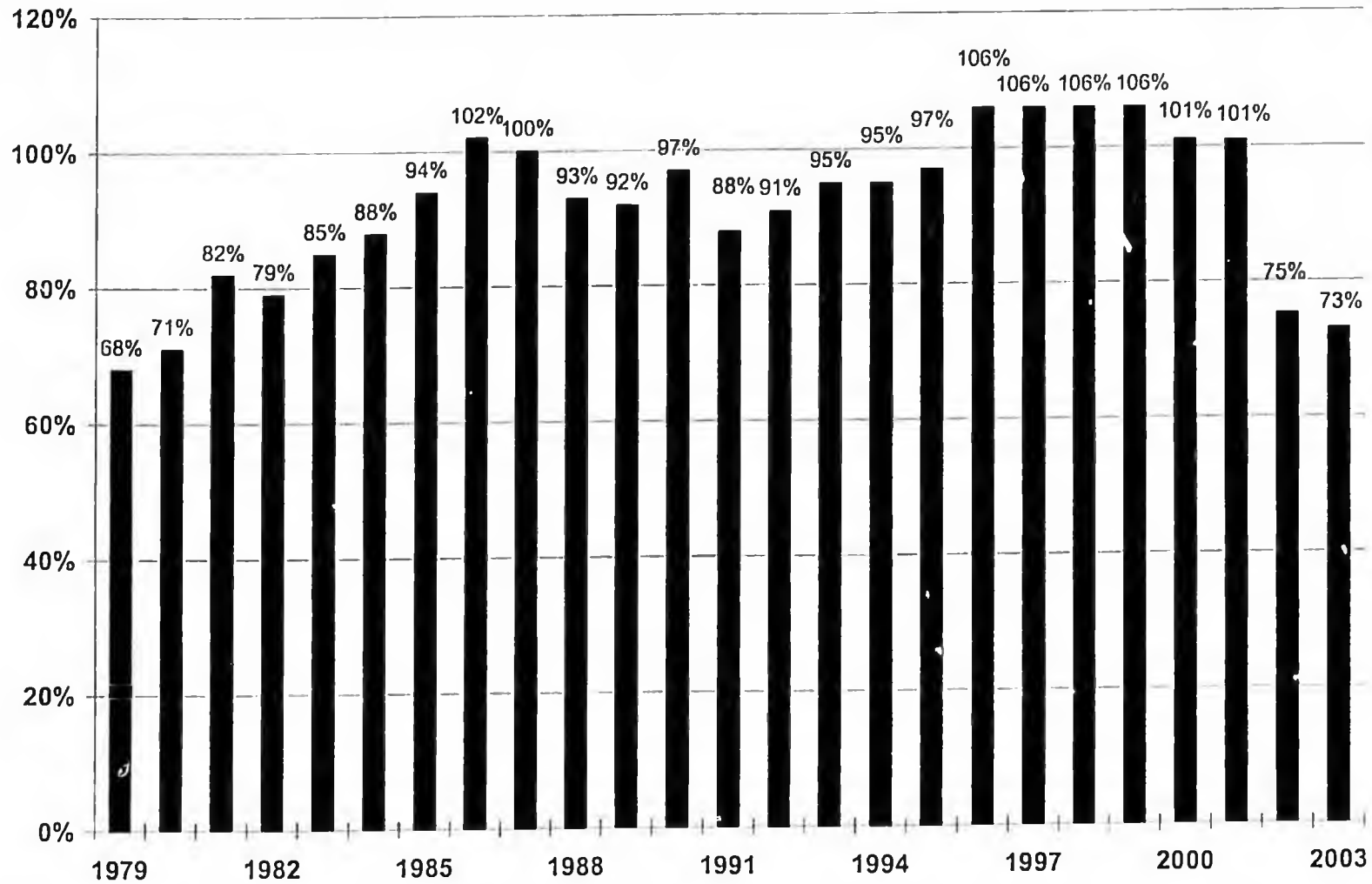
The principal results are as follows:

Funding Status as of June 30	2002	2003
(a) Valuation assets ¹	\$ 7,412,833	\$ 7,687,281
(b) Accrued liability ¹		
i) Non-medical benefits	6,133,182	6,330,541
ii) Total benefits (including medical)	9,859,591	10,561,653
(c) Funding Ratio, (a) ÷ (b)		
i) Non-medical benefits	120.9%	121.4%
ii) Total benefits (including medical)	75.2%	72.8%

¹ In thousands.

Report Highlights (continued)

PERS Funding Ratio History



Report Highlights *(continued)*

Employer Contribution Rates for Fiscal Year:	2005	2006
(a) Consolidated Rate	13.31%	13.24%
(b) Average Past Service Rate	11.60%	12.39%
(c) Average Employer Contribution Rate <i>(a) + (b)</i>	24.91%	25.63%
(d) PERS Board Adopted Average Employer Contribution Rate	11.77%	16.77%

Analysis of the Valuation *(continued)*

Summary

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

1. Last year's average employer contribution rate	24.91%
2. Change due to:	
a. Elimination of 102% target funding ratio	(0.90%)
b. Contribution shortfall compared to average employer contribution rate	1.10%
c. Investment experience	0.31%
d. Salary increases	(0.19%)
e. Demographic experience	0.40%
3. Average employer contribution rate this year	25.63%

1.1(c) Actuarial Value of Assets

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

(1) Deferral of Investment Return for FY03

(a) Market Value, June 30, 2002	\$	7,412,833
(b) Contributions for FY03		211,310
- Weighted for Timing		105,655
(c) Benefit Payments for FY03		464,040
- Weighted for Timing		232,020
(d) Investment Return (net of expenses)		231,352
(e) Expected Return Rate (net of expenses)		8.25%
(f) Expected Return-weighted for Timing, [(a. + b. - c.) x e.]		601,134
(g) Investment Gain/(Loss) for the Year (d. - f.)		(369,782)
(h) Deferral Percentage		80%
(i) Deferred Investment Return ² , (g. x h.)	\$	(295,826)

(2) Actuarial Value, June 30, 2003

(a) Market Value, June 30, 2003	\$	7,391,455
(b) 2003 Deferred Investment Return		(295,826)
(c) Preliminary Actuarial Value, June 30, 2003 (a. - b.)	\$	7,687,281
(d) Upper Limit: 120% of Market Value, June 30, 2003		8,869,746
(e) Lower Limit: 80% of Market Value, June 30, 2003		5,913,164
(f) Actuarial Value, June 30, 2003. (c. limited by d. and e.)	\$	7,687,281

² The table below shows the development of gain (loss) to be recognized in the current year.

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized In Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2003	\$ (369,782)	\$ 0	\$ (73,956)	\$ (295,826)
Total	\$ (369,782)	\$ 0	\$ (73,956)	\$ (295,826)

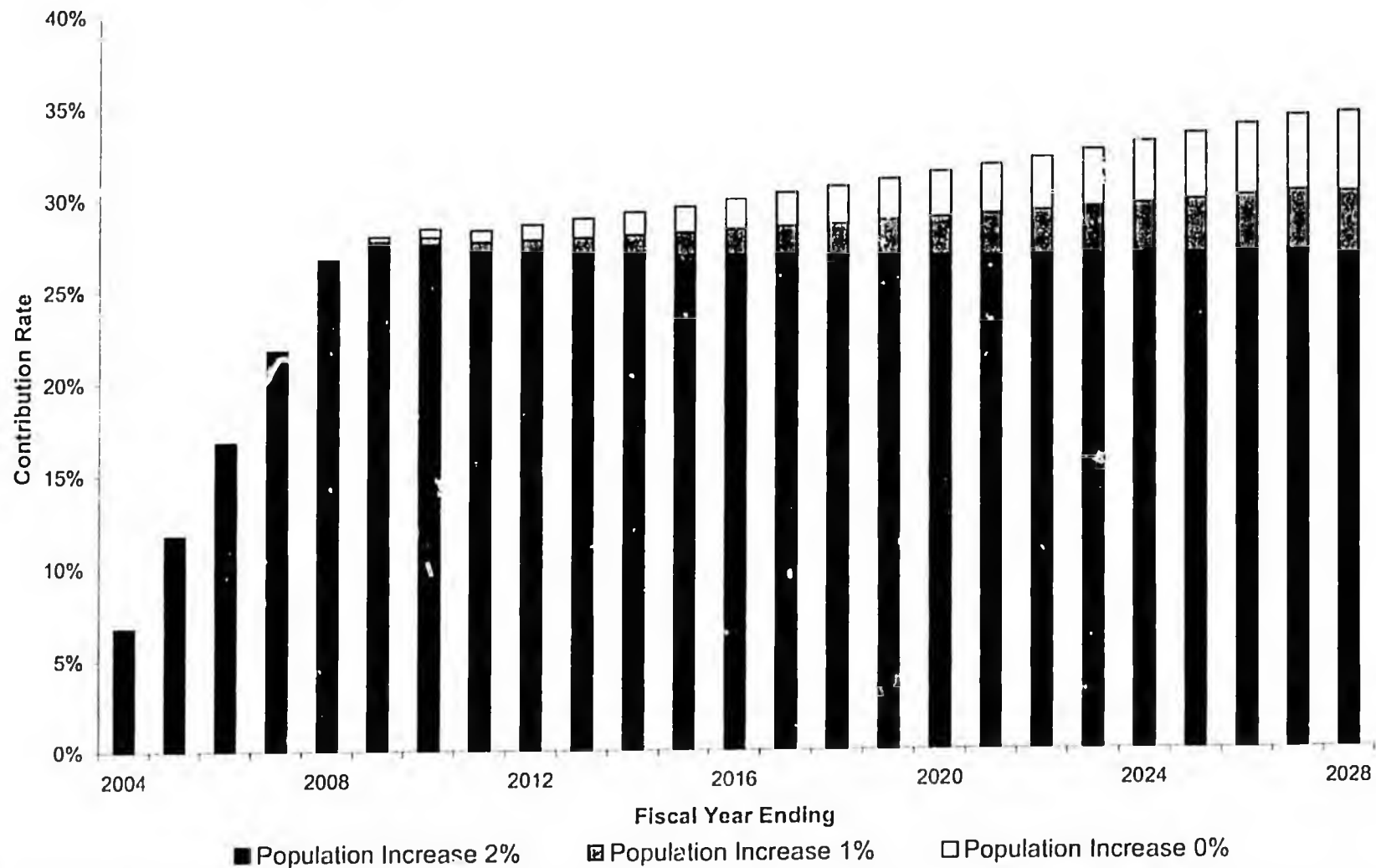
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Observations

- Calculated rates increase under all population scenarios
- Calculated rates begin to decline towards end of the projection period under the 1% and 2% scenarios.
- Over the past 9 years, the average annual population increase for the PERS has been 1.1%
- Calculated rates increase to above 30% under the 1% population increase scenario
- Factors contributing to the projected rate increases are:
 - Contributions are less than the actuarially calculated rate for the first 5 years of the projection
 - New entrants enter the System at lower pay levels than the exiting members they are replacing, diluting the pay-off of unfunded liabilities. Because new entrants also add additional liability, each new entrant generates a loss.
- Funding ratios are at least 96% by the end of the 25-year period, under all 3 population scenarios

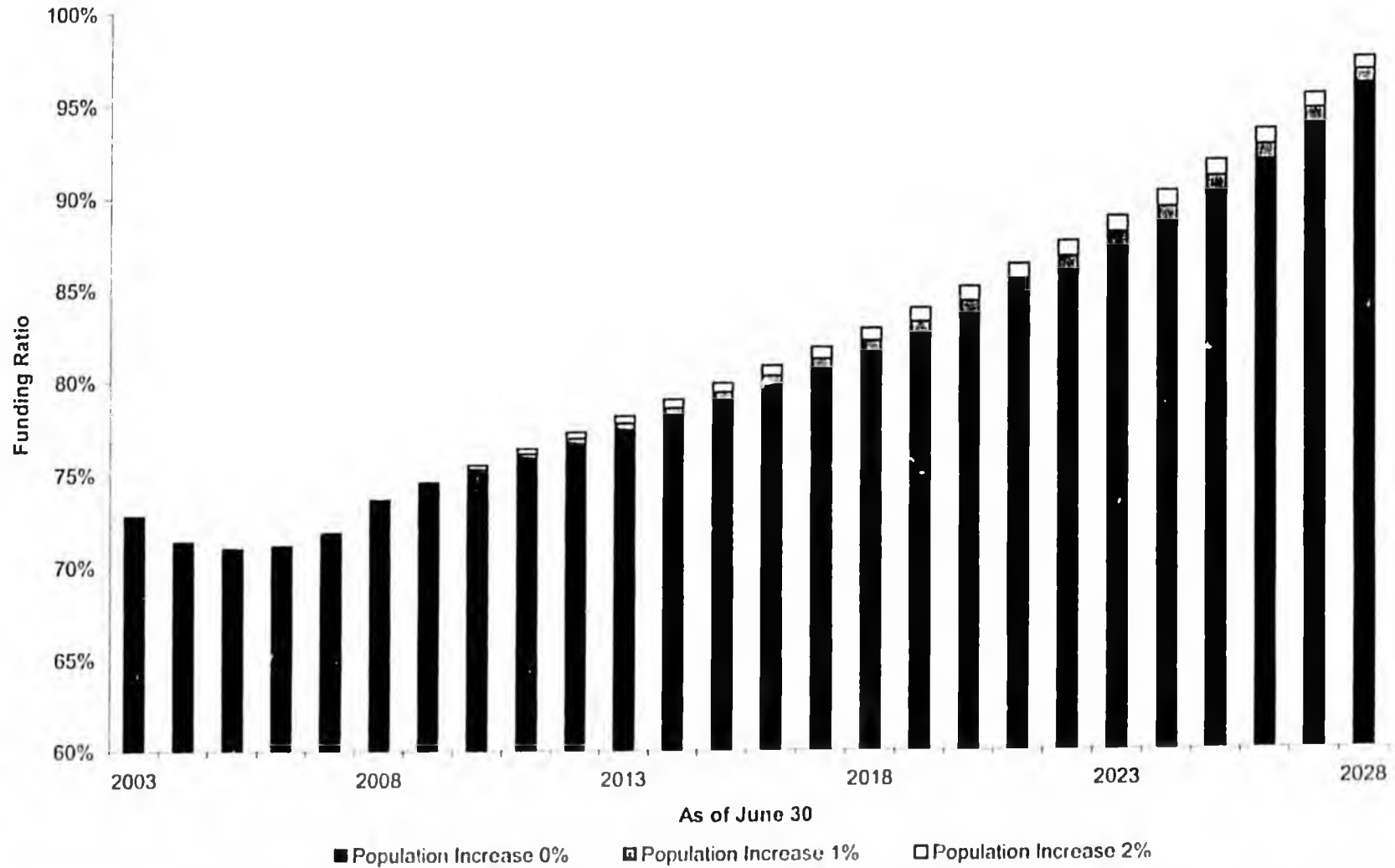
1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Projected Contribution Rates



1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Projected Funding Ratios



1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 1

State of Alaska PERS
Financial Projections (in thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 0.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer C'ib Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	7,687,281	10,561,653	72.8%	(2,874,372)	1,460,783	6.77%	98,895	99,479	198,374	526,345	(327,970)	1,228,670	52,524	8,640,504
2004	8,008,101	11,220,156	71.4%	(3,212,055)	1,531,183	11.77%	180,220	104,274	284,494	569,004	(284,510)	672,367	52,524	8,448,481
2005	8,448,481	11,898,173	71.0%	(3,449,691)	1,572,844	16.77%	263,766	107,111	370,877	617,251	(246,374)	705,938	52,524	8,960,569
2006	8,960,569	12,591,977	71.2%	(3,631,407)	1,619,105	21.77%	352,479	110,261	462,740	669,522	(206,782)	745,485	52,524	9,551,797
2007	9,551,797	13,298,892	71.8%	(3,747,095)	1,666,423	26.77%	446,101	113,483	559,585	726,337	(166,752)	791,579	126,481	10,303,105
2008	10,303,105	14,015,423	73.5%	(3,712,317)	1,715,556	28.00%	480,377	116,829	597,206	788,427	(191,221)	842,118	0	10,954,003
2009	10,954,003	14,736,883	74.3%	(3,782,880)	1,766,209	28.44%	502,343	120,279	622,622	854,570	(231,948)	894,137	0	11,616,192
2010	11,616,192	15,459,737	75.1%	(3,843,545)	1,818,672	28.36%	515,766	123,852	639,618	922,920	(283,302)	946,650	0	12,279,540
2011	12,279,540	16,180,553	75.9%	(3,901,013)	1,872,364	28.66%	536,712	127,508	664,220	992,494	(328,274)	999,521	0	12,950,787
2012	12,950,787	16,897,994	76.6%	(3,947,207)	1,928,329	28.97%	558,730	131,319	690,049	1,063,497	(373,448)	1,053,035	0	13,630,374
2013	13,630,374	17,612,028	77.4%	(3,981,654)	1,985,939	29.30%	581,913	135,242	717,155	1,135,658	(418,503)	1,107,243	0	14,319,114
2014	14,319,114	18,321,383	78.2%	(4,002,270)	2,045,810	29.60%	605,648	139,320	744,967	1,210,881	(465,914)	1,162,108	0	15,015,307
2015	15,015,307	19,023,318	78.9%	(4,008,011)	2,109,369	29.99%	632,654	143,648	776,302	1,284,686	(508,383)	1,217,792	0	15,724,716
2016	15,724,716	19,715,946	79.8%	(3,991,230)	2,173,921	30.34%	659,583	148,044	807,627	1,353,496	(545,870)	1,274,772	0	16,453,619
2017	16,453,619	20,405,934	80.6%	(3,952,316)	2,241,311	30.67%	687,404	152,633	840,037	1,421,965	(581,928)	1,333,419	0	17,205,110
2018	17,205,110	21,098,287	81.5%	(3,893,177)	2,312,521	31.06%	718,220	157,483	875,702	1,491,551	(615,849)	1,394,018	0	17,983,279
2019	17,983,279	21,791,202	82.5%	(3,807,923)	2,387,182	31.44%	750,493	162,567	913,060	1,561,508	(648,448)	1,456,872	0	18,791,703
2020	18,791,703	22,486,408	83.6%	(3,694,705)	2,465,541	31.83%	784,695	167,903	952,598	1,632,589	(679,990)	1,522,266	0	19,633,978
2021	19,633,978	23,184,799	84.7%	(3,550,821)	2,547,953	32.21%	820,640	173,516	994,156	1,703,881	(709,725)	1,590,527	0	20,514,780
2022	20,514,780	23,888,953	85.9%	(3,374,172)	2,635,107	32.60%	859,173	179,451	1,038,624	1,776,142	(737,518)	1,662,047	0	21,439,309
2023	21,439,309	24,598,928	87.2%	(3,159,619)	2,727,764	33.05%	901,460	185,761	1,087,221	1,847,080	(759,859)	1,737,399	0	22,416,849
2024	22,416,849	25,317,829	88.5%	(2,900,980)	2,825,691	33.50%	946,481	192,430	1,138,910	1,915,020	(776,109)	1,817,376	0	23,458,115
2025	23,458,115	26,041,049	90.2%	(2,582,934)	2,927,133	33.94%	993,519	199,338	1,192,856	1,984,302	(791,446)	1,902,647	0	24,569,316
2026	24,569,316	26,735,726	91.9%	(2,166,410)	3,032,257	34.43%	1,043,864	206,494	1,250,358	2,048,032	(797,673)	1,994,065	0	25,765,708
2027	25,765,708	27,447,386	93.9%	(1,681,678)	3,141,073	34.58%	1,086,309	213,907	1,300,016	2,110,813	(810,797)	2,092,226	0	27,047,136
2028	27,047,136	28,170,768	96.0%	(1,123,631)	3,253,837	34.77%	1,131,311	221,586	1,352,897	2,170,825	(817,928)	2,197,649	0	28,426,858

1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 2
State of Alaska PERS
Financial Projections (In thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 1.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Cth Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	7,687,281	10,561,653	72.8%	(2,874,372)	1,460,783	6.77%	98,895	99,479	198,374	526,345	(327,970)	1,228,670	52,524	8,640,504
2004	8,008,101	11,220,324	71.4%	(3,212,224)	1,531,183	11.77%	180,220	104,274	284,494	569,007	(284,513)	672,367	52,524	8,448,479
2005	8,448,479	11,899,896	71.0%	(3,451,417)	1,585,006	16.77%	265,806	107,939	373,745	617,365	(243,620)	706,051	52,524	8,963,434
2006	8,963,434	12,596,905	71.2%	(3,633,471)	1,644,687	21.77%	358,048	112,003	470,052	669,830	(199,778)	746,010	52,524	9,562,191
2007	9,562,191	13,309,044	71.8%	(3,746,854)	1,706,759	26.77%	456,899	116,230	573,130	726,921	(153,791)	792,972	126,481	10,327,852
2008	10,327,852	14,033,243	73.6%	(3,705,392)	1,772,065	27.74%	491,641	120,678	612,318	789,363	(177,045)	844,745	0	10,995,551
2009	10,995,551	14,765,321	74.5%	(3,769,770)	1,840,407	27.99%	515,183	125,332	640,515	835,776	(215,261)	894,253	0	11,678,544
2010	11,678,544	15,502,494	75.3%	(3,823,950)	1,912,174	27.73%	530,251	130,219	660,470	924,447	(263,976)	952,591	0	12,367,159
2011	12,367,159	16,242,023	76.1%	(3,874,864)	1,986,893	27.84%	553,153	135,307	688,460	994,403	(305,943)	1,007,670	0	13,068,886
2012	13,068,886	16,983,362	77.0%	(3,914,476)	2,065,722	27.96%	577,496	140,676	718,172	1,065,814	(347,642)	1,063,843	0	13,785,087
2013	13,785,087	17,727,409	77.8%	(3,942,322)	2,148,151	28.08%	603,194	146,289	749,483	1,138,456	(388,972)	1,121,225	0	14,517,340
2014	14,517,340	18,473,903	78.6%	(3,956,563)	2,234,922	28.20%	630,281	152,198	782,480	1,214,285	(431,805)	1,179,869	0	15,265,403
2015	15,265,403	19,221,061	79.4%	(3,955,658)	2,327,596	28.39%	660,814	158,509	819,323	1,288,878	(469,554)	1,240,027	0	16,035,875
2016	16,035,875	19,967,978	80.3%	(3,932,102)	2,423,538	28.53%	691,483	165,043	856,526	1,358,696	(502,170)	1,302,245	0	16,835,951
2017	16,835,951	20,722,487	81.2%	(3,886,537)	2,524,705	28.67%	723,779	171,932	895,712	1,428,434	(532,722)	1,366,991	0	17,670,220
2018	17,670,220	21,490,710	82.2%	(3,820,490)	2,632,258	28.84%	759,267	179,257	938,524	1,499,578	(561,054)	1,434,650	0	18,543,816
2019	18,543,816	22,272,117	83.3%	(3,728,301)	2,745,982	29.01%	796,577	187,001	983,578	1,571,428	(587,850)	1,505,616	0	19,461,582
2020	19,461,582	23,069,801	84.4%	(3,608,219)	2,866,296	29.17%	836,231	195,195	1,031,426	1,644,932	(613,405)	1,580,278	0	20,428,454
2021	20,428,454	23,886,053	85.5%	(3,457,599)	2,993,733	29.34%	878,335	203,873	1,082,208	1,718,975	(636,767)	1,659,081	0	21,450,768
2022	21,450,768	24,725,092	86.8%	(3,274,324)	3,129,150	29.50%	923,255	213,095	1,136,350	1,794,769	(658,419)	1,742,529	0	22,534,878
2023	22,534,878	25,588,389	88.1%	(3,053,511)	3,273,542	29.70%	972,337	222,928	1,195,265	1,869,878	(674,613)	1,831,306	0	23,691,565
2024	23,691,565	26,480,795	89.5%	(2,789,230)	3,426,878	29.90%	1,024,757	233,370	1,258,127	1,942,712	(684,585)	1,926,311	0	24,933,295
2025	24,933,295	27,364,626	91.1%	(2,431,331)	3,587,398	30.11%	1,080,246	244,302	1,324,548	2,018,010	(693,462)	2,028,392	0	26,268,225
2026	26,268,225	28,304,080	92.8%	(2,035,855)	3,755,436	30.34%	1,139,379	255,745	1,395,124	2,087,849	(692,724)	2,138,554	0	27,714,054
2027	27,714,054	29,252,224	94.7%	(1,538,170)	3,931,345	30.27%	1,189,973	267,725	1,457,697	2,157,398	(699,701)	2,257,547	0	29,271,900
2028	29,271,900	30,236,363	96.8%	(964,463)	4,115,495	30.22%	1,243,684	280,265	1,523,949	2,224,881	(700,931)	2,386,018	0	30,956,987

1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 3
State of Alaska PERS
Financial Projections (In thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 2.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Cth Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	7,687,281	10,561,653	72.8%	(2,874,372)	1,460,783	6.77%	98,895	99,479	198,374	526,345	(327,970)	1,228,670	52,524	8,640,504
2004	8,008,101	11,220,493	71.4%	(3,212,392)	1,531,183	11.77%	180,220	104,274	284,494	569,009	(284,515)	672,366	52,524	8,448,476
2005	8,448,476	11,901,623	71.0%	(3,453,147)	1,597,168	16.77%	267,845	108,767	376,612	617,479	(240,866)	706,165	52,524	8,966,299
2006	8,966,299	12,601,873	71.2%	(3,635,574)	1,670,523	21.77%	363,673	113,763	477,435	670,140	(192,705)	746,539	52,524	9,572,657
2007	9,572,657	13,319,342	71.9%	(3,746,684)	1,747,895	26.77%	467,911	119,032	586,943	727,514	(140,571)	794,380	126,481	10,352,947
2008	10,352,947	14,051,429	73.7%	(3,698,482)	1,830,263	27.49%	503,167	124,641	627,808	790,321	(162,513)	847,414	0	11,037,848
2009	11,037,848	14,794,520	74.6%	(3,756,672)	1,917,570	27.56%	528,567	130,587	659,154	857,024	(197,870)	902,460	0	11,742,439
2010	11,742,439	15,546,654	75.5%	(3,804,215)	2,010,366	27.12%	545,208	136,906	682,113	926,044	(243,930)	958,689	0	12,457,198
2011	12,457,198	16,305,878	76.4%	(3,848,680)	2,108,342	27.06%	570,429	143,578	714,008	996,419	(282,411)	1,016,069	0	13,190,856
2012	13,190,856	17,072,554	77.3%	(3,881,697)	2,212,837	26.99%	597,313	150,694	748,007	1,068,283	(320,276)	1,075,034	0	13,945,614
2013	13,945,614	17,848,644	78.1%	(3,903,029)	2,323,536	26.94%	626,033	158,233	784,266	1,141,463	(357,197)	1,135,779	0	14,724,197
2014	14,724,197	18,635,064	79.0%	(3,910,868)	2,441,380	26.90%	656,678	166,258	822,936	1,217,969	(395,033)	1,198,451	0	15,527,614
2015	15,527,614	19,431,191	79.9%	(3,903,577)	2,568,158	26.92%	691,247	174,892	866,138	1,293,438	(427,300)	1,263,402	0	16,363,717
2016	16,363,717	20,237,334	80.9%	(3,873,617)	2,701,386	26.89%	726,520	183,964	910,484	1,364,374	(453,890)	1,331,284	0	17,241,111
2017	17,241,111	21,062,758	81.9%	(3,821,647)	2,843,237	26.87%	763,866	193,624	957,490	1,435,518	(480,027)	1,402,673	0	18,165,756
2018	18,165,756	21,915,010	82.9%	(3,749,254)	2,995,166	26.87%	804,690	203,971	1,008,661	1,508,392	(499,731)	1,478,061	0	19,144,086
2019	19,144,086	22,795,189	84.0%	(3,651,102)	3,157,228	26.86%	848,140	215,007	1,063,148	1,582,351	(519,204)	1,557,970	0	20,182,853
2020	20,182,853	23,708,154	85.1%	(3,525,301)	3,330,149	26.86%	894,564	226,783	1,121,347	1,658,345	(536,998)	1,642,934	0	21,288,789
2021	21,288,789	24,658,054	86.3%	(3,369,264)	3,514,782	26.86%	944,130	239,357	1,183,487	1,735,674	(552,187)	1,733,547	0	22,470,150
2022	22,470,150	25,651,264	87.6%	(3,181,114)	3,712,311	26.86%	997,251	252,808	1,250,059	1,815,413	(565,354)	1,830,467	0	23,735,263
2023	23,735,263	26,691,258	88.9%	(2,955,995)	3,924,132	26.90%	1,055,538	267,233	1,322,771	1,895,206	(572,435)	1,934,546	0	25,097,373
2024	25,097,373	27,785,287	90.3%	(2,687,914)	4,150,604	26.94%	1,118,141	282,656	1,400,798	1,973,568	(572,771)	2,046,907	0	26,571,509
2025	26,571,509	28,893,212	92.0%	(2,321,703)	4,390,346	26.97%	1,184,110	298,969	1,483,078	2,055,651	(572,572)	2,168,531	0	28,167,468
2026	28,167,468	30,087,029	93.6%	(1,919,561)	4,643,513	27.04%	1,255,465	316,223	1,571,689	2,132,256	(560,567)	2,300,693	0	29,907,593
2027	29,907,593	31,318,227	95.5%	(1,410,634)	4,911,502	26.82%	1,317,380	334,473	1,651,854	2,209,241	(557,387)	2,444,384	0	31,794,590
2028	31,794,590	32,617,562	97.5%	(822,972)	5,194,958	26.64%	1,383,800	353,777	1,737,577	2,284,928	(547,351)	2,600,475	0	33,847,714

1.5(b) Actuarial Projections – Projections at Current Rate

Key Assumptions

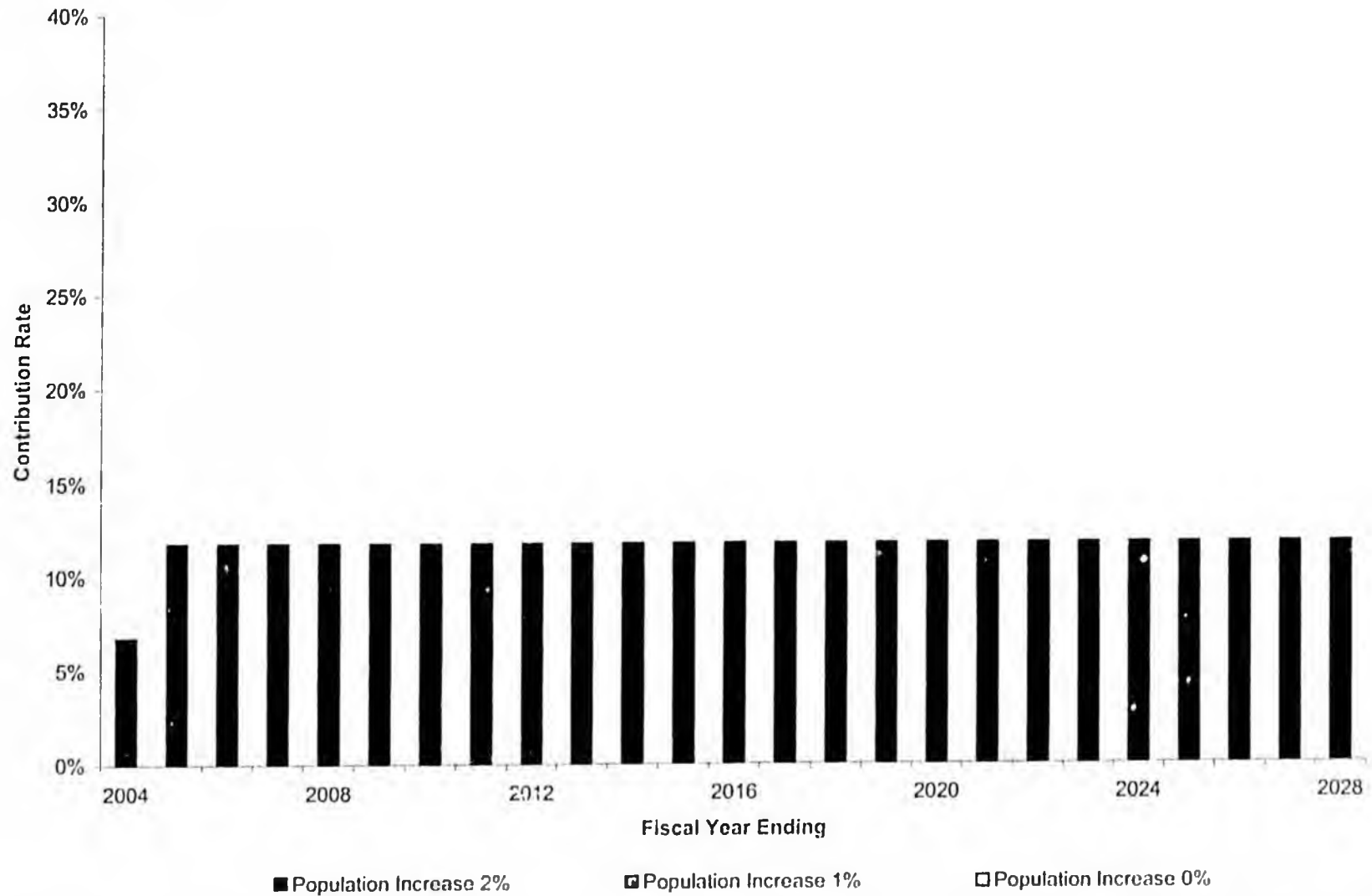
- All assumptions and methods are the same as Section 1.5(a), except
 - Adopted contribution rate is maintained at the FY05 level for all future years

Observations

- System funding deteriorates under all three population scenarios
- Actuarially calculated rates escalate under all population scenarios
- Assuming 1% population growth, actuarially calculated rates increase to more than 75%, while the funding ratio decreases to 20% by the end of the projection period.

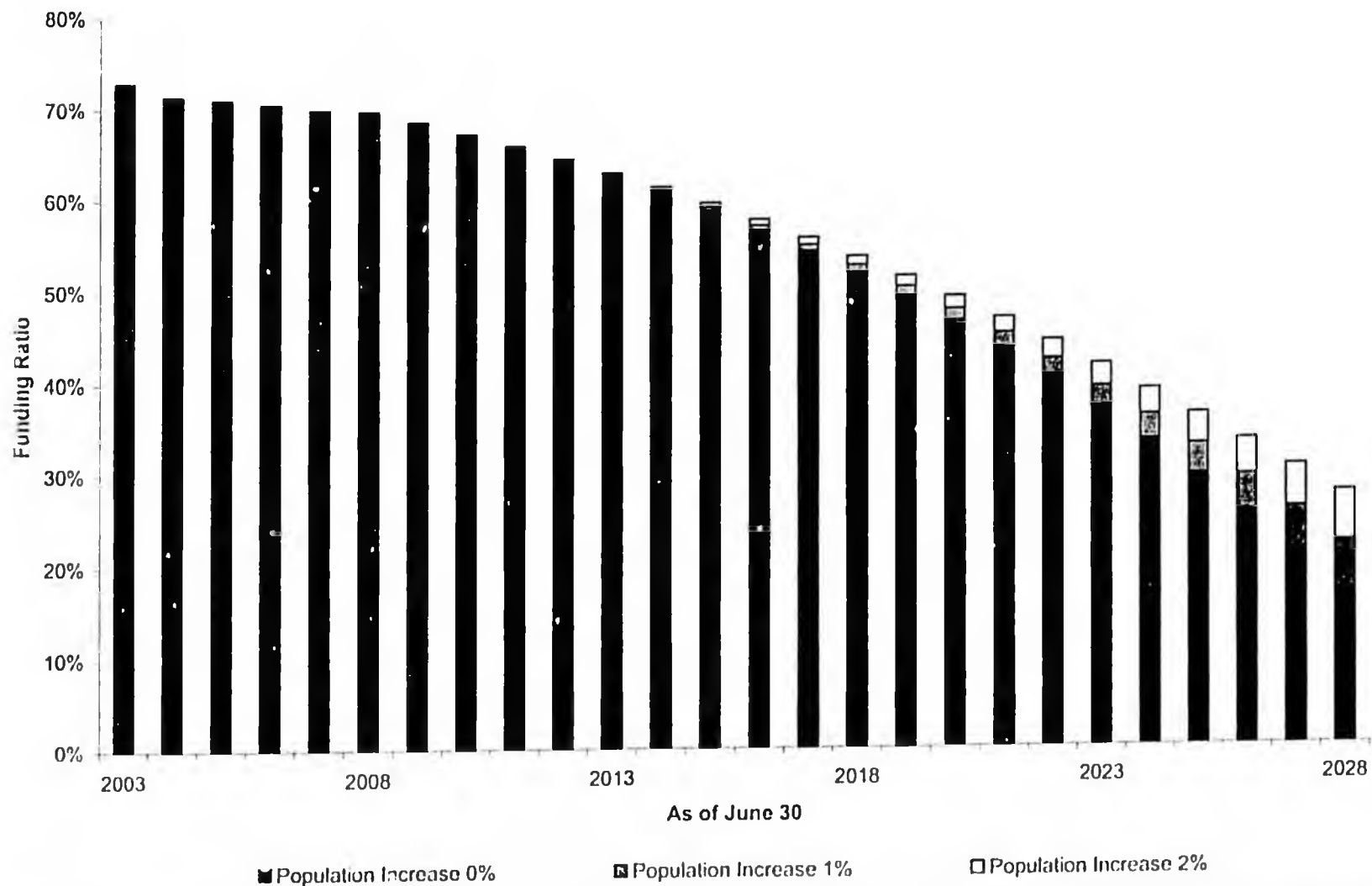
1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Contribution Rate



1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Funding Ratio



1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Table 4
State of Alaska PERS
Financial Projections (in thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 1.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cth Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	7,687,281	10,561,653	72.8%	(2,874,372)	1,460,783	6.77%	98,895	99,479	198,374	526,345	(327,970)	1,228,670	52,524	8,640,564
2004	8,008,101	11,220,324	71.4%	(3,212,224)	1,531,183	11.77%	180,220	104,274	284,494	569,007	(284,513)	672,367	52,524	8,448,479
2005	8,448,479	11,899,896	71.0%	(3,451,417)	1,585,006	11.77%	186,555	107,939	294,494	617,365	(322,870)	702,782	52,524	8,880,915
2006	8,880,915	12,596,905	70.5%	(3,715,990)	1,644,687	11.77%	193,580	112,003	305,583	669,830	(364,247)	732,418	52,524	9,301,610
2007	9,301,610	13,309,014	69.9%	(4,007,434)	1,706,759	11.77%	200,886	116,230	317,116	726,921	(409,805)	760,913	126,481	9,779,199
2008	9,779,199	14,033,243	69.7%	(4,254,044)	1,772,065	11.77%	208,572	120,678	329,250	789,363	(460,113)	787,804	0	10,106,890
2009	10,106,890	14,765,321	68.5%	(4,658,431)	1,840,407	11.77%	216,616	125,332	341,948	855,776	(513,828)	812,623	0	10,405,685
2010	10,405,685	15,502,494	67.1%	(5,096,809)	1,912,174	11.77%	225,063	130,219	355,282	924,447	(569,165)	834,991	0	10,671,511
2011	10,671,511	16,242,023	65.7%	(5,570,511)	1,986,893	11.77%	233,857	135,307	369,165	994,403	(625,237)	854,609	0	10,900,881
2012	10,900,881	16,983,362	64.2%	(6,082,481)	2,065,722	11.77%	243,135	140,676	383,811	1,065,814	(682,002)	871,190	0	11,090,069
2013	11,090,069	17,727,409	62.6%	(6,637,340)	2,148,151	11.77%	252,837	146,289	399,126	1,138,456	(739,329)	884,433	0	11,235,173
2014	11,235,173	18,473,903	60.8%	(7,238,730)	2,234,922	11.77%	263,050	152,198	415,249	1,214,285	(799,037)	893,942	0	11,330,078
2015	11,330,078	19,221,061	58.9%	(7,890,982)	2,327,596	11.77%	273,958	158,509	432,467	1,288,878	(856,410)	899,405	0	11,373,073
2016	11,373,073	19,967,978	57.0%	(8,594,905)	2,423,538	11.77%	285,250	165,043	450,293	1,358,696	(908,403)	900,807	0	11,365,477
2017	11,365,477	20,722,487	54.8%	(9,357,011)	2,524,705	11.77%	297,158	171,932	469,090	1,428,434	(959,343)	898,079	0	11,304,212
2018	11,304,212	21,490,710	52.6%	(10,186,498)	2,632,258	11.77%	309,817	179,257	489,073	1,499,578	(1,010,504)	890,914	0	11,184,622
2019	11,184,622	22,272,117	50.2%	(11,087,495)	2,745,982	11.77%	323,202	187,001	510,204	1,571,428	(1,061,224)	878,956	0	11,002,353
2020	11,002,353	23,069,801	47.7%	(12,067,447)	2,866,296	11.77%	337,363	195,195	532,558	1,644,832	(1,112,274)	861,813	0	10,751,893
2021	10,751,893	23,886,053	45.0%	(13,134,160)	2,993,733	11.77%	352,362	203,873	556,236	1,718,975	(1,162,740)	839,068	0	10,428,221
2022	10,428,221	24,725,092	42.2%	(14,296,870)	3,129,150	11.77%	368,301	213,095	581,396	1,794,769	(1,213,373)	810,277	0	10,025,125
2023	10,025,125	25,588,389	39.2%	(15,563,264)	3,273,542	11.77%	385,296	222,928	608,224	1,879,878	(1,261,654)	775,030	0	9,538,501
2024	9,538,501	26,480,795	36.0%	(16,942,294)	3,426,878	11.77%	403,344	233,370	636,714	1,942,712	(1,305,998)	733,054	0	8,965,556
2025	8,965,556	27,364,626	32.8%	(18,399,069)	3,587,398	11.77%	422,237	244,302	666,539	2,018,010	(1,351,471)	683,910	0	8,297,995
2026	8,297,995	28,304,080	29.3%	(20,006,085)	3,755,436	11.77%	442,015	255,745	697,760	2,087,849	(1,390,089)	627,243	0	7,535,149
2027	7,535,149	29,252,224	25.8%	(21,717,075)	3,931,345	11.77%	462,719	267,725	730,444	2,157,398	(1,426,954)	562,788	0	6,670,983
2028	6,670,983	30,236,363	22.1%	(23,565,380)	4,115,495	11.77%	484,394	280,265	764,659	2,224,881	(1,460,222)	490,122	0	5,700,884



State of Alaska
Teachers' Retirement System
Actuarial Valuation Report as of June 30, 2003

MERCER
Human Resource Consulting

March 19, 2004

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

Dear Members of the Board:

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Teachers' Retirement System has been prepared as of June 30, 2003 by Mercer Human Resource Consulting. The purposes of the report include:

- (1) a review of experience under the Plan for the year ended June 30, 2003;
- (2) a determination of the appropriate contribution rate for all employers in the System which will be applied for the fiscal year ending June 30, 2006; and
- (3) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(c))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(i))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)

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 by the audited report from KPMG LLP, to determine a sound value for the System liability. This 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 Board in October 2000 and adopted in December 2000. Actuarial methods, medical cost trend, and assumed blended medical premiums were reviewed and revised in January 2003.

Teacher's Retirement Board

March 19, 2004

Page 2

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY04 and a fixed 25-year amortization as a level percentage of pay 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 assets to liabilities decreased from 68.2% to 64.3% during the year primarily due to lower than expected equity market returns. Over the years, progress has been made toward achieving the funding objectives of the System.

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

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

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

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries and are fully qualified to provide actuarial services to the State of Alaska.

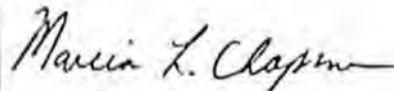
We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement Nos. 25 and 27.

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,



Robert M. Reynolds, ASA, MAAA



Marcia L. Chapman, FSA, EA, MAAA

Report Highlights

This report has been prepared by Mercer Human Resource Consulting for the State of Alaska Teachers' Retirement System to:

- (1) Present the results of a valuation of the Alaska Teachers' Retirement System as of June 30, 2003;
- (2) Review experience under the plan for the year ended June 30, 2003;
- (3) Determine the appropriate contribution rate for each employer in the System; and
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2003 Fiscal Year, the current annual costs, and reporting and disclosure information.

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

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

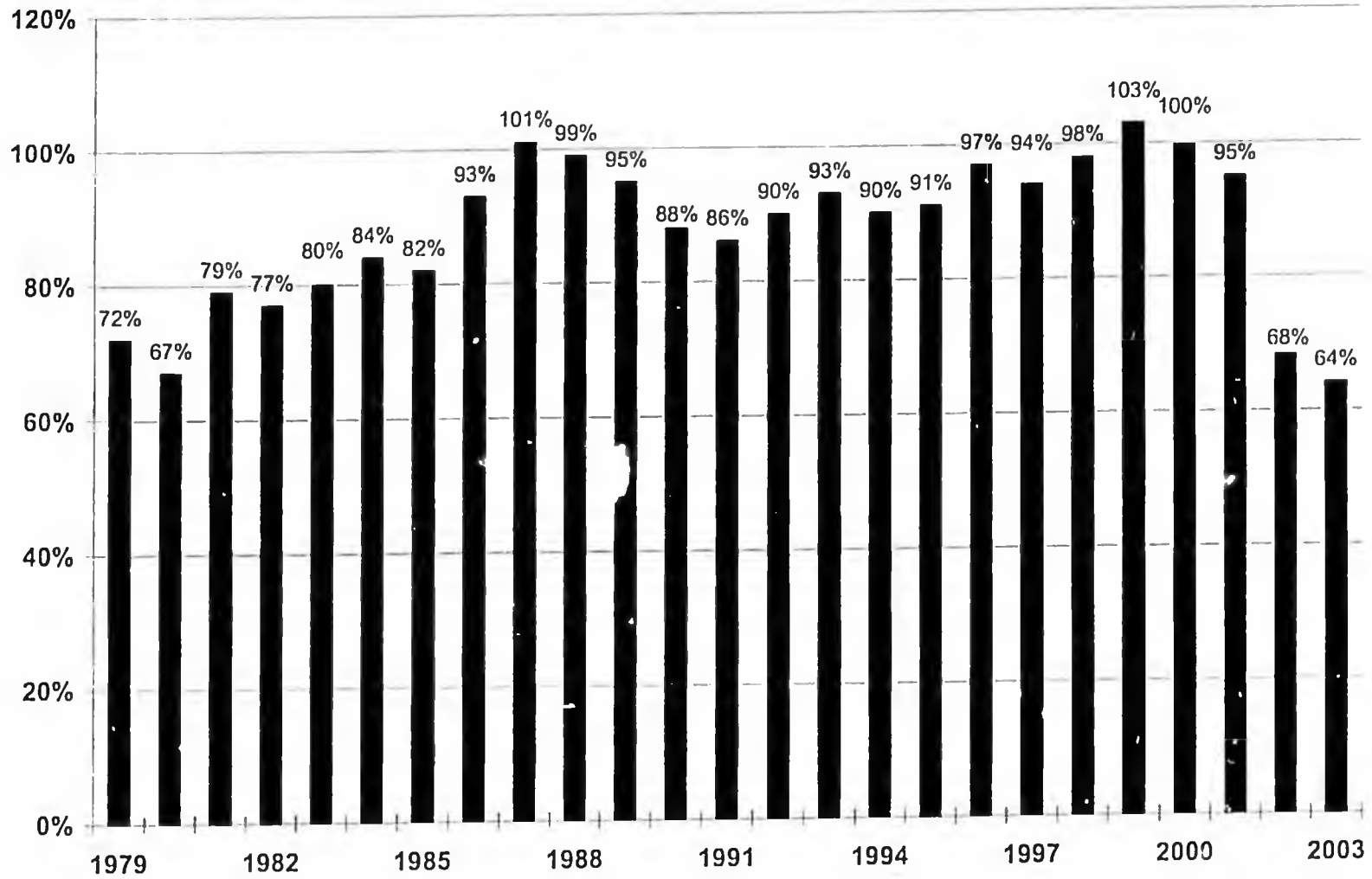
The principal results are as follows:

Funding Status as of June 30	2002	2003
(a) Valuation assets ¹	\$ 3,689,036	\$ 3,752,285
(b) Accrued liability ¹		
i) Non-medical benefits	3,959,958	4,190,970
ii) Total benefits (including medical)	5,411,642	5,835,609
(c) Funding Ratio, (a) ÷ (b)		
i) Non-medical benefits	93.2%	89.5%
ii) Total benefits (including medical)	68.2%	64.3%

¹ In thousands.

Report Highlights (continued)

TRS Funding Ratio History



Report Highlights *(continued)*

Employer Contribution Rates for Fiscal Year:	2005	2006
(a) Normal Cost Rate	14.76%	14.28%
(b) Past Service Rate	20.81%	24.57%
(c) Total Employer Contribution Rate <i>(a) + (b)</i>	35.57%	38.85%
(d) TRS Board Adopted Employer Contribution Rate	16.00%	21.00%

1.1(c) Actuarial Value of Assets

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

(1) Deferral of Investment Return for FY03

(a) Market Value, June 30, 2002	\$	3,689,036
(b) Contributions for FY03		118,645
- Weighted for timing		59,323
(c) Benefit Payments for FY03		314,256
- Weighted for timing		157,128
(d) Investment Return (net of expenses)		109,194
(e) Expected Return Rate (net of expenses)		8.25%
(f) Expected Return-weighted for Timing, [(a. + b. - c.) x e.]		296,277
(g) Investment Gain (Loss) for the Year (d. - f.)		(187,083)
(h) Deferral Percentage		80%
(i) Deferred Investment Return ² , (g. x h.)	\$	(149,666)

(2) Actuarial Value, June 30, 2003

(a) Market Value, June 30, 2003	\$	3,602,619
(b) 2003 Deferred Investment Return		(149,666)
(c) Preliminary Actuarial Value, June 30, 2003 (a. - b.)	\$	3,752,285
(d) Upper Limit: 120% of Market Value, June 30, 2003		4,323,143
(e) Lower Limit: 80% of Market Value, June 30, 2003		2,882,095
(f) Actuarial Value, June 30, 2003, (c. limited by d. and e.)	\$	3,752,285

² The table below shows the development of gain (loss) to be recognized in the current year.

Plan Year Ended	Assot Gain/(Loss)	Gain/(Loss) Recognized In Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2003	\$ (187,083)	\$ 0	\$ (37,417)	\$ (149,666)
Total	\$ (187,083)	\$ 0	\$ (37,417)	\$ (149,666)

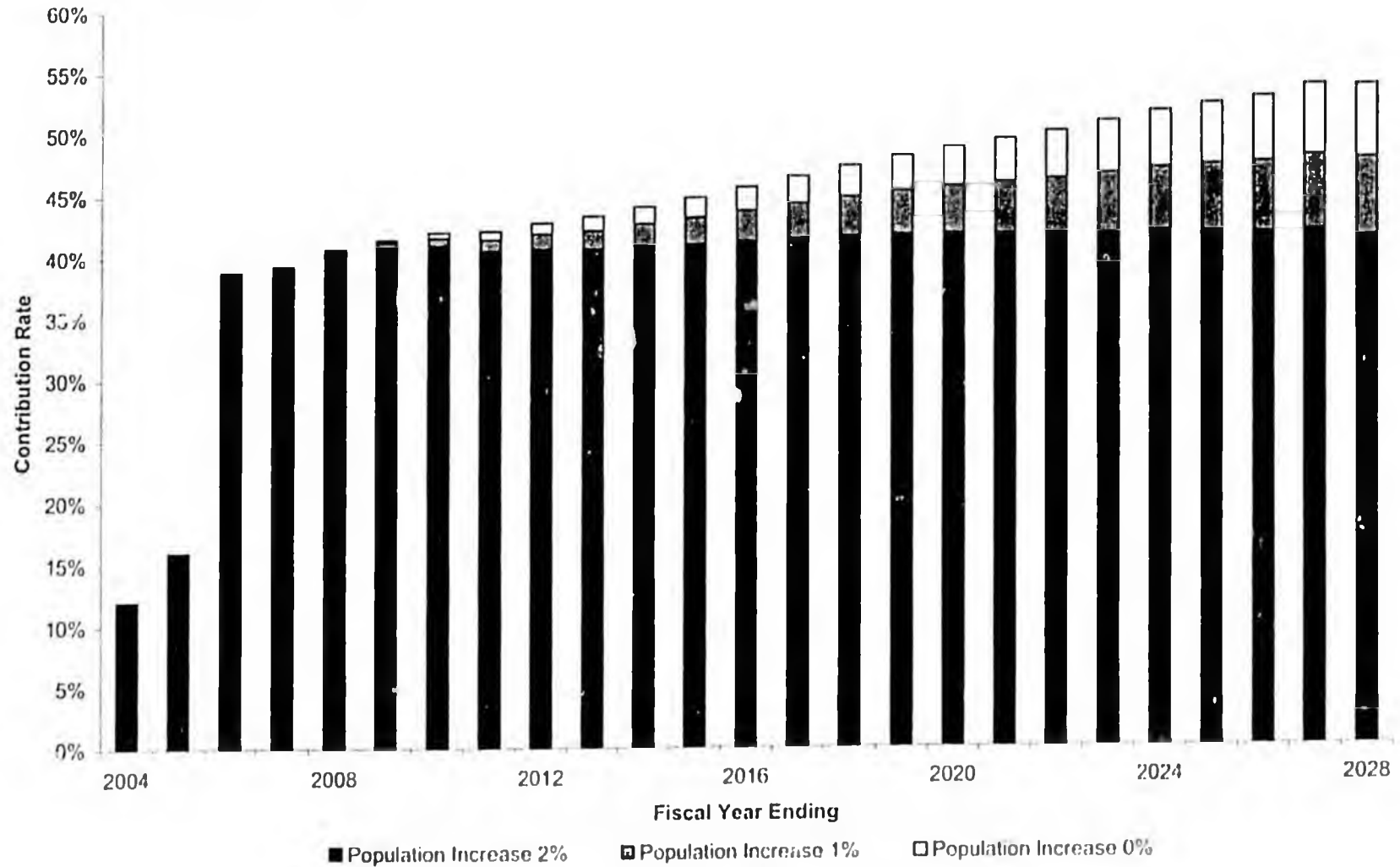
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Observations

- Calculated rates increase under all population scenarios
- Calculated rates begin to decline towards end of the projection period under the 1% and 2% scenarios
- Calculated rates increase to 42% even under the 2% population increase scenario
- Factors contribution to the projected rate increases are:
 - Contributions are less than the actuarially calculated rate for the first 2 years of the projection
 - After the first 2 years, there is still a 2-year lag before calculated rates actually enter the System
 - New entrants enter the System at lower pay levels than the exiting members they are replacing, diluting the pay-off of unfunded liabilities. Because new entrants also add additional liability, each new entrant generates a loss.
- Funding ratios are at least 96% by the end of the 25-year period, under all 3 population scenarios

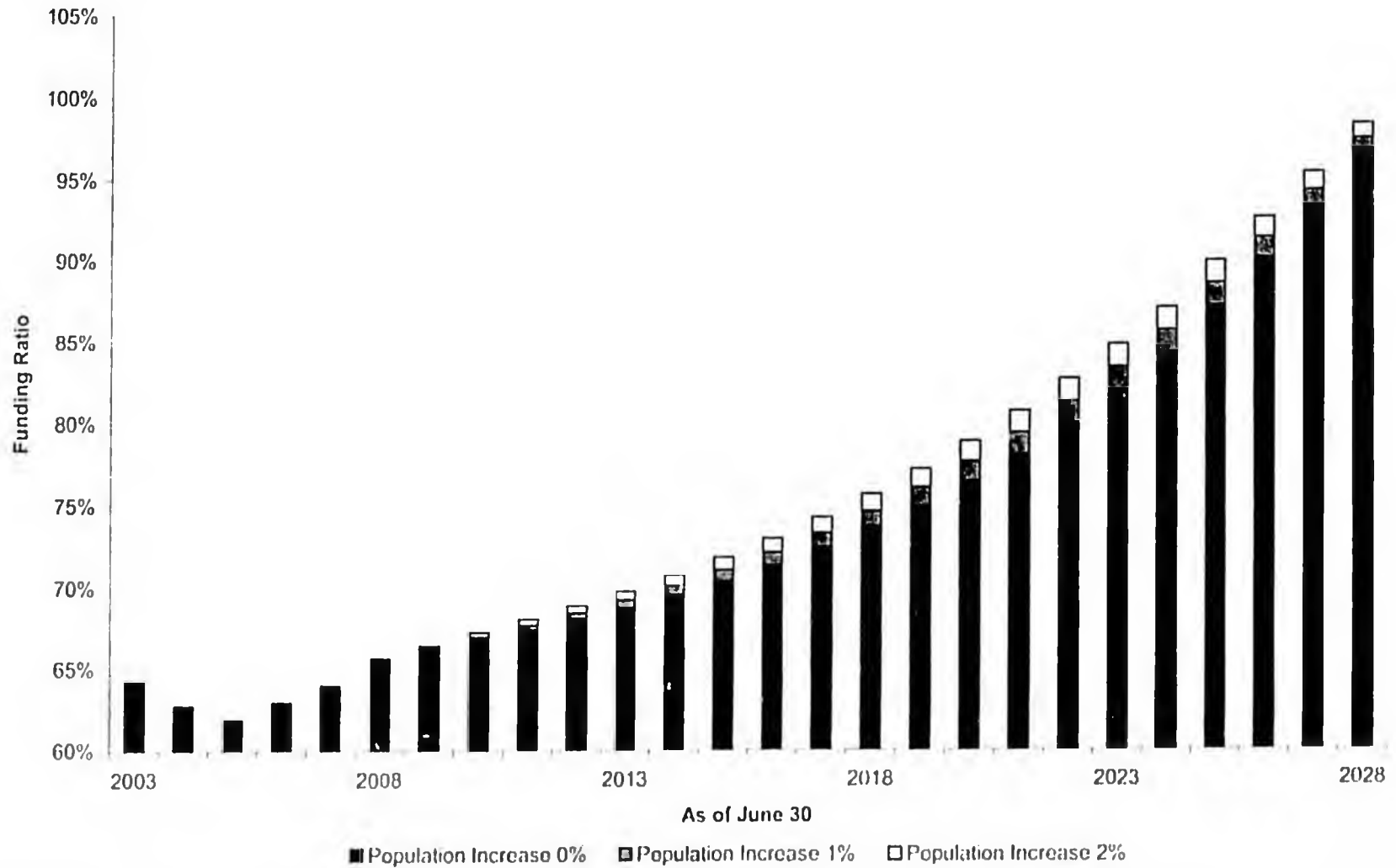
1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Projected Contribution Rates



1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Projected Funding Ratios



1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 1
State of Alaska TRS
Financial Projections (In thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 0.00%								Recognized Asset Gain	Ending Actuarial Assets
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cth Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
2003	3,752,285	5,835,609	64.3%	(2,083,324)	532,630	12.00%	63,916	46,286	110,201	350,944	(240,742)	591,982	23,523	4,127,048
2004	3,822,351	6,089,875	62.8%	(2,267,524)	556,132	16.00%	88,981	48,328	137,309	378,310	(241,001)	316,252	23,523	3,921,125
2005	3,921,125	6,334,769	61.9%	(2,413,645)	568,975	38.85%	221,058	49,444	270,502	400,708	(130,205)	327,031	23,523	4,141,473
2006	4,141,473	6,579,652	62.9%	(2,438,180)	577,375	39.06%	225,521	50,174	275,695	424,090	(148,394)	342,518	23,523	4,359,119
2007	4,359,119	6,823,023	63.9%	(2,463,904)	590,015	40.76%	240,479	51,272	291,751	448,025	(156,273)	358,209	60,939	4,621,994
2008	4,621,994	7,064,811	65.4%	(2,442,817)	603,379	41.50%	250,391	52,434	302,825	473,335	(170,511)	374,281	0	4,825,764
2009	4,825,764	7,303,444	66.1%	(2,477,680)	617,765	42.06%	259,860	53,684	313,544	499,783	(186,240)	390,443	0	5,029,968
2010	5,029,968	7,537,607	66.7%	(2,507,640)	633,313	42.17%	267,044	55,035	322,079	528,128	(206,049)	406,473	0	5,230,391
2011	5,230,391	7,763,535	67.4%	(2,533,144)	649,750	42.85%	278,418	56,463	334,882	555,624	(220,742)	422,402	0	5,432,051
2012	5,432,051	7,982,896	68.0%	(2,550,845)	666,447	43.35%	288,885	57,914	346,799	582,374	(235,575)	438,427	0	5,634,902
2013	5,634,902	8,196,415	68.7%	(2,561,512)	684,228	44.08%	301,630	59,459	361,090	607,634	(246,545)	454,709	0	5,843,067
2014	5,843,067	8,405,450	69.5%	(2,562,383)	702,909	44.84%	315,166	61,083	376,249	632,158	(255,909)	471,497	0	6,058,655
2015	6,058,655	8,611,487	70.4%	(2,552,832)	723,135	45.66%	330,162	62,840	393,002	656,180	(263,178)	488,983	0	6,284,460
2016	6,284,460	8,814,836	71.3%	(2,530,375)	744,806	46.50%	346,317	64,724	411,040	678,198	(267,158)	507,448	0	6,524,750
2017	6,524,750	9,016,852	72.4%	(2,492,102)	767,757	47.32%	363,267	66,718	429,985	699,647	(269,662)	527,168	0	6,782,256
2018	6,782,256	9,220,366	73.6%	(2,438,110)	792,083	48.12%	381,137	68,832	449,969	722,442	(272,474)	548,297	0	7,058,080
2019	7,058,080	9,423,429	74.9%	(2,365,349)	817,534	48.83%	399,167	71,044	470,211	744,802	(274,591)	570,965	0	7,354,453
2020	7,354,453	9,626,807	76.4%	(2,272,354)	844,363	49.45%	417,544	73,375	490,919	764,595	(273,676)	595,453	0	7,676,230
2021	7,676,230	9,835,220	78.0%	(2,158,990)	873,415	50.09%	437,479	75,900	513,379	782,591	(269,212)	622,184	0	8,029,202
2022	8,029,202	10,051,673	79.9%	(2,022,471)	905,090	50.87%	460,460	78,652	539,112	802,007	(262,895)	651,565	0	8,417,872
2023	8,417,872	10,275,866	81.9%	(1,857,995)	938,668	51.67%	485,011	81,570	566,581	823,016	(256,435)	683,896	0	8,845,333
2024	8,845,333	10,506,521	84.2%	(1,661,188)	974,342	52.25%	509,097	84,670	593,767	838,688	(244,924)	719,637	0	9,320,049
2025	9,320,049	10,695,314	87.1%	(1,375,265)	1,012,000	52.78%	534,102	87,943	622,045	857,397	(235,352)	759,196	0	9,843,892
2026	9,843,892	10,930,203	90.1%	(1,086,310)	1,051,113	53.71%	564,530	91,342	655,872	877,242	(221,370)	802,990	0	10,425,512
2027	10,425,512	11,186,425	93.2%	(760,913)	1,091,737	54.65%	582,697	94,872	680,569	897,476	(216,907)	851,157	0	11,059,762
2028	11,059,762	11,446,359	96.6%	(386,697)	1,133,931	53.82%	610,742	98,539	708,781	916,746	(207,965)	903,852	0	11,755,649

1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 2

State of Alaska TRS
Financial Projections (In thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 1.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cth Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	3,752,285	5,835,609	64.3%	(2,083,324)	532,630	12.00%	63,916	46,286	110,201	350,944	(240,742)	591,982	23,523	4,127,048
2004	3,822,351	6,089,921	62.8%	(2,267,570)	556,132	16.00%	88,981	48,328	137,309	378,310	(241,001)	316,252	23,523	3,921,125
2005	3,921,125	6,335,870	61.9%	(2,414,746)	573,377	38.85%	222,768	49,826	272,595	400,744	(128,149)	327,115	23,523	4,143,614
2006	4,143,614	6,583,111	62.9%	(2,439,497)	586,635	39.22%	230,080	50,979	281,058	424,193	(143,134)	342,912	23,523	4,366,914
2007	4,366,914	6,830,369	63.9%	(2,463,454)	604,620	40.75%	246,356	52,541	298,898	448,231	(149,334)	359,138	60,939	4,637,658
2008	4,637,658	7,077,875	65.5%	(2,440,218)	623,847	41.29%	257,590	54,212	311,803	473,672	(161,870)	375,930	0	4,851,718
2009	4,851,718	7,324,422	66.2%	(2,472,704)	644,648	41.65%	268,469	56,020	324,489	500,274	(175,785)	393,016	0	5,068,948
2010	5,068,948	7,569,118	67.0%	(2,500,169)	667,202	41.53%	277,087	57,980	335,067	528,795	(193,728)	410,197	0	5,285,417
2011	5,285,417	7,808,690	67.7%	(2,523,272)	691,229	41.98%	290,177	60,068	350,245	556,483	(206,238)	427,540	0	5,506,719
2012	5,506,719	8,045,390	68.4%	(2,538,671)	716,139	42.24%	302,531	62,233	364,764	583,454	(218,690)	445,283	0	5,733,312
2013	5,733,312	8,280,370	69.2%	(2,547,058)	742,797	42.75%	317,570	64,549	382,119	609,070	(226,951)	463,637	0	5,969,998
2014	5,969,998	8,515,355	70.1%	(2,545,357)	771,037	43.25%	333,484	67,003	400,487	634,054	(233,567)	482,890	0	6,219,321
2015	6,219,321	8,752,349	71.1%	(2,533,028)	801,545	43.79%	350,994	69,654	420,649	658,670	(238,021)	503,276	0	6,484,576
2016	6,484,576	8,992,207	72.1%	(2,507,631)	834,288	44.32%	369,779	72,500	442,279	681,438	(239,160)	525,112	0	6,770,528
2017	6,770,528	9,236,885	73.3%	(2,466,357)	869,145	44.83%	389,665	75,529	465,194	703,844	(238,651)	548,724	0	7,080,602
2018	7,080,602	9,489,746	74.6%	(2,409,144)	906,267	45.30%	410,540	78,755	489,295	727,837	(238,542)	574,310	0	7,416,369
2019	7,416,369	9,749,431	76.1%	(2,333,062)	945,445	45.68%	431,833	82,159	513,993	751,588	(237,596)	602,050	0	7,780,823
2020	7,780,823	10,017,495	77.7%	(2,236,671)	986,990	45.96%	453,623	85,769	539,392	772,993	(233,600)	632,282	0	8,179,505
2021	8,179,505	10,299,492	79.4%	(2,119,987)	1,031,829	46.25%	477,229	89,666	566,895	792,856	(225,961)	665,488	0	8,619,032
2022	8,619,032	10,599,300	81.3%	(1,980,268)	1,080,428	46.68%	504,295	93,889	598,184	814,477	(216,292)	702,148	0	9,104,888
2023	9,104,888	10,917,437	83.4%	(1,812,549)	1,132,136	47.08%	533,061	98,383	631,444	838,053	(206,609)	742,631	0	9,610,909
2024	9,640,909	11,253,590	85.7%	(1,612,681)	1,187,212	47.32%	561,783	103,169	664,952	856,624	(191,671)	787,469	0	10,236,707
2025	10,236,707	11,558,848	88.6%	(1,322,142)	1,244,968	47.49%	591,297	108,188	699,484	879,275	(179,791)	837,112	0	10,994,028
2026	10,894,028	11,927,076	91.3%	(1,033,048)	1,305,533	48.01%	626,844	113,451	740,295	901,422	(163,128)	892,028	0	11,822,928
2027	11,622,928	12,329,651	94.3%	(706,722)	1,369,045	47.71%	653,171	118,970	772,141	928,486	(156,344)	952,442	0	12,619,026
2028	12,419,026	12,750,275	97.4%	(331,248)	1,435,647	47.62%	683,590	124,758	808,348	953,088	(144,740)	1,018,599	0	13,592,885

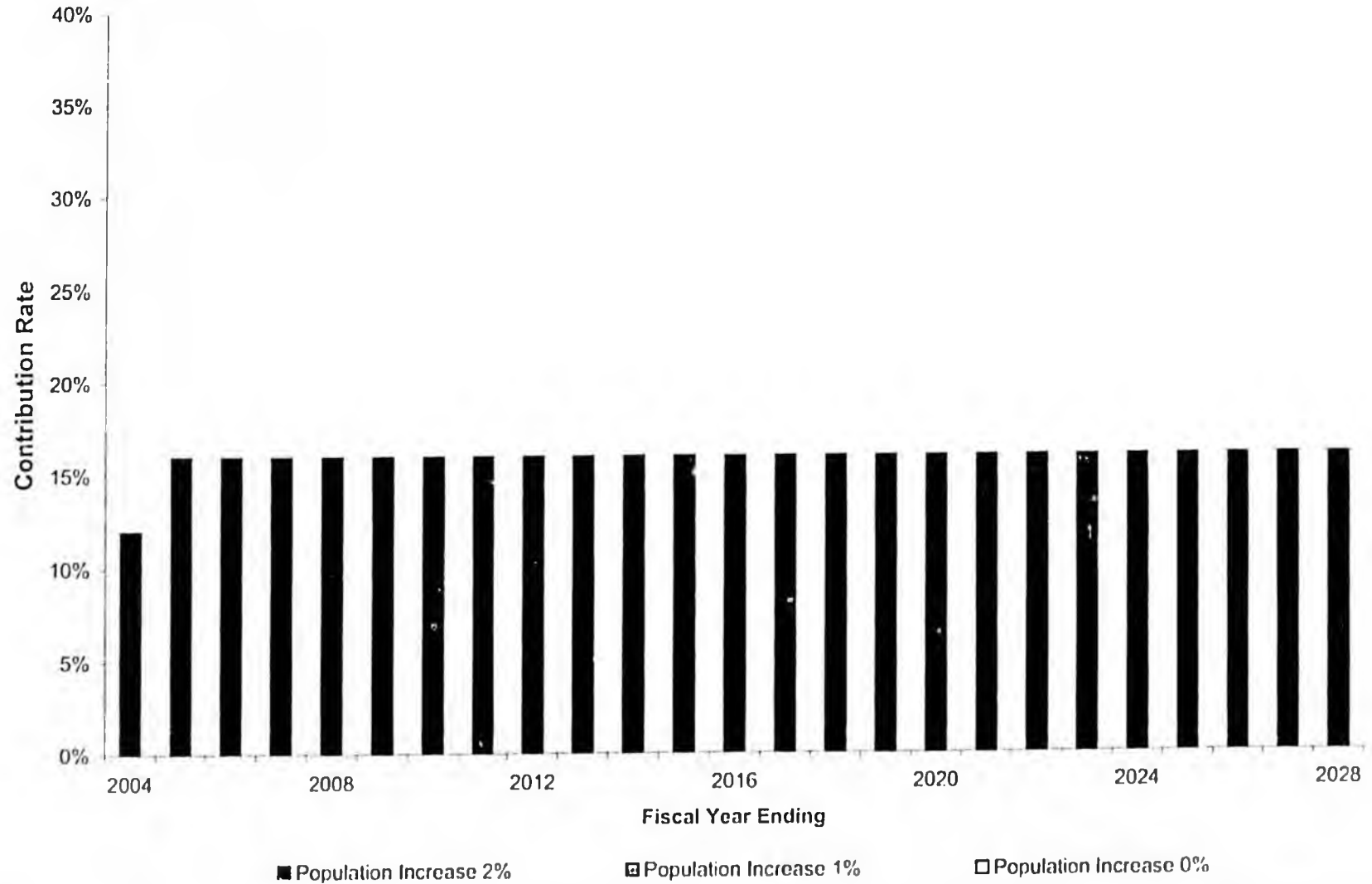
1.5(a) Actuarial Projections – Projections at Calculated Rate (continued)

Table 3
State of Alaska TRS
Financial Projections (in thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 2.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cib Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	3,752,285	5,835,609	64.3%	(2,083,324)	532,630	12.00%	63,916	46,286	110,201	350,944	(240,742)	591,982	23,523	4,127,048
2004	3,822,351	6,089,968	62.8%	(2,267,617)	556,132	16.00%	88,981	48,328	137,309	378,310	(241,001)	316,252	23,523	3,921,125
2005	3,921,125	6,336,661	61.9%	(2,415,536)	577,778	38.85%	224,479	50,209	274,688	400,780	(126,092)	327,200	23,523	4,145,755
2006	4,145,755	6,585,496	63.0%	(2,439,740)	595,987	39.34%	234,466	51,791	286,257	424,297	(138,040)	343,299	23,523	4,374,537
2007	4,374,537	6,835,398	64.3%	(2,460,861)	619,514	40.62%	251,665	53,836	305,500	448,441	(142,941)	360,031	60,939	4,652,566
2008	4,652,566	7,086,824	65.7%	(2,434,258)	644,925	40.90%	263,783	56,044	319,827	474,017	(154,190)	377,476	0	4,875,853
2009	4,875,853	7,338,846	66.4%	(2,462,993)	672,605	40.95%	275,405	58,449	333,854	500,780	(166,926)	395,372	0	5,104,299
2010	5,104,299	7,590,899	67.2%	(2,486,600)	702,790	40.55%	284,960	61,072	346,032	529,487	(183,455)	413,537	0	5,334,382
2011	5,334,382	7,840,095	68.0%	(2,505,714)	735,215	40.69%	299,194	63,890	363,084	557,384	(194,300)	432,072	0	5,572,154
2012	5,572,154	8,089,136	68.9%	(2,516,982)	769,353	40.66%	312,797	66,857	379,654	584,553	(204,899)	451,251	0	5,818,505
2013	5,818,505	8,339,612	69.8%	(2,521,106)	806,136	40.85%	329,341	70,053	399,394	610,446	(211,052)	471,321	0	6,078,774
2014	6,078,774	8,593,663	70.7%	(2,514,890)	845,443	41.03%	346,886	73,469	420,355	635,774	(215,419)	492,613	0	6,355,967
2015	6,355,967	8,853,817	71.8%	(2,497,849)	888,032	41.23%	366,135	77,170	443,305	660,823	(217,518)	515,395	0	6,653,844
2016	6,653,844	9,121,477	72.9%	(2,467,634)	933,968	41.42%	386,840	81,162	468,002	684,136	(216,135)	540,027	0	6,977,735
2017	6,977,735	9,399,227	74.2%	(2,421,492)	983,213	41.60%	408,975	85,441	494,416	707,236	(212,819)	566,883	0	7,331,800
2018	7,331,800	9,691,030	75.7%	(2,359,230)	1,036,011	41.72%	432,237	90,029	522,266	732,093	(209,827)	596,218	0	7,718,192
2019	7,718,192	9,996,210	77.2%	(2,278,019)	1,092,237	41.77%	456,208	94,915	551,123	756,857	(205,734)	628,264	0	8,140,722
2020	8,140,722	10,317,161	78.9%	(2,176,439)	1,152,307	41.73%	480,836	100,135	580,972	779,450	(198,478)	663,422	0	8,605,667
2021	8,605,667	10,660,343	80.7%	(2,054,676)	1,217,279	41.70%	507,565	105,782	613,346	800,713	(187,367)	702,239	0	9,120,538
2022	9,120,538	11,030,644	82.7%	(1,910,106)	1,287,738	41.78%	538,076	111,904	649,980	824,014	(174,034)	745,266	0	9,691,770
2023	9,691,770	11,429,585	84.8%	(1,737,815)	1,363,168	41.87%	570,726	118,459	689,195	849,564	(160,369)	792,956	0	10,324,357
2024	10,324,357	11,858,005	87.1%	(1,533,648)	1,443,955	41.80%	603,631	125,480	729,110	870,393	(141,283)	845,932	0	11,029,005
2025	11,029,005	12,266,708	89.9%	(1,237,702)	1,530,213	41.71%	638,274	132,976	771,250	896,222	(124,972)	904,738	0	11,808,771
2026	11,808,771	12,756,011	92.6%	(947,240)	1,621,625	41.91%	679,569	140,919	820,488	923,744	(103,256)	969,964	0	12,675,479
2027	12,675,479	13,293,834	95.3%	(618,355)	1,718,497	41.39%	711,260	149,337	860,597	952,577	(91,980)	1,041,933	0	13,625,433
2028	13,625,433	13,865,479	98.3%	(240,047)	1,821,156	41.07%	747,863	158,258	906,122	981,309	(75,187)	1,120,997	0	14,671,242

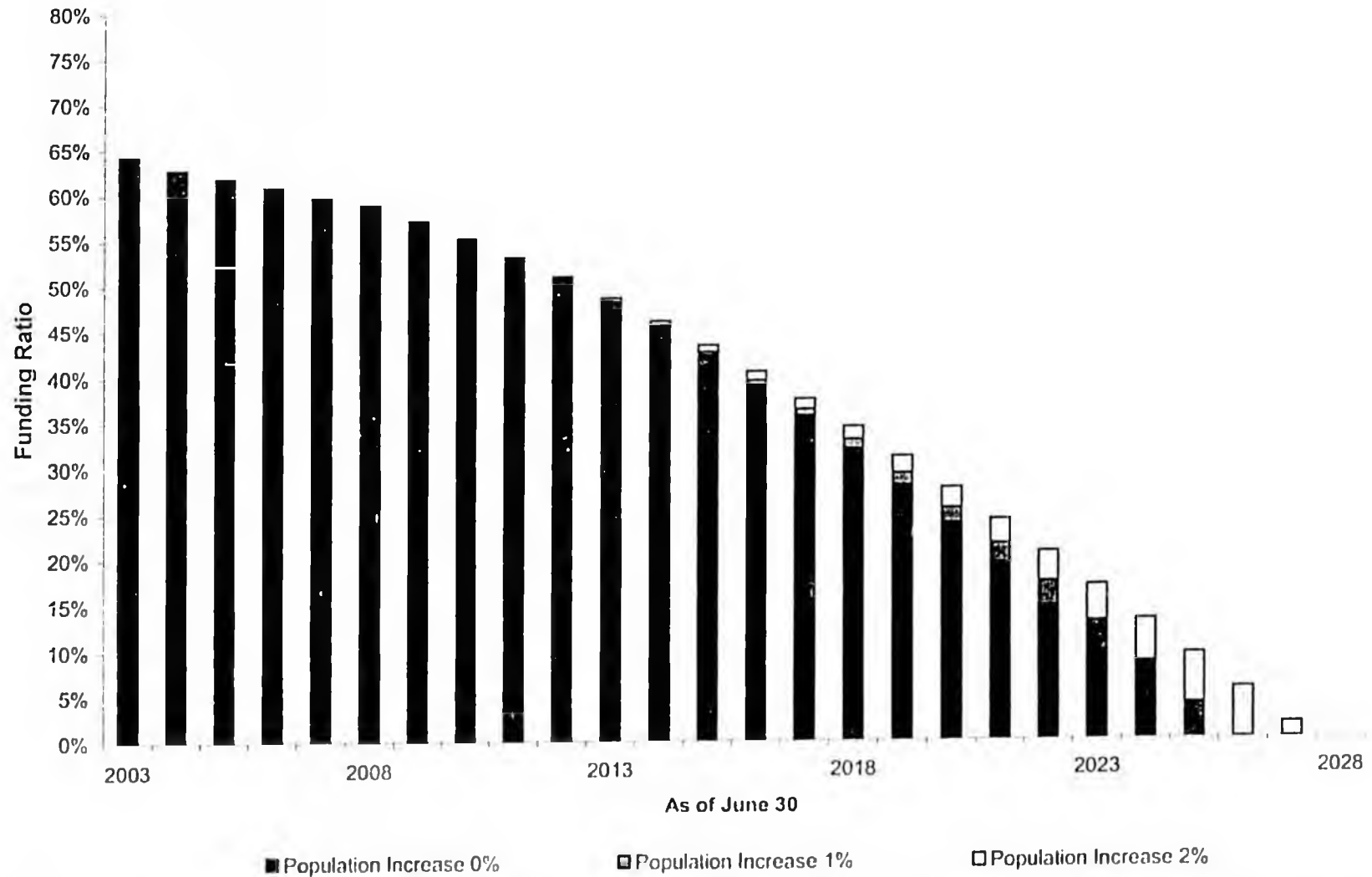
1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Contribution Rate



1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Funding Ratio



1.5(b) Actuarial Projections – Projections at Current Rate (continued)

Table 4
State of Alaska TRS
Financial Projections (In thousands)

As of June 30	Investment Return 8.25%				Annual Population Increase 1.00%								Recognized Asset Gain	Ending Actuarial Assets
	----- Valuation Amounts on July 1 -----				----- Flow Amounts During Following 12 Months -----									
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2003	3,752,285	5,835,609	64.3%	(2,083,324)	532,630	12.00%	63,916	46,286	110,201	350,944	(240,742)	591,982	23,523	4,127,048
2004	3,822,351	6,089,921	62.8%	(2,267,570)	556,132	16.00%	88,981	48,328	137,309	378,310	(241,001)	316,252	23,523	3,921,125
2005	3,921,125	6,335,870	61.9%	(2,414,746)	573,377	16.00%	91,740	49,826	141,567	400,744	(259,177)	321,710	23,523	4,007,181
2006	4,007,181	6,583,111	60.9%	(2,575,930)	586,635	16.00%	93,862	50,979	144,840	424,193	(279,353)	326,037	23,523	4,077,388
2007	4,077,388	6,830,369	59.7%	(2,752,981)	604,620	16.00%	96,739	52,541	149,281	448,231	(298,951)	329,080	60,939	4,168,457
2008	4,168,457	7,077,875	58.9%	(2,909,418)	623,847	16.00%	99,815	54,212	154,028	473,672	(319,644)	330,712	0	4,179,525
2009	4,179,525	7,324,422	57.1%	(3,144,897)	644,648	16.00%	103,144	56,020	159,164	500,274	(341,111)	330,740	0	4,169,154
2010	4,169,154	7,569,118	55.1%	(3,399,963)	667,202	16.00%	106,752	57,980	164,732	528,795	(364,062)	328,938	0	4,134,030
2011	4,134,030	7,808,690	52.9%	(3,674,660)	691,229	16.00%	110,597	60,068	170,664	556,483	(385,819)	325,142	0	4,073,353
2012	4,073,353	8,045,390	50.6%	(3,972,037)	716,139	16.00%	114,582	62,233	176,815	583,454	(406,639)	319,278	0	3,985,992
2013	3,985,992	8,280,370	48.1%	(4,294,378)	742,797	16.00%	118,848	64,549	183,397	609,070	(425,674)	311,285	0	3,871,604
2014	3,871,604	8,515,355	45.5%	(4,643,751)	771,037	16.00%	123,366	67,003	190,369	634,054	(443,685)	301,105	0	3,729,024
2015	3,729,024	8,752,349	42.6%	(5,023,325)	801,545	16.00%	128,247	69,654	197,902	658,670	(460,768)	288,638	0	3,556,894
2016	3,556,894	8,992,207	39.6%	(5,435,313)	834,288	16.00%	133,486	72,500	205,986	681,438	(475,452)	273,831	0	3,355,273
2017	3,355,273	9,236,885	36.3%	(5,881,612)	869,145	16.00%	139,063	75,529	214,592	703,844	(489,252)	256,628	0	3,122,649
2018	3,122,649	9,489,746	32.9%	(6,367,097)	906,267	16.00%	145,003	78,755	223,757	727,837	(504,080)	236,825	0	2,855,395
2019	2,855,395	9,749,431	29.3%	(6,894,036)	945,445	16.00%	151,271	82,159	233,430	751,588	(518,158)	214,196	0	2,551,433
2020	2,551,433	10,017,495	25.5%	(7,466,061)	986,990	16.00%	157,918	85,769	243,688	772,993	(529,305)	188,659	0	2,210,788
2021	2,210,788	10,299,492	21.5%	(8,088,704)	1,031,829	16.00%	165,093	89,666	254,759	792,856	(538,098)	160,193	0	1,832,884
2022	1,832,884	10,599,300	17.3%	(8,766,416)	1,080,428	16.00%	172,868	93,889	266,758	814,477	(547,719)	128,619	0	1,413,784
2023	1,413,784	10,917,437	12.9%	(9,503,652)	1,132,136	16.00%	181,142	98,383	279,524	838,053	(558,529)	93,598	0	948,854
2024	948,854	11,253,590	8.4%	(10,304,736)	1,187,212	16.00%	189,954	103,169	293,123	856,624	(563,501)	55,036	0	440,389
2025	440,389	11,558,848	3.8%	(11,118,460)	1,245,623	16.00%	199,300	108,245	307,544	879,275	(571,731)	12,748	0	0
2026	0	11,927,076	0.0%	(11,927,076)	1,306,908	16.00%	209,105	113,570	322,675	903,422	(580,747)	0	0	0
2027	0	12,329,651	0.0%	(12,329,651)	1,371,207	16.00%	219,393	119,158	338,551	928,486	(589,935)	0	0	0
2028	0	12,750,275	0.0%	(12,750,275)	1,438,671	16.00%	230,187	125,020	355,208	953,088	(597,880)	0	0	0

Charts 1, 2, 3 and 4 reflect the analysis of the long-term past service cost distribution over current tiers and new tiers. They show the total number of employees, projected salaries, and corresponding past service cost payments. With the adoption of a new tier the past service cost is still distributed over total wages. This is independent of whether employees enter under the new tier or current tier structure.

HCS SB 141(FIN) creates a new defined contribution retirement tier to which no further past service cost will accrue. This saves the system from additional liability that could be created from adding new employees to current defined benefit tiers. In this way, HCS SB 141(FIN) limits the potential for accruing additional unfunded liability to the system.

Under HCS SB 141(FIN), the death and disability benefits to members remains unchanged from current status.

Health Care Costs

The composite health care medical plan coverage is actuarially computed at 2.5% of salary. There is language in the bill for an annual review of this figure to ensure that it is sufficient.

The analysis on pages 5 – 11 show the actuarial computed cost of providing medical benefits to members 60 month pre-Medicare eligible.

The HRA cost to the system is independent of actuarial analysis because it is a defined contribution account.

State of Alaska Public Employees' Retirement System
 Projections Based on July 1, 2003 Valuation
 Population Growth 1 Percent

Valuation Year	Fiscal Year	Annual Payment To Past Service Cost (000's)*					Present Value of Past Service Cost Payments (000's)**				
		Tier 1	Tier 2	Tier 3	Tier 4	Total	Tier 1	Tier 2	Tier 3	Tier 4	Total
						9,025,483	328,745	385,141	500,233	1,660,287	2,874,406
2003	2006	-	-	-	-	-	-	-	-	-	-
2004	2007	-	-	-	-	-	-	-	-	-	-
2005	2008	17,062	17,356	21,383	5,223	61,024	13,451	13,683	16,857	4,117	48,108
2006	2009	37,866	38,986	46,758	23,097	146,707	27,576	28,392	34,052	16,821	106,841
2007	2010	56,481	59,269	70,098	53,097	238,945	37,998	39,874	47,159	35,721	160,752
2008	2011	60,548	64,671	76,335	78,725	280,279	37,630	40,192	47,441	48,926	174,189
2009	2012	58,021	63,061	75,074	98,932	295,088	33,311	36,205	43,101	56,799	169,416
2010	2013	55,292	61,191	73,799	120,062	310,344	29,325	32,454	39,140	63,677	164,596
2011	2014	52,367	58,990	72,422	142,669	326,448	25,657	28,902	35,483	69,900	159,942
2012	2015	49,239	56,745	70,815	166,451	343,250	22,286	25,683	32,052	75,337	155,358
2013	2016	45,896	54,206	69,101	191,666	360,869	19,190	22,664	28,892	80,138	150,884
2014	2017	42,451	51,531	67,178	218,188	379,348	16,397	19,904	25,947	84,275	146,523
2015	2018	38,891	48,854	65,141	245,867	398,753	13,877	17,432	23,243	87,728	142,280
2016	2019	35,178	45,472	63,011	275,138	418,799	11,595	14,988	20,770	90,690	138,043
2017	2020	31,388	41,997	60,830	305,494	439,709	9,557	12,788	18,522	93,022	133,889
2018	2021	27,647	38,426	58,610	337,093	461,776	7,777	10,809	16,486	94,821	129,893
2019	2022	23,904	35,013	55,973	369,989	484,879	6,212	9,098	14,545	96,142	125,997
2020	2023	20,393	32,052	52,542	404,164	509,151	4,895	7,694	12,613	97,019	122,221
2021	2024	17,032	29,047	48,970	439,645	534,694	3,777	6,441	10,859	97,493	118,570
2022	2025	13,998	26,096	45,306	476,267	561,667	2,867	5,346	9,281	97,565	115,059
2023	2026	11,355	23,215	41,724	513,787	590,081	2,149	4,393	7,896	97,229	111,667
2024	2027	8,953	20,489	38,132	552,345	619,919	1,565	3,582	6,666	96,560	108,373
2025	2028	6,887	17,821	34,402	589,722	648,832	1,112	2,878	5,556	95,237	104,783
2026	2029	2,192	6,473	13,174	264,403	286,242	327	966	1,965	39,445	42,703
2027	2030	1,247	4,334	9,420	220,582	235,583	172	597	1,298	30,400	32,467
2028	2031	331	1,379	3,215	88,171	93,096	42	176	409	11,225	11,852
Total		714,619	896,674	1,233,413	6,180,777	9,025,483					

* Expected employer contributions paid during fiscal year

** Expected employer contributions during fiscal year, discounted to June 30, 2003 at 8.25%

Comparison of the States Normal Retirement by Age/Service

A = Any				Rule: Age+Service = Number				
State	Teachers				Other*			
Georgia	60/10		A/30		65/10		A/30	
Indiana	65/10	60/15	55/30		65/10	60/15		Rule 85
Massachusetts	65/10		A/20		65/10		A/20	
Colorado					65/5	50/30		Rule 80
Idaho					65/5	60/5		
Missouri	60/5		A/30	Rule 80	65/5	60/15		Rule 80
Nebraska	65/5		A/35	Rule 85	65/5			
Nevada					65/5	60/10	A/30	
New Mexico	65/5	60/15	A/25		65/5	60/20	A/25	
North Carolina					65/5	60/25	A/30	
South Carolina					65/5		A/28	
Virginia					65/5	50/30		
Washington	65/A				65/5			
Utah					65/4		A/30	
North Dakota	65/A			Rule 85	65/3			Rule 85
South Dakota					65/3			Rule 85
Maryland	65/2	62/5	A/30		65/2	62/5	A/30	
Minnesota	65/3	62/30			65/1			
Arizona					65/A	62/10		Rule 80
Iowa					65/A	62/20		Rule 88
Kansas					65/A	62/10		Rule 85
Kentucky	55/5		60/27		65/A		A/27	
Montana	60/5		A/25		65/A	60/5	A/30	
Vermont	62/A		A/30		65/A		A/30	
Wisconsin					65/A			
Hawaii					62/10	55/30		
Maine					62/10	62/5	60/5	
Oklahoma	62/5			Rule 90	62/8			Rule 90
Florida					62/6		A/30	
Delaware					62/5	60/15	A/30	
New York	62/5	55/30			62/5	55/30		
Alabama	60/10		A/25		60/10		A/25	
Louisiana	65/20	55/25	A/30		60/10	55/25	A/30	
Michigan					60/10		55/30	
New Jersey	60/10		A/25		60/10			
Rhode Island					60/10		A/28	
Illinois	62/5	60/10	55/35		60/8			Rule 85
Alaska	60/8		A/20		60/5		A/30	
California	55/5	50/30			60/5	50/5	55/5	
Ohio	60/5	55/25	A/30		60/5	55/25	A/30	
Oregon					60/5			
Tennessee					60/5		A/30	
Texas	65/5			Rule 80	60/5			Rule 80
West Virginia	60/5	55/30	A/35		60/5			Rule 80
Mississippi					60/4		A/25	
Wyoming					60/4			Rule 85
Pennsylvania	62/1	60/30	A/35		60/3		A/35	
New Hampshire					60/A			
Connecticut	60/20		A/35		55/10		A/25	
Arkansas	60/5		A/28					

* Other may include teachers and public safety personnel in some states

CSSB 141(FIN) Sectional Analysis

Defined Contribution (DC) Plan Elements

◆ Required Contributions

- Employee: 8.0% of compensation, deducted pre-tax by employer.
14.25.340(a) (pg 15), 39.35.730(a) (pg 81).
- Employer: 4.5% of employee compensation.
14.25.350(a) (pg 16), 39.35.750(a) (pg 82)
- Total individual account contributions: 12.5%.

◆ Optional Contributions

- A member may elect to contribute additional earnings not to exceed the limits established by the Internal Revenue Code.
14.25.340(b) (pg 15), 39.35.730(b) (pg 81)

◆ Rollovers 14.25.360 (pg 16), 39.35.760 (pg 82)

- Employees can take their individual account with them when they leave employment.
- Employees can "roll" in other qualified funds when they are hired.

◆ Vesting 14.25.390 (pg 18), 39.35.790 (pg 84)

- All members of the DC plan are immediately vested in their own contributions and related earnings.
- Members are gradually vested in the employer contributions and related earnings on the following schedule:
 - ⇒ 25% after two years;
 - ⇒ 50% after three years;
 - ⇒ 75% after four years;
 - ⇒ 100% after five years.

◆ Investment of Accounts 14.25.400 (pg 18), 39.35.800 (pg 84)

- The Alaska Retirement Management Board will provide a range of investment options.
- Participants direct the investment of their funds.

◆ Distribution of Accounts

14.25.410(pg 19) -- 14.25.440 (pg 22), 39.35.810 (pg 85) -- 39.35.840 (pg 87)

- Employee may elect a distribution of funds upon termination of employment, after 60 days.
- Subject to IRC regulations.
- May receive funds prior to 60 days for financial hardship.

CSSB 14(FIN) Sectional Analysis

Medical Program Elements

- ◆ **Required Contribution by Employer** 14.25.350(b) (pg 16), 39.35.750(b) (pg 82)
 - 1.75% of employee compensation.
 - Contribution is made to group health and life insurance trust fund to be used for employer share of retiree's monthly medical premiums.

- ◆ **Eligibility** 14.25.470 (pg 26), 39.35.870 (pg 92)
 - A member is eligible to elect medical benefits if the member:
 - ⇒ is 65 years of age and has at least 10 years of service; or
 - ⇒ has 25 years of service as a peace officer / firefighter; or
 - ⇒ has 30 years of service for all others.
 - A member's surviving spouse is eligible for medical benefits if the member was eligible to elect medical benefits at the time of the member's death.

- ◆ **Benefits** 14.25.480 (pg 26), 39.35.880 (pg 92)
 - Medical benefits include *access* to major medical insurance and the health reimbursement arrangement (HRA).
 - *Access* means that an eligible person may not be denied insurance coverage except for failure to pay the required premium.
 - An eligible person may participate in the medical insurance, the HRA, or both.
 - An irrevocable decision to elect major medical insurance must be made by age 70 ½.

- ◆ **Major Medical Insurance** Sec. 14.25.480 (pg 26), Sec. 39.35.880 (pg 92)
 - Insurance coverage for an eligible member includes the member's spouse and the member's dependent children.
 - Insurance coverage for a surviving spouse includes the member's dependent children if they are dependent on the surviving spouse.
 - Retirees who meet the required years of service, but who are less than Medicare age eligible (presently age 65), must pay the full premium to receive coverage.
 - Retirees who are Medicare age eligible will pay only a portion of monthly medical premiums depending on years of service:
 - + 10-14 years = 30%
 - + 15-19 years = 25 %
 - + 20-24 years = 20%
 - + 25-29 years = 15%
 - + 30+ years = 10%
 - Only one premium per retiree and family.
 - Different premiums developed for single retirees and retirees with spouse and/or children.

CSSB 141(FIN) Sectional Analysis

- ◆ **Health Reimbursement Arrangement (HRA)** 39.30.300 (pg 57)
 - **Employer Fund**
 - ⇒ The HRA Trust is an employer owned fund. 39.30.350 (pg 58)
 - ⇒ Employee contributions are not permitted.
 - ⇒ Employers may use surplus funds held in the trust to credit individual employee records with the annual contributions owed by the employer.
 - **Required Contributions** 39.30.370 (pg 58)
 - ⇒ Employer contributes an annual (and equal) dollar amount per employee to the health insurance trust fund.
 - ⇒ Amount is 2% of employer's annual average group compensation.
 - ⇒ Contribution is recorded in both an individual employee account and an employer record.
 - ⇒ Interest is posted to individual accounts annually, the rate determined by the ARMB.
 - ⇒ Contributions and interest accumulate over working lifetime of employees.
 - **Termination of Employment** 39.30.380 (pg 58)
 - ⇒ Individual accounts of record are maintained for five years if an employee terminates without retiring.
 - ⇒ Terminated employee accounts revert to the employer unless the individual returns to work within the five-year period.
 - ⇒ A person who returns to work within the five-year period is attributed the account balance recorded in their name on the date of termination.
 - **Reimbursements**
 - ⇒ Who is eligible? 39.30.390 (pg 58)
 - + Persons who meet the eligibility requirements for medical benefits.
 - + Dependent children are eligible if both retiree and spouse die.
 - ⇒ Reimbursements made for qualified medical expenses under IRC 213(d), including medical premium payments. 39.30.400 (pg 58)
 - ⇒ Total reimbursements are limited to an individual's recorded account.
 - ⇒ No set limits other than exhaustion of account balance.

CSSB 141(FIN) Sectional Analysis

Other Plan Elements

- ◆ **Option to Convert from DB to DC Plan** 14.25.540 (pg 30), 39.35.940 (pg 96)
 - Unvested, active members of PERS and TRS are eligible to convert to DC plan.
 - Employer must first make choice to offer this option to all their employees.
 - Participation in DC plan is in lieu of the DB plan; all rights to DB plan are forfeit.
 - A member's individual account balance will be rolled into a new account under the DC plan.
 - A member's employer shall make a 100% matching contribution with new funds (i.e., cannot transfer employer portion from the DB trust fund).
 - A member's years of service under the DB plan will be counted toward the years of service required for medical benefits eligibility.

- ◆ **Participating Employers**
 - Mechanism is included for political subdivisions and public organizations that do not currently participate in PERS to join the DC plan in the future.
39.35.950-39.35.955 (pg 98)
 - Includes specific employers already participating in PERS and TRS to allow their future employees to participate in the DC Plan (DB plan closes on July 1, 2005).
14.25.560-14.25.580 (pg 32-33), 39.35.965-39.35.970 (pg 99)
 - ⇒ Legislators who have been teachers
 - ⇒ National Education Association employees
 - ⇒ Special Education Service Agency employees
 - ⇒ Army and Air National Guard employees
 - ⇒ North Pacific Fishery Management Council employees

Changes to Existing Retirement System

- ◆ **Employee and Employer Contributions to the Defined Benefit Plans**
Sec. 8 (pg 7), Sec. 88 (pg 68-69)
 - The employee contribution rate is changed to the greater of:
 - ⇒ the amount set in statute prior to enactment of this bill; or
 - ⇒ one-half of the normal cost rate as determined by the ARM Board.
 - The employer contribution rate is changed so that it may not be less than the difference between the employee contribution and the normal cost rate that is set by the ARM Board. Sec. 10 (pg 8), Sec. 96 (pg 72)

- ◆ **Ad-hoc Post Retirement Pension Adjustments** Sec. 17-18 (pg 11), Sec. 513 (pg 77)
 - Defines "financial condition of the retirement fund" for the ad-hoc post retirement pension adjustment as a 110% ratio of assets to liabilities (applicable only to Tier I retirees). (See editor's notes under AS 14.25.143 and AS 39.35.483)

CSSB 141(FIN) Sectional Analysis

- ◆ **University Optional Retirement Program (ORP)**
Sec. 35 (pg 38) through Sec. 51 (pg 42)
 - Changed AS 14.40.661-14.40.799 giving the Board of Regents flexibility to design both optional and mandatory retirement programs for future University employees.
 - Specifies the University's retirement programs are not subject to collective bargaining.
 - Provides one-time option for current employees who chose to participate in PERS and TRS to transfer into the existing ORP.

- ◆ **Consolidation of Boards**
 - Eliminates:
 - ⇒ Public Employees' Retirement System Board
 - ⇒ Teachers' Retirement System Board.
 - ⇒ Alaska State Pension Investment Board.
 - Creates new Alaska Retirement Management Board (ARM Board) Sec. 59 (pg 46)
 - ⇒ 9 trustees appointed by the Governor
 - + Commissioner of Administration
 - + Commissioner of Revenue
 - + 3 Alaska residents who do not participate in the retirement systems
 - + 1 finance officer of a political subdivision
 - + 1 finance officer of a school district
 - + 1 PERS member (active or retired)
 - + 1 TRS member (active or retired)
 - ⇒ All trustees must have recognized competence (working or teaching) in one or more of the fields of investment management, finance, banking, economics, accounting, pension administration, or actuarial analysis.
 - ⇒ Terms
 - + Staggered three years
 - + Limited to three consecutive terms with a required one-year break.

- ◆ **Powers and Duties of ARM Board** Sec. 61 (pg 47-50)
 - Manage the assets and set the investment objectives of the defined benefit trust fund to meet pension liabilities.
 - Annual actuarial valuation of system plans, coordinating with the retirement system administrator.
 - Analysis of actuarial assumptions experience, including a second opinion:
 - ⇒ Health costs assumptions annually.
 - ⇒ All other assumptions not less than every four years.
 - Audit of actuary not less than every four years.

CSSB 141(FIN) Sectional Analysis

- Rate setting:
 - ⇒ Employer contribution rates, including "normal cost" and "past service cost".
 - ⇒ Employee contribution rates if one-half of the "normal cost" is higher than the current rates set in statute.
 - ⇒ Interest rates credited to individual employee accounts.
 - ⇒ Interest rates credited to employee HRA account records.
- Provide a range of investment options for all employee-directed accounts.
- ◆ Other Duties of the former PERS and TRS Boards Transferred
 - To the Commissioner of Administration:
 - ⇒ Adoption of regulations governing the retirement systems.
14.25.003 (pg 2), 14.25.005 (pg 4), 39.35.003 (pg 61), 39.35.005 (pg 63)
 - ⇒ Requests for a waiver of any adjustment made to the retirement system accounts due to a change or error in contributions or benefit computations.
Sec. 21-23 (pg 12)
 - To the Office of Administrative Hearings:
 - ⇒ Adjudication of appeals related to decisions of the retirement system administrator. 14.25.006 (pg 5), 39.35.006 (pg 64), Sec. 129 (pg 105)
 - ⇒ Adjudication of appeals related to the denial of a waiver for repayment of overpayments. Sec. 24-25 (pg 13)
- ◆ Conditional Service Retirement Benefits Sec. 111 (pg 76)
 - Changes the credited service requirement to 120 days for legislative employees under AS 39.35.385(f).
- ◆ Repeal
 - Refunded prior members Sec. 131 (pg 105) <AS 14.25.062 and AS 39.35.350>
 - ⇒ Repealed effective June 30, 2010.
 - ⇒ The intent of the repeal is to relieve the "off books" liability of hundreds of millions of dollars represented by more than 77,000 people who have refunded out of the State's retirement system but who could return to work and be restored to the tier status they held prior to termination by repaying the amount refunded plus interest.
 - ⇒ In medical premiums alone, this amount stands at greater than \$107 million for one year in today's dollars.
- ◆ Fiscal Note
 - Appropriates \$69.5 million directly to the retirement trust funds on behalf of all PERS participating employers (includes small amount of TRS). This amount represents the 5% increase in PERS employer costs from FY2005 to FY2006.
 - PERS and TRS for school districts (\$38.1 million) is rolled into the BSA at \$4,919.



Official Business

Alaska State Senate

Senate Finance Committee

Mail Stop 3100
State Capitol
Juneau, Alaska 99801-1182

SENATE BILL 141 SPONSOR STATEMENT

For almost two years, the legislature has heard of the looming crisis in the State's retirement systems. The systems are underfunded by \$5 billion. Employer contribution rates have been raised by five percent per year for the past two years, and greater increases are required unless something is done soon. In the first sixty days of this legislative session, members of the Senate have worked diligently to understand and evaluate the problems in the retirement system in order to propose a solution to those problems. Senate Bill 141 offers a two-prong approach: (1) create a defined contribution retirement plan for the long-term solution to employer cost management; and (2) implement management changes to the existing system so we can begin to address the \$5 billion deficit situation there.

In 2003, the Governor appointed a subcommittee of the PERS and TRS Boards that was charged with researching and evaluating the concept of a new retirement tier. This subcommittee worked throughout 2004, performing research and analyses of information gathered from employers statewide and studying nationwide trends in both the public and private sectors. In November of 2004, the subcommittee presented two tier alternatives to the PERS and TRS Boards suggesting that a recommendation be forwarded to the Governor and the Legislature.

Unfortunately, the Boards opted not to forward a recommendation. However, the work done by the subcommittee did not go in vain. The Senate leadership used the subcommittee's work, as well as its own research and analysis, to draft this legislation. SB 141 offers a holistic solution to our problem and allows Alaska to join other states in retirement system reform.

The true long-term solution, 30 to 50 years from now, will be accomplished by the change in the retirement plan for future government employees from the traditional pension plan to a defined contribution (DC) plan, commonly known in the private sector as a 401(k). Such a plan has three clear advantages: (1) cost predictability; (2) portability between employers; and (3) clarity. Hundreds of thousands of private sector employers and other state retirement systems offer their employees this type of plan. SB 141 combines the DC plan features with the tradition of offering insurability for all retirees and an IRS allowable vehicle for tax free savings accounts used to pay for out-of-pocket medical expenses during retirement years. As Alaska's older tier employees retire out of the defined benefits system, and the new DC plan employees are brought in to replace them, the existing structure will become more stable.

Senate Bill 141
Sponsor Statement
Page Two

In the short-term, SB 141 implements the management changes needed to effectively address the \$5 billion deficit. It creates a single board to replace the separate public employees' and teachers' retirement system boards and the pension investment board. The new board is the Alaska Retirement Management (ARM) Board. The Arm Board will be more experienced with financial and pension matters than the current boards require and will be charged with greater emphasis on its fiduciary role to balance the retirement system assets to system liabilities.

SB 141 seems voluminous. The concepts, however, are simple and few. Please take the time to read the "Senate Finance Committee White Paper: SB 141". This document is a succinct compilation of much of the research undertaken to date. It describes more fully the features contained in SB 141 and provides the understanding of the framework for the discussions to come.

The Senate Finance Committee is committed to addressing this problem this legislative session.



Alaska State Legislature

Senate Majority Web: www.akrepublicans.org

Sponsor: FINANCE
Current Version: CSSB 141 (FIN)
Contact: Miles Baker, 465-3873

Fact Sheet for: Senate Bill 141

Short Title: PUBLIC EMPLOYEE/TEACHER RETIREMENT

Summary:

- Establishes a Defined Contribution (DC) Plan, Retiree Medical Benefit and Health Reimbursement Arrangement for new employees.
- Increases payroll contributions for existing employees by 0.5 percent annually until employers and employees share normal costs 50/50.
- Streamlines retirement system management by replacing the PERS, TRS and ASPIB boards with a newly created 9-member Alaska Retirement Management Board (ARMB) consisting of the commissioners of administration and revenue, 7 governor-appointed trustees with credentials or recognized competence in finance or accounting (3 non-beneficiary public members, a finance officer of PERS and one of TRS, one PERS member, one TRS member.)
- Strengthens the ARMB's fiduciary role to balance system assets and liabilities; provides more employer representation; and makes the ARMB responsible for setting employer contribution rates and adopting actuarial assumptions.
- Transfers the quasi-judicial responsibility for hearing appeals and waivers to the Office of Administrative Hearings.

Benefits:

- Strengthens management and fiduciary oversight of the state's retirement systems.
- Constrains growth of the unfunded liability.
- Establishes a portable defined contribution plan for new employees that, over time, reduces the state's dependence on riskier and less predictable defined benefit plans.

Background:

- Alaska's public retirement system assets have not kept up with obligations because of factors including rising health care costs, shifting demographic trends, market performance, and underestimation of system liabilities. The result is \$5.7 billion in underfunding. Last year, the Administration formed a work group to come up with solutions. This fall, after much research and analysis, the work group presented two alternatives to the PERS and TRS boards. The boards declined to forward a solution to the Legislature. Based on the recommendations of that work group, the Senate Finance Committee conducted its own analysis and is introducing the Retirement Security Act. Unlike a defined benefit plan in which employees are guaranteed a pension benefit regardless of cost, a DC plan provides employees with a retirement amount based on actual account contributions and investment earnings.

Testimony of Jerry Patterson
SB 141
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789-7328

My name is Jerry Patterson and I represent NEA Alaska Retired. I am also a former TRS board member. I would like to thank the chair and this committee for the opportunity to speak on SB 141.

What we are essentially doing is closing the defined benefit plan. When I was on the TRS board, I attended trustee training sessions and the information on closed funds tended to have two common characteristics. One, they were small and secondly, they were one hundred percent funded. We are neither small nor one hundred percent funded. I know of no precedent in the public sector for a fund of our size and with an un-funded liability being closed and thus of any model for us to follow. Basically, we are flying by the seat of our pants.

Normally, we would have a twenty-five year rolling amortization time period. But because we are closing the fund to new entrants and have a large un-funded liability, we need to front load the fund in a hurry. SB 141 requires that active member's retirement be fully funded and we need to get that money before they retire. How much money we need at this time is unknown because we apparently do not have accurate actuarial data. The other reason we need to frontload the plan is if we don't, the plan will run out of money and it will require year-by-year appropriations in the future to pay the benefits of the last group of retirees.

Another twist in SB 141 is that it requires that only the actives be fully funded. There is a large un-funded liability associated with those who are already retired that is not being addressed. What will happen is that money will go into the retirement fund with the idea that you are fully funding the actives when you are really not doing so. Current retirees will be taking out of the fund not only what was contributed for them but also the amount to cover their un-funded liability. Again, those left in the system at the end will need to be paid by a direct appropriation.

What kind of liability could a future legislature have? There are some 38,000 public employees under the age of 55. If they were to all to retire and live to 2035 they would collectively receive a 996 million dollar benefit in today's dollars. Mercer produced charts that showed that at a 16% contribution rate the TRS fund would run out of money in 2026. At an 11.77% contribution rate, PERS would be broke around 2034. Thus it is imperative that will have a solid understanding of how much money we need to put in now.

What is our funding source? It is the aggregate of all wages times the contribution rate. That funding source is going to shrink rapidly. First of all there are no new employees

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4/23/05

entering the system. Secondly, SB141 allows non-vested members to move to the defined contribution plan taking with them their own accumulated account plus an equal amount from the employer's previous contributions. And there will be of course a steady stream of retirements. With a shrinking salary base and smaller amounts of money coming into the fund, every downturn in the stock market, every spike in medical costs, and every new mortality table will have a profound effect on the fund and liabilities going forward.

My final comment is about the retirement funds themselves. At 12 billion dollars, they generate on average a billion a year in income. Do we really want to give up a billion dollars a year in income?

In closing, I would say that it would be prudent to learn as much as possible about the consequences of closing a retirement fund. I think it would be prudent to get a handle on the costs that are associated with closing a fund. And I think it would be prudent to get the best and latest actuarial numbers possible.

Thank you

Attachment 5/1/05

Police & Fire

As of June 30, 2005

Death Benefit

Number	2727
Average Age	40.72
Average Credited Service	9.7
Average Annual Earnings	\$ 58,945
Number Vested	1739
Percent Vested	63.8%

	Retiree	Survivor	Disabilitant
Average Age at Commencement	51.72	56.54	49.86
Average Monthly Benefit	\$ 2,835	\$ 1,265	\$ 1,945
Average Annual Benefit	\$ 34,020	\$ 15,180	\$ 23,340

Est Current Occ Death Benefit (50% Salary) or; \$ 29,473
 Est Current Occ Death Benefit (75% Retirement) \$ 25,515

Survivor Age at Member's Death	Life Expectancy Female	Estimated Benefit		
		6.0%	7.0%	8.0%
25	55.4	\$31,238	\$35,844	\$40,571
26	54.5	\$31,308	\$35,899	\$40,612
27	53.5	\$31,390	\$35,963	\$40,662
28	52.5	\$31,477	\$36,033	\$40,716
29	51.6	\$31,561	\$36,100	\$40,769
30	50.6	\$31,660	\$36,179	\$40,831
31	49.6	\$31,765	\$36,265	\$40,899
32	48.7	\$31,866	\$36,347	\$40,965
33	47.7	\$31,985	\$36,446	\$41,045
34	46.7	\$32,113	\$36,551	\$41,131
35	45.8	\$32,235	\$36,653	\$41,214
36	44.8	\$32,380	\$36,775	\$41,314
37	43.9	\$32,519	\$36,892	\$41,412
38	42.9	\$32,684	\$37,032	\$41,529
39	42.0	\$32,842	\$37,168	\$41,643
40	41.0	\$33,029	\$37,330	\$41,781
41	40.1	\$33,210	\$37,486	\$41,915
42	39.1	\$33,425	\$37,674	\$42,076
43	38.2	\$33,631	\$37,855	\$42,233
44	37.3	\$33,852	\$38,050	\$42,403
45	36.3	\$34,115	\$38,284	\$42,607
46	35.4	\$34,369	\$38,511	\$42,807
47	34.5	\$34,640	\$38,755	\$43,024
48	33.6	\$34,931	\$39,018	\$43,259
49	32.7	\$35,243	\$39,301	\$43,513
50	31.8	\$35,578	\$39,606	\$43,789
51	30.9	\$35,937	\$39,936	\$44,088
52	30.0	\$36,324	\$40,293	\$44,414
53	29.1	\$36,741	\$40,679	\$44,768
54	28.2	\$37,191	\$41,098	\$45,154
55	27.4	\$37,622	\$41,500	\$45,527
56	26.5	\$38,144	\$41,990	\$45,982
57	25.6	\$38,709	\$42,523	\$46,481

Prepared : 5/1/2005

State of Alaska

Division of Retirement & Benefits

Normal Cost Rate and Actuarial Computed Rate from FY 1983 through FY 2006

Valuation report date June 30	Fiscal year of rate	Normal Cost rate PERS	Actuarial Computed Rate PERS	Normal Cost rate TRS	Actuarial Computed Rate TRS
1980	1983	11.46%	13.78%	11.95%	16.84%
1981	1984	12.03%	13.68%	13.51%	17.42%
1982	1985	11.36%	13.62%	13.64%	17.96%
1983	1986	11.82%	13.59%	13.13%	17.36%
1984	1987	12.31%	13.84%	13.91%	13.28%
1985	1988	11.13%	9.55%	11.62%	13.28%
1986	1989	10.20%	9.38%	9.36%	11.16%
1987	1990	9.23%	9.30%	9.14%	8.19%
1988	1991	10.37%	12.00%	11.86%	12.27%
1989	1992	12.00%	14.20%	13.26%	15.16%
1990	1993	12.83%	13.58%	14.07%	19.65%
1991	1994	10.18%	13.72%	9.05%	15.59%
1992	1995	10.90%	13.70%	8.57%	13.36%
1993	1996	11.29%	12.82%	9.06%	12.48%
1994	1997	10.36%	12.14%	9.70%	14.96%
1995	1998	10.61%	11.90%	10.10%	14.94%
1996	1999	9.85%	7.74%	8.97%	10.52%
1997	2000	9.89%	7.36%	9.21%	13.00%
1998	2001	8.67%	7.03%	8.99%	10.55%
1999	2002	8.07%	6.56%	8.88%	7.09%
2000	2003	10.07%	6.12%	9.40%	8.29%
2001	2004	9.53%	6.77%	10.36%	14.44%
2002	2005	13.31%	24.91%	14.76%	35.57%
2003	2006	13.24%	25.63%	14.28%	38.85%

Normal Cost Rate: present value of benefits, which are expected to be credited with respect to service during the year beginning on the valuation date.

Actuarial Computed Rate: after comparing plan assets and liabilities, an actuarial rate is computed that would fully fund the retirement systems over 25 years. There are two components: the normal cost rate and the past service rate necessary to pay any unfunded liability. Both rates account for differences between actual experience versus anticipated results, changes in actuarial assumptions and / or methods, changes in statutory provisions, and the difference between the rate actually adopted by the Boards for a particular year versus the computed rate.

5 year average PERS 10.84%
 5 year average TRS 11.54%
 24 year average PERS 10.86%
 24 year average TRS 11.11%

TESTIMONY ON CS SB 141 [amHSA]

Sam Trivette

President

Retired Public Employees of Alaska

- I'm retired from the Alaska Department of Corrections after 32 yrs. of service to Alaskans. 19 years of that time I served as the Director of the Alaska Parole Board, and in that capacity, worked closely with the Legislature in a complete rewrite of the Parole Administration Act and in rewriting other legislation and developing regulations. So I understand the enormous responsibility of dealing with the 100+ page bill.
- As the President of the Retired Public Employees of Alaska, I have attended many of the PERS/TRS Board & SPIB meetings in recent years. I have watched them work and I've participated extensively in their meetings.
- I have attended or watched almost all of the Senate Finance and House State Affairs Committee hearings on the retiree bills since they were introduced. I've spent countless hours discussing issues surrounding retiree legislation with numerous people. Everyone I've talked to thinks the system needs change and RPEA agrees. But citizens are asking that the problem areas be clearly & accurately identified, and responsible viable options be studied & discussed before we try to design fixes.
- Here are some of my observations.
 1. The State's contracted actuary made significant errors in judgment and in calculations, that resulted in seriously understating the current and future liabilities of the retiree systems. [A few—mortality tables, salary schedules, medical benefits, statutory change impacts]
 2. Because of the significant errors beginning in the mid-90's, the actuary's advice to the PERS/TRS Board resulted in the adoption of artificially low rates, at a time when full funding would have resulted in a much lower shortfall today.
 3. Many unfunded "benefit enhancements" created by the legislature or employers over the years, have resulted in significant unintended liabilities for the retirement system. These "unfunded enhancements" refer to any law, regulation or practice that allows an employee to capture a benefit that is not fully actuarially funded. Many are legislative decisions, [allowing local governments & districts to provide retirement benefits to elected officials with minimal system contributions; allowing legislative staff to "vest" in the retirement system with full benefits with minimal contributions. Some others are the result of local government decisions, such as allowing senior employees significant overtime pay during the 3 high

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years, or paying employee bonuses to encourage retirement, significantly increasing the employee's retirement pay.

4. One example in a recent hearing is there are about 20 local elected officials, in just one location, that are making minimal payments into the retirement system, but these officials will be eligible for full retirement benefits. Multiply this impact around the State.

I firmly believe that benefits that are not fully funded, must not be allowed.

The logical question is if these laws and rules were changed to disallow the unfunded benefits, how much money would be saved? Would there even be A NEED to consider the drastic move to a defined contribution system? If you review the minutes of the PERS & TRS meetings last fall when they did not recommend a new Defined Contribution plan, they believed there were many other options that they were not allowed to put forth & study, that could put the retirement system on sound footing. Some options include increasing the employee contribution to the fund, reducing the employer Supplemental Benefits System contributions, raising the number of years of service before vesting, and of course adjusting the health benefits package. These & other options need to be fully studied & carefully considered BEFORE adopting a new Tier.

You've been told there has been finger pointing between the retiree Boards in recent years. That simply is not true. The three Boards meet jointly at least several times each year & work very cooperatively. In fact, many of the decisions by the PERS/TRS Boards that deal with the "cost savings" or liability side of the equation, have positively affected the fund status.

- Most of you have probably heard about the education program on generic drugs that is now saving \$5-6 Million a year by encouraging retirees to use generic vs. brand name medications, and also having prescriptions filled by mail order, resulting in further savings to the State.
- You probably haven't heard about the savings to the State in the Term Life Insurance Program. Retirees and the State had been overpaying premiums & fees to the firm administering the retiree self funded program for years. This problem was identified after probing of the PERS/TRS Board members, and the fees to the State & the retiree premiums significantly reduced.
- PERS/TRS retirees for years were paying more than necessary into the self funded retiree Dental/Audio/Visual Plan. By pushing for accurate expense information on the plan, the Boards recommended the State increase the benefits. The plan continued to make these increased reimbursements for 3 years before the premiums had to be increased. These efforts bought lots of good will from the retirees for the system's attempts to hold down retiree expenses.
- RPEA members continue to work diligently with the PERS/TRS Boards to identify responsible cost savings. Their next meeting is Monday, April 25. We will be discussing options that could save the retirement system millions more, if the Board recommendations are followed. Come see your Boards do their work.

Another important decision was made by the PERS/TRS Boards several years ago. After receiving the disturbing news in the early 2000's the funds that had been over 100% funded were now projected to be less than 80% funded, the Boards asked for a second opinion from another actuary. This second actuary report pointed out some significant problems with previous actuary assumptions, and these problems have been corrected.

Our belief is that some significant solutions to cost cutting still have not been identified. Most employees understand the current funding gap and would be more than willing to offer information and suggest potential solutions to this problem. Bring them to the table and ask their help.

Everyone involved with the system has identified health care costs as one of the primary culprits in the funding shortfall. Skyrocketing health care costs are a national crisis and are behind the massive increases in Medicare, Medicaid, & Worker Compensation costs as well. There is nothing the employees, the employers, the retirees, or any of the 3 Boards have done to cause this problem. Until ALL OF US put pressure on Congress and the health care industry to make changes, we will be stuck with relentless pressure on the retirement funds.

We agree that the employers do need relief this year and the next year in meeting their financial obligations to the retirement funds. You don't need to pass this bill to provide that funding. This bill poses significant Public Policy questions. Every Alaska citizen will be affected, not just public employees. You need to get the public buy-in for such major changes. That will be impossible at this late date in the session. Listen to our friends @ AARP & to others who urge you not to pass SB 141 this session. You need to take the time to look at reasonable, viable options. The final report by the Michigan actuary firm should provide you additional information on your next steps for a solution. Invite all the stakeholders to the table during the interim to come up with a plan.

We are here today because we want a viable system that will meet the needs of our kids, or grandkids, and all future Alaskans. Thank you again for the opportunity to testify.



Municipality of Anchorage

P.O. Box 196650 • Anchorage, Alaska 99519-0650 • Telephone: (907) 343-4425 • Fax: (907) 343-4450 <http://www.muni.org>

Mayor Mark Begich

Department of Employee Relations

November 19, 2004

Public Employees' Retirement Board
PO Box 110203
Juneau, AK 99811-0203

Members of the Public Employees Retirement System Board:

The Municipality of Anchorage has followed the TIER IV development over the past year with much anticipation of and interest in the outcome. The Municipality is the second largest PERS employer, second only to the State of Alaska, and the decision made by the Board will potentially have significant impact on the Municipality of Anchorage and its future employees. As the TIER IV design concept approaches finalization, the Municipality of Anchorage would like to offer an opinion on the two options before the Board for consideration. The Municipality of Anchorage strongly urges the Board adopt the "Second Alternative" or Defined Contribution Alternative as the final TIER IV design. This design holds the least liability for employers going forward while still offering a competitive retirement product for our future employees.

The Municipality of Anchorage thanks the TIER Committee and the Board for its diligent efforts on behalf of the Municipality and its PERS employees.

Sincerely,


David K. F. Otto
Director, Employee Relations

Tier Design Alternatives

- Alternative 1 - DB/DC Hybrid Plan
- Alternative 2 - Pure DC Plan - eliminates Employer Risk

Community, Security, Prosperity

Hire Date	7/1/2005
Age at hire	25
Age at retirement	55
Subsidy Start Age	60
Service	30
Salary	\$42,245
Wage Inflation	3.0%
HRA contribution rate	1.0%
HRA accumulation rate	8.25%
Subsidy Base (7/1/2003)	\$5,982
Subsidy Index	5%
Subsidy percent	90%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes only use of HRA funds is to pay for Net (after subsidy if applicable) retiree premium contributions
 Assumes 30 years to normal retirement
 Assumes demographic composition of pre-Medicare retiree group does not change from current

All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

HRA Fund at retirement	\$69,975
Total retiree contribution	\$336,978
Net retiree cost (w/HRA Int)	\$262,959

Gross Retiree Premium Cost	Total State Subsidy	Total HRA Spend
\$537,717	\$200,739	\$74,019

Duration	Age	Salary	Contribution	End of Year HRA Balance	Pro MC Composite Premium	Pro MC Composite Trend	Retiree Med/Rx Premium	Subsidy Base	Retiree Subsidy	Retiree Contribution	Beg of Year HRA Balance	HRA Spend
1	25	\$42,245	\$422	\$440	\$7,318	1.23	\$0	\$7,318	\$0	\$0	\$0	\$0
2	26	\$43,512	\$435	\$929	\$8,107	1.11	\$0	\$7,684	\$0	\$0	\$0	\$0
3	27	\$44,818	\$448	\$1,471	\$8,937	1.10	\$0	\$8,068	\$0	\$0	\$0	\$0
4	28	\$46,162	\$462	\$2,073	\$9,802	1.10	\$0	\$8,471	\$0	\$0	\$0	\$0
5	29	\$47,547	\$475	\$2,739	\$10,695	1.09	\$0	\$8,895	\$0	\$0	\$0	\$0
6	30	\$48,974	\$490	\$3,474	\$11,608	1.09	\$0	\$9,340	\$0	\$0	\$0	\$0
7	31	\$50,443	\$504	\$4,286	\$12,532	1.08	\$0	\$9,807	\$0	\$0	\$0	\$0
8	32	\$51,956	\$520	\$5,180	\$13,456	1.07	\$0	\$10,297	\$0	\$0	\$0	\$0
9	33	\$53,515	\$535	\$6,164	\$14,369	1.07	\$0	\$10,812	\$0	\$0	\$0	\$0
10	34	\$55,120	\$551	\$7,246	\$15,258	1.06	\$0	\$11,352	\$0	\$0	\$0	\$0
11	35	\$56,774	\$568	\$8,435	\$16,112	1.06	\$0	\$11,920	\$0	\$0	\$0	\$0
12	36	\$58,477	\$585	\$9,739	\$16,918	1.05	\$0	\$12,516	\$0	\$0	\$0	\$0
13	37	\$60,231	\$602	\$11,169	\$17,764	1.05	\$0	\$13,142	\$0	\$0	\$0	\$0
14	38	\$62,038	\$620	\$12,736	\$18,652	1.05	\$0	\$13,799	\$0	\$0	\$0	\$0
15	39	\$63,899	\$639	\$14,451	\$19,585	1.05	\$0	\$14,489	\$0	\$0	\$0	\$0
16	40	\$65,816	\$658	\$16,328	\$20,564	1.05	\$0	\$15,213	\$0	\$0	\$0	\$0
17	41	\$67,791	\$678	\$18,381	\$21,592	1.05	\$0	\$15,974	\$0	\$0	\$0	\$0
18	42	\$69,825	\$698	\$20,624	\$22,672	1.05	\$0	\$16,773	\$0	\$0	\$0	\$0
19	43	\$71,919	\$719	\$23,073	\$23,805	1.05	\$0	\$17,611	\$0	\$0	\$0	\$0
20	44	\$74,077	\$741	\$25,748	\$24,995	1.05	\$0	\$18,492	\$0	\$0	\$0	\$0
21	45	\$76,299	\$763	\$28,666	\$26,245	1.05	\$0	\$19,416	\$0	\$0	\$0	\$0
22	46	\$78,588	\$786	\$31,848	\$27,558	1.05	\$0	\$20,387	\$0	\$0	\$0	\$0
23	47	\$80,946	\$809	\$35,318	\$28,936	1.05	\$0	\$21,407	\$0	\$0	\$0	\$0
24	48	\$83,374	\$834	\$39,099	\$30,382	1.05	\$0	\$22,477	\$0	\$0	\$0	\$0
25	49	\$85,875	\$859	\$43,218	\$31,901	1.05	\$0	\$23,601	\$0	\$0	\$0	\$0
26	50	\$88,452	\$885	\$47,704	\$33,496	1.05	\$0	\$24,781	\$0	\$0	\$0	\$0
27	51	\$91,105	\$911	\$52,588	\$35,171	1.05	\$0	\$26,020	\$0	\$0	\$0	\$0
28	52	\$93,838	\$938	\$57,902	\$36,930	1.05	\$0	\$27,321	\$0	\$0	\$0	\$0
29	53	\$96,654	\$967	\$63,685	\$38,776	1.05	\$0	\$28,687	\$0	\$0	\$0	\$0
30	54	\$99,553	\$996	\$69,975	\$40,715	1.05	\$0	\$30,121	\$0	\$0	\$0	\$0
31	55	\$0	\$0	\$31,268	\$42,751	1.05	\$42,751	\$31,627	\$0	\$42,751	\$69,975	\$42,751
32	56	\$0	\$0	\$0	\$44,888	1.05	\$44,888	\$33,200	\$0	\$44,888	\$31,268	\$31,268
33	57	\$0	\$0	\$0	\$47,133	1.05	\$47,133	\$34,809	\$0	\$47,133	\$0	\$0
34	58	\$0	\$0	\$0	\$49,490	1.05	\$49,490	\$36,612	\$0	\$49,490	\$0	\$0
35	59	\$0	\$0	\$0	\$51,964	1.05	\$51,964	\$38,443	\$0	\$51,964	\$0	\$0
36	60	\$0	\$0	\$0	\$54,562	1.05	\$54,562	\$40,305	\$36,329	\$18,234	\$0	\$0
37	61	\$0	\$0	\$0	\$57,290	1.05	\$57,290	\$42,383	\$38,145	\$19,145	\$0	\$0
38	62	\$0	\$0	\$0	\$60,155	1.05	\$60,155	\$44,503	\$40,052	\$20,102	\$0	\$0
39	63	\$0	\$0	\$0	\$63,163	1.05	\$63,163	\$46,728	\$42,055	\$21,108	\$0	\$0
40	64	\$0	\$0	\$0	\$66,321	1.05	\$66,321	\$49,064	\$44,158	\$22,163	\$0	\$0

Projected Values for Health Reimbursement Accounts

1. PERS "other" early hire - 1% HRA
2. PERS "other" early hire - 2% HRA
3. PERS "other" late hire - 1% HRA
4. PERS "other" late hire - 2% HRA
5. PERS "other" with spouse late hire - 2% HRA
6. PERS police/ fire early hire - 1% HRA
7. PERS police/ fire early hire - 2% HRA
8. PERS police/ fire late hire - 1% HRA
9. PERS police/ fire late hire - 2% HRA
10. PERS police/ fire with spouse late hire - 2% HRA
11. TRS early hire - 1% HRA
12. TRS early hire - 2% HRA
13. TRS late hire - 1% HRA
14. TRS late hire - 2% HRA
15. TRS late hire with spouse - 2% HRA

State of Alaska Public Employees' Retirement System
 Projections Based on July 1, 2003 Valuation
 Population Growth 1 Percent

Valuation Year	Fiscal Year	Number of Active Members					Projected Salaries				
		Tier 1	Tier 2	Tier 3	Tier 4	Total	Tier 1	Tier 2	Tier 3	Tier 4	Total
2003	2006	8,814	9,747	15,503	-	34,064	445,612,413	444,684,916	570,485,671	-	1,460,783,000
2004	2007	8,047	8,982	13,585	3,790	34,404	467,087,982	466,115,785	597,979,304	-	1,531,183,071
2005	2008	7,405	8,317	12,108	6,919	34,749	443,170,178	450,811,828	555,400,922	135,653,981	1,585,036,909
2006	2009	6,774	7,707	10,932	9,683	35,096	424,502,518	437,058,318	524,190,528	258,937,144	1,644,688,508
2007	2010	6,186	7,130	9,982	12,150	35,448	403,437,555	423,347,289	500,700,859	379,263,597	1,706,749,300
2008	2011	5,629	6,580	9,189	14,404	35,802	382,811,771	408,881,345	482,626,935	497,736,648	1,772,056,699
2009	2012	5,102	6,053	8,483	16,522	36,160	361,864,984	393,298,549	468,217,939	617,020,112	1,840,401,584
2010	2013	4,596	5,541	7,828	18,556	36,521	340,672,881	377,023,399	454,701,421	739,749,209	1,912,146,910
2011	2014	4,116	5,060	7,221	20,490	36,887	318,726,365	359,035,502	440,790,891	868,339,057	1,986,891,815
2012	2015	3,657	4,598	6,662	22,338	37,255	296,324,286	341,498,361	426,172,270	1,001,713,372	2,065,708,289
2013	2016	3,227	4,163	6,142	24,096	37,628	273,207,199	322,670,777	411,338,155	1,140,931,235	2,148,147,366
2014	2017	2,823	3,759	5,662	25,760	38,004	250,100,955	303,593,105	395,776,219	1,285,453,959	2,234,924,238
2015	2018	2,442	3,351	5,209	27,382	38,384	227,013,934	285,172,271	380,239,911	1,435,170,115	2,327,596,231
2016	2019	2,088	2,970	4,785	28,925	38,768	203,568,141	263,142,249	364,638,155	1,592,183,766	2,423,532,311
2017	2020	1,765	2,612	4,387	30,392	39,156	180,221,422	241,135,972	349,270,550	1,754,077,565	2,524,705,509
2018	2021	1,466	2,286	3,998	31,797	39,547	157,594,474	219,036,817	334,095,610	1,921,529,873	2,632,256,774
2019	2022	1,204	2,003	3,604	33,132	39,943	135,374,479	198,287,761	316,989,771	2,095,331,248	2,745,983,259
2020	2023	971	1,739	3,229	34,403	40,342	114,803,685	180,436,391	295,789,651	2,275,266,070	2,866,295,797
2021	2024	769	1,499	2,876	35,601	40,745	95,361,469	162,631,692	274,183,515	2,461,558,447	2,993,735,123
2022	2025	602	1,281	2,551	36,719	41,153	77,984,925	145,383,837	252,406,495	2,653,379,532	3,129,154,789
2023	2026	457	1,087	2,248	37,773	41,565	62,993,027	128,788,268	211,466,581	2,850,292,445	3,273,540,321
2024	2027	342	914	1,965	38,759	41,980	49,492,319	113,259,938	210,793,089	3,053,333,799	3,426,879,145
2025	2028	251	761	1,726	39,662	42,400	38,098,152	98,589,336	190,319,061	3,262,437,964	3,589,444,513
2026	2029	176	629	1,516	40,503	42,824	28,813,450	85,087,382	173,172,799	3,475,706,069	3,762,779,700
2027	2030	121	513	1,324	41,294	43,252	20,882,176	72,578,868	157,741,958	3,693,564,973	3,944,767,975
2028	2031	82	413	1,147	42,043	43,685	14,715,638	61,276,477	142,887,499	3,918,714,657	4,137,594,271

State of Alaska Teachers' Retirement System
Projections Based on July 1, 2003 Valuation
Population Growth 1 Percent

Valuation Year	Fiscal Year	Annual Payment To Past Service Cost (000's)*				Present Value of Past Service Cost Payments (000's)**				Valuation Year	Fiscal Year
		Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total		
					6,641,180	234,981	556,468	1,292,193	2,083,642		
2003	2006	-	-	-	-	-	-	-	-	2003	2006
2004	2007	6,980	9,593	-	16,573	6,197	8,518	-	14,715	2004	2007
2005	2008	17,788	24,905	3,006	45,699	14,590	20,427	2,465	37,482	2005	2008
2006	2009	25,439	39,182	10,938	75,559	19,275	29,688	8,288	57,251	2006	2009
2007	2010	32,308	52,810	22,625	107,743	22,614	36,965	15,837	75,416	2007	2010
2008	2011	37,667	65,879	38,629	142,175	24,356	42,598	24,978	91,932	2008	2011
2009	2012	41,798	78,123	59,033	178,954	24,967	46,666	35,263	106,896	2009	2012
2010	2013	44,603	90,110	84,663	219,376	24,612	49,724	46,718	121,054	2010	2013
2011	2014	41,368	91,262	104,203	236,833	21,088	46,521	53,118	120,727	2011	2014
2012	2015	36,134	89,494	122,882	248,510	17,016	42,143	57,866	117,025	2012	2015
2013	2016	32,120	86,133	142,453	260,706	13,973	37,469	61,970	113,412	2013	2016
2014	2017	28,198	82,184	163,044	273,426	11,332	33,027	65,521	109,880	2014	2017
2015	2018	24,584	78,105	184,063	286,752	9,126	28,995	68,331	106,452	2015	2018
2016	2019	21,092	73,696	205,866	300,654	7,233	25,274	70,601	103,108	2016	2019
2017	2020	17,728	68,979	228,378	315,085	5,616	21,853	72,352	99,821	2017	2020
2018	2021	14,436	64,019	251,717	330,172	4,225	18,736	73,668	96,629	2018	2021
2019	2022	11,255	58,561	276,071	345,887	3,043	15,832	74,638	93,513	2019	2022
2020	2023	8,295	52,544	301,457	362,296	2,072	13,123	75,290	90,485	2020	2023
2021	2024	5,958	45,885	327,731	379,574	1,375	10,587	75,614	87,576	2021	2024
2022	2025	4,243	40,041	353,458	397,742	904	8,534	75,335	84,773	2022	2025
2023	2026	3,018	34,630	379,047	416,695	594	6,818	74,631	82,043	2023	2026
2024	2027	2,077	28,560	405,767	436,404	378	5,195	73,803	79,376	2024	2027
2025	2028	1,412	21,972	431,092	454,476	237	3,692	72,434	76,363	2025	2028
2026	2029	634	13,123	312,993	326,750	98	2,037	48,582	50,717	2026	2029
2027	2030	297	9,099	264,947	274,343	43	1,305	37,991	39,339	2027	2030
2028	2031	129	5,595	203,072	208,796	17	741	26,899	27,657	2028	2031
Total		459,561	1,304,484	4,877,135	6,641,180	234,981	556,468	1,292,193	2,083,642		

* Expected employer contributions paid during fiscal year

** Expected employer contributions during fiscal year, discounted to June 30, 2003 at 8.25%

State of Alaska Teachers' Retirement System
 Projections Based on July 1, 2003 Valuation
 Population Growth 1 Percent

Valuation Year	Fiscal Year	Number of Active Members				Projected Salaries				Valuation Year	Fiscal Year
		Tier 1	Tier 2	Tier 3	Total	Tier 1	Tier 2	Tier 3	Total		
2003	2006	3,533	6,342	-	9,875	224,321,356	308,308,644	-	532,630,000	2003	2006
2004	2007	3,250	5,878	846	9,974	234,219,606	321,912,859	-	556,132,465	2004	2007
2005	2008	2,778	5,474	1,821	10,073	223,184,546	312,480,238	37,711,792	573,376,576	2005	2008
2006	2009	2,461	5,113	2,600	10,174	197,505,616	304,204,838	84,924,658	586,635,112	2006	2009
2007	2010	2,165	4,794	3,317	10,276	181,302,565	296,350,944	126,966,178	604,619,687	2007	2010
2008	2011	1,903	4,499	3,977	10,379	165,278,628	289,067,834	169,500,401	623,846,863	2008	2011
2009	2012	1,655	4,224	4,604	10,483	150,568,581	281,424,078	212,655,302	644,647,961	2009	2012
2010	2013	1,421	3,960	5,206	10,587	135,653,981	274,058,655	257,489,490	667,202,126	2010	2013
2011	2014	1,180	3,701	5,812	10,693	120,738,837	266,359,405	304,130,800	691,229,042	2011	2014
2012	2015	1,002	3,408	6,390	10,800	104,129,396	257,896,541	354,113,311	716,139,248	2012	2015
2013	2016	842	3,115	6,951	10,908	91,516,579	245,407,254	405,873,541	742,797,374	2013	2016
2014	2017	703	2,841	7,473	11,017	79,515,576	231,752,432	459,769,165	771,037,173	2014	2017
2015	2018	579	2,575	7,973	11,127	68,718,148	218,322,646	514,504,374	801,545,168	2015	2018
2016	2019	468	2,320	8,451	11,239	58,527,452	204,500,661	571,260,238	834,288,351	2016	2019
2017	2020	368	2,075	8,908	11,351	48,901,037	190,275,091	629,969,112	869,145,240	2017	2020
2018	2021	278	1,831	9,356	11,465	39,625,543	175,721,394	690,920,442	906,267,379	2018	2021
2019	2022	201	1,586	9,792	11,579	30,763,576	160,070,010	754,611,837	945,445,423	2019	2022
2020	2023	142	1,336	10,217	11,695	22,597,174	143,143,575	821,249,702	986,990,451	2020	2023
2021	2024	99	1,125	10,588	11,812	16,196,454	124,733,989	890,898,931	1,031,829,374	2021	2024
2022	2025	70	940	10,920	11,930	11,524,721	108,766,612	960,136,374	1,080,427,707	2022	2025
2023	2026	47	745	11,257	12,049	8,200,329	94,088,348	1,029,847,409	1,132,136,086	2023	2026
2024	2027	32	548	11,590	12,170	5,650,344	77,695,776	1,103,866,284	1,187,212,404	2024	2027
2025	2028	21	462	11,809	12,292	3,869,034	60,221,757	1,181,532,316	1,245,623,107	2025	2028
2026	2029	12	389	12,013	12,414	2,535,473	52,493,844	1,251,970,579	1,306,999,896	2026	2029
2027	2030	7	321	12,211	12,539	1,484,959	45,493,666	1,324,737,179	1,371,715,804	2027	2030
2028	2031	4	260	12,400	12,664	887,477	38,582,813	1,400,496,073	1,439,966,363	2028	2031

Hi Katie:

I wanted to let you know that Mercer has costed the medical benefits for House CS for CS for Senate Bill No. 141 (STA)

Mercer states, "we have analyzed the expected liabilities associated with the new tier described in House Bill 238 medical provisions. The analysis is based on the following:

- * Coverage is available only to members who retire from the System at normal retirement (age 60 with 10 years of service) or after 30 years of service.
- * Members or their spouses who are less than age 60 pay the full cost for their coverage.
- * Upon reaching age 60, members (or their spouses) are eligible for System-subsidized medical coverage. They will receive a defined subsidy amount based on Medicare eligibility status and service duration (3% per year of service, up to 30 years). Based on these provisions we estimate that the current normal cost rate (as a percentage of total payroll) will be 1.0% for TRS and 1.1% for PERS."

It took longer because I asked Mercer to run the models again. Please let me know if you have any questions. Thanks.

--
Melanie Millhorn, Director

State of Alaska

Department of Administration - Division of Retirement & Benefits

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Hiro Date	7/1/2003
Age at hire	50
Age at retirement	60
Subsidy Start Age	60
Service	10

Subsidy Base Pro MC	\$5,962
Subsidy Base MC Eligible	\$2,903
Subsidy Index	5%
Discount Rate	8.25%
HIB 238 Subsidy percent	30%
SB 141 Contribution percent	30%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

House Bill 238		Senate Bill 141	
Total State Subsidy		Total State Subsidy	Total Retiree Contribution
\$179,627		\$634,600	\$279,289
\$30,220		\$55,850	\$77,819

Gross Cash Flow
Present Value at Retirement

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pro MC Composite Premium	MC Elig Composite Premium	Medical / Rx Composite Trend	Retiree Med/Rx Premium	Subsidy Base Pro-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
1	50	\$3,998	10.0%	2.5%	\$784	15.0%	3.5%	\$0	\$5,962	\$2,903	1.11	\$0	\$5,962	\$2,903	\$0	\$0	\$0
2	51	\$4,508	9.5%	2.5%	\$934	14.0%	3.5%	\$0	\$6,572	\$3,216	1.10	\$0	\$6,260	\$3,048	\$0	\$0	\$0
3	52	\$5,060	9.0%	2.5%	\$1,102	13.0%	3.5%	\$0	\$7,208	\$3,527	1.10	\$0	\$6,573	\$3,201	\$0	\$0	\$0
4	53	\$5,653	8.5%	2.5%	\$1,288	12.0%	3.5%	\$0	\$7,865	\$3,849	1.09	\$0	\$6,902	\$3,361	\$0	\$0	\$0
5	54	\$6,287	8.0%	2.5%	\$1,494	11.0%	3.5%	\$0	\$8,536	\$4,177	1.09	\$0	\$7,247	\$3,529	\$0	\$0	\$0
6	55	\$6,960	7.5%	3.5%	\$1,716	10.0%	3.0%	\$0	\$9,216	\$4,510	1.08	\$0	\$7,609	\$3,705	\$0	\$0	\$0
7	56	\$7,744	7.0%	3.5%	\$1,944	9.0%	3.0%	\$0	\$9,895	\$4,842	1.07	\$0	\$7,990	\$3,890	\$0	\$0	\$0
8	57	\$8,576	6.5%	3.5%	\$2,183	8.0%	3.0%	\$0	\$10,567	\$5,171	1.07	\$0	\$8,389	\$4,085	\$0	\$0	\$0
9	58	\$9,453	6.0%	3.5%	\$2,428	7.0%	3.0%	\$0	\$11,221	\$5,491	1.06	\$0	\$8,809	\$4,289	\$0	\$0	\$0
10	59	\$10,371	5.5%	3.5%	\$2,676	6.0%	3.0%	\$0	\$11,849	\$5,798	1.06	\$0	\$9,249	\$4,504	\$0	\$0	\$0
11	60	\$11,324	5.0%	3.5%	\$2,922	5.0%	3.0%	\$14,246	\$12,441	\$6,088	1.05	\$12,441	\$9,711	\$4,729	\$2,913	\$0	\$12,441
12	61	\$12,306	5.0%	3.5%	\$3,160	5.0%	3.0%	\$15,466	\$13,063	\$6,393	1.05	\$13,063	\$10,197	\$4,965	\$3,059	\$0	\$13,063
13	62	\$13,374	5.0%	3.5%	\$3,417	5.0%	3.0%	\$16,791	\$13,716	\$6,712	1.05	\$13,716	\$10,707	\$5,213	\$3,212	\$0	\$13,716
14	63	\$14,534	5.0%	3.5%	\$3,696	5.0%	3.0%	\$18,230	\$14,402	\$7,048	1.05	\$14,402	\$11,242	\$5,474	\$3,373	\$0	\$14,402
15	64	\$15,795	5.0%	3.5%	\$3,997	5.0%	3.0%	\$19,792	\$15,122	\$7,400	1.05	\$15,122	\$11,804	\$5,748	\$3,541	\$0	\$15,122
16	65	\$3,198	5.0%	4.0%	\$3,382	5.0%	1.5%	\$6,580	\$15,879	\$7,770	1.05	\$7,770	\$12,395	\$6,035	\$1,811	\$4,249	\$2,331
17	66	\$3,492	5.0%	4.0%	\$3,604	5.0%	1.5%	\$7,096	\$16,672	\$8,159	1.05	\$8,159	\$13,014	\$6,337	\$1,901	\$4,649	\$2,448
18	67	\$3,813	5.0%	4.0%	\$3,841	5.0%	1.5%	\$7,655	\$17,506	\$8,567	1.05	\$8,567	\$13,665	\$6,654	\$1,996	\$5,085	\$2,570
19	68	\$4,164	5.0%	4.0%	\$4,094	5.0%	1.5%	\$8,258	\$18,381	\$8,995	1.05	\$8,995	\$14,348	\$6,986	\$2,096	\$5,560	\$2,699
20	69	\$4,547	5.0%	4.0%	\$4,363	5.0%	1.5%	\$8,910	\$19,300	\$9,445	1.05	\$9,445	\$15,066	\$7,336	\$2,201	\$6,077	\$2,833
21	70	\$4,966	5.0%	4.0%	\$4,650	5.0%	1.5%	\$9,616	\$20,265	\$9,917	1.05	\$9,917	\$15,819	\$7,703	\$2,311	\$6,670	\$2,975
22	71	\$5,422	5.0%	4.0%	\$4,956	5.0%	1.5%	\$10,378	\$21,279	\$10,413	1.05	\$10,413	\$16,610	\$8,088	\$2,426	\$7,254	\$3,124
23	72	\$5,921	5.0%	4.0%	\$5,282	5.0%	1.5%	\$11,203	\$22,343	\$10,934	1.05	\$10,934	\$17,440	\$8,492	\$2,548	\$7,923	\$3,280
24	73	\$6,466	5.0%	4.0%	\$5,629	5.0%	1.5%	\$12,095	\$23,460	\$11,480	1.05	\$11,480	\$18,312	\$8,917	\$2,675	\$8,651	\$3,444
25	74	\$7,061	5.0%	4.0%	\$5,999	5.0%	1.5%	\$13,060	\$24,633	\$12,054	1.05	\$12,054	\$19,228	\$9,362	\$2,809	\$9,444	\$3,610
26	75	\$7,711	5.0%	1.5%	\$6,393	5.0%	0.5%	\$14,104	\$25,864	\$12,657	1.05	\$12,657	\$20,189	\$9,831	\$2,949	\$10,307	\$3,797
27	76	\$8,218	5.0%	1.5%	\$6,747	5.0%	0.5%	\$14,964	\$27,158	\$13,290	1.05	\$13,290	\$21,199	\$10,322	\$3,097	\$10,977	\$3,987
28	77	\$8,758	5.0%	1.5%	\$7,119	5.0%	0.5%	\$15,877	\$28,516	\$13,954	1.05	\$13,954	\$22,259	\$10,838	\$3,251	\$11,691	\$4,186
29	78	\$9,334	5.0%	1.5%	\$7,513	5.0%	0.5%	\$16,846	\$29,941	\$14,652	1.05	\$14,652	\$23,372	\$11,380	\$3,414	\$12,451	\$4,396
30	79	\$9,947	5.0%	1.5%	\$7,928	5.0%	0.5%	\$17,875	\$31,438	\$15,385	1.05	\$15,385	\$24,540	\$11,949	\$3,585	\$13,260	\$4,615
31	80	\$10,601	5.0%	1.5%	\$8,366	5.0%	0.5%	\$18,967	\$33,010	\$16,154	1.05	\$16,154	\$25,767	\$12,547	\$3,764	\$14,121	\$4,846
32	81	\$11,298	5.0%	1.5%	\$8,828	5.0%	0.5%	\$20,126	\$34,661	\$16,961	1.05	\$16,961	\$27,056	\$13,174	\$3,952	\$15,038	\$5,088
33	82	\$12,041	5.0%	1.5%	\$9,316	5.0%	0.5%	\$21,357	\$36,394	\$17,810	1.05	\$17,810	\$28,409	\$13,833	\$4,150	\$16,014	\$5,343
34	83	\$12,833	5.0%	1.5%	\$9,830	5.0%	0.5%	\$22,663	\$38,214	\$18,700	1.05	\$18,700	\$29,829	\$14,524	\$4,357	\$17,053	\$5,610
35	84	\$13,677	5.0%	1.5%	\$10,374	5.0%	0.5%	\$24,050	\$40,124	\$19,635	1.05	\$19,635	\$31,320	\$15,250	\$4,575	\$18,160	\$5,891
36	85	\$14,576	5.0%	0.5%	\$10,947	5.0%	0.0%	\$25,523	\$42,131	\$20,617	1.05	\$20,617	\$32,886	\$16,013	\$4,804	\$19,338	\$6,185
37	86	\$15,381	5.0%	0.5%	\$11,494	5.0%	0.0%	\$26,875	\$44,237	\$21,648	1.05	\$21,648	\$34,531	\$16,814	\$5,044	\$20,381	\$6,494
38	87	\$16,231	5.0%	0.5%	\$12,069	5.0%	0.0%	\$28,300	\$46,449	\$22,730	1.05	\$22,730	\$36,257	\$17,654	\$5,296	\$21,481	\$6,819
39	88	\$17,128	5.0%	0.5%	\$12,672	5.0%	0.0%	\$29,800	\$48,771	\$23,866	1.05	\$23,866	\$38,070	\$18,537	\$5,561	\$22,640	\$7,160
40	89	\$18,074	5.0%	0.5%	\$13,306	5.0%	0.0%	\$31,380	\$51,210	\$25,060	1.05	\$25,060	\$39,974	\$19,464	\$5,839	\$23,862	\$7,518
41	90	\$19,073	5.0%	0.5%	\$13,971	5.0%	0.0%	\$33,044	\$53,770	\$26,313	1.05	\$26,313	\$41,972	\$20,437	\$6,131	\$25,150	\$7,894
42	91	\$20,127	5.0%	0.5%	\$14,670	5.0%	0.0%	\$34,796	\$56,459	\$27,628	1.05	\$27,628	\$44,071	\$21,459	\$6,438	\$26,508	\$8,289
43	92	\$21,239	5.0%	0.5%	\$15,403	5.0%	0.0%	\$36,642	\$59,282	\$29,010	1.05	\$29,010	\$46,275	\$22,532	\$6,760	\$27,939	\$8,703

Hire Date	7/1/2003
Age at hire	50
Age at retirement	60
Subsidy Start Age	60
Service	10

Subsidy Base Pro MC	\$5,982
Subsidy Base MC Eligible	\$2,903
Subsidy index	5%
Discount Rate	8.25%
HB 238 Subsidy percent	30%
SB 141 Contribution percent	30%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

**Gross Cash Flow
 Present Value at Retirement**

House Bill 238	Senate Bill 141
Total State Subsidy	Total State Subsidy Total Retiree Contribution
\$179,627	\$634,600 \$279,289
\$30,220	\$55,850 \$77,819

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pre MC Composite Premium	MC Elig Composite Premium	Medical / Rx Composite Trend	Retiree Mod/Rx Premium	Subsidy Base Pre-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
44	93	\$22,412	5.0%	0.5%	\$16,173	5.0%	0.0%	\$38,585	\$62,246	\$30,460	1.05	\$30,460	\$48,588	\$23,658	\$7,098	\$29,447	\$9,138
45	94	\$23,650	5.0%	0.5%	\$16,982	5.0%	0.0%	\$40,632	\$65,358	\$31,983	1.05	\$31,983	\$51,018	\$24,841	\$7,452	\$31,037	\$9,595
46	95	\$24,957	5.0%	0.5%	\$17,831	5.0%	0.0%	\$42,788	\$68,626	\$33,583	1.05	\$33,583	\$53,569	\$26,083	\$7,825	\$32,713	\$10,075
47	96	\$26,336	5.0%	0.5%	\$18,723	5.0%	0.0%	\$45,058	\$72,057	\$35,262	1.05	\$35,262	\$56,247	\$27,388	\$8,216	\$34,480	\$10,578
48	97	\$27,791	5.0%	0.5%	\$19,659	5.0%	0.0%	\$47,450	\$75,660	\$37,025	1.05	\$37,025	\$59,059	\$28,757	\$8,627	\$36,347	\$11,107
49	98	\$29,326	5.0%	0.5%	\$20,642	5.0%	0.0%	\$49,968	\$79,443	\$38,876	1.05	\$38,876	\$62,012	\$30,195	\$9,058	\$38,305	\$11,663
50	99	\$30,947	5.0%	0.5%	\$21,674	5.0%	0.0%	\$52,620	\$83,416	\$40,820	1.05	\$40,820	\$65,113	\$31,705	\$9,511	\$40,374	\$12,246

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Hire Date 7/1/2003
 Age at hire 40
 Age at retirement 60
 Subsidy Start Age 60
 Service 20

Subsidy Base Pro MC \$5,962
 Subsidy Base MC Eligible \$2,903
 Subsidy index 5%
 Discount Rate 8.25%
 HB 238 Subsidy percent 60%
 SB 141 Contribution percent 20%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Cash Flow
 Present Value at Retirement

House Bill 238	
Total State Subsidy	\$585,187
	\$98,449

Senate Bill 141	
Total State Subsidy	\$1,148,015
Total Retiree Contribution	\$340,615
	\$102,980
	\$114,753

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pro MC Composite Premium	MC Elig Composite Premium	Medical / Rx Composite Trend	Retiree Mod/Rx Premium	Subsidy Base Pro-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
1	40	\$3,201	10.0%	2.0%	\$530	15.0%	4.5%	\$0	\$5,962	\$2,903	1.11	\$0	\$5,362	\$2,903	\$0	\$0	\$0
2	41	\$3,591	9.5%	2.0%	\$637	14.0%	4.5%	\$0	\$6,572	\$3,216	1.10	\$0	\$6,260	\$3,048	\$0	\$0	\$0
3	42	\$4,011	9.0%	2.0%	\$759	13.0%	4.5%	\$0	\$7,208	\$3,527	1.10	\$0	\$6,573	\$3,201	\$0	\$0	\$0
4	43	\$4,460	8.5%	2.0%	\$896	12.0%	4.5%	\$0	\$7,865	\$3,849	1.09	\$0	\$6,902	\$3,361	\$0	\$0	\$0
5	44	\$4,936	8.0%	2.0%	\$1,049	11.0%	4.5%	\$0	\$8,536	\$4,177	1.09	\$0	\$7,247	\$3,529	\$0	\$0	\$0
6	45	\$5,437	7.5%	2.5%	\$1,216	10.0%	3.5%	\$0	\$9,216	\$4,510	1.08	\$0	\$7,609	\$3,705	\$0	\$0	\$0
7	46	\$5,991	7.0%	2.5%	\$1,385	9.0%	3.5%	\$0	\$9,895	\$4,842	1.07	\$0	\$7,990	\$3,890	\$0	\$0	\$0
8	47	\$6,570	6.5%	2.5%	\$1,562	8.0%	3.5%	\$0	\$10,567	\$5,171	1.07	\$0	\$8,389	\$4,085	\$0	\$0	\$0
9	48	\$7,173	6.0%	2.5%	\$1,746	7.0%	3.5%	\$0	\$11,221	\$5,491	1.06	\$0	\$8,809	\$4,289	\$0	\$0	\$0
10	49	\$7,793	5.5%	2.5%	\$1,934	6.0%	3.5%	\$0	\$11,849	\$5,798	1.06	\$0	\$9,249	\$4,504	\$0	\$0	\$0
11	50	\$8,427	5.0%	2.5%	\$2,122	5.0%	3.5%	\$0	\$12,441	\$6,088	1.05	\$0	\$9,711	\$4,729	\$0	\$0	\$0
12	51	\$9,070	5.0%	2.5%	\$2,306	5.0%	3.5%	\$0	\$13,063	\$6,393	1.05	\$0	\$10,197	\$4,965	\$0	\$0	\$0
13	52	\$9,761	5.0%	2.5%	\$2,506	5.0%	3.5%	\$0	\$13,716	\$6,712	1.05	\$0	\$10,707	\$5,213	\$0	\$0	\$0
14	53	\$10,506	5.0%	2.5%	\$2,723	5.0%	3.5%	\$0	\$14,402	\$7,048	1.05	\$0	\$11,242	\$5,474	\$0	\$0	\$0
15	54	\$11,307	5.0%	2.5%	\$2,960	5.0%	3.5%	\$0	\$15,122	\$7,400	1.05	\$0	\$11,804	\$5,748	\$0	\$0	\$0
16	55	\$12,169	5.0%	3.5%	\$3,216	5.0%	3.0%	\$0	\$15,879	\$7,770	1.05	\$0	\$12,395	\$6,035	\$0	\$0	\$0
17	56	\$13,224	5.0%	3.5%	\$3,479	5.0%	3.0%	\$0	\$16,672	\$8,159	1.05	\$0	\$13,014	\$6,337	\$0	\$0	\$0
18	57	\$14,372	5.0%	3.5%	\$3,762	5.0%	3.0%	\$0	\$17,506	\$8,567	1.05	\$0	\$13,665	\$6,654	\$0	\$0	\$0
19	58	\$15,618	5.0%	3.5%	\$4,069	5.0%	3.0%	\$0	\$18,381	\$8,995	1.05	\$0	\$14,348	\$6,986	\$0	\$0	\$0
20	59	\$16,973	5.0%	3.5%	\$4,400	5.0%	3.0%	\$0	\$19,300	\$9,445	1.05	\$0	\$15,066	\$7,336	\$0	\$0	\$0
21	60	\$18,446	5.0%	3.5%	\$4,759	5.0%	3.0%	\$23,204	\$20,265	\$9,917	1.05	\$20,265	\$15,819	\$7,703	\$9,491	\$0	\$20,265
22	61	\$20,046	5.0%	3.5%	\$5,147	5.0%	3.0%	\$25,192	\$21,270	\$10,413	1.05	\$21,270	\$16,610	\$8,088	\$9,966	\$0	\$21,270
23	62	\$21,785	5.0%	3.5%	\$5,566	5.0%	3.0%	\$27,351	\$22,343	\$10,934	1.05	\$22,343	\$17,440	\$8,492	\$10,464	\$0	\$22,343
24	63	\$23,674	5.0%	3.5%	\$6,020	5.0%	3.0%	\$29,694	\$23,460	\$11,480	1.05	\$23,460	\$18,312	\$8,917	\$10,987	\$0	\$23,460
25	64	\$25,728	5.0%	3.5%	\$6,511	5.0%	3.0%	\$32,239	\$24,633	\$12,054	1.05	\$24,633	\$19,228	\$9,362	\$11,537	\$0	\$24,633
26	65	\$5,209	5.0%	4.0%	\$5,509	5.0%	1.5%	\$10,718	\$25,864	\$12,657	1.05	\$12,657	\$20,189	\$9,831	\$5,898	\$8,187	\$2,531
27	66	\$5,688	5.0%	4.0%	\$5,871	5.0%	1.5%	\$11,559	\$27,158	\$13,290	1.05	\$13,290	\$21,199	\$10,322	\$6,193	\$8,901	\$2,658
28	67	\$6,212	5.0%	4.0%	\$6,257	5.0%	1.5%	\$12,469	\$28,516	\$13,954	1.05	\$13,954	\$22,259	\$10,838	\$6,503	\$9,678	\$2,791
29	68	\$6,783	5.0%	4.0%	\$6,669	5.0%	1.5%	\$13,452	\$29,941	\$14,652	1.05	\$14,652	\$23,372	\$11,380	\$6,828	\$10,521	\$2,930
30	69	\$7,407	5.0%	4.0%	\$7,107	5.0%	1.5%	\$14,514	\$31,438	\$15,385	1.05	\$15,385	\$24,540	\$11,949	\$7,160	\$11,437	\$3,077
31	70	\$8,080	5.0%	4.0%	\$7,574	5.0%	1.5%	\$15,663	\$33,010	\$16,154	1.05	\$16,154	\$25,767	\$12,547	\$7,528	\$12,432	\$3,231
32	71	\$8,833	5.0%	4.0%	\$8,072	5.0%	1.5%	\$16,905	\$34,661	\$16,961	1.05	\$16,961	\$27,056	\$13,174	\$7,904	\$13,513	\$3,392
33	72	\$9,645	5.0%	4.0%	\$8,603	5.0%	1.5%	\$18,248	\$36,394	\$17,810	1.05	\$17,810	\$28,409	\$13,833	\$8,300	\$14,685	\$3,562
34	73	\$10,533	5.0%	4.0%	\$9,169	5.0%	1.5%	\$19,701	\$38,214	\$18,700	1.05	\$18,700	\$29,829	\$14,524	\$8,715	\$15,961	\$3,740
35	74	\$11,502	5.0%	4.0%	\$9,772	5.0%	1.5%	\$21,273	\$40,124	\$19,635	1.05	\$19,635	\$31,320	\$15,250	\$9,150	\$17,346	\$3,927
36	75	\$12,560	5.0%	1.5%	\$10,414	5.0%	0.5%	\$22,974	\$42,131	\$20,617	1.05	\$20,617	\$32,886	\$16,013	\$9,608	\$18,850	\$4,123
37	76	\$13,385	5.0%	1.5%	\$10,989	5.0%	0.5%	\$24,375	\$44,237	\$21,648	1.05	\$21,648	\$34,531	\$16,814	\$10,088	\$20,045	\$4,330
38	77	\$14,266	5.0%	1.5%	\$11,597	5.0%	0.5%	\$25,862	\$46,449	\$22,730	1.05	\$22,730	\$36,257	\$17,654	\$10,593	\$21,316	\$4,546
39	78	\$15,204	5.0%	1.5%	\$12,237	5.0%	0.5%	\$27,441	\$48,771	\$23,866	1.05	\$23,866	\$38,070	\$18,537	\$11,122	\$22,668	\$4,773
40	79	\$16,203	5.0%	1.5%	\$12,913	5.0%	0.5%	\$29,117	\$51,210	\$25,060	1.05	\$25,060	\$39,974	\$19,464	\$11,678	\$24,105	\$5,012
41	80	\$17,269	5.0%	1.5%	\$13,627	5.0%	0.5%	\$30,895	\$53,770	\$26,313	1.05	\$26,313	\$41,972	\$20,437	\$12,262	\$25,633	\$5,263
42	81	\$18,404	5.0%	1.5%	\$14,380	5.0%	0.5%	\$32,784	\$56,459	\$27,628	1.05	\$27,628	\$44,071	\$21,459	\$12,875	\$27,258	\$5,526
43	82	\$19,314	5.0%	1.5%	\$15,174	5.0%	0.5%	\$34,788	\$59,282	\$29,010	1.05	\$29,010	\$46,275	\$22,532	\$13,510	\$28,986	\$5,802

Hire Date	7/1/2003
Age at hire	40
Age at retirement	60
Subsidy Start Age	60
Service	20

Subsidy Base Pro MC	\$5,982
Subsidy Base MC Eligible	\$2,903
Subsidy Index	5%
Discount Rate	8.25%
HB 238 Subsidy percent	60%
SB 141 Contribution percent	20%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Cash Flow
 Present Value at Retirement

House Bill 238	Senate Bill 141
Total State Subsidy	Total State Subsidy Total Retiree Contribution
\$585,187	\$1,148,015 \$340,615
\$98,449	\$102,980 \$114,753

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pro MC Composite Premium	MC Elig Composite Premium	Medical / Rx Composite Trend	Retiree Med/Rx Premium	Subsidy Base Pro-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
44	83	\$20,904	5.0%	1.5%	\$16,013	5.0%	0.5%	\$36,916	\$62,246	\$30,460	1.05	\$30,460	\$48,588	\$23,658	\$14,195	\$30,824	\$6,092
45	84	\$22,278	5.0%	1.5%	\$16,897	5.0%	0.5%	\$39,175	\$65,358	\$31,983	1.05	\$31,983	\$51,018	\$24,841	\$14,905	\$32,779	\$6,397
46	85	\$23,743	5.0%	0.5%	\$17,831	5.0%	0.0%	\$41,574	\$68,626	\$33,583	1.05	\$33,583	\$53,569	\$26,083	\$15,650	\$34,857	\$6,717
47	86	\$25,055	5.0%	0.5%	\$18,723	5.0%	0.0%	\$43,777	\$72,057	\$35,262	1.05	\$35,262	\$56,247	\$27,388	\$16,433	\$36,725	\$7,052
48	87	\$26,439	5.0%	0.5%	\$19,659	5.0%	0.0%	\$46,098	\$75,660	\$37,025	1.05	\$37,025	\$59,059	\$28,757	\$17,254	\$38,693	\$7,405
49	88	\$27,900	5.0%	0.5%	\$20,642	5.0%	0.0%	\$48,541	\$79,443	\$38,876	1.05	\$38,876	\$62,012	\$30,195	\$18,117	\$40,766	\$7,775
50	89	\$29,441	5.0%	0.5%	\$21,674	5.0%	0.0%	\$51,115	\$83,416	\$40,820	1.05	\$40,820	\$65,113	\$31,705	\$19,023	\$42,951	\$8,164
51	90	\$31,068	5.0%	0.5%	\$22,757	5.0%	0.0%	\$53,825	\$87,586	\$42,861	1.05	\$42,861	\$68,369	\$33,290	\$19,974	\$45,253	\$8,572
52	91	\$32,784	5.0%	0.5%	\$23,895	5.0%	0.0%	\$56,679	\$91,966	\$45,004	1.05	\$45,004	\$71,787	\$34,954	\$20,973	\$47,679	\$9,001
53	92	\$34,596	5.0%	0.5%	\$25,090	5.0%	0.0%	\$59,685	\$96,564	\$47,254	1.05	\$47,254	\$75,376	\$36,702	\$22,021	\$50,235	\$9,451
54	93	\$36,507	5.0%	0.5%	\$26,344	5.0%	0.0%	\$62,851	\$101,392	\$49,617	1.05	\$49,617	\$79,145	\$38,537	\$23,122	\$52,928	\$9,923
55	94	\$38,524	5.0%	0.5%	\$27,662	5.0%	0.0%	\$66,186	\$106,462	\$52,098	1.05	\$52,098	\$83,103	\$40,464	\$24,278	\$55,766	\$10,420
56	95	\$40,652	5.0%	0.5%	\$29,015	5.0%	0.0%	\$69,697	\$111,785	\$54,702	1.05	\$54,702	\$87,258	\$42,487	\$25,492	\$58,757	\$10,940
57	96	\$42,898	5.0%	0.5%	\$30,497	5.0%	0.0%	\$73,395	\$117,374	\$57,438	1.05	\$57,438	\$91,621	\$44,612	\$26,767	\$61,908	\$11,488
58	97	\$45,269	5.0%	0.5%	\$32,022	5.0%	0.0%	\$77,290	\$123,243	\$60,309	1.05	\$60,309	\$96,202	\$46,842	\$28,105	\$65,229	\$12,062
59	98	\$47,770	5.0%	0.5%	\$33,623	5.0%	0.0%	\$81,393	\$129,405	\$63,325	1.05	\$63,325	\$101,012	\$49,184	\$29,511	\$68,728	\$12,665
60	99	\$50,409	5.0%	0.5%	\$35,301	5.0%	0.0%	\$85,713	\$135,875	\$66,491	1.05	\$66,491	\$106,062	\$51,644	\$30,986	\$72,415	\$13,298

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Hiro Date	7/1/2003
Ago at hiro	30
Ago at retirement	60
Subsidy Start Ago	60
Service	30

Subsidy Base Pro MC	\$5,962
Subsidy Base MC Eligible	\$2,903
Subsidy index	5%
Discount Rate	8.25%
HB 238 Subsidy percent	90%
SB 141 Contribution percent	10%

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Housou Bill 238		Senato Bill 141	
Total State Subsidy		Total State Subsidy	Total Rollroo Contribution
\$1,429,812		\$2,056,206	\$368,614
\$240,546		\$187,300	\$167,363

Gross Cash Flow
Present Value at Retirement

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pro MC Composite Premium	MC Elig Composite Premium	Pro MC Composite Trend	Retiree Mor/Rx Premium	Subsidy Base Pre-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
1	30	\$2,626	10.0%	2.0%	\$341	15.0%	4.5%	\$0	\$5,962	\$2,903	1.11	\$0	\$5,962	\$2,903	\$0	\$0	\$0
2	31	\$2,946	9.5%	2.0%	\$410	14.0%	4.5%	\$0	\$6,572	\$3,216	1.10	\$0	\$6,260	\$3,048	\$0	\$0	\$0
3	32	\$3,291	9.0%	2.0%	\$489	13.0%	4.5%	\$0	\$7,208	\$3,527	1.10	\$0	\$6,573	\$3,201	\$0	\$0	\$0
4	33	\$3,658	8.5%	2.0%	\$577	12.0%	4.5%	\$0	\$7,865	\$3,849	1.09	\$0	\$6,902	\$3,361	\$0	\$0	\$0
5	34	\$4,049	8.0%	2.0%	\$675	11.0%	4.5%	\$0	\$8,536	\$4,177	1.09	\$0	\$7,247	\$3,529	\$0	\$0	\$0
6	35	\$4,460	7.5%	2.0%	\$783	10.0%	4.5%	\$0	\$9,216	\$4,510	1.08	\$0	\$7,609	\$3,705	\$0	\$0	\$0
7	36	\$4,891	7.0%	2.0%	\$900	9.0%	4.5%	\$0	\$9,895	\$4,842	1.07	\$0	\$7,990	\$3,890	\$0	\$0	\$0
8	37	\$5,338	6.5%	2.0%	\$1,026	8.0%	4.5%	\$0	\$10,567	\$5,171	1.07	\$0	\$8,389	\$4,085	\$0	\$0	\$0
9	38	\$5,798	6.0%	2.0%	\$1,158	7.0%	4.5%	\$0	\$11,221	\$5,491	1.06	\$0	\$8,809	\$4,289	\$0	\$0	\$0
10	39	\$6,269	5.5%	2.0%	\$1,294	6.0%	4.5%	\$0	\$11,849	\$5,798	1.06	\$0	\$9,249	\$4,504	\$0	\$0	\$0
11	40	\$6,746	5.0%	2.0%	\$1,434	5.0%	4.5%	\$0	\$12,441	\$6,088	1.05	\$0	\$9,711	\$4,729	\$0	\$0	\$0
12	41	\$7,225	5.0%	2.0%	\$1,573	5.0%	4.5%	\$0	\$13,063	\$6,393	1.05	\$0	\$10,197	\$4,965	\$0	\$0	\$0
13	42	\$7,738	5.0%	2.0%	\$1,726	5.0%	4.5%	\$0	\$13,716	\$6,712	1.05	\$0	\$10,707	\$5,213	\$0	\$0	\$0
14	43	\$8,288	5.0%	2.0%	\$1,894	5.0%	4.5%	\$0	\$14,402	\$7,048	1.05	\$0	\$11,242	\$5,474	\$0	\$0	\$0
15	44	\$8,876	5.0%	2.0%	\$2,078	5.0%	4.5%	\$0	\$15,122	\$7,400	1.05	\$0	\$11,804	\$5,748	\$0	\$0	\$0
16	45	\$9,506	5.0%	2.5%	\$2,280	5.0%	3.5%	\$0	\$15,879	\$7,770	1.05	\$0	\$12,395	\$6,029	\$0	\$0	\$0
17	46	\$10,231	5.0%	2.5%	\$2,478	5.0%	3.5%	\$0	\$16,672	\$8,159	1.05	\$0	\$13,014	\$6,337	\$0	\$0	\$0
18	47	\$11,011	5.0%	2.5%	\$2,693	5.0%	3.5%	\$0	\$17,506	\$8,567	1.05	\$0	\$13,665	\$6,654	\$0	\$0	\$0
19	48	\$11,851	5.0%	2.5%	\$2,927	5.0%	3.5%	\$0	\$18,381	\$8,995	1.05	\$0	\$14,348	\$6,986	\$0	\$0	\$0
20	49	\$12,754	5.0%	2.5%	\$3,180	5.0%	3.5%	\$0	\$19,300	\$9,445	1.05	\$0	\$15,066	\$7,336	\$0	\$0	\$0
21	50	\$13,727	5.0%	2.5%	\$3,456	5.0%	3.5%	\$0	\$20,265	\$9,917	1.05	\$0	\$15,819	\$7,703	\$0	\$0	\$0
22	51	\$14,774	5.0%	2.5%	\$3,756	5.0%	3.5%	\$0	\$21,279	\$10,413	1.05	\$0	\$16,610	\$8,088	\$0	\$0	\$0
23	52	\$15,900	5.0%	2.5%	\$4,082	5.0%	3.5%	\$0	\$22,343	\$10,934	1.05	\$0	\$17,440	\$8,492	\$0	\$0	\$0
24	53	\$17,112	5.0%	2.5%	\$4,436	5.0%	3.5%	\$0	\$23,460	\$11,480	1.05	\$0	\$18,312	\$8,917	\$0	\$0	\$0
25	54	\$18,417	5.0%	2.5%	\$4,821	5.0%	3.5%	\$0	\$24,633	\$12,054	1.05	\$0	\$19,228	\$9,362	\$0	\$0	\$0
26	55	\$19,821	5.0%	3.5%	\$5,239	5.0%	3.0%	\$0	\$25,864	\$12,657	1.05	\$0	\$20,169	\$9,831	\$0	\$0	\$0
27	56	\$21,541	5.0%	3.5%	\$5,666	5.0%	3.0%	\$0	\$27,158	\$13,290	1.05	\$0	\$21,199	\$10,322	\$0	\$0	\$0
28	57	\$23,410	5.0%	3.5%	\$6,128	5.0%	3.0%	\$0	\$28,516	\$13,954	1.05	\$0	\$22,259	\$10,838	\$0	\$0	\$0
29	58	\$25,440	5.0%	3.5%	\$6,627	5.0%	3.0%	\$0	\$29,941	\$14,652	1.05	\$0	\$23,372	\$11,380	\$0	\$0	\$0
30	59	\$27,647	5.0%	3.5%	\$7,168	5.0%	3.0%	\$0	\$31,438	\$15,385	1.05	\$0	\$24,540	\$11,949	\$0	\$0	\$0
31	60	\$30,046	5.0%	3.5%	\$7,752	5.0%	3.0%	\$37,798	\$33,010	\$16,154	1.05	\$33,010	\$25,767	\$12,547	\$23,191	\$0	\$33,010
32	61	\$32,652	5.0%	3.5%	\$8,384	5.0%	3.0%	\$41,036	\$34,661	\$16,961	1.05	\$34,661	\$27,056	\$13,174	\$24,350	\$0	\$34,661
33	62	\$35,485	5.0%	3.5%	\$9,067	5.0%	3.0%	\$44,552	\$36,394	\$17,810	1.05	\$36,394	\$28,409	\$13,833	\$25,568	\$0	\$36,394
34	63	\$38,563	5.0%	3.5%	\$9,806	5.0%	3.0%	\$48,369	\$38,214	\$18,700	1.05	\$38,214	\$29,829	\$14,524	\$26,846	\$0	\$38,214
35	64	\$41,909	5.0%	3.5%	\$10,605	5.0%	3.0%	\$52,514	\$40,124	\$19,635	1.05	\$40,124	\$31,320	\$15,250	\$28,188	\$0	\$40,124
36	65	\$8,485	5.0%	4.0%	\$8,973	5.0%	1.5%	\$17,458	\$42,131	\$20,617	1.05	\$20,617	\$32,886	\$16,013	\$14,412	\$15,397	\$2,062
37	66	\$9,265	5.0%	4.0%	\$9,563	5.0%	1.5%	\$18,829	\$44,237	\$21,648	1.05	\$21,648	\$34,531	\$16,814	\$15,132	\$16,664	\$2,165
38	67	\$10,118	5.0%	4.0%	\$10,192	5.0%	1.5%	\$20,310	\$46,449	\$22,730	1.05	\$22,730	\$36,257	\$17,654	\$15,889	\$18,027	\$2,273
39	68	\$11,049	5.0%	4.0%	\$10,862	5.0%	1.5%	\$21,911	\$48,771	\$23,866	1.05	\$23,866	\$38,070	\$18,537	\$16,683	\$19,525	\$2,387
40	69	\$12,065	5.0%	4.0%	\$11,577	5.0%	1.5%	\$23,642	\$51,210	\$25,060	1.05	\$25,060	\$39,974	\$19,464	\$17,518	\$21,136	\$2,506
41	70	\$13,175	5.0%	4.0%	\$12,338	5.0%	1.5%	\$25,513	\$53,770	\$26,313	1.05	\$26,313	\$41,972	\$20,437	\$18,393	\$22,882	\$2,631
42	71	\$14,387	5.0%	4.0%	\$13,149	5.0%	1.5%	\$27,536	\$56,459	\$27,628	1.05	\$27,628	\$44,071	\$21,450	\$19,313	\$24,774	\$2,763
43	72	\$15,711	5.0%	4.0%	\$14,014	5.0%	1.5%	\$29,725	\$59,282	\$29,010	1.05	\$29,010	\$46,275	\$22,537	\$20,270	\$26,024	\$2,901

10

Hire Date	7/1/2003
Age at hire	30
Age at retirement	60
Subsidy Start Age	60
Service	30

Subsidy Base Pro MC	\$5,862
Subsidy Base MC Eligible	\$2,803
Subsidy Index	5%
Discount Rate	8.25%
HB 238 Subsidy percent	90%
SB 141 Contribution percent	10%

Assumes participant rolls from system and is receiving system sponsored benefits
 Assumes 30 years to normal retirement
 Assumes demographic composition of retiree group does not change from current
 All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Cash Flow
 Present Value at Retirement

House Bill 238		Senate Bill 141	
Total State Subsidy		Total State Subsidy	Total Retiree Contribution
\$1,429,812		\$2,056,206	\$368,614
\$240,546		\$187,300	\$167,363

Duration	Age	Valuation Medical Claim Cost	Medical Trend Factor	Medical Aging Factor	Valuation Rx Claim Cost	Rx Trend Factor	Rx Aging Factor	Valuation Total Claim Cost	Pro MC Composite Premium	MC Elig Composite Premium	Pre MC Composite Trend	Retiree Mod/Rx Premium	Subsidy Base Pre-Medicare	Subsidy Base Medicare Eligible	Valuation Subsidy	Valuation Subsidy	Retiree Contribution
44	73	\$17,156	5.0%	1.0%	\$14,935	5.0%	1.5%	\$32,031	\$62,246	\$30,460	1.05	\$30,460	\$48,588	\$23,658	\$21,293	\$29,045	\$3,046
45	74	\$18,735	5.0%	4.0%	\$15,917	5.0%	1.5%	\$34,652	\$65,358	\$31,983	1.05	\$31,983	\$51,018	\$24,841	\$22,357	\$31,453	\$3,198
46	75	\$20,458	5.0%	1.5%	\$16,963	5.0%	0.5%	\$37,422	\$68,626	\$33,583	1.05	\$33,583	\$53,569	\$26,083	\$23,475	\$34,064	\$3,358
47	76	\$21,804	5.0%	1.5%	\$17,901	5.0%	0.5%	\$39,704	\$72,057	\$35,262	1.05	\$35,262	\$56,247	\$27,388	\$24,649	\$36,178	\$3,526
48	77	\$23,237	5.0%	1.5%	\$18,890	5.0%	0.5%	\$42,127	\$75,660	\$37,025	1.05	\$37,025	\$59,059	\$28,757	\$25,881	\$38,424	\$3,702
49	78	\$24,765	5.0%	1.5%	\$19,933	5.0%	0.5%	\$44,698	\$79,443	\$38,876	1.05	\$38,876	\$62,012	\$30,195	\$27,175	\$40,811	\$3,888
50	79	\$26,393	5.0%	1.5%	\$21,035	5.0%	0.5%	\$47,428	\$83,416	\$40,820	1.05	\$40,820	\$65,113	\$31,705	\$28,534	\$43,346	\$4,082
51	80	\$28,129	5.0%	1.5%	\$22,197	5.0%	0.5%	\$50,325	\$87,586	\$42,861	1.05	\$42,861	\$68,369	\$33,290	\$29,961	\$46,039	\$4,286
52	81	\$29,978	5.0%	1.5%	\$23,423	5.0%	0.5%	\$53,401	\$91,966	\$45,004	1.05	\$45,004	\$71,787	\$34,954	\$31,459	\$48,901	\$4,500
53	82	\$31,949	5.0%	1.5%	\$24,717	5.0%	0.5%	\$56,666	\$96,564	\$47,254	1.05	\$47,254	\$75,376	\$36,702	\$33,032	\$51,941	\$4,725
54	83	\$34,050	5.0%	1.5%	\$26,083	5.0%	0.5%	\$60,133	\$101,392	\$49,617	1.05	\$49,617	\$79,145	\$38,537	\$34,683	\$55,171	\$4,962
55	84	\$36,289	5.0%	1.5%	\$27,524	5.0%	0.5%	\$63,813	\$106,462	\$52,098	1.05	\$52,098	\$83,103	\$40,464	\$36,418	\$58,603	\$5,210
56	85	\$38,675	5.0%	0.5%	\$29,045	5.0%	0.0%	\$67,719	\$111,785	\$54,702	1.05	\$54,702	\$87,258	\$42,487	\$38,239	\$62,249	\$5,470
57	86	\$40,811	5.0%	0.5%	\$30,497	5.0%	0.0%	\$71,308	\$117,374	\$57,438	1.05	\$57,438	\$91,621	\$44,612	\$40,150	\$65,565	\$5,744
58	87	\$43,066	5.0%	0.5%	\$32,022	5.0%	0.0%	\$75,088	\$123,243	\$60,309	1.05	\$60,309	\$96,202	\$46,842	\$42,158	\$69,057	\$6,031
59	88	\$45,446	5.0%	0.5%	\$33,623	5.0%	0.0%	\$79,069	\$129,405	\$63,325	1.05	\$63,325	\$101,012	\$49,184	\$44,266	\$72,736	\$6,332
60	89	\$47,958	5.0%	0.5%	\$35,304	5.0%	0.0%	\$83,261	\$135,875	\$66,491	1.05	\$66,491	\$106,062	\$51,644	\$46,479	\$76,611	\$6,649
61	90	\$50,606	5.0%	0.5%	\$37,069	5.0%	0.0%	\$87,675	\$142,669	\$69,816	1.05	\$69,816	\$111,365	\$54,226	\$48,803	\$80,694	\$6,982
62	91	\$53,402	5.0%	0.5%	\$38,923	5.0%	0.0%	\$92,325	\$149,802	\$73,306	1.05	\$73,306	\$116,934	\$56,937	\$51,243	\$84,994	\$7,331
63	92	\$56,352	5.0%	0.5%	\$40,869	5.0%	0.0%	\$97,221	\$157,292	\$76,972	1.05	\$76,972	\$122,780	\$59,784	\$53,805	\$89,524	\$7,697
64	93	\$59,466	5.0%	0.5%	\$42,912	5.0%	0.0%	\$102,378	\$165,157	\$80,820	1.05	\$80,820	\$128,919	\$62,773	\$56,496	\$94,296	\$8,082
65	94	\$62,751	5.0%	0.5%	\$45,058	5.0%	0.0%	\$107,809	\$173,415	\$84,861	1.05	\$84,861	\$135,365	\$65,912	\$59,320	\$99,323	\$8,486
66	95	\$66,218	5.0%	0.5%	\$47,311	5.0%	0.0%	\$113,529	\$182,086	\$89,104	1.05	\$89,104	\$142,133	\$69,207	\$62,287	\$104,619	\$8,910
67	96	\$69,877	5.0%	0.5%	\$49,676	5.0%	0.0%	\$119,553	\$191,190	\$93,560	1.05	\$93,560	\$149,240	\$72,666	\$65,401	\$110,197	\$9,356
68	97	\$73,738	5.0%	0.5%	\$52,160	5.0%	0.0%	\$125,895	\$200,749	\$98,238	1.05	\$98,238	\$156,702	\$76,301	\$68,671	\$116,074	\$9,824
69	98	\$77,812	5.0%	0.5%	\$54,708	5.0%	0.0%	\$132,580	\$210,787	\$103,150	1.05	\$103,150	\$164,537	\$80,116	\$72,104	\$122,265	\$10,315
70	99	\$82,111	5.0%	0.5%	\$57,507	5.0%	0.0%	\$139,617	\$221,328	\$108,307	1.05	\$108,307	\$172,764	\$84,122	\$75,710	\$128,787	\$10,831

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Hire Date	7/1/2005
Age at hire	40
Age at retirement	60
Subsidy Eligibility Age	60
Service	20
Salary	\$53,925
Wage inflation	3.0%
HRA contribution rate	2.0%
HRA accumulation rate	8.25%
Subsidy Base	\$5,962
Subsidy index	5%
Subsidy percent	60%

HRA Fund at retirement	\$65,733
Total retiree contribution	\$161,299
Net retiree cost (w/HRA int)	\$89,198

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes only use of HRA funds is to pay for Net (after subsidy if applicable) retiree premium contributions
 Assumes 30 years to normal retirement
 Assumes demographic composition of pre-Medicare retiree group does not change from current
 Assumes spouse of equal age to retiree

All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Retiree
Premium Cost

Total State
Subsidy

Total HRA
Spend

\$290,044

\$128,745

\$72,101

Duration	Age	Salary	Contribution	End of Year HRA Balance	Pre MC Composite Premium	Pre MC Composite Trend	Retiree Med/Rx Premium	Subsidy Base	Retiree Subsidy	Retiree Contribution	Beg of Year HRA Balance	HRA Spend
1	40	\$53,925	\$1,079	\$1,122	\$14,636	1.23	\$0	\$14,636	\$0	\$0	\$0	\$0
2	41	\$55,543	\$1,111	\$2,370	\$16,215	1.11	\$0	\$15,307	\$0	\$0	\$0	\$0
3	42	\$57,203	\$1,144	\$3,756	\$17,874	1.10	\$0	\$16,136	\$0	\$0	\$0	\$0
4	43	\$58,925	\$1,179	\$5,293	\$19,604	1.10	\$0	\$16,943	\$0	\$0	\$0	\$0
5	44	\$60,693	\$1,214	\$6,992	\$21,390	1.09	\$0	\$17,790	\$0	\$0	\$0	\$0
6	45	\$62,514	\$1,250	\$8,870	\$23,216	1.09	\$0	\$18,679	\$0	\$0	\$0	\$0
7	46	\$64,389	\$1,288	\$10,941	\$25,064	1.08	\$0	\$19,613	\$0	\$0	\$0	\$0
8	47	\$66,321	\$1,326	\$13,224	\$26,912	1.07	\$0	\$20,594	\$0	\$0	\$0	\$0
9	48	\$68,311	\$1,366	\$15,737	\$28,738	1.07	\$0	\$21,624	\$0	\$0	\$0	\$0
10	49	\$70,360	\$1,407	\$18,499	\$30,517	1.06	\$0	\$22,705	\$0	\$0	\$0	\$0
11	50	\$72,471	\$1,449	\$21,533	\$32,225	1.06	\$0	\$23,840	\$0	\$0	\$0	\$0
12	51	\$74,645	\$1,493	\$24,863	\$33,876	1.05	\$0	\$25,032	\$0	\$0	\$0	\$0
13	52	\$76,884	\$1,538	\$28,514	\$35,528	1.05	\$0	\$26,284	\$0	\$0	\$0	\$0
14	53	\$79,191	\$1,584	\$32,514	\$37,304	1.05	\$0	\$27,598	\$0	\$0	\$0	\$0
15	54	\$81,566	\$1,631	\$36,894	\$39,169	1.05	\$0	\$28,978	\$0	\$0	\$0	\$0
16	55	\$84,013	\$1,680	\$41,686	\$41,128	1.05	\$0	\$30,426	\$0	\$0	\$0	\$0
17	56	\$86,534	\$1,731	\$46,925	\$43,184	1.05	\$0	\$31,948	\$0	\$0	\$0	\$0
18	57	\$89,130	\$1,783	\$52,651	\$45,343	1.05	\$0	\$33,545	\$0	\$0	\$0	\$0
19	58	\$91,804	\$1,836	\$58,906	\$47,611	1.05	\$0	\$35,222	\$0	\$0	\$0	\$0
20	59	\$94,558	\$1,891	\$65,733	\$49,991	1.05	\$0	\$36,984	\$0	\$0	\$0	\$0
21	60	\$0	\$0	\$40,784	\$52,491	1.05	\$52,491	\$38,833	\$23,300	\$29,191	\$65,733	\$29,191
22	61	\$0	\$0	\$12,259	\$55,115	1.05	\$55,115	\$40,774	\$24,465	\$30,651	\$40,784	\$30,651
23	62	\$0	\$0	\$0	\$57,871	1.05	\$57,871	\$42,813	\$25,688	\$32,183	\$12,259	\$12,259
24	63	\$0	\$0	\$0	\$60,765	1.05	\$60,765	\$44,954	\$26,972	\$33,792	\$0	\$0
25	64	\$0	\$0	\$0	\$63,803	1.05	\$63,803	\$47,201	\$28,321	\$35,482	\$0	\$0

Hire Date	7/1/2005
Age at hire	40
Age at retirement	60
Subsidy Start Age	60
Service	20
Salary	\$53,925
Wage inflation	3.0%
HRA contribution rate	2.0%
HRA accumulation rate	8.25%
Subsidy Base (7/1/2003)	\$5,962
Subsidy index	5%
Subsidy percent	60%

HRA Fund at retirement	\$65,733
Total retiree contribution	\$80,650
Net retiree cost (w/HRA int)	\$1,131

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes only use of HRA funds is to pay for Net (after subsidy if applicable) retiree premium contributions
 Assumes 30 years to normal retirement
 Assumes demographic composition of pre-Medicare retiree group does not change from current

All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Retiree Premium Cost	Total State Subsidy	Total HRA Spend
\$145,022	\$64,373	\$79,518

Duration	Age	Salary	Contribution	End of Year HRA Balance	Pre MC Composite Premium	Pre MC Composite Trend	Retiree Med/Rx Premium	Subsidy Base	Retiree Subsidy	Retiree Contribution	Beg of Year HRA Balance	HRA Spend
1	40	\$53,925	\$1,079	\$1,122	\$7,318	1.23	\$0	\$7,318	\$0	\$0	\$0	\$0
2	41	\$55,543	\$1,111	\$2,370	\$8,107	1.11	\$0	\$7,684	\$0	\$0	\$0	\$0
3	42	\$57,209	\$1,144	\$3,756	\$8,937	1.10	\$0	\$8,068	\$0	\$0	\$0	\$0
4	43	\$58,925	\$1,179	\$5,293	\$9,802	1.10	\$0	\$8,471	\$0	\$0	\$0	\$0
5	44	\$60,693	\$1,214	\$6,992	\$10,695	1.09	\$0	\$8,395	\$0	\$0	\$0	\$0
6	45	\$62,514	\$1,250	\$8,870	\$11,608	1.09	\$0	\$9,340	\$0	\$0	\$0	\$0
7	46	\$64,389	\$1,288	\$10,941	\$12,532	1.08	\$0	\$9,807	\$0	\$0	\$0	\$0
8	47	\$66,321	\$1,326	\$13,224	\$13,456	1.07	\$0	\$10,297	\$0	\$0	\$0	\$0
9	48	\$68,311	\$1,366	\$15,737	\$14,369	1.07	\$0	\$10,812	\$0	\$0	\$0	\$0
10	49	\$70,360	\$1,407	\$18,499	\$15,258	1.06	\$0	\$11,352	\$0	\$0	\$0	\$0
11	50	\$72,471	\$1,449	\$21,533	\$16,112	1.06	\$0	\$11,920	\$0	\$0	\$0	\$0
12	51	\$74,645	\$1,493	\$24,863	\$16,918	1.05	\$0	\$12,516	\$0	\$0	\$0	\$0
13	52	\$76,884	\$1,538	\$28,514	\$17,764	1.05	\$0	\$13,142	\$0	\$0	\$0	\$0
14	53	\$79,191	\$1,584	\$32,514	\$18,652	1.05	\$0	\$13,799	\$0	\$0	\$0	\$0
15	54	\$81,566	\$1,631	\$36,894	\$19,585	1.05	\$0	\$14,489	\$0	\$0	\$0	\$0
16	55	\$84,013	\$1,680	\$41,686	\$20,564	1.05	\$0	\$15,213	\$0	\$0	\$0	\$0
17	56	\$86,534	\$1,731	\$46,925	\$21,592	1.05	\$0	\$15,974	\$0	\$0	\$0	\$0
18	57	\$89,130	\$1,783	\$52,651	\$22,672	1.05	\$0	\$16,773	\$0	\$0	\$0	\$0
19	58	\$91,804	\$1,836	\$58,906	\$23,805	1.05	\$0	\$17,611	\$0	\$0	\$0	\$0
20	59	\$94,558	\$1,891	\$65,733	\$24,996	1.05	\$0	\$18,492	\$0	\$0	\$0	\$0
21	60	\$0	\$0	\$55,970	\$26,245	1.05	\$26,245	\$19,416	\$11,650	\$14,596	\$65,733	\$14,596
22	61	\$0	\$0	\$44,643	\$27,558	1.05	\$27,558	\$20,387	\$12,232	\$15,325	\$55,970	\$15,325
23	62	\$0	\$0	\$31,583	\$28,936	1.05	\$28,936	\$21,407	\$12,844	\$16,092	\$44,643	\$16,092
24	63	\$0	\$0	\$16,610	\$30,382	1.05	\$30,382	\$22,477	\$13,486	\$16,896	\$31,583	\$16,896
25	64	\$0	\$0	\$0	\$31,901	1.05	\$31,901	\$23,601	\$14,160	\$17,741	\$16,610	\$16,610

Hire Date	7/1/2005
Age at hire	40
Age at retirement	60
Subsidy Start Age	60
Service	20

Salary	\$53,925
Wage inflation	3.0%

HRA contribution rate	1.0%
HRA accumulation rate	8.25%

Subsidy Base (7/1/2003)	\$5,962
Subsidy index	5%
Subsidy percent	60%

HRA Fund at retirement	\$32,866
Total retiree contribution	\$80,650
Net retiree cost (w/HRA int)	\$44,599

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes only use of HRA funds is to pay for Net (after subsidy if applicable) retiree premium contributions
 Assumes 30 years to normal retirement
 Assumes demographic composition of pre-Medicare retiree group does not change from current

All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Retiree Premium Cost	Total State Subsidy	Total HRA Spend
\$145,022	\$64,373	\$36,050

Duration	Age	Salary	Contribution	End of Year HRA Balance	Pre MC Composite Premium	Pre MC Composite Trend	Retiree Med/Rx Premium	Subsidy Base	Retiree Subsidy	Retiree Contribution	Beg of Year HRA Balance	HRA Spend
1	40	\$53,925	\$539	\$561	\$7,318	1.23	\$0	\$7,318	\$0	\$0	\$0	\$0
2	41	\$55,543	\$555	\$1,185	\$8,107	1.11	\$0	\$7,684	\$0	\$0	\$0	\$0
3	42	\$57,209	\$572	\$1,878	\$8,937	1.10	\$0	\$8,068	\$0	\$0	\$0	\$0
4	43	\$58,925	\$589	\$2,646	\$9,802	1.10	\$0	\$8,471	\$0	\$0	\$0	\$0
5	44	\$60,693	\$607	\$3,496	\$10,695	1.09	\$0	\$8,895	\$0	\$0	\$0	\$0
6	45	\$62,514	\$625	\$4,435	\$11,608	1.09	\$0	\$9,340	\$0	\$0	\$0	\$0
7	46	\$64,389	\$644	\$5,471	\$12,532	1.08	\$0	\$9,807	\$0	\$0	\$0	\$0
8	47	\$66,321	\$663	\$6,612	\$13,456	1.07	\$0	\$10,297	\$0	\$0	\$0	\$0
9	48	\$68,311	\$683	\$7,868	\$14,369	1.07	\$0	\$10,812	\$0	\$0	\$0	\$0
10	49	\$70,360	\$704	\$9,249	\$15,258	1.06	\$0	\$11,352	\$0	\$0	\$0	\$0
11	50	\$72,471	\$725	\$10,767	\$16,112	1.06	\$0	\$11,920	\$0	\$0	\$0	\$0
12	51	\$74,645	\$746	\$12,431	\$16,918	1.05	\$0	\$12,516	\$0	\$0	\$0	\$0
13	52	\$76,884	\$769	\$14,257	\$17,764	1.05	\$0	\$13,142	\$0	\$0	\$0	\$0
14	53	\$79,191	\$792	\$16,257	\$18,652	1.05	\$0	\$13,799	\$0	\$0	\$0	\$0
15	54	\$81,566	\$816	\$18,447	\$19,585	1.05	\$0	\$14,489	\$0	\$0	\$0	\$0
16	55	\$84,013	\$840	\$20,843	\$20,564	1.05	\$0	\$15,213	\$0	\$0	\$0	\$0
17	56	\$86,534	\$865	\$23,463	\$21,592	1.05	\$0	\$15,974	\$0	\$0	\$0	\$0
18	57	\$89,130	\$891	\$26,326	\$22,672	1.05	\$0	\$16,773	\$0	\$0	\$0	\$0
19	58	\$91,804	\$918	\$29,453	\$23,805	1.05	\$0	\$17,611	\$0	\$0	\$0	\$0
20	59	\$94,558	\$946	\$32,866	\$24,996	1.05	\$0	\$18,492	\$0	\$0	\$0	\$0
21	60	\$0	\$0	\$20,392	\$26,245	1.05	\$26,245	\$19,416	\$11,650	\$11,596	\$22,866	\$14,596
22	61	\$0	\$0	\$6,130	\$27,558	1.05	\$27,558	\$20,387	\$12,232	\$15,325	\$20,392	\$15,325
23	62	\$0	\$0	\$0	\$28,936	1.05	\$28,936	\$21,407	\$12,844	\$16,092	\$6,130	\$6,130
24	63	\$0	\$0	\$0	\$30,382	1.05	\$30,382	\$22,477	\$13,486	\$16,896	\$0	\$0
25	64	\$0	\$0	\$0	\$31,901	1.05	\$31,901	\$23,601	\$14,160	\$17,741	\$0	\$0

Hire Date	7/1/2005
Age at hire	25
Age at retirement	55
Subsidy Start Age	60
Service	30

Salary	\$53,925
Wage inflation	3.0%

HRA contribution rate	2.0%
HRA accumulation rate	8.25%

Subsidy Base (7/1/2003)	\$5,962
Subsidy index	5%
Subsidy percent	90%

IIRA Fund at retirement	\$178,643
Total retiree contribution	\$338,978
Net retiree cost (w/ IIRA int)	\$123,140

Assumes participant retires from system and is receiving system sponsored benefits
 Assumes only use of HRA funds is to pay for Not (after subsidy if applicable) retiree premium contributions
 Assumes 30 years to normal retirement
 Assumes demographic composition of pre-Medicare retiree group does not change from current

All estimates, based upon the information available at a point in time, are subject to unforeseen and random events. Therefore any projection must be interpreted as having a likely range of variability from the estimate.

Gross Retiree Premium Cost	Total State Subsidy	Total HRA Spend
\$537,717	\$200,739	\$213,838

Duration	Age	Salary	Contribution	End of Year HRA Balance	Pre MC Composite Premium	Pre MC Composite Trend	Retiree Med/Rx Premium	Subsidy Base	Retiree Subsidy	Retiree Contribution	Beg of Year HRA Balance	HRA Spend
1	25	\$53,925	\$1,079	\$1,122	\$7,310	1.23	\$0	\$7,318	\$0	\$0	\$0	\$0
2	26	\$55,543	\$1,111	\$2,370	\$8,107	1.11	\$0	\$7,684	\$0	\$0	\$0	\$0
3	27	\$57,209	\$1,144	\$3,756	\$8,937	1.10	\$0	\$8,068	\$0	\$0	\$0	\$0
4	28	\$58,925	\$1,179	\$5,293	\$9,802	1.10	\$0	\$8,471	\$0	\$0	\$0	\$0
5	29	\$60,693	\$1,214	\$6,992	\$10,695	1.09	\$0	\$8,995	\$0	\$0	\$0	\$0
6	30	\$62,514	\$1,250	\$8,870	\$11,608	1.09	\$0	\$9,340	\$0	\$0	\$0	\$0
7	31	\$64,389	\$1,288	\$10,941	\$12,532	1.08	\$0	\$9,807	\$0	\$0	\$0	\$0
8	32	\$66,321	\$1,326	\$13,224	\$13,456	1.07	\$0	\$10,297	\$0	\$0	\$0	\$0
9	33	\$68,311	\$1,366	\$15,737	\$14,369	1.07	\$0	\$10,812	\$0	\$0	\$0	\$0
10	34	\$70,360	\$1,407	\$18,499	\$15,258	1.06	\$0	\$11,352	\$0	\$0	\$0	\$0
11	35	\$72,471	\$1,449	\$21,533	\$16,112	1.06	\$0	\$11,920	\$0	\$0	\$0	\$0
12	36	\$74,645	\$1,493	\$24,863	\$16,918	1.05	\$0	\$12,516	\$0	\$0	\$0	\$0
13	37	\$76,884	\$1,538	\$28,514	\$17,764	1.05	\$0	\$13,142	\$0	\$0	\$0	\$0
14	38	\$79,191	\$1,584	\$32,514	\$18,652	1.05	\$0	\$13,799	\$0	\$0	\$0	\$0
15	39	\$81,566	\$1,631	\$36,894	\$19,585	1.05	\$0	\$14,489	\$0	\$0	\$0	\$0
16	40	\$84,013	\$1,680	\$41,686	\$20,564	1.05	\$0	\$15,213	\$0	\$0	\$0	\$0
17	41	\$86,534	\$1,731	\$46,925	\$21,592	1.05	\$0	\$15,974	\$0	\$0	\$0	\$0
18	42	\$89,130	\$1,783	\$52,651	\$22,672	1.05	\$0	\$16,773	\$0	\$0	\$0	\$0
19	43	\$91,804	\$1,836	\$58,906	\$23,805	1.05	\$0	\$17,611	\$0	\$0	\$0	\$0
20	44	\$94,558	\$1,891	\$65,733	\$24,996	1.05	\$0	\$18,492	\$0	\$0	\$0	\$0
21	45	\$97,395	\$1,948	\$73,182	\$26,245	1.05	\$0	\$19,416	\$0	\$0	\$0	\$0
22	46	\$100,316	\$2,006	\$81,307	\$27,558	1.05	\$0	\$20,387	\$0	\$0	\$0	\$0
23	47	\$103,326	\$2,067	\$90,165	\$28,936	1.05	\$0	\$21,407	\$0	\$0	\$0	\$0
24	48	\$106,426	\$2,129	\$99,819	\$30,382	1.05	\$0	\$22,477	\$0	\$0	\$0	\$0
25	49	\$109,618	\$2,192	\$110,335	\$31,901	1.05	\$0	\$23,601	\$0	\$0	\$0	\$0
26	50	\$112,917	\$2,258	\$121,787	\$33,496	1.05	\$0	\$24,781	\$0	\$0	\$0	\$0
27	51	\$116,294	\$2,326	\$134,254	\$35,171	1.05	\$0	\$26,020	\$0	\$0	\$0	\$0
28	52	\$119,763	\$2,396	\$147,823	\$36,930	1.05	\$0	\$27,321	\$0	\$0	\$0	\$0
29	53	\$123,376	\$2,468	\$162,585	\$38,776	1.05	\$0	\$28,687	\$0	\$0	\$0	\$0
30	54	\$127,078	\$2,542	\$178,643	\$40,715	1.05	\$0	\$30,121	\$0	\$0	\$0	\$0
31	55	\$0	\$0	\$148,901	\$42,751	1.05	\$42,751	\$31,627	\$0	\$42,751	\$178,643	\$42,751
32	56	\$0	\$0	\$114,482	\$44,888	1.05	\$44,888	\$33,209	\$0	\$44,888	\$148,901	\$44,888
33	57	\$0	\$0	\$74,888	\$47,133	1.05	\$47,133	\$34,869	\$0	\$47,133	\$114,482	\$47,133
34	58	\$0	\$0	\$29,576	\$49,490	1.05	\$49,490	\$36,612	\$0	\$49,490	\$74,888	\$49,490
35	59	\$0	\$0	\$0	\$51,964	1.05	\$51,964	\$38,443	\$0	\$51,964	\$29,576	\$29,576
36	60	\$0	\$0	\$0	\$54,562	1.05	\$54,562	\$40,365	\$36,329	\$18,234	\$0	\$0
37	61	\$0	\$0	\$0	\$57,290	1.05	\$57,290	\$42,383	\$38,145	\$19,145	\$0	\$0
38	62	\$0	\$0	\$0	\$60,155	1.05	\$60,155	\$44,503	\$40,052	\$20,102	\$0	\$0
39	63	\$0	\$0	\$0	\$63,163	1.05	\$63,163	\$46,728	\$42,055	\$21,108	\$0	\$0
40	64	\$0	\$0	\$0	\$66,321	1.05	\$66,321	\$49,064	\$44,158	\$22,163	\$0	\$0