

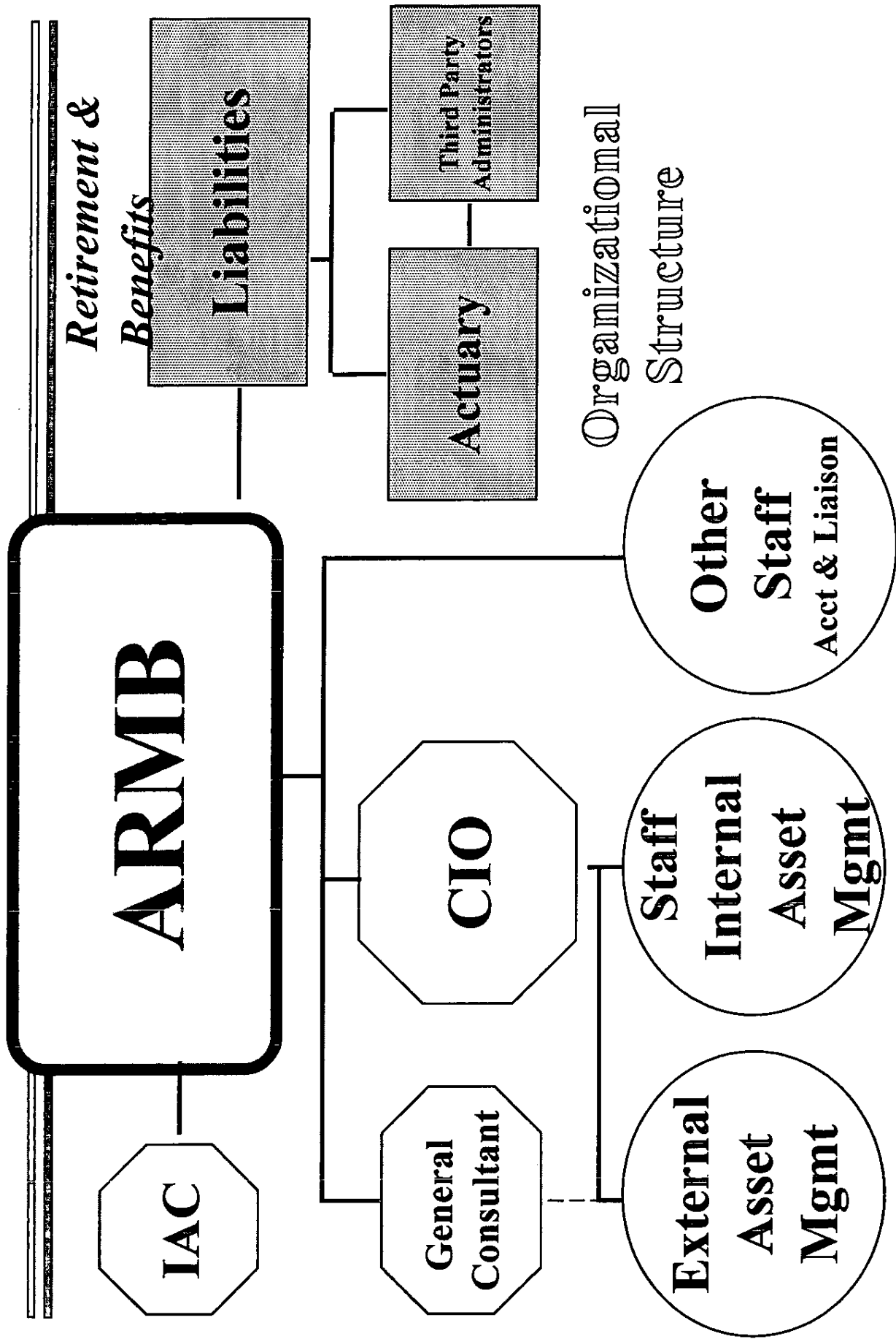
**2/11/09
RETIREMENT
TRUST &
CONSTITUTIONAL
BUDGET RESERVE
PERFORMANCE
REVIEWS**

<target><bill></bill><subject>2-11-09 RETIREMENT TRUST and
CONSTITUTIONAL BUDGET RESERVE PERFORMANCE
REVIEWS</subject><comm>SFIN26</comm></target>

State of Alaska Department of Revenue

Investment Operation Orientation
Treasury Division, Portfolio Management Section

February 2009



Alaska Retirement Management Board

Fiduciary of the Fund

- AS 14.25.007
- Consider status of the fund's investments and liabilities
- Determine the appropriate investment objectives
- Establish investment policies to achieve objective
- Act only in regard to the best interest of the system's plan and beneficiaries

Alaska Retirement Management Board

- Nine Members
- Establish Investment Policies
- Review Actuarial Earnings Assumption
- Establish Asset Allocation
- Provide Investment Options

Alaska Retirement Management Board

Consultant

- Asset Allocation/Strategy
- Performance Measurement
- General Consulting

General

Specific

Assist in Asset Manager Searches

Alaska Retirement Management Board

Investment Advisory Council

Permitted by Statute

Three to Five Members

Review and Advise on Investment Policy, Strategy & Procedures

Dr. Jerrold Mitchell

Dr. William W. Jennings

George Wilson

● Alaska Retirement Management Board ●

Asset Allocation Decision

Investment Objective

Risk Tolerance

Expected Return of Each Asset Class

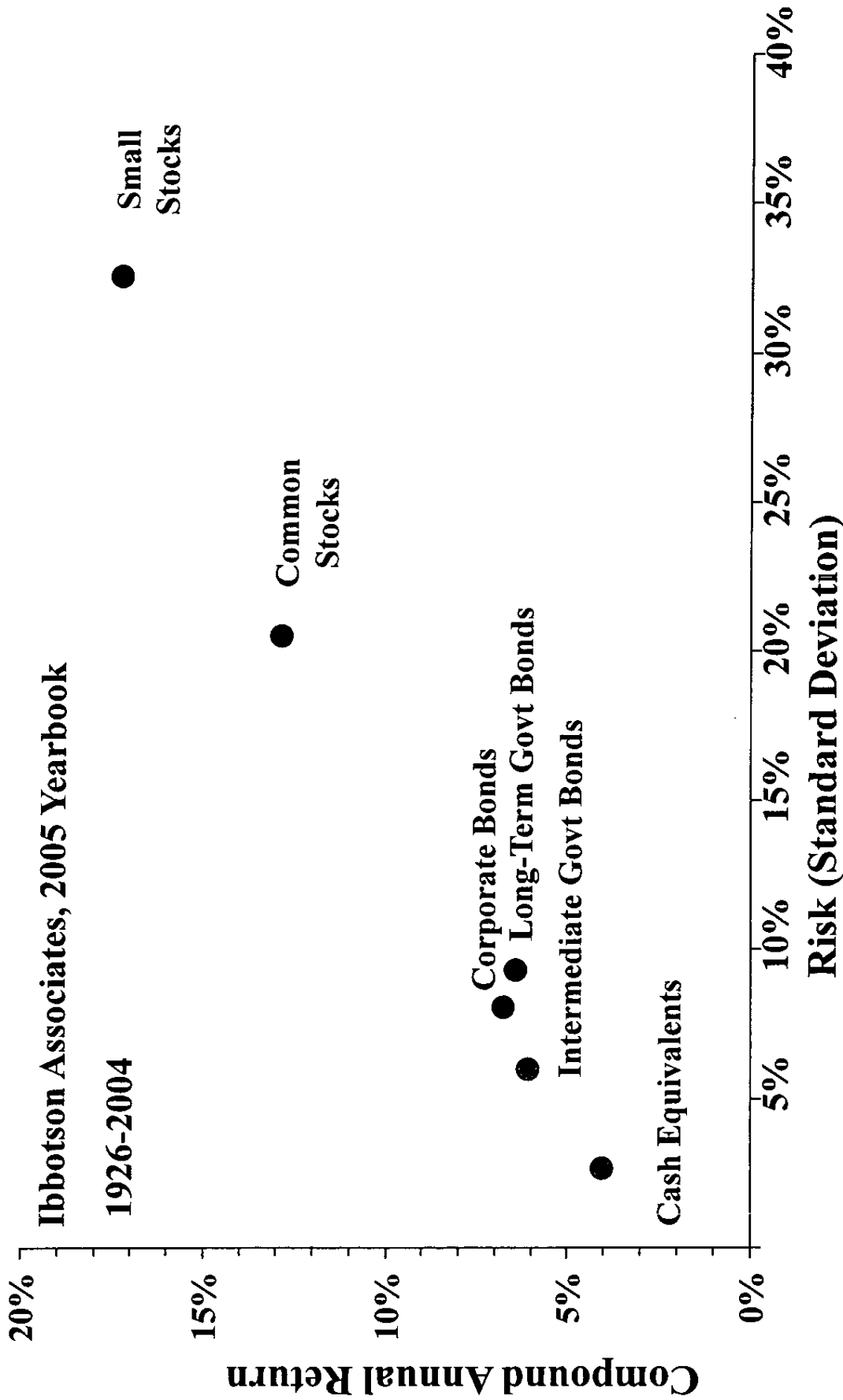
Expected Volatility of Each Asset Class

Correlation of Performance Between Asset Classes

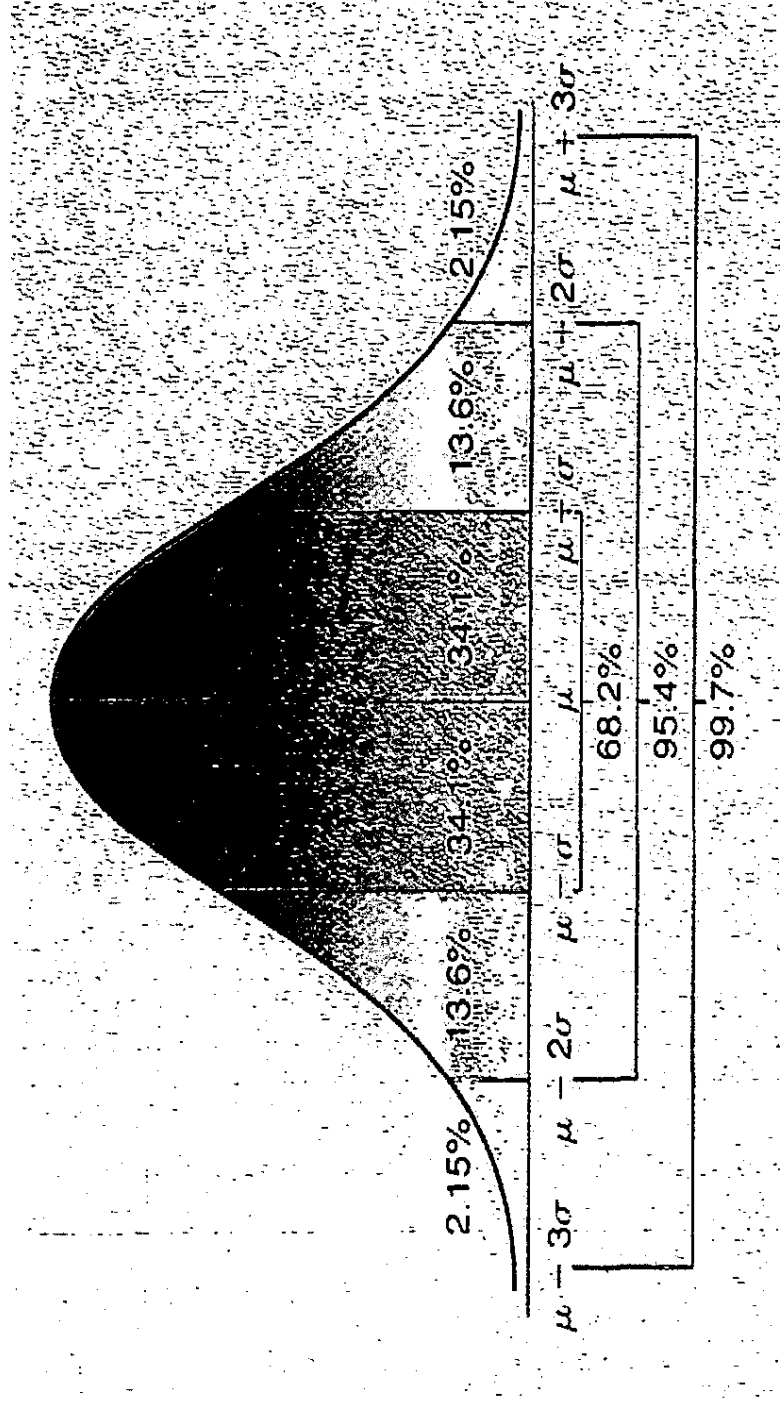
Efficient Frontier

Alaska Retirement Management Board

Historical Risk/Return Tradeoff



Normal Curve and Standard Deviation



Alaska Retirement Management Board

Correlation of Asset Class Returns

Ibbotson Associates, 2005 Yearbook

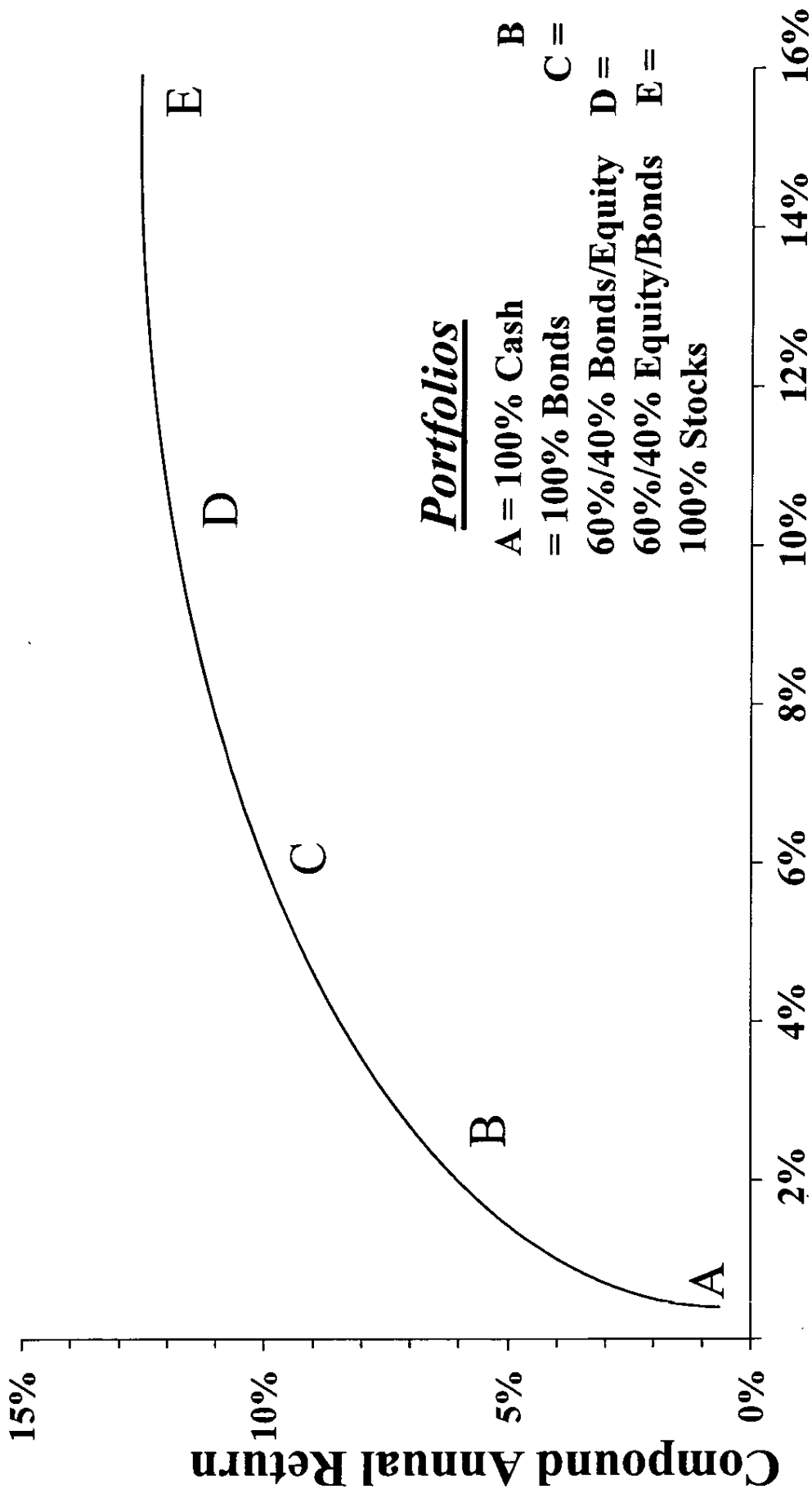
1926 to 2004

	Large <u>Stocks</u>	Small <u>Stocks</u>	LT Corp <u>Bonds</u>	LT Govt <u>Bonds</u>	Int Govt <u>Bonds</u>	US <u>T-Bills</u>
--	------------------------	------------------------	-------------------------	-------------------------	--------------------------	----------------------

Large Stocks	1.00					
Small Stocks	0.79	1.00				
LT Corp Bonds	0.19	0.08	1.00			
LT Govt Bonds	0.12	-0.02	0.93	1.00		
Int Govt Bonds	0.04	-0.07	0.90	0.90	1.00	
US T-Bills	-0.02	-0.10	0.20	0.23	0.48	1.00

Alaska Retirement Management Board

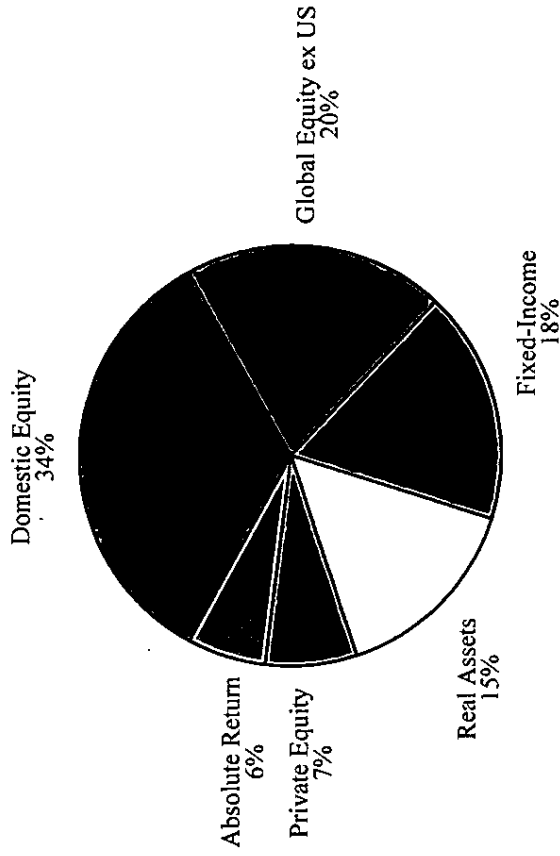
Efficient Frontier



Alaska Retirement Management Board

Target Asset Allocation 2009

Target Asset Allocation



Expected Rate of Return 8.15%
Standard Deviation (Risk) 12.85%

Alaska Retirement Management Board

One Year Cumulative Attribution Effects

Asset Class	Effective Weight	Avg. Tgt Weight	Actual Return	Target Return	Manager Effect	Asset Allocation
Domestic Equity	34%	36%	(21.61%)	(22.05%)	0.15%	0.16%
Fixed-Income	18%	18%	2.05%	2.59%	(0.09%)	0.02%
High Yield	2%	2%	-	-	0.02%	(0.03%)
Real Assets	13%	11%	0.20%	2.74%	(0.30%)	0.19%
International Equity	19%	17%	(29.28%)	(31.22%)	0.41%	0.01%
Int'l Fixed-Income	2%	2%	-	-	0.01%	(0.01%)
Private Equity	8%	7%	0.47%	(22.27%)	1.73%	(0.07%)
Absolute Return	4%	5%	(2.28%)	7.82%	(0.33%)	(0.17%)
Other	1%	2%	-	-	0.05%	(0.13%)

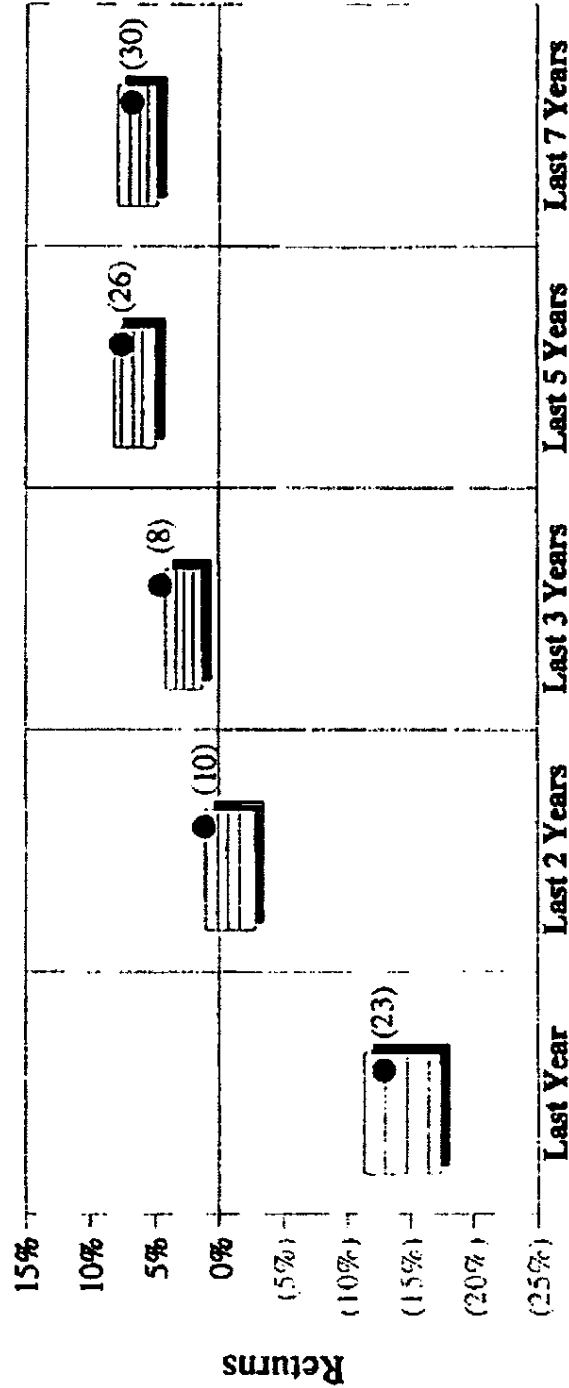
Total

$$(12.89\%) = (14.51\%) + 1.65\% + (0.03\%)$$

Current Quarter Target = 34.0% Russell 3000 Index, 20.0% MSCI ACWI ex-US Index, 12.6% BC Aggregate Index, 9.0% NCREIF Total Index, 6.0% month Treasury Bill+5.0%, 3.0% BC US TIPS Index, 2.3% MSCI EAFE Index, 2.3% S&P 500 Index, 2.3% Russell 2000 Index, 1.8% Citi Non-US Gvt Bd x, 1.8% 3-month Treasury Bill, 1.8% Hi Yld II Index, 1.5% NCREIF Farmland Index and 1.5% NCREIF Timberland Index.

Alaska Retirement Management Board

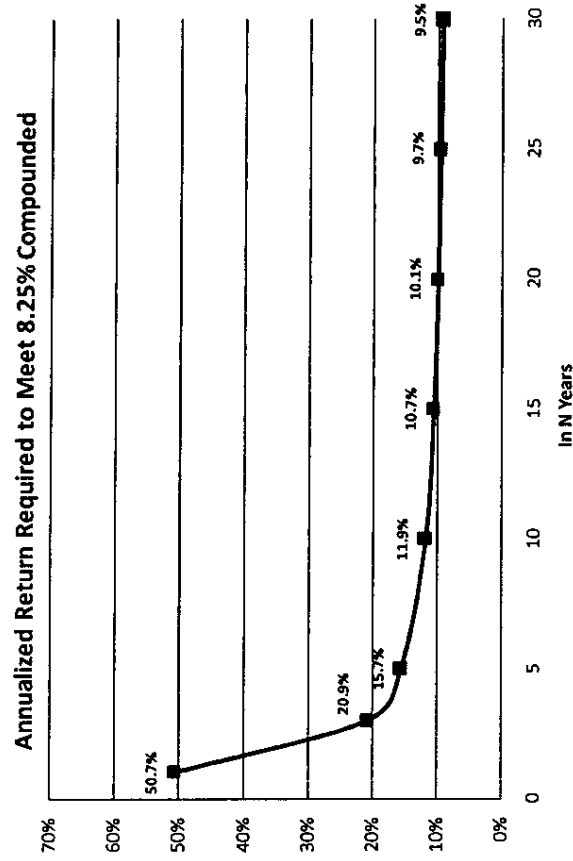
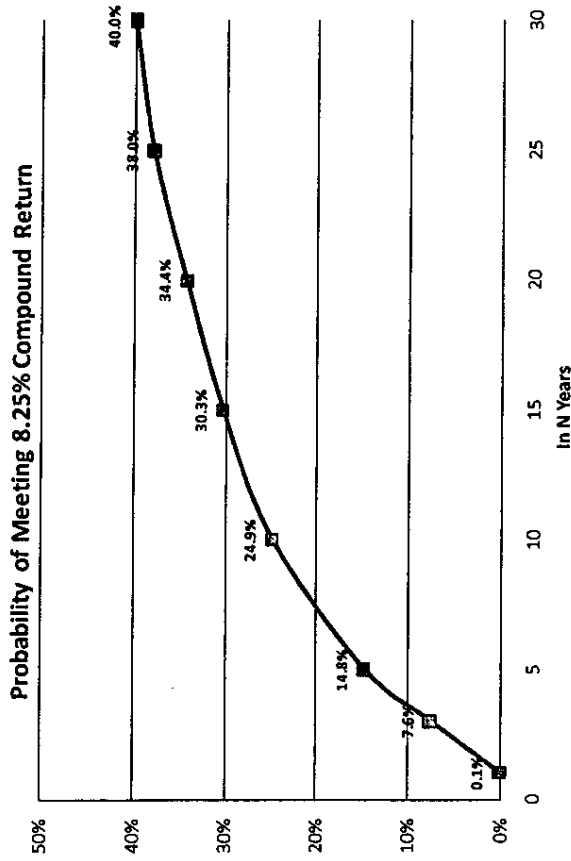
CAI Public Fund Sponsor Database



CAI Public Fund Sponsor Database ● Total Fund

PERS Probability of Meeting 8.25% Compound Return

- Simulation Approach:
 - 2007 was the base year for the simulation. The tracking portfolio was increased at a compounded rate of 8.25% per annum for 31 years.
 - The PERS portfolio assumed the 2008 estimated loss of -22.24% and simulated returns for 30 years using the 2008 asset allocation and 2009 capital market assumptions.
 - Cash flows were not modeled.
 - PERS portfolio and tracking portfolio started at the same level in 2007.
- The upper graph is the probability of the PERS portfolio exceeding the 8.25% tracking portfolio in 1, 3, 5, 10, ..., 30 years.
- The lower graph is the annualized return required to meet the 8.25% compounded return in 1, 3, 5, 10, ..., 30 years.



Alaska Retirement Management Board

Comparative Analysis of the General Fund, CBRF, PERS and TRS retirement plans and APFC.

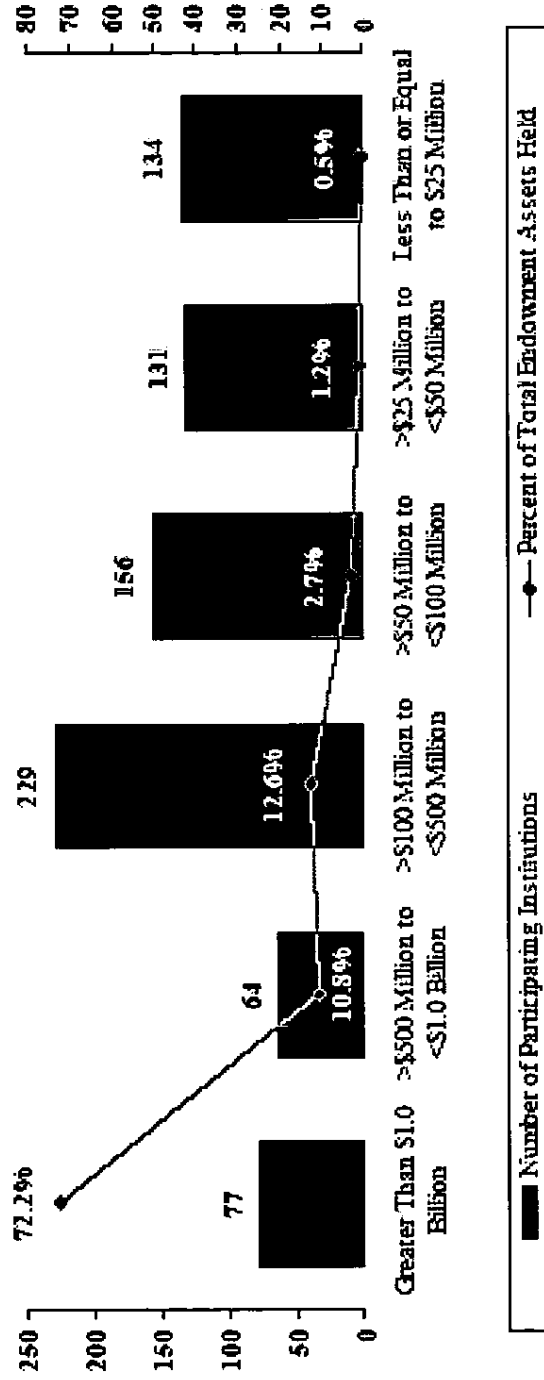
Account	Purpose	Market Value 12/31/07	Market Value 12/31/08	Estimated Market Value 1/31/09	Investment Objective	Target Asset Allocation	Fiduciary Oversight	Calendar YTD Returns	3 year Actual Returns	Returns Forecast
General Fund (and other nonsegregated investments)	Operating Fund	\$5,269.3 million	\$7,466.4 million	\$7,274.5 million	Moderate Risk, Short to Intermediate investment horizon	100% Fixed Income: Short term 37% Intermediate term 63%	Commissioner of Revenue	4.66%	5.29%	4.07%
Constitutional Budget Reserve (main fund)	Main Savings account	\$2,521.4 million	\$3,240.8 million	\$3,232.3 million	Moderate Risk, Intermediate investment horizon	100% Fixed Income: Short term 5% Intermediate term 75% Broad Market 20%	Commissioner of Revenue	5.67%	5.71%	4.53%
Constitutional Budget Reserve (sub fund)	Long-term Savings Account	\$576.9 million	\$3,590.8 million	\$3,382.2 million	High Risk, Moderately Long investment horizon	Fixed Income 37% Dom Equity 44% Int'l Equity 19%	Commissioner of Revenue	-29.34%	-5.17%	7.61%
PERS Retirement Defined Benefit	Public Employees Retirement Savings Account	\$11,129.1 million	\$8,359.8 million	\$7,958.0 million	Moderate Risk, Long Term investment horizon	Fixed Income 18% Dom Equity 34% Int'l/Global Equity 20% Real Assets 15% Alternatives 13%	Alaska Retirement Management Board	-22.24%	-0.35%	8.25%
TRS Retirement Defined Benefit	Teachers Retirement Savings Account	\$5,003.7 million	\$3,705.8 million	\$3,551.3 million	Moderate Risk, Long Term investment horizon	Fixed Income 18% Dom Equity 34% Int'l/Global Equity 20% Real Assets 15% Alternatives 13%	Alaska Retirement Management Board	-22.33%	-0.38%	8.25%
APFC	Constitutionally Dedicated Fund for All Alaskans	\$39,463.5 million	\$29,500.7 million	\$28,050.0 million	Long term investment goal is to achieve a real rate of return of 5% per year	Fixed Income 22% Dom Equity 26% Int'l/Global Equity 27% Real Assets 10% Alternatives/Infras. 15%	APFC Board	-25.64%	-2.74%	8.05%

Initial Response to Committee Questions

Michael O'Leary CFA
Executive Vice President
Callan Associates Inc.
2/10/09

Callan Presentation, Slide #26 (Sen. Hoffman) Please provide more detail on the institutions within the “Greater Than \$1 Billion” category. How many of the 774 surveyed are in that group?

Exhibit 8
Participants by Endowment Size and Percent of Total Assets Held



All data is taken from the 2008 NACUBO Study

The NACBUO Study Discloses Participating Institutions But Protects Some Information Such the Individual Asset Allocation Policies of Individual Institutions

All Institutions Listed by Fiscal Year 2008 Market Value of Endowment Assets with Percentage Change Between 2007 and 2008 Endowment Assets

Rank	Institution	State	2008 Endowment Funds (\$000)	2007 Endowment Funds	*Percentage Change in Endowment (2008 - 2007)
1	Harvard University	MA	36,556,284	34,634,906	5.5%
2	Yale University	CT	22,869,700	22,530,200	1.5%
3	Stanford University	CA	17,200,000	17,164,836	0.2%
4	Princeton University	NJ	16,349,329	15,787,300	3.6%
5	University of Texas System	TX	16,111,184	15,613,672	3.2%
6	Massachusetts Institute of Technology	MA	10,068,800	9,980,410	0.9%
7	University of Michigan	MI	7,571,904	7,089,830	6.8%
8	Northwestern University	IL	7,243,948	6,503,292	11.4%
9	Columbia University	NY	7,148,806	7,149,803	0.0%
10	The Texas A&M University System and Foundations	TX	6,659,352	6,590,100	1.0%
11	University of Chicago	IL	6,632,311	6,704,189	6.9%
12	University of Pennsylvania	PA	6,233,281	6,635,187	6.1%
13	University of Notre Dame	IN	6,225,688	5,976,973	4.2%
14	University of California	CA	6,217,340	6,439,436	-3.4%
15	Duke University	NC	6,123,743	5,910,280	3.6%
16	Emory University	GA	5,472,528	5,561,743	-1.6%
17	Cornell University	NY	5,285,482	5,247,097	2.6%
18	Washington University	MO	5,350,470	5,567,843	-3.9%
19	Rice University	TX	4,610,164	4,669,544	-1.3%
20	University of Virginia	VA	4,572,613	4,370,209	4.6%
21	Dartmouth College	NH	3,660,159	3,760,234	-2.7%
22	University of Southern California	CA	3,589,225	3,715,272	-3.4%
23	Vanderbilt University	TN	3,524,338	3,519,253	0.1%
24	University of Minnesota	MN	2,750,770	2,804,466	-1.9%
25	Brown University	RI	2,746,837	2,633,924	4.3%
26	Johns Hopkins University	MD	2,524,575	2,800,377	-9.8%
27	New York University	NY	2,475,200	2,161,800	14.5%
28	University of North Carolina at Chapel Hill and Foundations	NC	2,358,676	2,164,444	9.0%
29	University of Pittsburgh	PA	2,333,602	2,254,379	3.5%
30	University of Washington	WA	2,262,149	2,184,374	3.6%
31	Ohio State University and Foundation	OH	2,075,953	2,338,103	-11.2%
32	The Rockefeller University	NY	2,020,647	2,144,271	-5.8%
33	California Institute of Technology	CA	1,891,523	1,860,052	1.7%
34	Williams College	MA	1,808,280	1,892,055	-4.4%
35	Pontiana College	CA	1,794,453	1,760,907	1.9%
36	Case Western Reserve University	OH	1,766,478	1,841,234	-4.1%
37	Purdue University	IN	1,735,660	1,786,392	-2.9%
38	University of Wisconsin Foundation	WI	1,735,456	1,645,250	5.3%
39	University of Rochester	NY	1,730,772	1,726,318	0.3%
40	Amherst College	MA	1,705,917	1,662,377	2.6%
41	University of Richmond	VA	1,704,350	1,654,988	3.0%
42	University of Toronto	ON	1,702,481	1,763,764	-3.5%
43	Boston College	MA	1,630,626	1,670,092	-2.4%

Only 20 funds had
assets of more
than \$4 Bill

The listing details the largest institutions participating in the study. In a separate document we have provided a listing of actual & target asset allocation by unidentified institution. That listing is not segmented by fund size.



ARMB & APFC Policies Through Recent Years

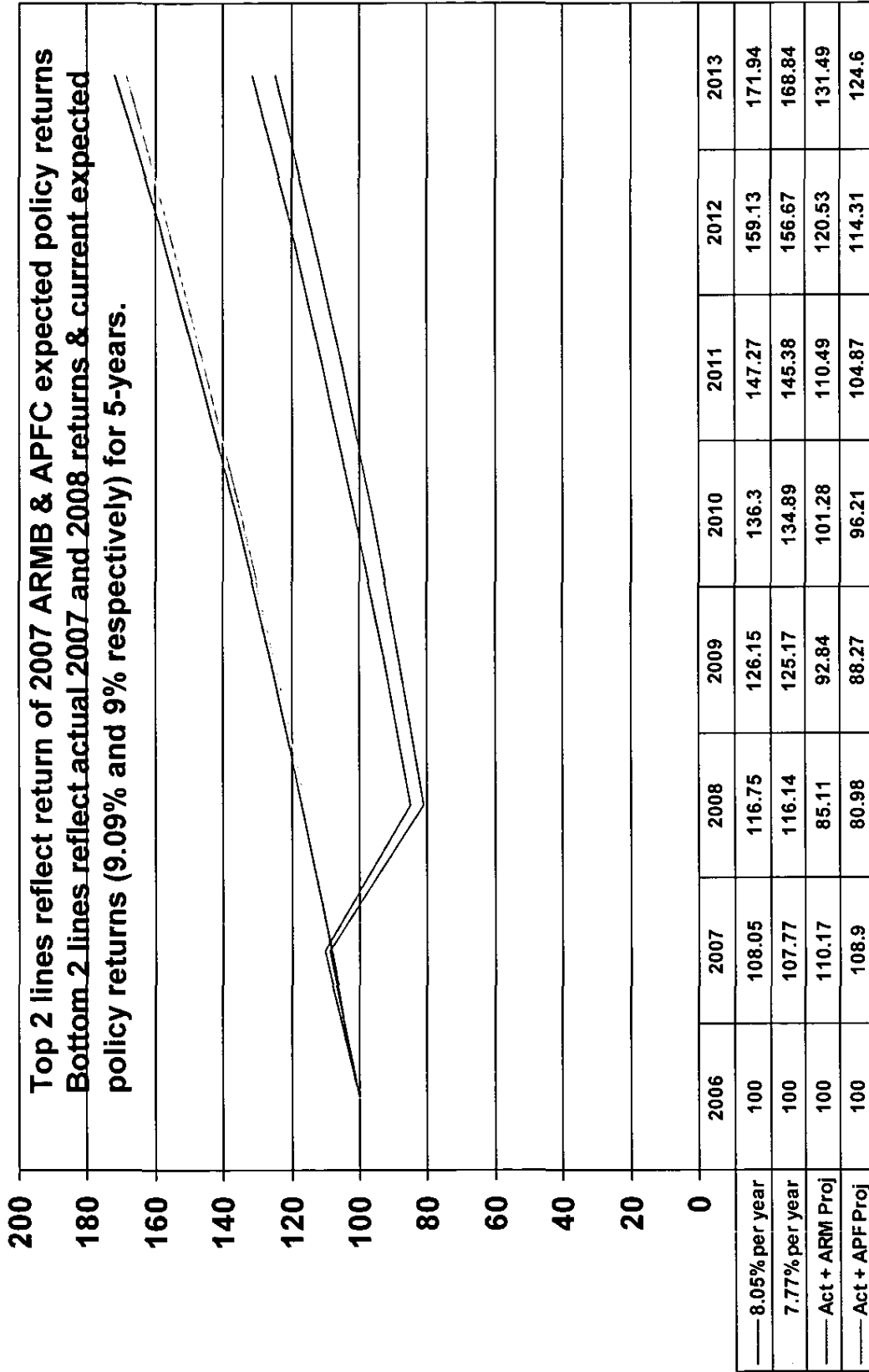
Policy is adopted each fiscal year

Asset Class	ARMB 06-07	APFC 06-7	ARMB 07-08	APFC 07-08	ARMB 08-09	APFC 08-09	ARMB 09-10	APFC 09-10
Broad Domestic Equity	36	34	37	34	34	33	34	33
International Equity	16	19	16	20	20	20	20	20
Private Equity	7	4	7	4	7	6	7	6
Fixed Income	24	29	23	26	18	22	18	22
Real Estate	10	10	10	10	10	10	10	10
Absolute Return	4	4	4	4	6	6	6	6
Other-real	3	0	3	2	5	3	5	3
5-Year Expected Return	8.05	7.77	8.12	7.89	8.15	8.05	9.09	9.00
Volatility	12.27	11.62	12.52	11.54	12.85	12.30	13.23	12.82

Important notes

1. Composition of "other" category varies by fund
 ARMB – farmland, energy, timber & TIPS
 APFC - Infrastructure
2. Both funds include sub-sectors within fixed income
3. APFC actual allocation to Private Equity is much more recent and therefore underfunded relative to ARMB
4. Implementation (structure) approaches to public equity allocation vary by fund. Big difference is the use of "global" equity managers by APFC. We have apportioned global to domestic & international to help ease of comparison.
5. Neither Board has yet adopted a policy for the 2009-10 fiscal period. We simply applied new projections to the current policies.

Cumulative Wealth



Note that 2008 ARMB return does not fully reflect q4 real estate returns. Such returns will not be provided to Callan until next week (for preliminary real estate returns from real estate consultant).



Official Business

Alaska State Senate

Senate Finance Committee

Mail Stop 3100
State Capitol
Juneau, Alaska 99801-1182

AGENDA

Wednesday, February 11, 2009

9:00 AM

Overview:

Retirement Trust Performance Review

Constitutional Budget Reserve Performance Review

Pat Galvin, Commissioner, Department of Revenue

Michael O'Leary, EVP, Callan Associates *o1e*

Jerry Burnett, Deputy Commissioner, Division of Treasury, Revenue

Gary Bader, Chief Investment Officer, Treasury Division, Revenue

Mike Burns

Alaska Statutes
AS 37.10.430

Sec. 37.10.430. Management of the budget reserve fund.

(a) The Department of Revenue may transfer management responsibility over all or a portion of the budget reserve fund (art. IX, sec. 17, Constitution of the State of Alaska) to the Alaska Permanent Fund Corporation.

(b) By March 15 of each year, the Department of Revenue shall, after consulting with the Alaska Permanent Fund Corporation, prepare a report setting out the balance in the budget reserve fund (art. IX, sec. 17, Constitution of the State of Alaska) on January 1 and on December 31 of the previous calendar year. The report shall state the nominal, real, and realized return on the budget reserve fund compared to the nominal, real, and realized return on the permanent fund and the general fund during the previous calendar year.

(c) A special subaccount is established in the budget reserve fund (art. IX, sec. 17, Constitution of the State of Alaska). Money in the subaccount shall be invested to yield higher returns than might be feasible to obtain with other money in the budget reserve fund. In establishing or modifying the investment policy for the subaccount in the constitutional budget reserve fund, the commissioner of revenue shall assume that those funds will not be needed for at least five years. Income earned on money in the subaccount shall be retained in the subaccount by the department.

1 Yupiiit School District

42,442

2 * **Sec. 33. CONSTITUTIONAL BUDGET RESERVE FUND.** (a) The sum of
3 \$2,600,000,000 is appropriated from the general fund to the constitutional budget reserve fund
4 (art. IX, sec. 17, Constitution of the State of Alaska) for repayment of amounts owed the
5 constitutional budget reserve fund.

6 (b) It is the intent of the legislature that the Department of Revenue invest the assets
7 of the constitutional budget reserve fund (art. IX, sec. 17, Constitution of the State of Alaska)
8 in a manner maximizing the long-term earnings of the fund while meeting the minimum
9 liquidity requirements of the state.

10 * **Sec. 34. LAPSE.** (a) The appropriations made by secs. 10, 13, 19(h), 22(b), 22(c), 26(b),
11 and 26(c) of this Act are for capital projects and lapse under AS 37.25.020.

12 (b) The appropriations made by sec. 21 of this Act are for the capitalization of funds
13 and do not lapse.

14 * **Sec. 35. CONTINGENCY.** (a) The appropriation made in sec. 21(d) of this Act is
15 contingent on passage by the Twenty-Fifth Alaska State Legislature and enactment into law of
16 a measure creating the community revenue sharing fund.

17 (b) The appropriations made in sec. 32 of this Act are contingent on passage by the
18 Twenty-Fifth Alaska State Legislature and enactment into law of a version of SB 125.

19 * **Sec. 36.** Sections 1, 16 - 20, 21(a), 21(b), 21(d), and 34 of this Act take effect March 10,
20 2008.

21 * **Sec. 37.** Section 21(c) of this Act takes effect June 30, 2008.

22 * **Sec. 38.** Except as provided in secs. 36 and 37 of this Act, this Act takes effect April 13,
23 2008.



Alaska Permanent Fund Corporation

P. O. Box 115500 Juneau, AK 99801
 Tel: (907) 796-1500 Fax: (907) 586-2057

Permanent Fund asset allocation
 Comparison of target allocation and actual allocations

	Target allocation band	Actual Allocation	
		12/31/08	02/03/09
US Fixed Income	19% +/- 6%	26.91% ¹	26.67% ¹
US Equities	26% +/- 6%	23.79%	23.11%
Non-US Equities	13% +/- 3%	11.02%	10.53%
Global Equities	14% +/- 4%	12.08%	11.57%
Non-US Fixed Income	3% +/- 3%	3.93%	3.99%
Real Estate	10% +/- 3%	12.64%	13.09% ²
Private Equity	6% +/- 5%	2.20%	2.13%
Absolute Return	6% +/- 3%	6.57%	7.58%
Infrastructure	3% +/- 3%	0.85% ¹	1.33% ¹

¹ Infrastructure is a new asset class for the Permanent Fund, and while commitments have been made, managers are still seeking out suitable properties for investment. In the interim, funds designated for infrastructure are currently held in US fixed income.

² APFC anticipates that write-downs in the value of some directly held properties will bring this asset allocation into compliance with its target band in the near future.

Follow-up Response To 2/11/09 Senate Finance Committee Question

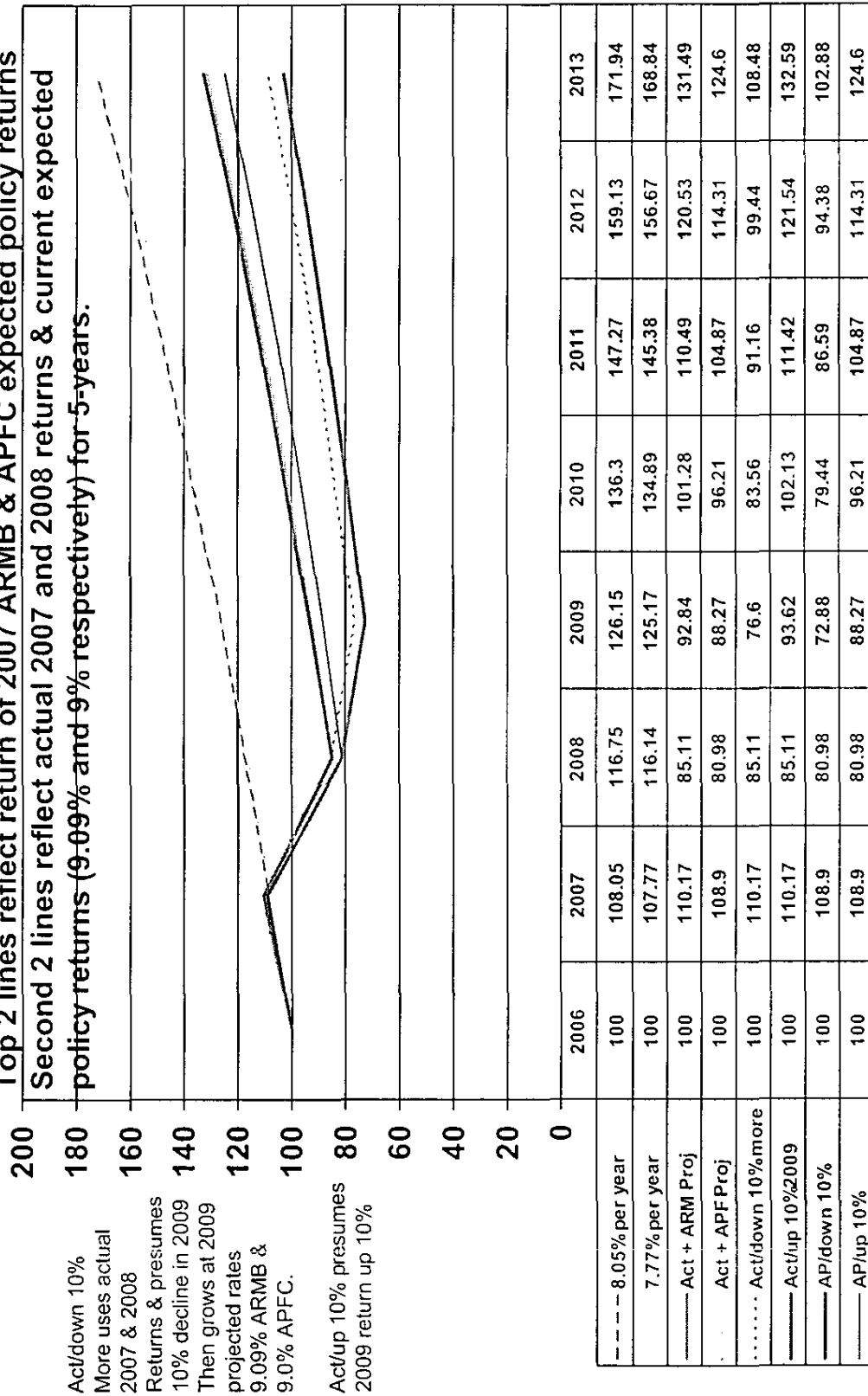
Michael J. O'Leary CFA
Executive Vice President
Callan Associates Inc.
2-11-09





Cumulative Wealth

Top 2 lines reflect return of 2007 ARMB & APFC expected policy returns
 Second 2 lines reflect actual 2007 and 2008 returns & current expected
 policy returns (9.09% and 9% respectively) for 5-years.



Note that 2008 ARMB return does not fully reflect q4 real estate returns. Such returns will not be provided to Callan until next week (for preliminary real estate returns from real estate consultant).