

April 11, 2014

VIA EMAIL

Mr. Mike Barnhill
Deputy Commissioner
Department of Administration
State of Alaska
333 Willoughby Avenue
6th Floor State Office Building
Juneau, AK 99811-0208

Re: Fiscal Note for HB 385 - Governor's Proposal for Funding PERS and TRS

Dear Mike:

As requested, we are providing the following information for a Fiscal Note on HB 385; the Governor's Proposal which transfers an amount of \$3 billion from the budget reserve fund into the State of Alaska Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS) in fiscal year 2015. This proposal would also amend the additional State contributions in fiscal years 2016 through 2035 to a fixed \$500 million annually, with additional appropriations as necessary to keep the systems funded consistent with actuarial standards. An amount of \$1,881,370,000 of the \$3 billion will be allocated to PERS and \$1,118,630,000 of the \$3 billion will be allocated to TRS. The amount of \$157 million of the \$500 million will be allocated to PERS and \$343 million of the \$500 million will be allocated to TRS each fiscal year beyond 2015. The proposed changes would become effective as of July 1, 2014. Our results are based on the 2012 actuarial valuation results as the 2013 actuarial valuation results are not yet final. A projected analysis of the Governor's Proposal for PERS and TRS is shown in the exhibits following this letter.

Actuarial Projection Analysis of Governor's Proposal

The Governor's proposal changes the future pace and funding pattern of state and employer contributions to PERS and TRS. It does not change the benefit provisions, expected future benefit payments, or the actuarial liabilities of PERS and TRS. In order to measure the fiscal impact of the proposal, Buck performed 30-year actuarial projections of the expected funding patterns for both the current funding policy adopted by the Alaska Retirement Management Board (ARMB), referred to as the Baseline, and the Governor's Proposal.

First, the proposal provides increased immediate funding by transferring \$3 billion from the budget reserve fund to PERS and TRS in fiscal year 2015. This transfer immediately improves the funding levels of PERS and TRS and lowers future funding needs. Levels of funding at any point in time are measured by the funding ratio which equals the ratio of the systems assets divided by the accrued

liability. For both PERS and TRS, the funding ratio is expected to increase almost 7% at the time of the transfer.

Second, future annual additional state assistance contributions, subject to appropriations, are fixed at \$500 million per year and are paid until the funding ratio reaches 100%. Based on our projections, we estimate this will occur in fiscal year 2037 for both PERS and TRS using the allocation noted earlier. This represents an extension of the funding period of six years from the current policy which is expected to reach 100% funding by fiscal year 2031.

The overall impact to state funding of PERS and TRS is shown on Exhibit 1 and 2 attached. The fiscal impact of the \$3 billion transfer lowers overall state assistance funding, and the extension of the funding period by six years increases overall employer funding. The net result is an increase in total state funding (state's contribution as an employer plus additional state assistance) from fiscal years 2015 to 2037 for PERS of \$495 million and for TRS of \$618 million, or a total of \$1,113 million. The funding of other non-state employers of PERS also increases from \$2,904 million to \$4,392 million, or a net increase of \$1,488 million. Greater detail of our projection results for both PERS and TRS is shown in Exhibits 3 through 6.

Funding Policy

It should be noted that these projections are **not** predictions, but rather expectations assuming all of the actuarial assumptions are exactly realized, including an 8.00% investment rate of return in each year from 2014 to 2043. To the extent actual future experience is different from what we have assumed, the actual results will increase or decrease the funding levels shown in our projections. We recommend policy makers take this into consideration when setting long-term funding policy.

There are many budgetary approaches being used today by public employers and states to fund pension systems. The most common are (1) the actuarial contribution approach, and (2) the fixed dollar or fixed contribution rate approach, typically set in statute. Alaska is currently using the actuarial contribution approach. Under this approach, the actuary performs an actuarial valuation each year to determine the contribution rate needed to fund the accruing benefit (known as normal cost) and amortize the unfunded past service liability over a defined period. The contribution rate will vary year by year given changes in experience, actuarial assumptions, methods, or plan provisions. These changes to the contribution rate keeps funding on a path to fully amortize the unfunded past service liability within the defined period. Alaska currently uses a 25 year fixed amortization period from the date portions of the unfunded liability are established.

The Governor's Proposal (HB 385) changes the funding policy for the additional state assistance contribution from the actuarial contribution approach to a fixed dollar contribution approach. Employer contributions will still be determined on the actuarial contribution approach with a cap of 22% of total payroll for PERS and 12.56% of total payroll for TRS. Future annual actuarial valuations will be

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performed to measure the ongoing actuarial positions of PERS and TRS and any changes in the funding period or date when the systems are expected to reach a 100% funding ratio. An important feature of HB 385 provides that, if any future actuarial analysis determines that the fixed annual state contribution amount is insufficient to amortize the unfunded past service liability over a period consistent with actuarial standards, the state will contribute, subject to appropriation, an additional fixed amount to keep the systems funded within actuarial standards. We recommend policy makers consult with the system's actuary to determine the conditions under which additional state contributions would be necessary.

Summary for Analysis of Governor's Proposal

The data, assumptions, plan provisions and methods used for the estimated costs are described in the actuarial valuation reports as of June 30, 2012 except that future contributions from the State have been based on the Governor's Proposal. We have also used the 12.50% investment rate of return in fiscal year 2013 and an 8.00% investment rate of return in all future years beyond fiscal year 2013 to project fund balances. The bill will become effective July 1, 2014.

Please let me know if you need any further information.

Sincerely,



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

- c: Ms. Kathy Lea, State of Alaska
- Mr. Brandon Maitlen, State of Alaska
- Mr. Kevin Worley, State of Alaska
- Mr. Chris Hulla, Buck Consultants
- Ms. Kyla Kaltenbach, Buck Consultants

Exhibit 1

**State of Alaska PERS and TRS
Financial Projections (in Thousands)
Summary of State Assistance**

Fiscal Year End	Baseline - Current ARM Board Funding Policy			Governor's Proposal - Additional \$3B State Contribution in FY15; \$500M State Contributions in FY16-FY35			Cost / (Savings) to Additional State Assistance of Governor's Proposal		
	PERS	TRS	Total	PERS	TRS	Total	PERS	TRS	Total
2013	\$310,528	\$298,101	\$608,629	\$310,528	\$298,101	\$608,629	\$0	\$0	\$0
2014	312,473	316,847	629,320	312,473	316,847	629,320	0	0	0
2015	519,676	455,904	975,580	1,881,370	1,118,630	3,000,000	1,361,694	662,726	2,024,420
2016	563,210	485,905	1,049,115	157,000	343,000	500,000	(406,210)	(142,905)	(549,115)
2017	555,103	492,448	1,047,551	157,000	343,000	500,000	(398,103)	(149,448)	(547,551)
2018	528,170	488,074	1,016,244	157,000	343,000	500,000	(371,170)	(145,074)	(516,244)
2019	517,221	489,890	1,007,111	157,000	343,000	500,000	(360,221)	(146,890)	(507,111)
2020	487,881	484,378	972,259	157,000	343,000	500,000	(330,881)	(141,378)	(472,259)
2021	466,935	483,595	950,530	157,000	343,000	500,000	(309,935)	(140,595)	(450,530)
2022	445,553	482,885	928,438	157,000	343,000	500,000	(288,553)	(139,885)	(428,438)
2023	424,549	482,733	907,282	157,000	343,000	500,000	(267,549)	(139,733)	(407,282)
2024	404,298	482,225	886,523	157,000	343,000	500,000	(247,298)	(139,225)	(386,523)
2025	383,915	481,478	865,393	157,000	343,000	500,000	(226,915)	(138,478)	(365,393)
2026	363,879	481,273	845,152	157,000	343,000	500,000	(206,879)	(138,273)	(345,152)
2027	342,312	480,405	822,717	157,000	343,000	500,000	(185,312)	(137,405)	(322,717)
2028	320,269	479,517	799,786	157,000	343,000	500,000	(163,269)	(136,517)	(299,786)
2029	296,545	478,207	774,752	157,000	343,000	500,000	(139,545)	(135,207)	(274,752)
2030	0	249,950	249,950	157,000	343,000	500,000	157,000	93,050	250,050
2031	0	0	0	157,000	343,000	500,000	157,000	343,000	500,000
2032	0	0	0	157,000	343,000	500,000	157,000	343,000	500,000
2033	0	0	0	157,000	343,000	500,000	157,000	343,000	500,000
2034	0	0	0	157,000	343,000	500,000	157,000	343,000	500,000
2035	0	0	0	157,000	343,000	500,000	157,000	343,000	500,000
2036	0	0	0	13,000	118,000	131,000	13,000	118,000	131,000
2037	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0	0
2043	0	0	0	0	0	0	0	0	0
Totals for 2015 & After	\$6,619,516	\$7,478,867	\$14,098,383	\$5,034,370	\$8,096,630	\$13,131,000	(\$1,585,146)	\$617,763	(\$967,383)

Exhibit 2

**State of Alaska PERS and TRS
Financial Projections (in Thousands)**

Summary of Total State Contributions - State's Share of Employer Contributions Plus Additional State Assistance

Fiscal Year End	Baseline - Current ARM Board Funding Policy			Governor's Proposal - Additional \$3B State Contribution in FY15; \$500M State Contributions in FY16-FY35			Total State Contribution Cost / (Savings) of Governor's Proposal		
	PERS	TRS	Total	PERS	TRS	Total	PERS	TRS	Total
2013	\$559,312	\$298,101	\$857,413	\$559,312	\$298,101	\$857,413	\$0	\$0	\$0
2014	558,699	316,847	875,546	558,699	316,847	875,546	0	0	0
2015	764,457	455,904	1,220,361	2,126,151	1,118,630	3,244,781	1,361,694	662,726	2,024,420
2016	807,472	485,905	1,293,377	401,262	343,000	744,262	(406,210)	(142,905)	(549,115)
2017	799,743	492,448	1,292,191	401,640	343,000	744,640	(398,103)	(149,448)	(547,551)
2018	774,002	488,074	1,262,076	402,832	343,000	745,832	(371,170)	(145,074)	(516,244)
2019	765,041	489,890	1,254,931	404,820	343,000	747,820	(360,221)	(146,890)	(507,111)
2020	738,108	484,378	1,222,486	407,227	343,000	750,227	(330,881)	(141,378)	(472,259)
2021	720,186	483,595	1,203,781	410,251	343,000	753,251	(309,935)	(140,595)	(450,530)
2022	702,268	482,885	1,185,153	413,715	343,000	756,715	(288,553)	(139,885)	(428,438)
2023	685,320	482,733	1,168,053	417,771	343,000	760,771	(267,549)	(139,733)	(407,282)
2024	669,945	482,225	1,152,170	422,647	343,000	765,647	(247,298)	(139,225)	(386,523)
2025	655,062	481,478	1,136,540	428,147	343,000	771,147	(226,915)	(138,478)	(365,393)
2026	641,281	481,273	1,122,554	434,402	343,000	777,402	(206,879)	(138,273)	(345,152)
2027	626,623	480,405	1,107,028	441,311	343,000	784,311	(185,312)	(137,405)	(322,717)
2028	612,247	479,517	1,091,764	448,978	343,000	791,978	(163,269)	(136,517)	(299,786)
2029	596,985	478,207	1,075,192	457,440	343,000	800,440	(139,545)	(135,207)	(274,752)
2030	106,053	249,950	356,003	466,646	343,000	809,646	360,593	93,050	453,643
2031	4,534	0	4,534	476,711	343,000	819,711	472,177	343,000	815,177
2032	3,153	0	3,153	487,587	343,000	830,587	484,434	343,000	827,434
2033	2,467	0	2,467	499,349	343,000	842,349	496,882	343,000	839,882
2034	2,006	0	2,006	512,446	343,000	855,446	510,440	343,000	853,440
2035	1,197	0	1,197	439,029	343,000	782,029	437,832	343,000	780,832
2036	626	0	626	267,208	118,000	385,208	266,582	118,000	384,582
2037	326	0	326	6,530	0	6,530	6,204	0	6,204
2038	0	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0	0
2043	0	0	0	0	0	0	0	0	0
Totals 2015 & After	\$10,679,102	\$7,478,867	\$18,157,969	\$11,174,100	\$8,096,630	\$19,270,730	\$494,998	\$617,763	\$1,112,761

Note: Assumes TRS does not contain any State Employers.

Exhibit 3

**State of Alaska PERS
Financial Projections (in Thousands)**

Baseline - Level Dollar Amortization over 25 years and 12.5% Investment Return in FY13, 8% in FY14 and later years

Fiscal Year End	Investment Return: 8.00%				Flow Amounts During Following 12 Months								Recognized Asset Gain/(Loss)	Ending Actuarial Assets	41.70% Municipal Er Cont's	58.30% State Er Cont's	State Assist Cont's	State Cont's	Total Er/State Cont's	
	Valuation Amounts on July 1 (Beginning of Fiscal Year)	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs								Investment Earnings
2013	\$11,832,030	\$19,292,361	61.3%	(\$7,460,331)	\$2,245,686	\$426,731	\$310,528	\$118,879	\$856,138	\$973,954	(\$117,816)	\$1,399,035	(\$924,132)	\$12,189,117	\$177,947	\$248,784	\$310,528	\$559,312	\$737,259	
2014	12,189,117	20,109,112	60.6%	(7,919,995)	2,295,881	422,343	312,473	120,633	855,449	1,056,528	(201,079)	994,291	195,922	13,178,251	176,117	246,226	312,473	558,699	734,816	
2015	13,178,251	20,885,260	63.1%	(7,707,009)	2,357,693	419,865	519,676	114,150	1,053,691	1,140,515	(86,824)	1,061,950	162,400	14,315,777	175,084	244,781	519,676	764,457	939,541	
2016	14,315,777	21,614,302	66.2%	(7,298,525)	2,428,744	418,974	563,210	107,781	1,089,965	1,225,841	(135,876)	1,137,751	(76,850)	15,240,802	174,712	244,262	563,210	807,472	982,184	
2017	15,240,802	22,291,137	68.4%	(7,050,335)	2,508,301	419,623	555,103	101,655	1,076,381	1,305,131	(228,750)	1,213,993	100,740	16,326,785	174,983	244,640	555,103	799,743	974,726	
2018	16,326,785	22,919,638	71.2%	(6,592,853)	2,595,896	421,688	528,170	95,970	1,045,808	1,380,741	(334,933)	1,288,394	0	17,280,246	175,836	245,832	528,170	774,002	949,838	
2019	17,280,246	23,501,895	73.5%	(6,221,649)	2,692,279	425,077	517,221	90,469	1,032,767	1,456,528	(423,761)	1,360,934	0	18,217,419	177,257	247,820	517,221	765,041	942,298	
2020	18,217,419	24,035,658	75.8%	(5,818,239)	2,792,589	429,205	487,881	85,274	1,002,360	1,537,884	(535,524)	1,431,251	0	19,113,146	178,978	250,227	487,881	738,108	917,086	
2021	19,113,146	24,512,466	78.0%	(5,399,320)	2,898,156	434,392	466,935	80,182	981,509	1,621,417	(639,908)	1,498,536	0	19,971,774	181,141	253,251	466,935	720,186	901,327	
2022	19,971,774	24,925,074	80.1%	(4,953,300)	3,008,108	440,335	445,553	75,193	961,081	1,698,588	(737,507)	1,563,139	0	20,797,406	183,620	256,715	445,553	702,268	885,888	
2023	20,797,406	25,278,587	82.3%	(4,481,181)	3,123,760	447,292	424,549	56,540	928,381	1,771,109	(842,728)	1,624,820	0	21,579,498	186,521	260,771	424,549	685,320	871,841	
2024	21,579,498	25,570,418	84.4%	(3,990,920)	3,248,785	455,655	404,298	51,656	911,609	1,835,920	(924,311)	1,683,971	0	22,339,158	190,008	265,647	404,298	669,945	859,953	
2025	22,339,158	25,795,109	86.6%	(3,455,951)	3,379,794	465,089	383,915	46,641	895,645	1,924,239	(1,028,594)	1,740,357	0	23,050,921	193,942	271,147	383,915	655,062	849,004	
2026	23,050,921	25,934,450	88.9%	(2,883,529)	3,517,793	475,818	363,879	42,214	881,911	1,991,781	(1,109,870)	1,793,885	0	23,734,936	198,416	277,402	363,879	641,281	839,697	
2027	23,734,936	26,004,608	91.3%	(2,269,672)	3,662,757	487,669	342,312	38,093	868,074	2,062,704	(1,194,630)	1,845,044	0	24,385,350	203,358	284,311	342,312	626,623	829,981	
2028	24,385,350	25,997,577	93.8%	(1,612,227)	3,815,471	500,820	320,269	33,958	855,047	2,123,648	(1,268,601)	1,893,972	0	25,010,721	208,842	291,978	320,269	612,247	821,089	
2029	25,010,721	25,917,989	96.5%	(907,268)	3,975,899	515,334	296,545	30,217	842,096	2,177,117	(1,335,021)	1,941,217	0	25,616,917	214,894	300,440	296,545	596,985	811,879	
2030	25,616,917	25,769,017	99.4%	(152,100)	4,143,703	181,909	0	26,520	208,429	2,226,897	(2,018,468)	1,962,735	0	25,561,184	75,856	106,053	0	106,053	181,909	
2031	25,561,184	25,549,181	100.0%	12,003	4,320,656	7,777	0	23,332	31,109	2,303,286	(2,272,177)	1,948,068	0	25,237,075	3,243	4,534	0	4,534	7,777	
2032	25,237,075	25,227,017	100.0%	10,058	4,506,592	5,408	0	20,730	26,138	2,351,333	(2,325,195)	1,919,899	0	24,831,779	2,255	3,153	0	3,153	5,408	
2033	24,831,779	24,821,687	100.0%	10,092	4,702,683	4,232	0	17,870	22,102	2,374,058	(2,351,956)	1,886,350	0	24,366,173	1,765	2,467	0	2,467	4,232	
2034	24,366,173	24,357,984	100.0%	8,189	4,915,446	3,441	0	15,238	18,679	2,405,178	(2,386,499)	1,847,642	0	23,827,316	1,435	2,006	0	2,006	3,441	
2035	23,827,316	23,817,428	100.0%	9,888	5,135,408	2,054	0	13,352	15,406	2,427,129	(2,411,723)	1,803,471	0	23,219,064	857	1,197	0	1,197	2,054	
2036	23,219,064	23,210,536	100.0%	8,528	5,363,274	1,073	0	11,263	12,336	2,461,663	(2,449,327)	1,753,220	0	22,522,957	447	626	0	626	1,073	
2037	22,522,957	22,515,424	100.0%	7,533	5,600,200	560	0	9,520	10,080	2,462,456	(2,452,376)	1,697,409	0	21,767,990	234	326	0	326	560	
2038	21,767,990	21,761,882	100.0%	6,108	5,846,914	0	0	7,601	7,601	2,440,642	(2,433,041)	1,637,843	0	20,972,792	0	0	0	0	0	
2039	20,972,792	20,968,326	100.0%	4,466	6,103,819	0	0	6,104	6,104	2,415,802	(2,409,698)	1,575,226	0	20,138,320	0	0	0	0	0	
2040	20,138,320	20,135,179	100.0%	3,141	6,368,696	0	0	5,095	5,095	2,423,877	(2,418,782)	1,508,085	0	19,227,623	0	0	0	0	0	
2041	19,227,623	19,225,406	100.0%	2,217	6,645,068	0	0	3,987	3,987	2,384,529	(2,360,542)	1,437,712	0	18,304,793	0	0	0	0	0	
2042	18,304,793	18,303,380	100.0%	1,413	6,931,674	0	0	2,773	2,773	2,308,626	(2,305,853)	1,366,218	0	17,365,158	0	0	0	0	0	
2043	17,365,158	17,364,761	100.0%	397	7,230,997	0	0	2,169	2,169	2,249,003	(2,246,834)	1,293,940	0	16,412,264	0	0	0	0	0	
Totals 2015 & After						\$ 6,963,270	\$ 6,619,516	\$ 1,215,547	\$ 14,798,333					\$2,903,684	\$ 4,059,586	\$ 6,619,516	\$ 10,679,102	\$ 13,582,786		
															21.38%			78.62%	100.00%	

Exhibit 4

**State of Alaska PERS
Financial Projections (in Thousands)
Governor's Proposal - Level Dollar Amortization over 30 years and 12.5% Investment Return in FY13, 8% in FY14 and later years
Additional State Contribution in FY15 Allocated based on Unfunded Liability**

Fiscal Year End	Investment Return: 8.00%				Flow Amounts During Following 12 Months								Recognized Asset Gain/(Loss)	Ending Actuarial Assets	41.70% Municipal Er Cont's	58.30% State Er Cont's	State Assist Cont's	State Cont's	Total Er/State Cont's
	Valuation Amounts on July 1 (Beginning of Fiscal Year)	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs							
2013	\$11,832,030	\$19,292,361	61.3%	(\$7,460,331)	\$2,245,686	\$426,731	\$310,528	\$118,879	\$856,138	\$973,954	(\$117,816)	\$1,399,035	(\$924,132)	\$12,189,117	\$177,947	\$248,784	\$310,528	\$559,312	\$737,259
2014	12,189,117	20,109,112	60.6%	(7,919,995)	2,295,881	422,343	312,473	120,633	855,449	1,056,528	(201,079)	994,291	195,922	13,178,251	176,117	246,226	312,473	558,699	734,816
2015	13,178,251	20,885,260	63.1%	(7,707,009)	2,357,693	419,865	1,881,370	114,150	2,415,385	1,140,515	1,274,870	1,115,370	162,400	15,730,891	175,084	244,781	1,881,370	2,126,151	2,301,235
2016	15,730,891	21,614,302	72.8%	(5,883,411)	2,428,744	418,974	157,000	107,781	683,755	1,225,841	(542,086)	1,235,024	(76,850)	16,346,979	174,712	244,262	157,000	401,262	575,974
2017	16,346,979	22,291,137	73.3%	(5,944,158)	2,508,301	419,623	157,000	101,655	678,278	1,305,131	(626,853)	1,286,869	100,740	17,107,735	174,983	244,640	157,000	401,640	576,623
2018	17,107,735	22,919,638	74.6%	(5,811,903)	2,595,896	421,668	157,000	95,970	674,638	1,380,741	(706,103)	1,336,309	0	17,737,941	175,836	245,832	157,000	402,832	578,668
2019	17,737,941	23,501,895	75.5%	(5,763,954)	2,692,279	425,077	157,000	90,469	672,546	1,456,528	(783,982)	1,383,418	0	18,337,377	177,257	247,820	157,000	404,820	582,077
2020	18,337,377	24,035,658	76.3%	(5,698,281)	2,792,589	429,205	157,000	85,274	671,479	1,537,884	(866,405)	1,427,867	0	18,898,839	178,978	250,227	157,000	407,227	586,205
2021	18,898,839	24,512,466	77.1%	(5,613,627)	2,898,156	434,392	157,000	80,182	671,574	1,621,417	(949,843)	1,469,232	0	19,418,228	181,141	253,251	157,000	410,251	591,392
2022	19,418,228	24,925,074	77.9%	(5,506,846)	3,008,108	440,335	157,000	75,193	672,528	1,698,588	(1,026,060)	1,507,536	0	19,899,704	183,620	256,715	157,000	413,715	597,335
2023	19,899,704	25,278,587	78.7%	(5,378,883)	3,123,760	447,292	157,000	56,540	660,832	1,771,109	(1,110,277)	1,542,508	0	20,331,935	186,521	260,771	157,000	417,771	604,292
2024	20,331,935	25,570,418	79.5%	(5,238,483)	3,248,785	455,655	157,000	51,656	664,311	1,835,920	(1,171,609)	1,574,464	0	20,734,790	190,008	265,647	157,000	422,647	612,655
2025	20,734,790	25,795,109	80.4%	(5,060,319)	3,379,794	465,089	157,000	46,641	668,730	1,924,239	(1,255,509)	1,603,106	0	21,082,387	193,942	271,147	157,000	428,147	622,089
2026	21,082,387	25,934,450	81.3%	(4,852,063)	3,517,793	475,818	157,000	42,214	675,032	1,991,781	(1,316,749)	1,628,286	0	21,393,924	198,416	277,402	157,000	434,402	632,818
2027	21,393,924	26,004,608	82.3%	(4,610,684)	3,662,757	487,669	157,000	38,093	682,762	2,062,704	(1,379,942)	1,650,493	0	21,664,475	203,358	284,311	157,000	441,311	644,669
2028	21,664,475	25,997,577	83.3%	(4,333,102)	3,815,471	500,820	157,000	33,958	691,778	2,123,648	(1,431,870)	1,669,897	0	21,902,502	208,842	291,978	157,000	448,978	657,820
2029	21,902,502	25,917,989	84.5%	(4,015,487)	3,975,899	515,334	157,000	30,217	702,551	2,177,117	(1,474,566)	1,687,085	0	22,115,021	214,894	300,440	157,000	457,440	672,334
2030	22,115,021	25,769,017	85.8%	(3,653,996)	4,143,703	531,126	157,000	26,520	714,646	2,226,897	(1,512,251)	1,702,442	0	22,305,212	221,480	309,646	157,000	466,646	688,126
2031	22,305,212	25,549,181	87.3%	(3,243,969)	4,320,656	548,390	157,000	23,332	728,722	2,303,286	(1,574,564)	1,714,958	0	22,445,606	228,679	319,711	157,000	476,711	705,390
2032	22,445,606	25,227,017	89.0%	(2,781,411)	4,506,592	567,044	157,000	20,730	744,774	2,351,333	(1,606,559)	1,724,774	0	22,563,821	236,457	330,587	157,000	487,587	724,044
2033	22,563,821	24,821,687	90.9%	(2,257,866)	4,702,683	587,220	157,000	17,870	762,090	2,374,058	(1,611,968)	1,733,943	0	22,685,796	244,871	342,349	157,000	499,349	744,220
2034	22,685,796	24,357,984	93.1%	(1,672,188)	4,915,446	609,685	157,000	15,238	781,923	2,405,178	(1,623,255)	1,743,154	0	22,805,695	254,239	355,446	157,000	512,446	766,685
2035	22,805,695	23,817,428	95.8%	(1,011,733)	5,135,408	483,755	157,000	13,352	854,107	2,427,129	(1,773,022)	1,746,798	0	22,779,471	201,726	282,029	157,000	439,029	640,755
2036	22,779,471	23,210,536	98.1%	(431,065)	5,363,274	436,034	13,000	11,263	460,297	2,461,663	(2,001,366)	1,735,626	0	22,513,731	181,826	254,208	13,000	267,208	449,034
2037	22,513,731	22,515,424	100.0%	(1,693)	5,600,200	11,200	0	9,520	20,720	2,462,456	(2,441,736)	1,697,089	0	21,769,084	4,670	6,530	0	6,530	11,200
2038	21,769,084	21,761,882	100.0%	7,202	5,846,914	0	0	7,601	7,601	2,440,642	(2,433,041)	1,637,931	0	20,973,974	0	0	0	0	0
2039	20,973,974	20,968,326	100.0%	5,648	6,103,819	0	0	6,104	6,104	2,415,802	(2,409,698)	1,575,321	0	20,139,597	0	0	0	0	0
2040	20,139,597	20,135,179	100.0%	4,418	6,368,696	0	0	5,095	5,095	2,423,877	(2,418,782)	1,508,187	0	19,229,002	0	0	0	0	0
2041	19,229,002	19,225,406	100.0%	3,596	6,645,068	0	0	3,987	3,987	2,364,529	(2,360,542)	1,437,822	0	18,306,282	0	0	0	0	0
2042	18,306,282	18,303,380	100.0%	2,902	6,931,674	0	0	2,773	2,773	2,308,626	(2,305,853)	1,366,337	0	17,366,766	0	0	0	0	0
2043	17,366,766	17,364,761	100.0%	2,005	7,230,997	0	0	2,169	2,169	2,249,003	(2,246,834)	1,293,690	0	16,413,622	0	0	0	0	0
Totals 2015 & After					\$ 10,531,270	\$ 5,034,370	\$ 1,215,547	\$ 16,781,187						\$ 4,391,540	\$ 6,139,730	\$ 5,034,370	\$ 11,174,100	\$ 15,565,640	
														28.21%			71.79%	100.00%	

Exhibit 5

**State of Alaska TRS
Financial Projections (in Thousands)**

Baseline - Level Dollar Amortization over 25 years and 12.5% Investment Return in FY13, 8% in FY14 and later years

Fiscal Year End	Investment Return: 8.00%				Flow Amounts During Following 12 Months								Recognized Asset Gain/(Loss)	Ending Actuarial Assets	
	Valuation Amounts on July 1 (Beginning of Fiscal Year)				Total Salaries	Employer/State Ctb Rate	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs			Investment Earnings
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)											
2013	\$4,869,154	\$9,346,444	52.1%	(\$4,477,290)	\$743,957	49.56%	\$70,604	\$298,101	\$53,263	\$421,968	\$525,672	(\$103,704)	\$570,927	(\$393,887)	\$4,942,490
2014	4,942,490	9,651,582	51.2%	(4,709,092)	762,692	50.10%	67,056	316,847	54,446	438,349	556,844	(118,495)	402,046	90,090	5,316,131
2015	5,316,131	9,944,626	53.5%	(4,628,495)	783,438	66.31%	63,594	455,904	52,102	571,600	586,966	(15,366)	428,675	72,872	5,802,312
2016	5,802,312	10,223,597	56.8%	(4,421,285)	805,914	67.76%	60,182	485,905	49,736	595,823	618,454	(22,631)	461,350	(29,854)	6,211,177
2017	6,211,177	10,485,997	59.2%	(4,274,820)	830,268	66.16%	56,857	492,448	47,420	596,725	648,576	(51,851)	495,200	43,566	6,698,092
2018	6,698,092	10,731,508	62.4%	(4,033,416)	855,825	63.28%	53,492	488,074	45,199	586,765	675,904	(89,139)	529,114	0	7,138,067
2019	7,138,067	10,963,107	65.1%	(3,825,040)	882,669	61.18%	50,127	489,890	42,905	582,922	705,092	(122,170)	562,919	0	7,578,816
2020	7,578,816	11,177,357	67.8%	(3,598,541)	911,010	58.30%	46,741	484,378	40,631	571,750	739,563	(167,813)	596,273	0	8,007,276
2021	8,007,276	11,367,833	70.4%	(3,360,557)	940,957	56.00%	43,341	483,595	38,284	565,220	771,294	(206,074)	628,943	0	8,430,145
2022	8,430,145	11,533,410	73.1%	(3,103,265)	973,382	53.73%	40,113	482,885	35,978	558,976	799,992	(241,016)	661,306	0	8,850,435
2023	8,850,435	11,678,589	75.8%	(2,828,154)	1,008,495	51.55%	37,146	482,733	26,120	545,999	825,117	(279,118)	693,351	0	9,264,668
2024	9,264,668	11,804,774	78.5%	(2,540,106)	1,045,905	49.38%	34,243	482,225	23,847	540,315	847,540	(307,225)	725,312	0	9,682,755
2025	9,682,755	11,906,243	81.3%	(2,223,488)	1,085,268	47.26%	31,420	481,478	21,488	534,386	877,945	(343,559)	757,232	0	10,096,428
2026	10,096,428	11,978,919	84.3%	(1,882,491)	1,126,840	45.26%	28,735	481,273	19,269	529,277	915,165	(385,888)	788,541	0	10,499,081
2027	10,499,081	12,014,999	87.4%	(1,515,918)	1,170,697	43.27%	26,156	480,405	17,092	523,653	942,377	(418,724)	819,374	0	10,899,731
2028	10,899,731	12,019,893	90.7%	(1,120,162)	1,217,232	41.35%	23,808	479,517	14,972	518,297	965,075	(446,778)	850,250	0	11,303,203
2029	11,303,203	11,999,271	94.2%	(696,068)	1,266,672	39.47%	21,748	478,207	13,047	513,002	988,765	(475,763)	881,311	0	11,708,751
2030	11,708,751	11,947,250	98.0%	(238,499)	1,318,359	20.47%	19,918	249,950	11,338	281,206	1,015,267	(734,061)	903,533	0	11,878,223
2031	11,878,223	11,862,365	100.1%	15,858	1,373,136	0.24%	3,296	0	9,749	13,045	1,052,765	(1,039,720)	904,975	0	11,743,478
2032	11,743,478	11,727,157	100.1%	16,321	1,430,917	0.17%	2,433	0	8,442	10,875	1,071,218	(1,060,343)	893,325	0	11,576,460
2033	11,576,460	11,561,467	100.1%	14,993	1,491,916	0.13%	1,939	0	7,161	9,100	1,076,092	(1,066,992)	879,686	0	11,389,154
2034	11,389,154	11,375,441	100.1%	13,713	1,556,143	0.10%	1,556	0	6,069	7,625	1,087,071	(1,079,446)	864,176	0	11,173,884
2035	11,173,884	11,161,401	100.1%	12,483	1,622,872	0.07%	1,136	0	5,031	6,167	1,110,566	(1,104,399)	845,897	0	10,915,382
2036	10,915,382	10,904,315	100.1%	11,067	1,692,489	0.05%	846	0	4,231	5,077	1,108,805	(1,103,728)	825,250	0	10,636,904
2037	10,636,904	10,627,228	100.1%	9,676	1,764,921	0.03%	529	0	3,530	4,059	1,104,345	(1,100,286)	803,121	0	10,339,739
2038	10,339,739	10,331,515	100.1%	8,224	1,840,538	0.02%	368	0	2,945	3,313	1,098,370	(1,095,057)	779,573	0	10,024,255
2039	10,024,255	10,017,472	100.1%	6,783	1,919,401	0.02%	384	0	2,303	2,687	1,092,046	(1,089,359)	754,579	0	9,689,475
2040	9,689,475	9,684,161	100.1%	5,314	2,000,850	0.02%	400	0	1,801	2,201	1,079,552	(1,077,351)	728,309	0	9,340,433
2041	9,340,433	9,336,574	100.0%	3,859	2,085,904	0.01%	209	0	1,460	1,669	1,066,437	(1,064,768)	700,923	0	8,976,588
2042	8,976,588	8,974,342	100.0%	2,246	2,174,467	0.01%	217	0	1,087	1,304	1,048,163	(1,046,859)	672,579	0	8,602,308
2043	8,602,308	8,601,721	100.0%	587	2,266,698	0.00%	0	0	907	907	1,020,993	(1,020,086)	644,587	0	8,226,809
Totals 2015 & After					\$	650,934	\$	7,478,867	\$	554,144	\$	8,683,945			

Exhibit 6

**State of Alaska TRS
Financial Projections (in Thousands)**

**Governor's Proposal - Level Dollar Amortization over 30 years and 12.5% Investment Return in FY13, 8% in FY14 and later years
Additional State Contribution in FY15 Allocated based on Unfunded Liability**

Fiscal Year End	Investment Return: 8.00%				Flow Amounts During Following 12 Months									Recognized Asset Gain/(Loss)	Ending Actuarial Assets	
	Valuation Amounts on July 1 (Beginning of Fiscal Year)				Total Salaries	Employer/State Ctb Rate	Employer Contribs	State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings			
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)												
2013	\$4,869,154	\$9,346,444	52.1%	(\$4,477,290)	\$743,957	49.56%	\$70,604	\$298,101	\$53,263	\$421,968	\$525,672	(\$103,704)	\$570,927	(\$393,887)	\$4,942,490	
2014	4,942,490	9,651,582	51.2%	(4,709,092)	762,692	50.34%	67,056	316,847	54,446	438,349	556,844	(118,495)	402,046	90,090	5,316,131	
2015	5,316,131	9,944,626	53.5%	(4,628,495)	783,438	150.90%	63,594	1,118,630	52,102	1,234,326	586,966	647,360	454,674	72,872	6,491,037	
2016	6,491,037	10,223,597	63.5%	(3,732,560)	805,914	50.03%	60,182	343,000	49,736	452,918	618,454	(165,536)	510,841	(29,854)	6,806,488	
2017	6,806,488	10,485,997	64.9%	(3,679,509)	830,268	48.16%	56,857	343,000	47,420	447,277	648,576	(201,299)	536,962	43,566	7,185,717	
2018	7,185,717	10,731,508	67.0%	(3,545,791)	855,825	46.33%	53,492	343,000	45,199	441,691	675,904	(234,213)	562,433	0	7,513,937	
2019	7,513,937	10,963,107	68.5%	(3,449,170)	882,669	44.54%	50,127	343,000	42,905	436,032	705,092	(269,060)	587,226	0	7,832,103	
2020	7,832,103	11,177,357	70.1%	(3,345,254)	911,010	42.78%	46,741	343,000	40,631	430,372	739,563	(309,191)	610,990	0	8,133,902	
2021	8,133,902	11,367,833	71.6%	(3,233,931)	940,957	41.06%	43,341	343,000	38,284	424,625	771,294	(346,669)	633,557	0	8,420,790	
2022	8,420,790	11,533,410	73.0%	(3,112,620)	973,382	39.36%	40,113	343,000	35,978	419,091	799,992	(380,901)	655,070	0	8,694,959	
2023	8,694,959	11,678,589	74.5%	(2,983,630)	1,008,495	37.69%	37,146	343,000	26,120	406,266	825,117	(418,851)	675,431	0	8,951,539	
2024	8,951,539	11,804,774	75.8%	(2,853,235)	1,045,905	36.07%	34,243	343,000	23,847	401,090	847,540	(446,450)	694,799	0	9,199,888	
2025	9,199,888	11,906,243	77.3%	(2,706,355)	1,085,268	34.50%	31,420	343,000	21,488	395,908	877,945	(482,037)	713,170	0	9,431,021	
2026	9,431,021	11,978,919	78.7%	(2,547,898)	1,126,840	32.99%	28,735	343,000	19,269	391,004	915,165	(524,161)	729,884	0	9,636,744	
2027	9,636,744	12,014,999	80.2%	(2,378,255)	1,170,697	31.53%	26,156	343,000	17,092	386,248	942,377	(556,129)	744,997	0	9,825,612	
2028	9,825,612	12,019,893	81.7%	(2,194,281)	1,217,232	30.13%	23,808	343,000	14,972	381,780	965,075	(583,295)	758,964	0	10,001,281	
2029	10,001,281	11,999,271	83.3%	(1,997,990)	1,266,672	28.80%	21,748	343,000	13,047	377,795	988,765	(610,970)	771,853	0	10,162,164	
2030	10,162,164	11,947,250	85.1%	(1,785,086)	1,318,359	27.53%	19,918	343,000	11,338	374,256	1,015,267	(641,011)	783,457	0	10,304,610	
2031	10,304,610	11,862,365	86.9%	(1,557,755)	1,373,136	26.32%	18,342	343,000	9,749	371,091	1,052,765	(681,674)	793,132	0	10,416,068	
2032	10,416,068	11,727,157	88.8%	(1,311,089)	1,430,917	25.16%	16,962	343,000	8,442	368,404	1,071,218	(702,814)	801,158	0	10,514,412	
2033	10,514,412	11,561,467	90.9%	(1,047,055)	1,491,916	24.05%	15,796	343,000	7,161	365,957	1,076,092	(710,135)	808,722	0	10,612,999	
2034	10,612,999	11,375,441	93.3%	(762,442)	1,556,143	23.00%	14,836	343,000	6,069	363,905	1,087,071	(723,166)	816,061	0	10,705,894	
2035	10,705,894	11,161,401	95.9%	(455,507)	1,622,872	22.00%	14,047	343,000	5,031	362,078	1,110,566	(748,488)	822,421	0	10,779,827	
2036	10,779,827	10,904,315	98.9%	(124,488)	1,692,489	7.77%	13,438	118,000	4,231	135,669	1,108,805	(973,136)	819,528	0	10,626,219	
2037	10,626,219	10,627,228	100.0%	(1,009)	1,764,921	0.74%	12,979	0	3,530	16,509	1,104,345	(1,087,836)	802,755	0	10,341,138	
2038	10,341,138	10,331,515	100.1%	9,623	1,840,538	0.02%	368	0	2,945	3,313	1,098,370	(1,095,057)	779,685	0	10,025,766	
2039	10,025,766	10,017,472	100.1%	8,294	1,919,401	0.02%	384	0	2,303	2,687	1,092,046	(1,089,359)	754,700	0	9,691,107	
2040	9,691,107	9,684,161	100.1%	6,946	2,000,850	0.02%	400	0	1,801	2,201	1,079,552	(1,077,351)	728,440	0	9,342,196	
2041	9,342,196	9,336,574	100.1%	5,622	2,085,904	0.01%	209	0	1,460	1,669	1,066,437	(1,064,768)	701,064	0	8,978,492	
2042	8,978,492	8,974,342	100.0%	4,150	2,174,467	0.01%	217	0	1,087	1,304	1,048,163	(1,046,859)	672,732	0	8,604,365	
2043	8,604,365	8,601,721	100.0%	2,644	2,266,698	0.00%	0	0	907	907	1,020,993	(1,020,086)	643,943	0	8,228,222	
				Totals 2015 & After				\$	745,599	\$	8,096,630	\$	554,144	\$	9,396,373	