
ALASKA RETIREMENT MANAGEMENT BOARD

BOARD OF TRUSTEES
AGENDA

April 19-20, 2012

Dena'Ina Convention Center
K'enakatnu Room
600 W. 7th Avenue
Anchorage, AK
907 263-2850

Teleconference # 1-800-315-6338 Pass Code 2762#

Thursday, April 19, 2012

- I. 9:00 am Call to Order
- II. Roll Call
- III. Public Meeting Notice
- IV. Approval of Agenda
- V. Communications, Public/Member Participation, and Appearances
(Three Minute Limit)
- VI. Approval of Minutes: February 16-17, 2012

- VII. 9:15 Reports
 - 1. Chair Report

 - 2. Committee Reports

 - 3. Retirement & Benefits Division Report
 - Finance Manager
 - Retirement Manager
 - Benefits ManagerLegislative Update
Deputy Commissioner Mike Barnhill

 - 4. Treasury Division Report
Deputy Commissioner Angela Rodell

 - 5. Chief Investment Officer Report, *Gary Bader*

 - 9:40-9:50 6. Fund Financial Report
Pamela Leary, State Comptroller
Teresa Kesey, CFO, Division of Retirement & Benefits

9:55-10:10 7. IFS Report Actions
Item B.5, Recommendations 1, 3 & 4, Real Estate
Guidelines: Res 2012-03
Item A.1.b, Recommendation 10, Real Estate
Benchmark Disclosure
Item A.1.b Recommendation 9, Real Estate
Country Allocation
Item B.1, Recommendation 1, Equity Investment
Guidelines: Res 2012-08
Gary Bader, Chief Investment Officer

10:15-10:45 8. Private Equity Tactical Plan
Action: Resolution 2012-04 - Private Equity Plan
Zachary Hanna, State Investment Officer

*10:45 - Break
15 Minutes*

11:00-11:30 9. Pathway Capital Management
James Chambliss and Canyon Lew

11:30-12:00 10. Relational Investors
Ralph Whitworth

Lunch - 12:00 - 1:15 pm

- 1:15-1:45 11. Prisma Capital Partners
Girish Reddy and Helenmarie Rodgers
- 1:50-2:10 12. Actuarial Valuation Review - FY10
Certification of Draft FY10 Actuarial Valuation
Public Employees' Retirement System (PERS)
Teachers' Retirement System (TRS)
PERS Defined Contribution Plan
TRS Defined Contribution Plan
Dana Woolfrey, Gabriel Roeder Smith

- 2:15-3:00 13. FY10 Draft Actuarial Valuation Reports
Public Employees' Retirement System (PERS)
Teachers' Retirement System (TRS)

*3:00 - Break
15 Minutes*

- 3:15-3:45 PERS Defined Contribution Plan
TRS Defined Contribution Plan
Judicial/National Guard Naval Militia Roll-Forward Valuation
David Slishinsky and Monica DeGraff
Buck Consulting

- 3:45-4:00 Health Reimbursement Arrangement Plan Rate - FY2013
Jim Puckett, Director, Division of Retirement & Benefits

Recess

Friday, April 20, 2012

9:00 Call to Order

9:00-9:40 14. Lazard Asset Management
All Mandates - John Reinsberg and Tony Dote

9:45-10:45 15. Low Interest Rate Strategies
Gary Bader, Chief Investment Officer

*10:45 - Break
15 Minutes*

11:00-11:30 16. Investment Actions
A. Additional Hedge Fund Investment
B. Dow Jones Dividend 100 Index Mandate
C. Master Limited Partnership Search
D. Increase Cap on Non-Treasury Portion of
Intermediate Treasury Portfolio
Gary Bader, Chief Investment Officer

11:35-11:45 17. Investment Advisory Council Contract
Gary Bader, Chief Investment Officer

Lunch - 12:00 - 1:15 pm

1:15-2:15 18. Performance Measurement - 4th Quarter
Michael O'Leary and Paul Erlendson, Callan Associates, Inc.

2:20-2:50 19. Adopt Asset Allocation:
Resolution 2012-05:
DB PERS/TRS/JRS
PERS/TRS/JRS Retiree Health Trusts
Retiree Major Medical HRAP/ODD
Resolution 2012-06: DB NGNMRS
Resolution 2012-07: DC PERS/TRS Holding Account
Gary Bader, Chief Investment Officer
Michael O'Leary, Callan Associates, Inc

VIII. Unfinished Business

1. Disclosure Reports
2. Meeting Schedule
3. Legal Report

IX. New Business

X. Other Matters to Properly Come Before the Board

XI. Public/Member Comments

XII. Investment Advisory Council Comments

XIII. Trustee Comments

XIV. Future Agenda Items

XV. Adjournment

(Times are approximate. Every attempt will be made to stay on schedule; however, adjustments may be made.)

DIVISION OF RETIREMENT & BENEFITS

ARM Board Quarterly Meeting



Benefits Section



Benefits Section

- **Administrative Team**
 - Section management
 - Vendor contract administration
 - Health appeals
 - Communications materials
 - Systems administration



Benefits Section

- **Operations Team**
 - Member call center
 - Retiree coverage
 - Health eligibility
 - Disability claims
 - COBRA Administration





Retirement and Benefits

Finance Section



Finance Section

- **Accounting**
 - Track financial activity for employers and plan members
 - Transfer of funds to third party administrator (TPA)
 - Alaska Retirement Management Board (ARMB)
 - Annual financial statements



Finance Section

- **Employer Payroll Processing**
 - Payroll reporting for employers
 - Maintain employee records and accounts
 - Member refunds / transfers / rollovers
 - Service verifications and indebtedness payments



Finance Section

- **Retiree Payroll**
 - Retiree benefit payments and refunds
 - Annual Form 1099Rs
 - Federal income tax withholdings
 - Mailing addresses for retirees





Retirement Section



Retirement Section

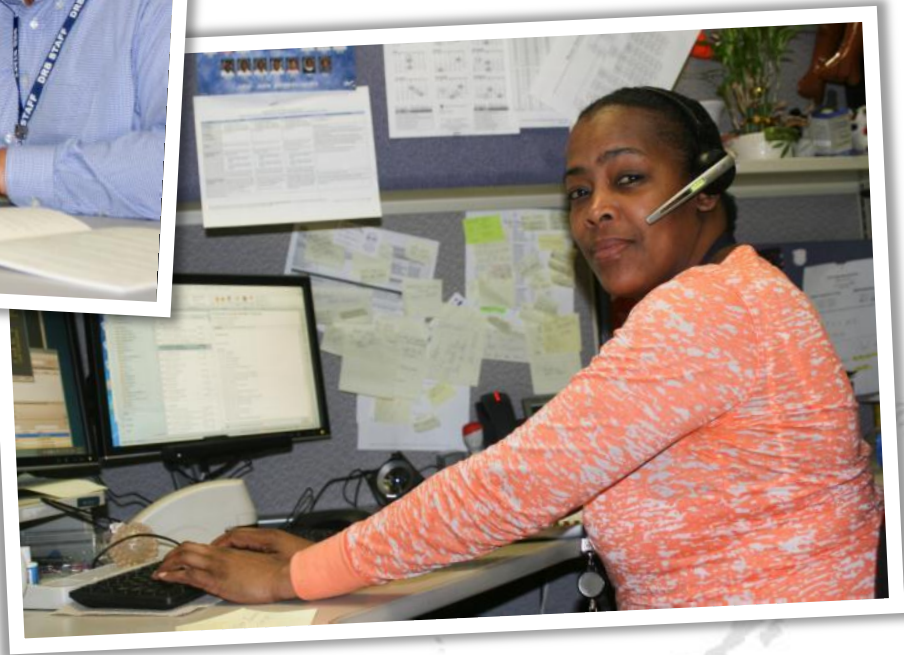
- Deliver excellent customer service to employers, members, and their survivors
- Retirement Customer Service Center
- Counseling and Education Team
- Survivor Benefits Team
- Disability Team



Retirement Section

- **Appeals Team**
 - Appeals for all programs
 - Research





and Benefits

CHIEF INVESTMENT OFFICER REPORT

- Transferred \$2.5 million out of Analytic Investors option fund to State Street S&P 500 Account.
- Transferred \$1 million from State Street S&P 500 account to Analytic Investors.
- Rebalance all ARMB funds closer to policy target
- Transferred \$2 million from State Street S&P 500 account to Analytic Investors.
- Rebalance all ARMB funds closer to policy target
- Reduced various domestic Equity accounts to add \$135 million to US Intermediate Treasury Fund.
- Rob Johnson's contract renewed for last one year extension.
- Waiver of Audit Aurora Borealis Fund
- _____
- _____



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

January 5, 2012

Mr. Kevin Clark
Analytic Investors, LLC
555 West Fifth Street, 50th Floor
Los Angeles, CA 90013

Dear Mr. Clark:

In order to reduce the cash position in Analytic's account, I direct you to make the following liquidation:

Analytic Investors (038CDCNT2) < \$2,500,000 >

This amount will subsequently be contributed to the underlying S&P 500 Index fund, managed by State Street Global Advisors (SSgA), which combine to make the Analytic/SSgA Buy-Write strategy.

I grant the portfolio manager full discretion to sell securities to effect this liquidation when in his/her best judgment it is most advantageous to the Alaska Retirement Management Board, but in any event, the funds should be available for transfer on Wednesday, January 11, 2012.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Bader".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer

GMB/smh



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

January 5, 2012

State Street Global Advisors
State Street Financial Center
One Lincoln Street
Boston, MA 02111

<input type="checkbox"/>	Revision
<input type="checkbox"/>	Cancellation

Attention: SSgA Boston Shareholder Services – (617) 204 0088

Dear State Street Global Advisors:

The Alaska Retirement Management Board _____ is writing to advise SSgA of our intent to make the below contribution to our separately managed account:

TRADE DATE:	January 11, 2012
TRANSACTION:	Contribution
SSgA ACCOUNT NAME:	S&P 500 Index Separate Account
SSgA ACCOUNT CODE:	AY4W
AMOUNT:	\$2,500,000
CURRENCY:	USD

Special Instructions:

Please trade market on close

We understand that SSgA will buy securities on Trade Date in the portfolio on the basis of the instructions provided in this letter. We agree to work with our custodian to ensure funds are deposited in a timely fashion and understand SSgA will not be responsible for any overdraft charge or impact that results from a delay in payment.

We also understand that this letter should be faxed to SSgA Shareholder Services Team at the following fax number at least 2 business days before the Trade Date.

(617) 204 0088

Sincerely yours,

Authorized Signature

Date: 1/5/2012



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

February 13, 2012

Ms. Amanda Polidoro
Morgan Stanley Prime Brokerage
555 California Street, Suite 2200
San Francisco, CA 94104

Dear Ms. Polidoro:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Thursday, February 16, 2012. Please process the following cash transfer as early as possible on that day:

State Street Global Advisors (038CDCJN0)	< \$1,000,000 >
Analytic Investors (038CDCNT2)	\$1,000,000

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Bader".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer
Mary Ellen McDonald, State Street

GMB/smh



Alaska Retirement Management Board

P.O. Box 110405
 Juneau, Alaska 99811-0405
 (907) 465-3749

February 15, 2012

Mr. Michael McElligott
 State Street Corporation
 Lafayette Corporate Center
 2 Avenue de Lafayette – 2nd Floor
 Boston, MA 02111-2900

Dear Mr. McElligott:

Please make the following transactions on February 21, 2012 to bring the ARMB funds allocations closer to target.

		AY21	AY22	AY23	AY24	AYW2	AYW3	AYW4	AYX2	AYX3	AYY2	AYY3	AY6G	AY6H	AY6I
Broad Domestic Equity	Asset ID														
EXTERNAL LG CAP DOMESTIC	309991916	473,941	(2,670,908)	(16,063)	(28,576)	1,763,404	(379,821)	5,542	79,114	32,221	534,386	160,262	28,296	1,795	16,407
CONVERTIBLE BOND TRUST	939RUC909	18,995	(61,325)	(374)	(7,789)	35,443	(9,169)	21	2,263	940	15,067	4,542	826	93	467
EXTERNAL SM CAP DOM EQ POOL	321990921	84,555	(619,989)	(4,312)	13,049	373,744	(96,336)	1,098	24,556	10,166	151,821	46,139	9,217	1,510	4,782
Fixed Income															
AY77 AK RET FXD INC POOL	001996933	1,574	(11,265)	73	(1,455)	7,770	(1,049)	54	406	167	2,673	807	146	15	84
AY1A US TREASURY FI POOL	959WQA902	13,677,369	11,748,773	197,629	(227,277)	(18,862,750)	(6,414,728)	(74,601)	(15,617)	(7,553)	283	(4,290)	(8,846)	(7,495)	(897)
INTERNATIONAL FIXED INC POOL	460994932	28,040	(261,956)	(1,803)	38,710	152,880	(40,264)	466	7,860	3,214	52,415	15,763	2,833	227	1,615
AK HIGH YIELD POOL	01199N9D2	33,928	(293,450)	(1,940)	35,508	174,786	(44,175)	543	8,887	3,637	59,176	17,809	3,205	262	1,824
EMERGING MARKETS DEBT POOL A	29099E910	11,125	(86,577)	(556)	9,611	52,846	(12,782)	166	2,399	976	16,469	4,934	850	37	502
Global Equity Ex-US															
INTERNATIONAL POOL	460181993	291,538	(1,725,477)	(10,084)	16,544	1,126,983	(242,687)	3,590	49,714	20,245	338,990	101,644	17,689	929	10,382
INTERNATIONAL EQUITY SM CAP	ACI006021	30,805	(148,861)	(827)	(15,242)	102,768	(20,224)	324	4,837	1,981	31,922	9,614	1,754	163	986
EMERGING MARKET EQUITY POOL	290990969	99,744	(640,416)	(4,208)	28,848	402,364	(95,518)	1,212	19,457	7,937	130,004	39,028	7,001	543	4,004
Private Equity															
ALASKA PRIVATE EQUITY POOL	011993995	179,123	(981,054)	(5,300)	-	640,563	(140,440)	2,079	27,910	11,357	192,070	57,529	9,878	408	5,877
Real Assets															
ALASKA REAL ESTATE POOL	011991916	(474,190)	(941,143)	(14,595)	-	1,102,742	53,309	3,826	25,046	10,202	169,311	50,769	8,956	567	5,200
REAL ESTATE POOL B	756072922	145,161	(145,959)	798	-	-	-	-	-	-	-	-	-	-	-
REIT POOL A	769488917	16,623	(120,143)	(792)	-	73,667	(18,066)	225	4,798	1,990	29,643	9,022	1,803	297	933
FARMLAND POOL A	311990988	69,019	(368,401)	(2,466)	-	236,467	(57,315)	755	11,302	4,614	76,418	22,964	4,042	255	2,346
FARMLAND WATER POOL	313548919	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TIMBER POOL A	886995943	23,408	(140,194)	(800)	-	91,849	(19,440)	297	4,163	1,700	28,119	8,451	1,488	95	864
ENERGY POOL A	293188918	12,047	(72,147)	(411)	-	47,267	(10,004)	153	2,141	874	14,470	4,350	766	49	445
AK TIPS POOL	46599K949	24,359	(141,680)	(811)	-	93,349	(19,648)	299	4,058	1,652	27,742	8,319	1,441	71	849
Absolute Return															
ALASKA ABSOLUTE RETURN POOL	857993901	80,300	(480,934)	(2,743)	-	315,081	(66,686)	1,018	14,280	5,831	96,462	28,990	5,110	328	2,963
Cash															
AY70 SHORT TERM POOL	825990961	(14,827,464)	(1,836,894)	(130,415)	138,069	12,068,777	7,635,043	52,933	(27,574)	(112,151)	(1,967,441)	(586,646)	(96,455)	(149)	(59,633)



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 9, 2012

Ms. Amanda Polidoro
Morgan Stanley Prime Brokerage
555 California Street, Suite 2200
San Francisco, CA 94104

Dear Ms. Polidoro:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Wednesday, March 14, 2012. Please process the following cash transfer as early as possible on that day:

State Street Global Advisors (038CDCJN0)	< \$2,000,000 >
Analytic Investors (038CDCNT2)	\$2,000,000

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Bader".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer
Mary Ellen McDonald, State Street

GMB/smh



Alaska Retirement Management Board

P.O. Box 110405

Juneau, Alaska 99811-0405

(907) 465-3749

March 21, 2012

Mr. Michael McElligott
 State Street Corporation
 Lafayette Corporate Center
 2 Avenue de Lafayette – 2nd Floor
 Boston, MA 02111-2900

Dear Mr. McElligott:

Please make the following transactions on March 27, 2012 to bring the ARMB funds allocations closer to target.

		AY21	AY22	AY23	AY24	AYW2	AYW3	AYW4	AYX2	AYX3	AYY2	AYY3	AY6G	AY6H	AY6I
Broad Domestic Equity	Asset ID														
EXTERNAL LG CAP DOMESTIC	309997916	786,872	(3,012,812)	4,701	(78,657)	1,938,956	(607,985)	9,744	91,488	34,293	612,639	168,760	33,128	2,077	16,826
CONVERTIBLE BOND TRUST	939RU909	17,947	(68,476)	111	(1,803)	44,055	(13,839)	222	2,080	779	13,928	3,833	754	47	382
EXTERNAL SM CAP DOM EQ POOL	321990921	174,505	(669,778)	1,090	(17,215)	430,604	(135,201)	2,162	20,417	7,660	136,551	37,637	7,399	477	3,752
Fixed Income															
AY77 AK RET FXD INC POOL	001996933	2,850	(34,161)	10	1,621	8,240	(2,984)	44	417	156	2,799	769	153	9	77
AY1A US TREASURY FI POOL	959WQA902	13,826,641	11,542,333	205,917	(153,142)	(18,811,369)	(6,462,879)	(73,263)	(17,840)	(9,721)	(12,643)	(14,402)	(9,612)	(7,838)	(2,102)
INTERNATIONAL FIXED INC POOL	460994932	54,806	(270,894)	193	31,253	157,523	(57,345)	814	7,976	2,981	53,467	14,699	2,887	176	1,464
AK HIGH YIELD POOL	01199N902	64,267	(318,932)	205	36,873	185,467	(67,352)	952	9,390	3,515	62,958	17,323	3,400	207	1,727
EMERGING MARKETS DEBT POOL A	29099E910	18,882	(93,657)	62	10,827	54,463	(19,787)	279	2,758	1,032	18,488	5,086	998	62	507
Global Equity Ex-US															
INTERNATIONAL POOL	460181993	471,823	(1,943,868)	2,476	34,124	1,213,931	(397,734)	6,134	58,460	21,904	391,658	107,858	21,166	1,317	10,751
INTERNATIONAL EQUITY SM CAP	AC1006021	41,072	(168,847)	221	2,910	105,436	(34,603)	533	5,082	1,903	34,035	9,369	1,840	114	935
EMERGING MARKET EQUITY POOL	29099E969	169,753	(700,472)	871	12,571	437,296	(143,251)	2,205	21,077	7,899	141,177	38,888	7,633	477	3,876
Private Equity															
ALASKA PRIVATE EQUITY POOL	011999395	273,830	(1,091,243)	1,598	-	689,569	(222,753)	3,492	32,962	12,341	220,736	60,737	11,934	744	6,053
Real Assets															
ALASKA REAL ESTATE POOL	011991916	383,332	(598,826)	4,659	-	226,771	(300,973)	1,545	26,845	9,998	181,743	49,817	9,664	472	4,953
REAL ESTATE POOL B	756072922	162,641	(164,852)	2,211	-	-	-	-	-	-	-	-	-	-	-
REIT POOL A	769488917	32,139	(127,693)	194	-	80,711	(26,109)	410	3,848	1,439	25,786	7,089	1,393	86	707
FARMLAND POOL A	311990908	140,404	(320,338)	(1,392)	-	166,288	(114,797)	949	12,242	4,569	82,509	22,653	4,418	241	2,254
FARMLAND WATER POOL	313548919	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TIMBER POOL A	886995943	39,209	(156,294)	227	-	98,767	(31,894)	500	4,721	1,767	31,613	8,700	1,711	107	866
ENERGY POOL A	293188918	19,617	(78,205)	114	-	49,420	(15,959)	251	2,363	885	15,819	4,353	855	54	433
AK TIPS POOL	46599K949	37,786	(150,477)	223	-	95,077	(30,739)	482	4,546	1,703	30,441	8,375	1,646	103	834
Absolute Return															
ALASKA ABSOLUTE RETURN POOL	857993901	132,885	(529,717)	773	-	334,745	(108,095)	1,693	15,998	5,992	107,146	29,487	5,793	362	2,938
Cash															
AY70 SHORT TERM POOL	825990961	(16,851,261)	(1,062,791)	(224,404)	120,638	12,484,070	8,794,309	41,852	(304,830)	(111,095)	(2,150,850)	(580,951)	(107,160)	706	(57,233)



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

State Street Global Advisors
State Street Financial Center
One Lincoln Street
Boston, MA 02111

<input type="checkbox"/>	Revision
<input type="checkbox"/>	Cancellation

Attention: SSgA Boston Shareholder Services – (617) 204 0088

Dear State Street Global Advisors:

The Alaska Retirement Management Board _____ is writing to advise SSgA of our intent to make the below withdrawal from our separately managed account:

DATE CASH IS REQUIRED:	April 4, 2012
TRANSACTION:	Cash Withdrawal
SSgA ACCOUNT NAME:	Russell 1000 Growth Index Separate Account
SSgA ACCOUNT CODE:	AY4L
AMOUNT:	\$25,000,000
CURRENCY:	USD

Special Instructions:

Please be sure the trade-related futures position for the cash receivable associated with this transaction is closed out at the end of the day on April 3, 2012.

We understand SSgA may sell securities in advance of the date that cash is required in our custody account based on the standard market conventions.

We also understand that this letter should be faxed to SSgA Shareholder Services Team at the following fax number at least 5 business days before the funds are needed to provide ample lead time for trading and security settlement. We acknowledge that failure to do so may result in the requested funds not being available in our custody account and that SSgA would not be responsible for any resulting overdraft charges.

(617) 204 0088

Sincerely yours,

Gary M. Bader
Authorized Signature

Date: 3/28/12



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

State Street Global Advisors
State Street Financial Center
One Lincoln Street
Boston, MA 02111

<input type="checkbox"/>	Revision
<input type="checkbox"/>	Cancellation

Attention: SSgA Boston Shareholder Services – (617) 204 0088

Dear State Street Global Advisors:

The Alaska Retirement Management Board _____ is writing to advise SSgA of our intent to make the below withdrawal from our separately managed account:

DATE CASH IS REQUIRED:	April 5, 2012
TRANSACTION:	Cash Withdrawal
SSgA ACCOUNT NAME:	Russell 1000 Value Index Separate Account
SSgA ACCOUNT CODE:	AY4M
AMOUNT:	\$25,000,000
CURRENCY:	USD

Special Instructions:

Please be sure the trade-related futures position for the cash receivable associated with this transaction is closed out at the end of the day on April 4, 2012.

We understand SSgA may sell securities in advance of the date that cash is required in our custody account based on the standard market conventions.

We also understand that this letter should be faxed to SSgA Shareholder Services Team at the following fax number at least 5 business days before the funds are needed to provide ample lead time for trading and security settlement. We acknowledge that failure to do so may result in the requested funds not being available in our custody account and that SSgA would not be responsible for any resulting overdraft charges.

(617) 204 0088

Sincerely yours,

Authorized Signature

Date: 3/28/12



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

** REVISED **

MMB

State Street Global Advisors
State Street Financial Center
One Lincoln Street
Boston, MA 02111

<input checked="" type="checkbox"/>	Revision
<input type="checkbox"/>	Cancellation

Attention: SSgA Boston Shareholder Services – (617) 204 0088

Dear State Street Global Advisors:

The Alaska Retirement Management Board _____ is writing to advise SSgA of our intent to make the below withdrawal from our separately managed account:

DATE CASH IS REQUIRED:

~~April 6, 2012~~ *April 5, 2012*

MMB

TRANSACTION:

Cash Withdrawal

SSgA ACCOUNT NAME:

Russell 2000 Growth Index Separate Account

SSgA ACCOUNT CODE:

AY4N

AMOUNT:

\$15,000,000

CURRENCY:

USD

Special Instructions:

Please be sure the trade-related futures position for the cash receivable associated with this transaction is closed out at the end of the day on ~~April 5, 2012~~ *April 4, 2012*

MMB

We understand SSgA may sell securities in advance of the date that cash is required in our custody account based on the standard market conventions.

We also understand that this letter should be faxed to SSgA Shareholder Services Team at the following fax number at least 5 business days before the funds are needed to provide ample lead time for trading and security settlement. We acknowledge that failure to do so may result in the requested funds not being available in our custody account and that SSgA would not be responsible for any resulting overdraft charges.

(617) 204 0088

Sincerely yours,

Sam M. Podes

Authorized Signature

Date: *3/28/12*



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

State Street Global Advisors
State Street Financial Center
One Lincoln Street
Boston, MA 02111

<input type="checkbox"/>	Revision
<input type="checkbox"/>	Cancellation

Attention: SSgA Boston Shareholder Services – (617) 204 0088

Dear State Street Global Advisors:

The Alaska Retirement Management Board _____ is writing to advise SSgA of our intent to make the below withdrawal from our separately managed account:

DATE CASH IS REQUIRED:	April 9, 2012
TRANSACTION:	Cash Withdrawal
SSgA ACCOUNT NAME:	Russell 2000 Value Index Separate Account
SSgA ACCOUNT CODE:	AY4P
AMOUNT:	\$20,000,000
CURRENCY:	USD

Special Instructions:

Please be sure the trade-related futures position for the cash receivable associated with this transaction is closed out at the end of the day on April 6, 2012.

We understand SSgA may sell securities in advance of the date that cash is required in our custody account based on the standard market conventions.

We also understand that this letter should be faxed to SSgA Shareholder Services Team at the following fax number at least 5 business days before the funds are needed to provide ample lead time for trading and security settlement. We acknowledge that failure to do so may result in the requested funds not being available in our custody account and that SSgA would not be responsible for any resulting overdraft charges.

(617) 204 0088

Sincerely yours,

Gary M. Bader

Authorized Signature

Date:

3/28/12



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

Ms. Melody McDonald
RCM
555 Mission Street, Suite 1700
San Francisco, CA 94105

Dear Ms. McDonald:

The Alaska Retirement Management Board (ARMB) is in the process of rebalancing its asset allocation. In order to work towards the Board's target allocation, I direct you to make the following liquidation:

RCM Large Cap (AY38) < \$25,000,000 >

I grant the portfolio manager full discretion to sell securities to effect this liquidation when in his/her best judgment it is most advantageous to the ARMB, but in any event, the funds should be available for transfer on Tuesday, April 10, 2012.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Bader".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer

GMB/smh



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

Mr. Alexander H. Slivka
McKinley Capital Management, LLC
3301 C Street, Suite 500
Anchorage, AK 99503

Dear Mr. Slivka:

The Alaska Retirement Management Board (ARMB) is in the process of rebalancing its asset allocation. In order to work towards the Board's target allocation, I direct you to make the following liquidation:

McKinley Large Cap (AY48) < \$25,000,000 >

I grant the portfolio manager full discretion to sell securities to effect this liquidation when in his/her best judgment it is most advantageous to the ARMB, but in any event, the funds should be available for transfer on Wednesday, April 11, 2012.

If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

A handwritten signature in blue ink that reads "Gary M. Bader".

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller
Scott Jones, Assistant State Comptroller
James McKnight, Senior Investment Compliance Officer
Bob Mitchell, State Investment Officer
Steve Sikes, State Investment Officer

GMB/smh



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 28, 2012

Mr. Bob Mitchell
333 Willoughby Ave.,
Treasury Division, 11th Floor SOB
Juneau, AK 99801

** REVISED * MMB*

Dear Mr. Mitchell:

The Alaska Retirement Management Board (ARMB) is in the process of rebalancing its asset allocation. In order to work towards the Board's target allocation, I direct you to invest an additional \$135,000,000 in the US Intermediate Treasury Fund (AY1A). This amount will be available for investment according to the following schedule:

Date	Amount
April 4, 2012	\$25,000,000
April 5, 2012	\$25,000,000 <i>\$40,000,000</i>
April 6, 2012	\$15,000,000
April 9, 2012	\$20,000,000
April 10, 2012	\$25,000,000
April 11, 2012	\$25,000,000
	<u>\$135,000,000</u>

MMB

If you have any questions, please do not hesitate to contact me.

Sincerely,

Gary M. Bader
Chief Investment Officer

cc: Gail Schubert, ARMB Chair
Angela Rodell, Deputy Commissioner
Pam Leary, State Comptroller



Alaska Retirement Management Board

P.O. Box 110405
Juneau, Alaska 99811-0405
(907) 465-3749

March 22, 2011

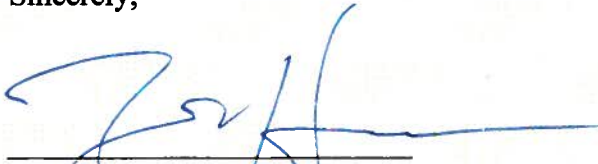
Marlena Kaplan
Cadogan Management, LLC
499 Park Avenue, Fourth Floor
New York, NY 10022

Dear Marlena:

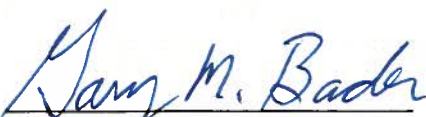
The Alaska Retirement Management Board is the sole limited partner of the Aurora Borealis Fund, L.P., a fund managed by Cadogan Management, LLC. The Aurora Borealis fund is in the final stage of liquidation and redemption. As of December 31, 2011, the net assets of the fund are less than \$100,000 and are largely composed of cash and a receivable that is being collected. The fund will have an audit completed for 2011.

The \$35,000 expected cost of having the fund audited for the calendar year 2012 is an unnecessary expense since the fund has a low level of assets and is not expected to have any material activity in 2012. Accordingly, the Alaska Retirement Management Board agrees to waive the requirement for a 2012 audit of the fund, but reserves the right to inspect the fund's books and records.

Sincerely,



Zachary A Hanna
State Investment Officer



Gary M. Bader
Chief Investment Officer



Pamela Leary
State Comptroller

cc: Angela Rodell, Deputy Commissioner, Revenue
Ross Balagula, Cadogan Management, LLC

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT

As of February 29, 2012

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Eight Months Ending February 29, 2012

	Beginning Invested Assets	Investment Income ⁽¹⁾	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income ⁽²⁾
<u>Public Employees' Retirement System (PERS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	\$ 6,264,552,684	\$ 62,655,833	\$ (82,010,443)	\$ 6,245,198,074	-0.31%	1.01%
Retirement Health Care Trust	5,134,162,802	61,989,168	59,915,714	5,256,067,684	2.37%	1.20%
Total Defined Benefit Plans	<u>11,398,715,486</u>	<u>124,645,001</u>	<u>(22,094,729)</u>	<u>11,501,265,758</u>	0.90%	1.09%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	180,109,444	5,171,168	36,076,528	221,357,140	22.90%	2.61%
Health Reimbursement Arrangement	53,935,537	1,839,508	11,977,078	67,752,123	25.62%	3.07%
Retiree Medical Plan	12,298,211	356,511	1,752,417	14,407,139	17.15%	2.71%
Defined Benefit Occupational Death and Disability:						
Public Employees	5,286,780	145,573	632,837	6,065,190	14.72%	2.60%
Police and Firefighters	1,917,717	60,369	347,056	2,325,142	21.25%	2.89%
Total Defined Contribution Plans	<u>253,547,689</u>	<u>7,573,129</u>	<u>50,785,916</u>	<u>311,906,734</u>	23.02%	2.71%
Total PERS	<u>11,652,263,175</u>	<u>132,218,130</u>	<u>28,691,187</u>	<u>11,813,172,492</u>	1.38%	1.13%
<u>Teachers' Retirement System (TRS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	3,118,844,542	31,363,804	(43,651,593)	3,106,556,753	-0.39%	1.01%
Retirement Health Care Trust	1,614,432,210	21,082,909	36,404,093	1,671,919,212	3.56%	1.29%
Total Defined Benefit Plans	<u>4,733,276,752</u>	<u>52,446,713</u>	<u>(7,247,500)</u>	<u>4,778,475,965</u>	0.95%	1.11%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	81,208,363	1,910,792	13,561,100	96,680,255	19.05%	2.17%
Health Reimbursement Arrangement	17,780,154	528,932	3,366,202	21,675,288	21.91%	2.72%
Retiree Medical Plan	5,433,467	140,826	651,270	6,225,563	14.58%	2.45%
Defined Benefit Occupational Death and Disability	2,234,171	45,694	44,443	2,324,308	4.03%	2.03%
Total Defined Contribution Plans	<u>106,656,155</u>	<u>2,626,244</u>	<u>17,623,015</u>	<u>126,905,414</u>	18.99%	2.27%
Total TRS	<u>4,839,932,907</u>	<u>55,072,957</u>	<u>10,375,515</u>	<u>4,905,381,379</u>	1.35%	1.14%
<u>Judicial Retirement System (JRS)</u>						
Defined Benefit Plan Retirement Trust	110,498,974	1,049,341	(1,796,014)	109,752,301	-0.68%	0.96%
Defined Benefit Retirement Health Care Trust	20,475,723	230,675	30,936	20,737,334	1.28%	1.13%
Total JRS	<u>130,974,697</u>	<u>1,280,016</u>	<u>(1,765,078)</u>	<u>130,489,635</u>	-0.37%	0.98%
<u>National Guard/Naval Militia Retirement System (MRS)</u>						
Defined Benefit Plan Retirement Trust	32,995,190	861,279	(96,465)	33,760,004	2.32%	2.61%
<u>Other Participant Directed Plans</u>						
Supplemental Annuity Plan	2,552,981,709	91,035,371	4,154,897	2,648,171,977	3.73%	3.56%
Deferred Compensation Plan	596,689,747	15,675,707	3,223,872	615,589,326	3.17%	2.62%
Total All Funds	<u>\$ 19,805,837,425</u>	<u>\$ 296,143,460</u>	<u>\$ 44,583,928</u>	<u>\$ 20,146,564,813</u>	1.72%	1.49%

Notes:

(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: <http://www.revenue.state.ak.us/treasury/programs/programs/other/armb/investmentresults.asp>

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
For the Month Ended February 29, 2012

	Beginning Invested Assets	Investment Income ⁽¹⁾	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income ⁽²⁾
<u>Public Employees' Retirement System (PERS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	\$ 6,100,976,275	\$ 176,702,775	\$ (32,480,976)	\$ 6,245,198,074	2.31%	2.90%
Retirement Health Care Trust	5,124,491,297	149,121,074	(17,544,687)	5,256,067,684	2.50%	2.91%
Total Defined Benefit Plans	<u>11,225,467,572</u>	<u>325,823,849</u>	<u>(50,025,663)</u>	<u>11,501,265,758</u>	2.40%	2.91%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	210,138,721	7,717,097	3,501,322	221,357,140	5.07%	3.64%
Health Reimbursement Arrangement	64,632,913	1,850,043	1,269,167	67,752,123	4.60%	2.83%
Retiree Medical Plan	13,832,813	398,012	176,314	14,407,139	3.99%	2.86%
<u>Defined Benefit Occupational Death and Disability:</u>						
Public Employees	5,835,953	168,222	61,015	6,065,190	3.78%	2.87%
Police and Firefighters	2,224,693	63,913	36,536	2,325,142	4.32%	2.85%
Total Defined Contribution Plans	<u>296,665,093</u>	<u>10,197,287</u>	<u>5,044,354</u>	<u>311,906,734</u>	4.89%	3.41%
Total PERS	<u>11,522,132,665</u>	<u>336,021,136</u>	<u>(44,981,309)</u>	<u>11,813,172,492</u>	2.46%	2.92%
<u>Teachers' Retirement System (TRS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	3,042,786,398	88,455,038	(24,684,683)	3,106,556,753	2.05%	2.92%
Retirement Health Care Trust	1,632,383,648	47,561,811	(8,026,247)	1,671,919,212	2.36%	2.92%
Total Defined Benefit Plans	<u>4,675,170,046</u>	<u>136,016,849</u>	<u>(32,710,930)</u>	<u>4,778,475,965</u>	2.16%	2.92%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	91,271,856	3,413,966	1,994,433	96,680,255	5.59%	3.70%
Health Reimbursement Arrangement	20,607,668	591,453	476,167	21,675,288	4.93%	2.84%
Retiree Medical Plan	5,963,507	171,925	90,131	6,225,563	4.21%	2.86%
Defined Benefit Occupational Death and Disability	2,259,134	65,707	(533)	2,324,308	2.80%	2.91%
Total Defined Contribution Plans	<u>120,102,165</u>	<u>4,243,051</u>	<u>2,560,198</u>	<u>126,905,414</u>	5.36%	3.50%
Total TRS	<u>4,795,272,211</u>	<u>140,259,900</u>	<u>(30,150,732)</u>	<u>4,905,381,379</u>	2.24%	2.93%
<u>Judicial Retirement System (JRS)</u>						
Defined Benefit Plan Retirement Trust	107,159,953	3,102,403	(510,055)	109,752,301	2.36%	2.90%
Defined Benefit Retirement Health Care Trust	20,183,876	587,565	(34,107)	20,737,334	2.67%	2.91%
Total JRS	<u>127,343,829</u>	<u>3,689,968</u>	<u>(544,162)</u>	<u>130,489,635</u>	2.41%	2.90%
<u>National Guard/Naval Militia Retirement System (MRS)</u>						
Defined Benefit Plan Retirement Trust	33,145,446	759,958	(145,400)	33,760,004	1.82%	2.30%
<u>Other Participant Directed Plans</u>						
Supplemental Annuity Plan	2,597,014,095	53,606,833	(2,448,951)	2,648,171,977	1.93%	2.07%
Deferred Compensation Plan	602,881,218	13,463,861	(755,753)	615,589,326	2.06%	2.23%
Total All Funds	<u>\$ 19,677,789,464</u>	<u>\$ 547,801,656</u>	<u>\$ (79,026,307)</u>	<u>\$ 20,146,564,813</u>	2.33%	2.79%

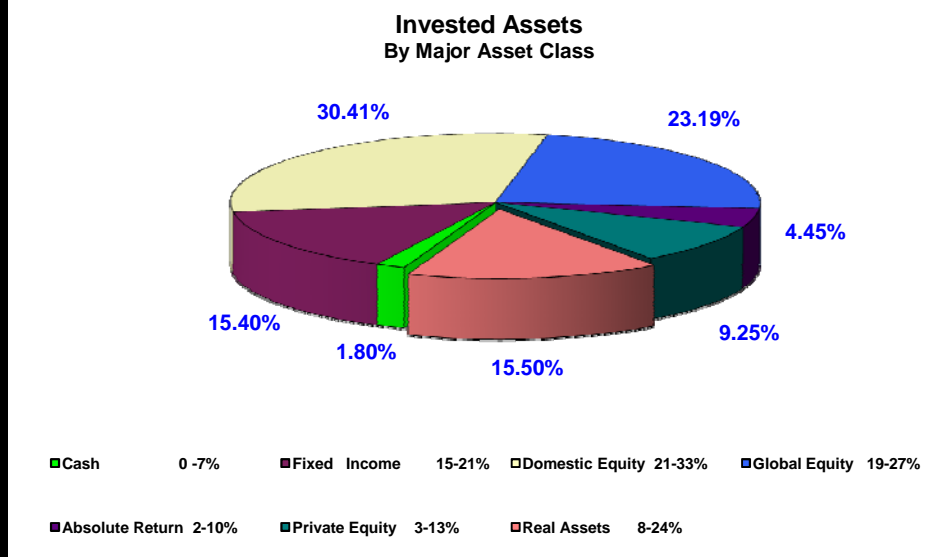
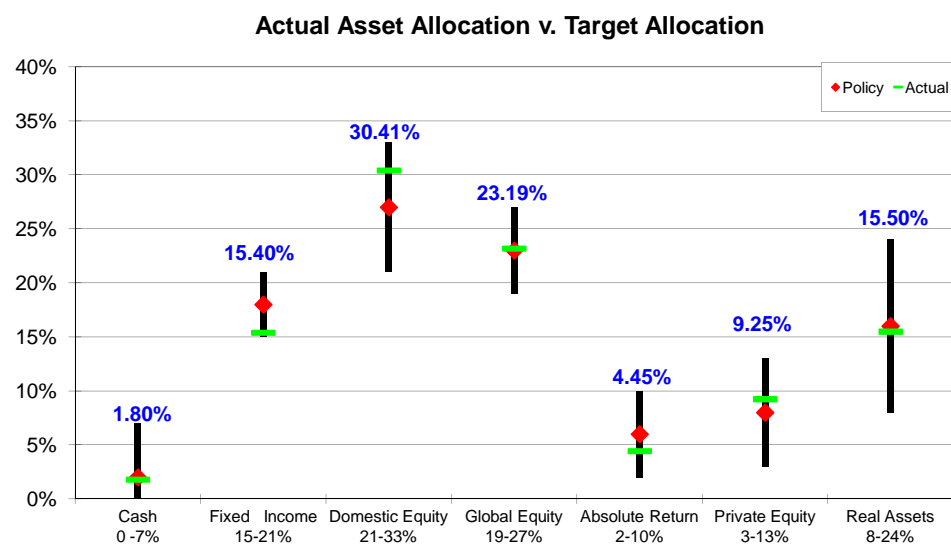
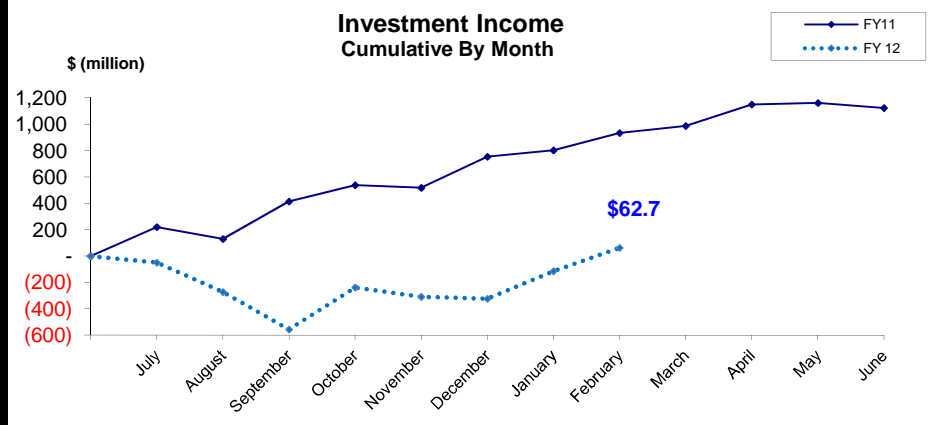
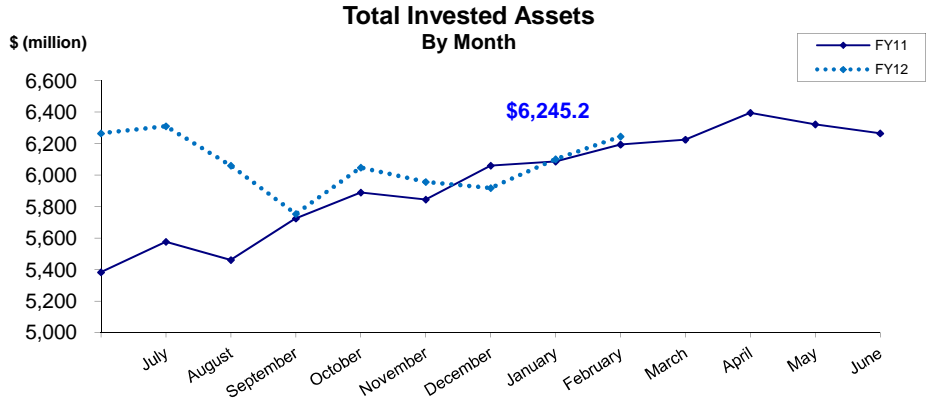
Notes:

(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

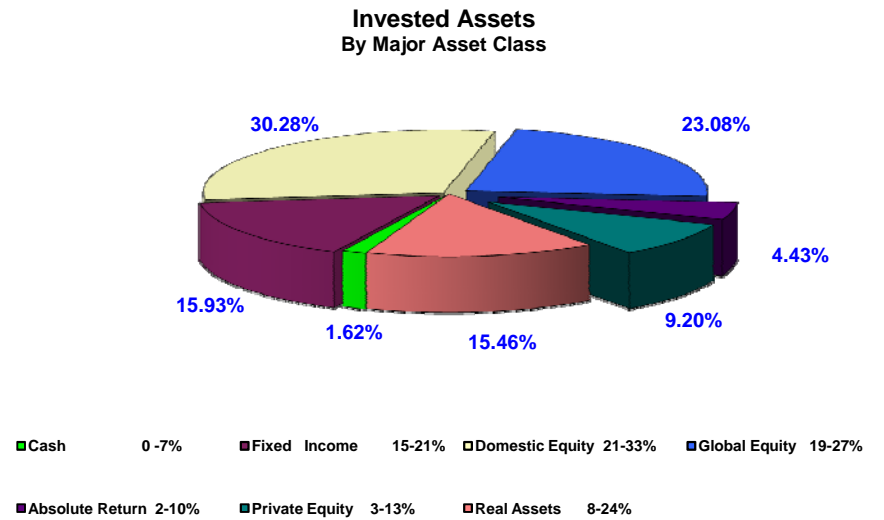
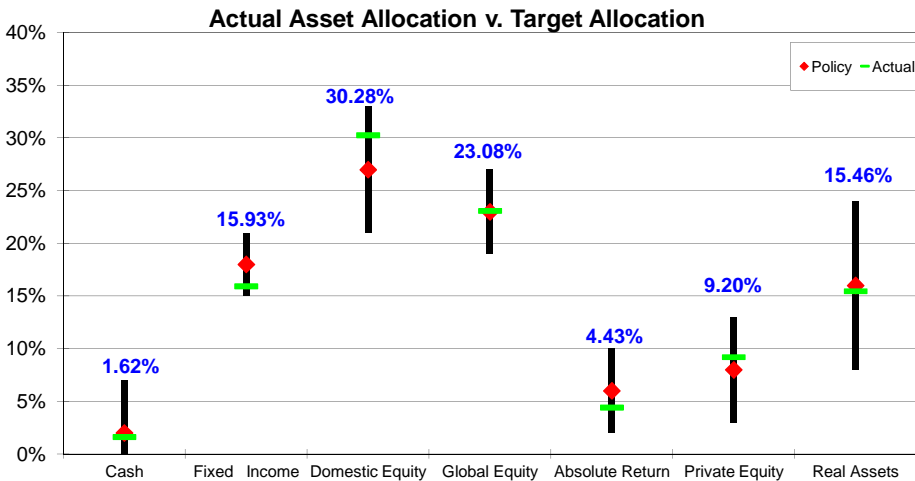
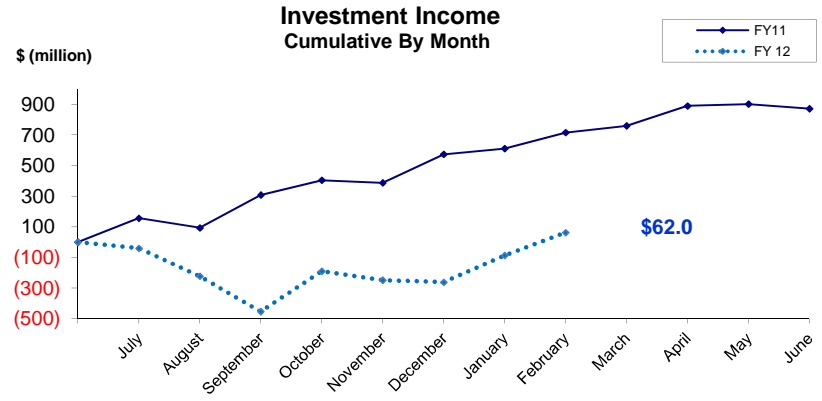
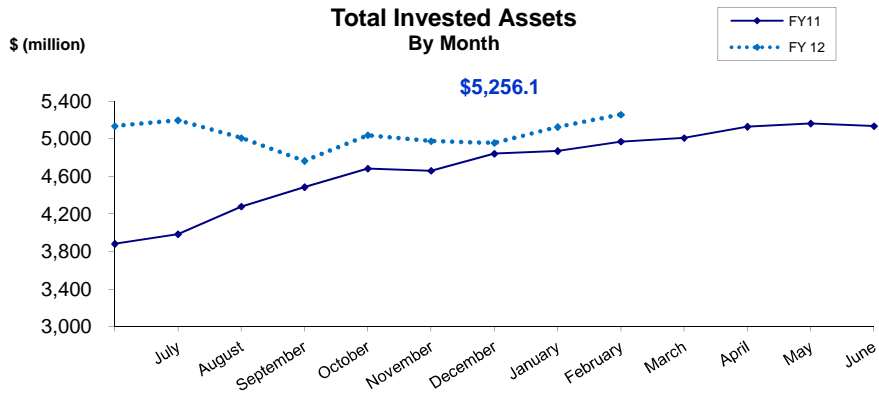
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: <http://www.revenue.state.ak.us/treasury/programs/programs/other/amb/investmentresults.aspx>

PUBLIC EMPLOYEES' RETIREMENT TRUST FUND

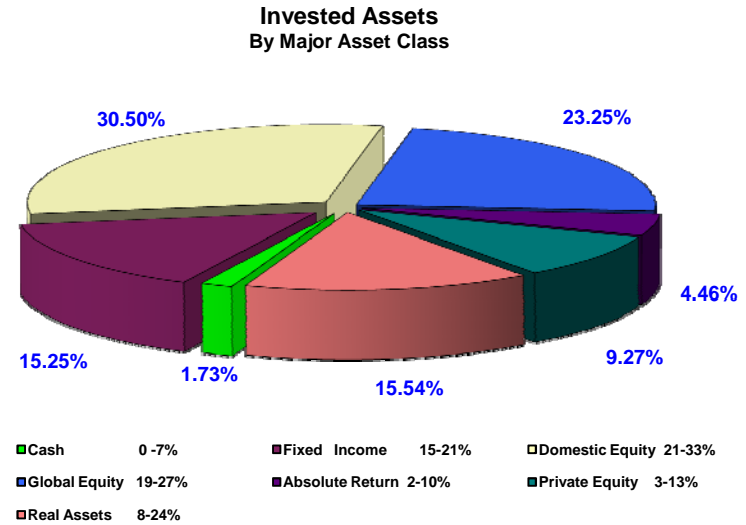
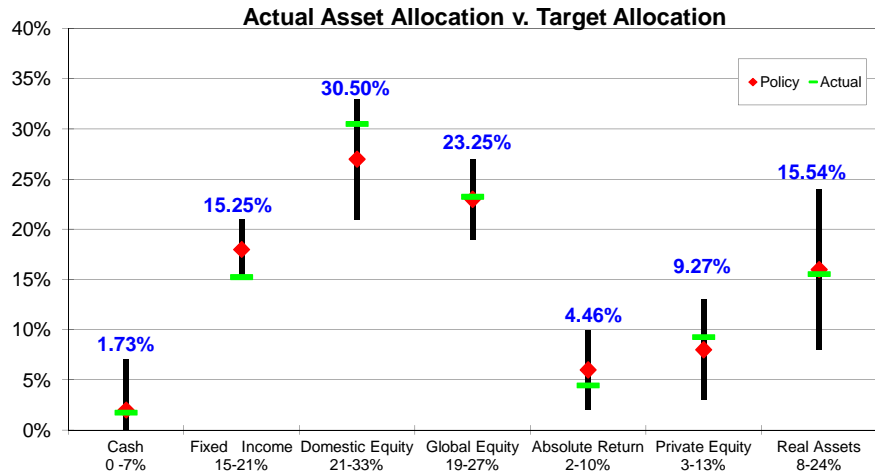
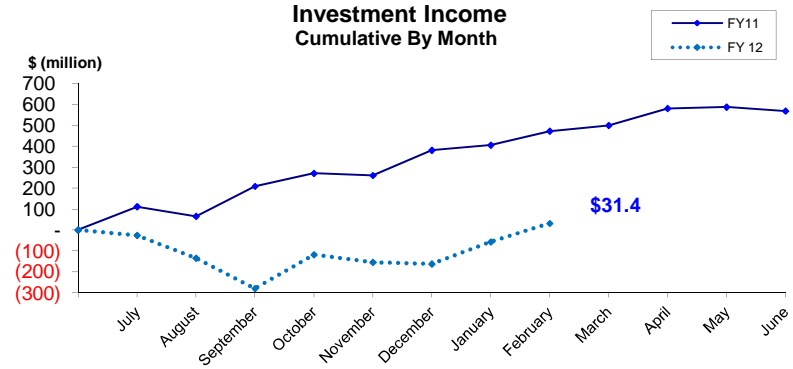
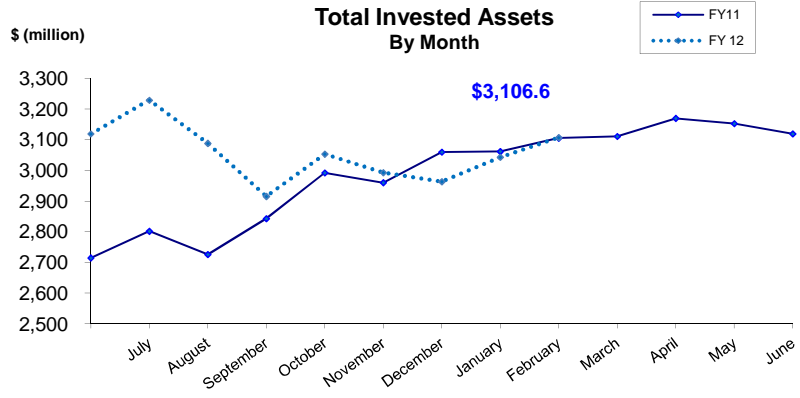
As of February 29, 2012



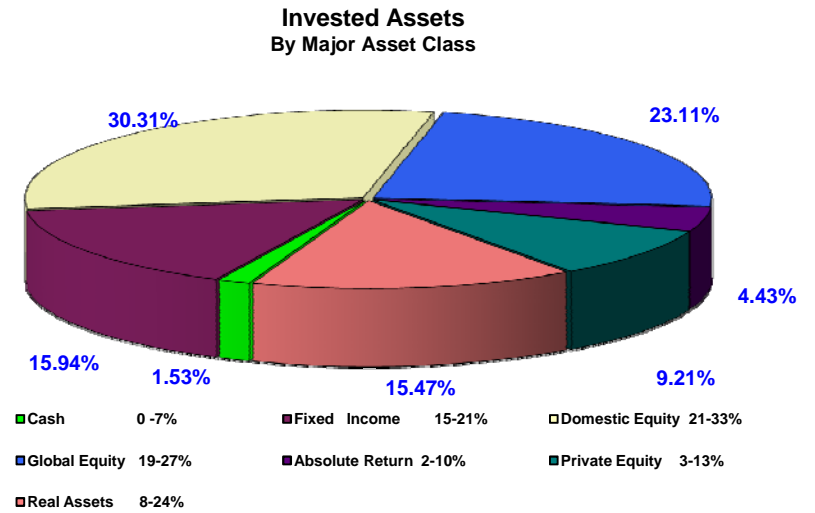
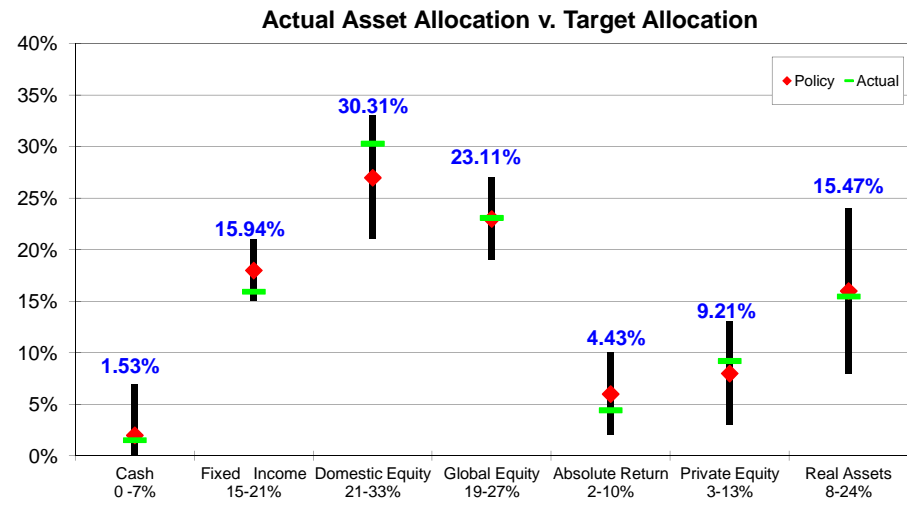
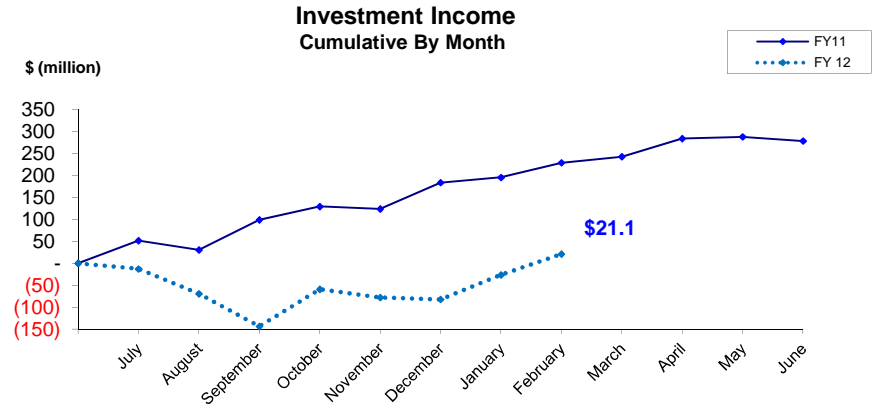
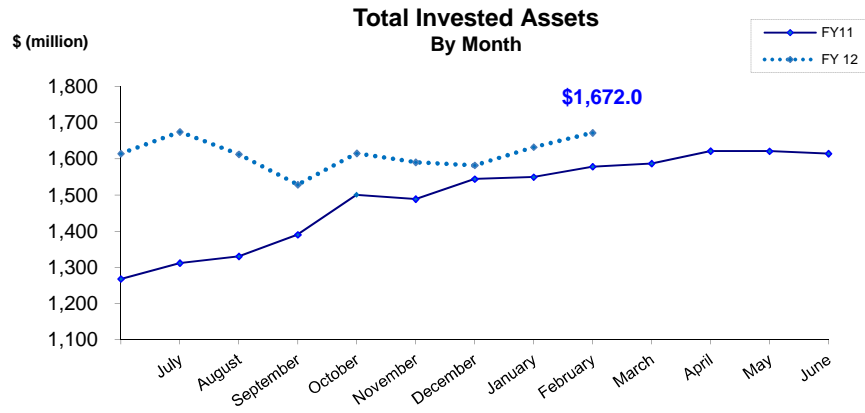
PUBLIC EMPLOYEES' RETIREE HEALTH CARE TRUST FUND As of February 29, 2012



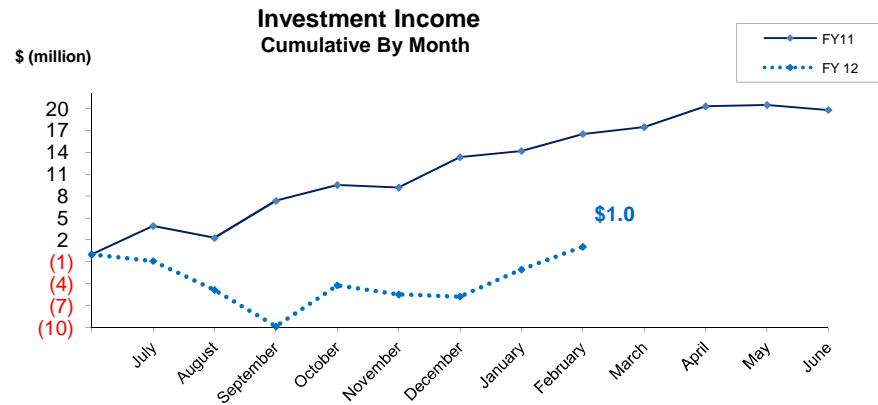
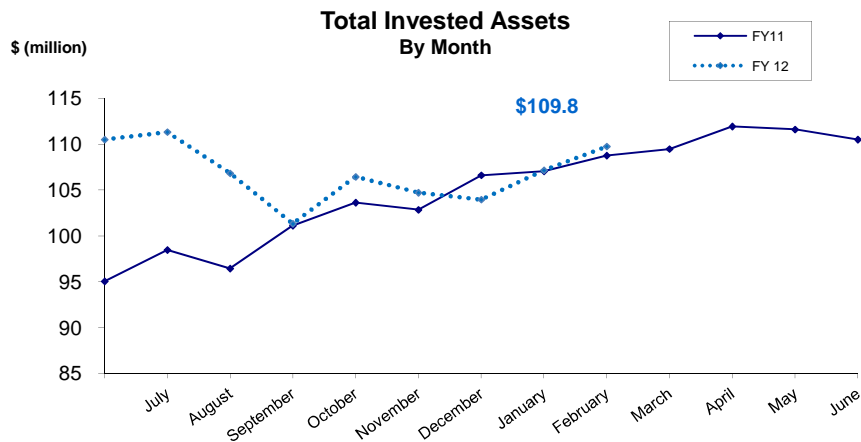
TEACHERS' RETIREMENT TRUST FUND As of February 29, 2012



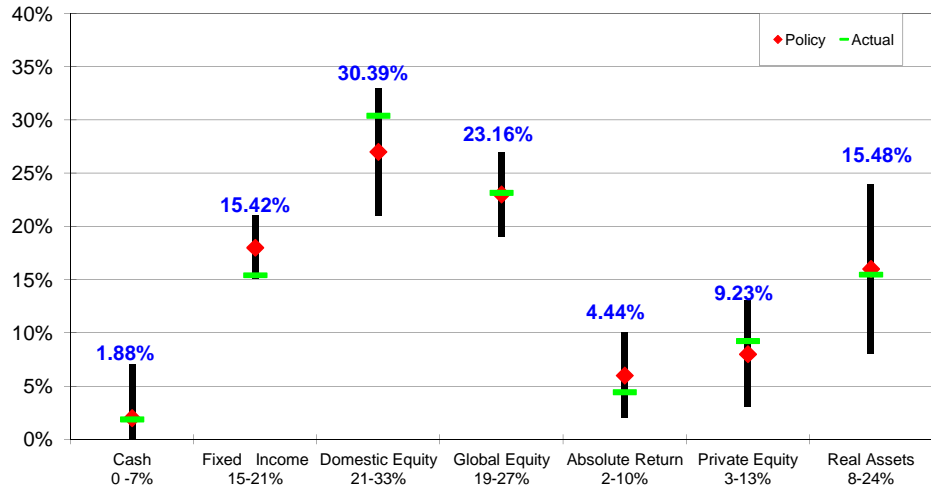
TEACHERS' RETIREE HEALTH CARE TRUST FUND As of February 29, 2012



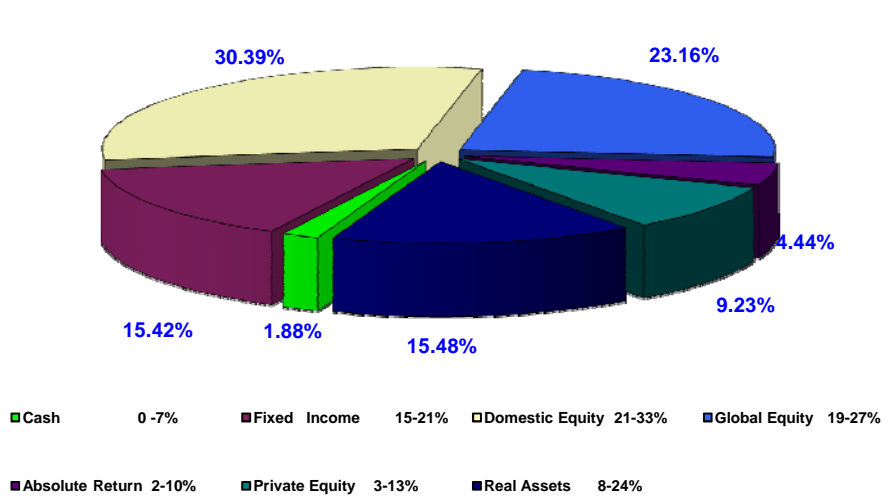
JUDICIAL RETIREMENT TRUST FUND As of February 29, 2012



Actual Asset Allocation v. Target Allocation

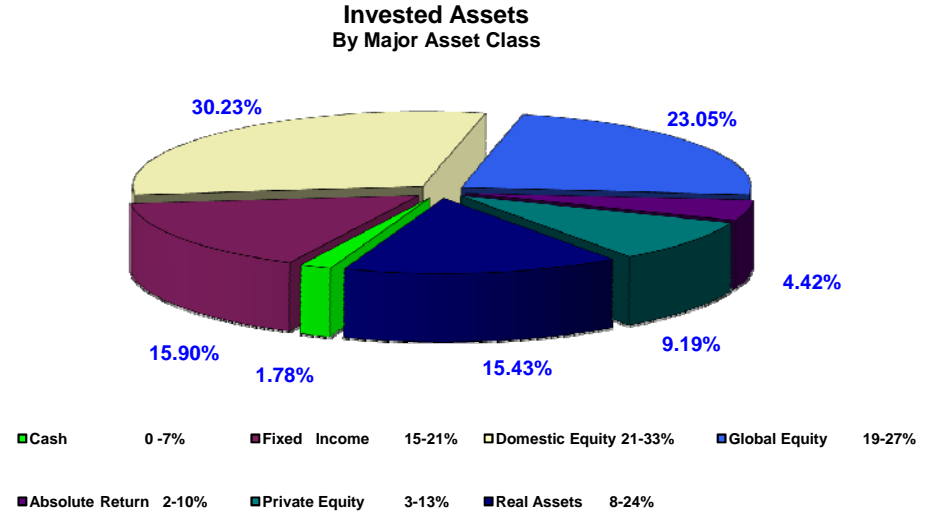
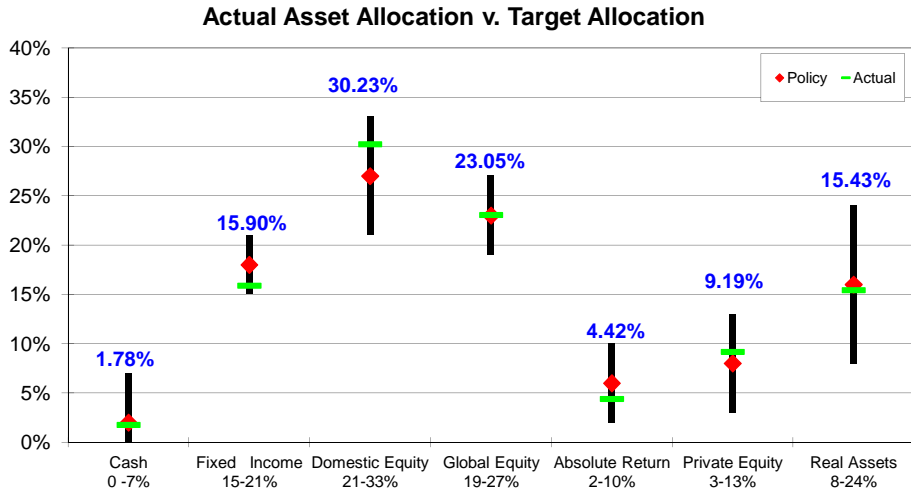
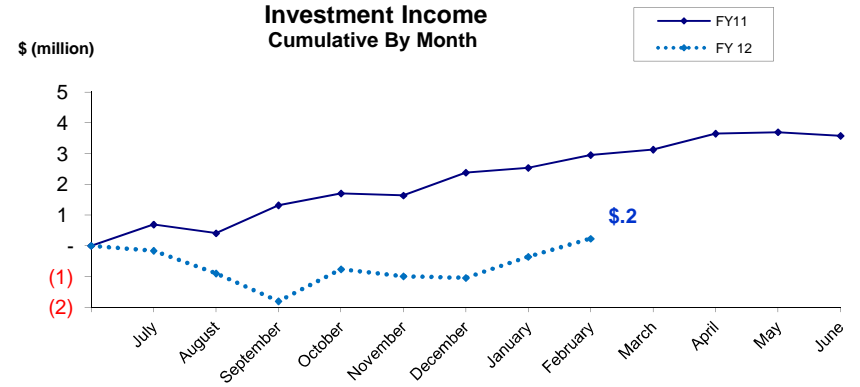
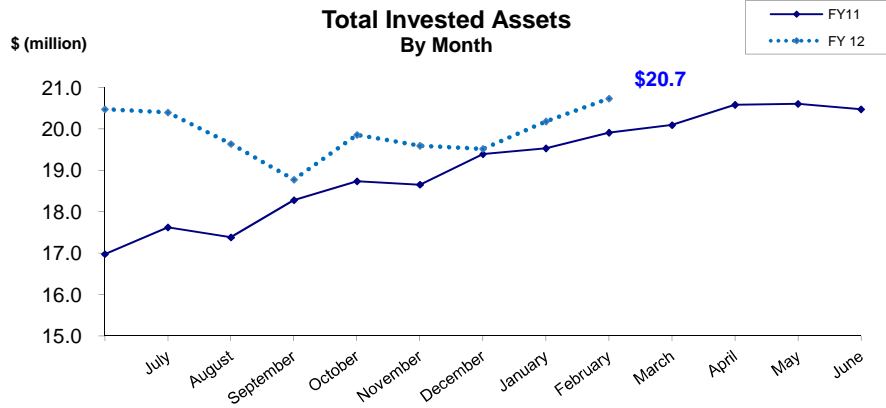


Invested Assets By Major Asset Class



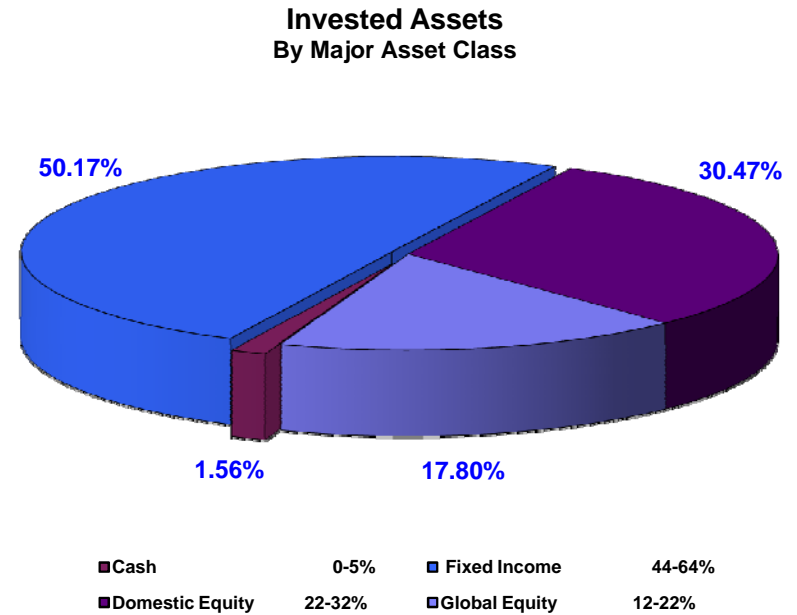
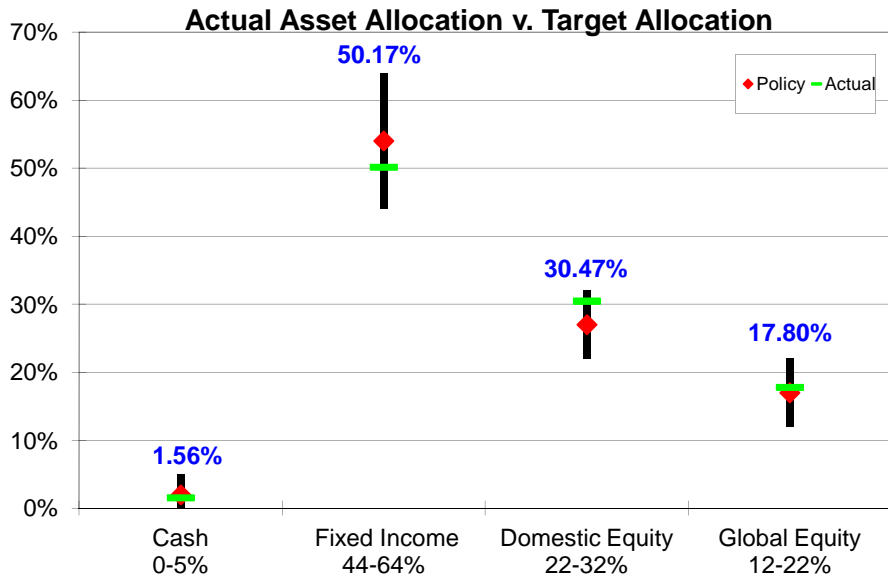
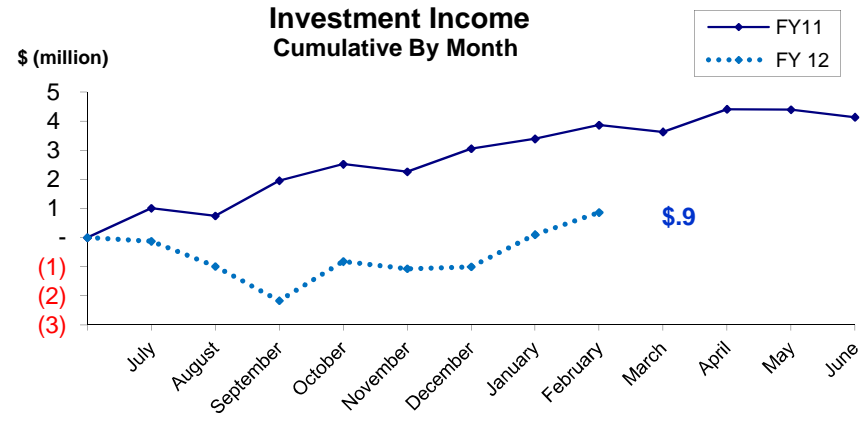
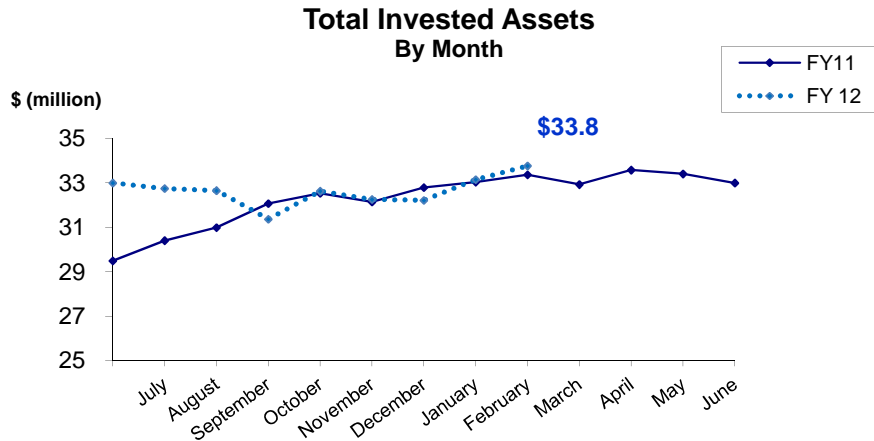
JUDICIAL RETIREE HEALTH CARE TRUST FUND

As of February 29, 2012



MILITARY RETIREMENT TRUST FUND

As of February 29, 2012



ALASKA RETIREMENT MANAGEMENT BOARD
Reporting of Funds by Manager

All Non-Participant Directed Plans

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended February 29, 2012

AY		Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)
	Cash					
70	Short-Term Fixed Income Pool	\$ 302,216,230	\$ 229,179	\$ (18,930,744)	\$ 283,514,665	-6.19%
	Total Cash	<u>302,216,230</u>	<u>229,179</u>	<u>(18,930,744)</u>	<u>283,514,665</u>	<u>-6.19%</u>
	Fixed Income					
1A	US Treasury Fixed Income	<u>1,705,567,783</u>	<u>(6,487,289)</u>	<u>(65,127,101)</u>	<u>1,633,953,393</u>	<u>-4.20%</u>
77	Internal Fixed Income Investment Pool	<u>18,885,923</u>	<u>177,571</u>	<u>-</u>	<u>19,063,494</u>	<u>0.94%</u>
	International Fixed Income Pool					
63	Mondrian Investment Partners	<u>379,232,057</u>	<u>710,261</u>	<u>-</u>	<u>379,942,318</u>	<u>0.19%</u>
	High Yield Pool					
9P	MacKay Shields, LLC	<u>425,735,380</u>	<u>8,325,279</u>	<u>-</u>	<u>434,060,659</u>	<u>1.96%</u>
	Total High Yield	<u>425,735,380</u>	<u>8,325,279</u>	<u>-</u>	<u>434,060,659</u>	<u>1.96%</u>
	Emerging Debt Pool					
5M	Lazard Emerging Income	<u>126,675,849</u>	<u>1,671,579</u>	<u>-</u>	<u>128,347,428</u>	<u>1.32%</u>
	Total Fixed Income	<u>2,656,096,992</u>	<u>4,397,401</u>	<u>(65,127,101)</u>	<u>2,595,367,292</u>	<u>-2.29%</u>
	(cont.)					

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended February 29, 2012

	Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)	
Domestic Equities						
Small Cap Pool						
Passively Managed						
4N	SSgA Russell 2000 Growth	25,645,616	857,594	-	26,503,210	3.34%
4P	SSgA Russell 2000 Value	70,125,738	1,066,621	-	71,192,359	1.52%
	Total Passive	<u>95,771,354</u>	<u>1,924,215</u>	<u>-</u>	<u>97,695,569</u>	2.01%
Actively Managed						
4E	DePrince, Race & Zollo Inc.- Micro Cap	73,546,845	218,151	-	73,764,996	0.30%
4F	Luther King Capital Management	130,509,051	5,522,863	-	136,031,914	4.23%
4G	Jennison Associates, LLC	127,757,950	4,893,753	-	132,651,703	3.83%
5G	Frontier Capital Mgmt Co.	107,990,743	4,967,705	-	112,958,448	4.60%
6A	SSgA Futures Small Cap	5,976,011	310,559	-	6,286,570	5.20%
4H	Lord Abbett & Co.	133,002,839	5,186,895	-	138,189,734	3.90%
4Q	Barrow, Haney, Mewhinney & Strauss	115,695,127	6,430,285	-	122,125,412	5.56%
4Z	Lord Abbett & Co.- Micro Cap	73,303,039	2,308,453	-	75,611,492	3.15%
	Total Active	<u>767,781,605</u>	<u>29,838,664</u>	<u>-</u>	<u>797,620,269</u>	3.89%
	Total Small Cap	<u>863,552,959</u>	<u>31,762,879</u>	<u>-</u>	<u>895,315,838</u>	3.68%
Large Cap Pool						
Passively Managed						
4L	SSgA Russell 1000 Growth	761,780,115	36,376,527	-	798,156,642	4.78%
4M	SSgA Russell 1000 Value	929,342,996	37,098,676	-	966,441,672	3.99%
4R	SSgA Russell 200	374,510,570	16,778,404	-	391,288,974	4.48%
	Total Passive	<u>2,065,633,681</u>	<u>90,253,607</u>	<u>-</u>	<u>2,155,887,288</u>	4.37%
Actively Managed						
47	Lazard Freres	290,728,265	12,321,682	-	303,049,947	4.24%
48	McKinley Capital Mgmt.	339,333,912	18,582,653	-	357,916,565	5.48%
4U	Barrow, Haney, Mewhinney & Strauss	140,924,747	6,196,113	-	147,120,860	4.40%
4V	Quantitative Management Assoc.	137,599,314	5,670,001	-	143,269,315	4.12%
4W/4X	Analytic Buy Write Account	107,641,868	2,809,299	-	110,451,167	2.61%
4Y	RCM Buy Write Account	99,598,494	1,326,252	-	100,924,746	1.33%
38	RCM	364,052,874	19,311,803	-	383,364,677	5.30%
6B	SSgA Futures large cap	8,215,099	556,763	61	8,771,923	6.78%
4J	Relational Investors, LLC	311,511,466	5,477,861	13,201,465	330,190,792	6.00%
	Total Active	<u>1,799,606,039</u>	<u>72,252,427</u>	<u>13,201,526</u>	<u>1,885,059,992</u>	4.75%
	Total Large Cap	<u>3,865,239,720</u>	<u>162,506,034</u>	<u>13,201,526</u>	<u>4,040,947,280</u>	4.55%

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended February 29, 2012

	Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)	
Convertible Bond Pool						
52	Advent Capital	92,699,962	2,282,443	-	94,982,405	2.46%
	Total Convertible Bond Pool	92,699,962	2,282,443	-	94,982,405	2.46%
	Total Domestic Equity	4,821,492,641	196,551,356	13,201,526	5,031,245,523	4.35%
Global Equities Ex US						
Small Cap Pool						
5B	Mondrian Investment Partners	109,538,938	7,225,504	-	116,764,442	6.60%
5D	Schroder Investment Management	108,130,185	6,666,000	-	114,796,185	6.16%
	Total Small Cap	217,669,123	13,891,504	-	231,560,627	6.38%
Large Cap Pool						
65	Brandes Investment Partners	749,963,168	39,713,772	-	789,676,940	5.30%
58	Lazard Freres	363,354,120	21,893,816	-	385,247,936	6.03%
67	Cap Guardian Trust Co	573,714,654	38,365,668	-	612,080,322	6.69%
68	State Street Global Advisors	498,898,035	28,284,725	-	527,182,760	5.67%
6D	SSgA Futures International	61	-	(61)	-	-100.00%
69	McKinley Capital Management	308,606,712	16,001,282	-	324,607,994	5.19%
	Total Large Cap	2,494,536,750	144,259,263	(61)	2,638,795,952	5.78%
Emerging Markets Equity Pool A ⁽¹⁾						
6P	Lazard Asset Management	323,925,851	22,643,696	-	346,569,547	6.99%
6Q	Eaton Vance	200,480,582	11,624,143	-	212,104,725	5.80%
62	The Capital Group Inc.	385,500,843	19,513,005	-	405,013,848	5.06%
	Total Emerging Markets Pool A	909,907,276	53,780,844	-	963,688,120	5.91%
	Total Global Equities	3,622,113,149	211,931,611	(61)	3,834,044,699	5.85%
Private Equity Pool						
7Z	Merit Capital Partners	7,435,884	-	-	7,435,884	0.00%
98	Pathway Capital Management LLC	707,018,930	10,516,455	350,104	717,885,489	1.54%
85	Abbott Capital	691,667,452	3,572,479	(5,382,231)	689,857,700	-0.26%
8A	Blum Capital Partners-Strategic	13,329,618	-	-	13,329,618	0.00%
8P	Lexington Partners	31,963,319	-	-	31,963,319	0.00%
8Q	Onex Partnership III	10,760,984	(138,557)	-	10,622,427	-1.29%
8W	Warburg Pincus X	26,459,081	1,541,196	-	28,000,277	5.82%
8X	Angelo, Gordon & Co.	26,071,393	1,020,745	-	27,092,138	3.92%
	Total Private Equity	1,514,706,661	16,512,318	(5,032,127)	1,526,186,852	0.76%

(cont.)

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended February 29, 2012

	Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)	
Absolute Return Pool ⁽²⁾						
8M	Global Asset Management (USA) Inc.	140,879,523	3,281,903	-	144,161,426	2.33%
8N	Prisma Capital Partners	142,340,605	2,556,719	-	144,897,324	1.80%
9D	Mariner Investment Group, Inc.	189,758,914	3,428,261	-	193,187,175	1.81%
9E	Cadogan Management LLC	93,714	-	-	93,714	0.00%
9F	Crestline Investors, Inc.	245,943,053	2,064,120	3,500,000	251,507,173	2.26%
	Total Absolute Return Investments	719,015,809	11,331,003	3,500,000	733,846,812	2.06%
Real Assets						
Farmland Pool A						
9B	UBS Agrinvest, LLC	332,236,526	3,770,656	852,597	336,859,779	1.39%
9G	Hancock Agricultural Investment Group	210,250,179	2,063,149	-	212,313,328	0.98%
	Total Farmland Pool A	542,486,705	5,833,805	852,597	549,173,107	1.23%
Farmland Water Pool						
8Y	Hancock Water PPTY	8,369,904	78,433	-	8,448,337	0.94%
8Z	UBS Arginvest, LLC	19,150,180	358,454	-	19,508,634	1.87%
	Total Farmland Water Pool	27,520,084	436,887	-	27,956,971	1.59%
Timber Pool A						
9Q	Timberland INVT Resource LLC	135,683,031	1,168,024	-	136,851,055	0.86%
9S	Hancock Natural Resource Group	73,912,610	5,759,509	-	79,672,119	7.79%
	Total Timber Pool A	209,595,641	6,927,533	-	216,523,174	3.31%
Energy Pool A						
5A	EIG Energy Fund XV	20,654,725	82,055	-	20,736,780	0.40%
9A	EIG Energy Fund XD	12,398,798	(1,298,326)	-	11,100,472	-10.47%
9Z	EIG Energy Fund XIV-A	77,316,638	392,654	(1,204,812)	76,504,480	-1.05%
	Total Energy Pool A	110,370,161	(823,617)	(1,204,812)	108,341,732	-1.84%
REIT Pool						
9H	REIT Holdings	172,649,991	(1,696,745)	-	170,953,246	-0.98%
Treasury Inflation Proof Securities						
6N	TIPS Internally Managed Account (cont.)	213,287,885	(1,065,692)	-	212,222,193	-0.50%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended February 29, 2012

	Beginning Invested Assets	Total Investment Income	Net Contributions (Withdrawals) & Transfers In (Out)	Ending Invested Assets	% increase (decrease)	
Real Estate						
Core Commingled Accounts						
7A	JP Morgan	171,840,893	413,144	-	172,254,037	0.24%
7B	UBS Trumbull Property Fund	73,372,541	-	-	73,372,541	0.00%
	Total Core Commingled	<u>245,213,434</u>	<u>413,144</u>	<u>-</u>	<u>245,626,578</u>	<u>0.17%</u>
Core Separate Accounts						
7D	Cornerstone Real Estate Advisers Inc.	88,295,069	2,245,100	185,000	90,725,169	2.75%
7E	LaSalle Investment Management	195,552,590	4,537,638	(640,141)	199,450,087	1.99%
7F	Sentinel Separate Account	107,134,089	5,178,863	(454,963)	111,857,989	4.41%
7G	UBS Realty	242,149,794	8,978,891	(677,592)	250,451,093	3.43%
	Total Core Separate	<u>633,131,542</u>	<u>20,940,492</u>	<u>(1,587,696)</u>	<u>652,484,338</u>	<u>3.06%</u>
Non-Core Commingled Accounts						
7H	Coventry	20,997,146	-	-	20,997,146	0.00%
7J	Lowe Hospitality Partners	4,616,354	-	-	4,616,354	0.00%
7N	ING Clarion Development Ventures II	15,402,633	(2,301,028)	(19,214)	13,082,391	-15.06%
7P	Silverpeak Legacy Pension Partners II, L.P. ⁽³⁾	77,853,901	(34)	(6,269,083)	71,584,784	-8.05%
7Q	Almanac Realty Securities IV ⁽⁵⁾	39,615,241	7	(358,305)	39,256,943	-0.90%
7R	Tishman Speyer Real Estate Venture VI	63,794,692	-	-	63,794,692	0.00%
7X	Tishman Speyer Real Estate Venture VII	17,467,024	-	-	17,467,024	0.00%
7S	Almanac Realty Securities V ⁽⁶⁾	19,462,809	-	-	19,462,809	0.00%
7V	ING Clarion Development Ventures III	21,258,574	(561,627)	(15,625)	20,681,322	-2.72%
7W	Silverpeak Legacy Pension Partners III, L.P. ⁽⁴⁾	10,619,597	-	-	10,619,597	0.00%
8R	BlackRock Diamond Property Fund	23,695,842	-	-	23,695,842	0.00%
8S	Colony Investors VIII, L.P.	19,665,176	-	-	19,665,176	0.00%
8U	LaSalle Medical Office Fund II	21,829,658	391,562	(326,713)	21,894,507	0.30%
8V	Cornerstone Apartment Venture III	30,308,002	152,344	-	30,460,346	0.50%
	Total Non-Core Commingled	<u>386,586,649</u>	<u>(2,318,776)</u>	<u>(6,988,940)</u>	<u>377,278,933</u>	<u>-2.41%</u>
	Total Real Estate	<u>1,264,931,625</u>	<u>19,034,860</u>	<u>(8,576,636)</u>	<u>1,275,389,849</u>	<u>0.83%</u>
	Total Real Assets	<u>2,540,842,092</u>	<u>28,647,031</u>	<u>(8,928,851)</u>	<u>2,560,560,272</u>	<u>0.78%</u>
	Totals	<u>\$ 16,176,483,574</u>	<u>\$ 469,599,899</u>	<u>\$ (81,317,358)</u>	<u>\$ 16,564,766,115</u>	<u>2.40%</u>

Notes

- (1) Investment is represented by shares in (or as a percentage of) commingled equity investments which, at any given time, may be a combination of securities and cash.
- (2) Investment is represented by shares in various hedge funds.
- (3) Previously titled Lehman Brothers Real Estate Partners II
- (4) Previously titled Lehman Brothers Real Estate Partners III
- (5) Previously titled Rothschild Five Arrows Realty Securities V
- (6) Previously titled Rothschild Five Arrows Realty Securities IV

ALASKA RETIREMENT MANAGEMENT BOARD

Participant Directed Plans

Supplemental Annuity Plan
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
February 29, 2012

	<u>Beginning Invested Assets</u>	<u>Investment Income</u>	<u>Net Contributions (Withdrawals)</u>	<u>Transfers in (out)</u>	<u>Ending Invested Assets</u>
Interim Transit Account					
Treasury Division ⁽¹⁾					
Cash and Cash Equivalents	\$ 6,672,472	\$ 2,926	\$ (168,565)	\$ -	\$ 6,506,833
Participant Options ⁽²⁾					
T. Rowe Price					
Stable Value Fund	314,443,118	710,241	(1,306,396)	(3,428,476)	310,418,487
Small-Cap Stock Fund	89,606,243	3,312,338	35,434	2,293,283	95,247,298
Alaska Balanced Fund	1,092,345,312	18,263,696	(2,912,724)	(1,511,226)	1,106,185,058
Long Term Balanced Fund	342,236,296	9,680,541	1,925,486	(993,532)	352,848,791
AK Target Date 2010 Trust	6,193,854	148,907	(8,036)	(531,262)	5,803,463
AK Target Date 2015 Trust	85,173,973	2,382,476	101,012	725,964	88,383,425
AK Target Date 2020 Trust	35,836,950	1,135,669	51,186	155,932	37,179,737
AK Target Date 2025 Trust	17,671,722	620,351	318,937	(12,530)	18,598,480
AK Target Date 2030 Trust	6,635,621	252,889	172,476	81,245	7,142,231
AK Target Date 2035 Trust	6,304,852	254,736	202,074	95,868	6,857,530
AK Target Date 2040 Trust	5,923,369	243,177	236,352	(36,908)	6,365,990
AK Target Date 2045 Trust	5,627,930	231,301	272,900	8,397	6,140,528
AK Target Date 2050 Trust	5,955,315	244,924	292,071	9,898	6,502,208
AK Target Date 2055 Trust	<u>3,192,362</u>	<u>136,031</u>	<u>57,878</u>	<u>532,323</u>	<u>3,918,594</u>
Total Investments with T. Rowe Price	<u>2,017,146,917</u>	<u>37,617,277</u>	<u>(561,350)</u>	<u>(2,611,024)</u>	<u>2,051,591,820</u>
State Street Global Advisors					
State Street Treasury Money Market Fund - Inst.	36,342,656	1	(774,694)	(617,463)	34,950,500
S&P 500 Stock Index Fund Series A	228,359,764	9,834,831	(950,426)	(222,648)	237,021,521
Russell 3000 Index	14,090,194	608,424	39,574	1,028,455	15,766,647
US Real Estate Investment Trust Index	24,015,610	(348,996)	96,611	2,336,461	26,099,686
World Equity Ex-US Index	10,480,707	610,017	48,797	896,022	12,035,543
Long US Treasury Bond Index	20,694,643	(431,076)	(21,255)	(2,557,720)	17,684,592
US Treasury Inflation Protected Securities Index	19,665,415	(64,816)	47,623	1,111,063	20,759,285
World Government Bond Ex-US Index	5,073,500	(49,369)	23,014	(127,504)	4,919,641
Global Balanced Fund	<u>52,418,963</u>	<u>1,554,889</u>	<u>(387,496)</u>	<u>(9,916)</u>	<u>53,576,440</u>
Total Investments with SSGA	<u>411,141,452</u>	<u>11,713,905</u>	<u>(1,878,252)</u>	<u>1,836,750</u>	<u>422,813,855</u>
BlackRock					
Government Bond Fund	54,266,734	(47,652)	(163,433)	29,894	54,085,543
Intermediate Bond Fund	<u>13,992,972</u>	<u>(60,976)</u>	<u>(12,882)</u>	<u>418,949</u>	<u>14,338,063</u>
Total Investments with BlackRock	<u>68,259,706</u>	<u>(108,628)</u>	<u>(176,315)</u>	<u>448,843</u>	<u>68,423,606</u>
Brandes Institutional					
International Equity Fund Fee	65,225,322	3,387,024	313,038	540,509	69,465,893
RCM					
Sustainable Opportunities Fund	<u>28,568,226</u>	<u>994,329</u>	<u>22,493</u>	<u>(215,078)</u>	<u>29,369,970</u>
Total Externally Managed Funds	<u>2,590,341,623</u>	<u>53,603,907</u>	<u>(2,280,386)</u>	<u>-</u>	<u>2,641,665,144</u>
Total All Funds	<u>\$ 2,597,014,095</u>	<u>\$ 53,606,833</u>	<u>\$ (2,448,951)</u>	<u>\$ -</u>	<u>\$ 2,648,171,977</u>

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.

Supplemental Annuity Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
February 29, 2012
\$ (Thousands)

<u>Invested Assets (At Fair Value)</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>
Investments with Treasury Division								
Cash and cash equivalents	\$ 8,592	\$ 7,922	\$ 8,146	\$ 7,972	\$ 7,123	\$ 6,382	\$ 6,672	\$ 6,507
Investments with T. Rowe Price								
Stable Value Fund	307,698	310,946	307,698	313,922	312,557	316,824	314,443	310,418
Small-Cap Stock Fund	90,243	80,388	70,487	82,828	83,568	82,943	89,606	95,247
Alaska Balanced Fund	1,081,747	1,058,805	1,028,933	1,068,346	1,062,547	1,068,797	1,092,345	1,106,185
Long Term Balanced Fund	327,767	316,287	302,465	325,296	325,532	329,690	342,236	352,849
AK Target Date 2010 Trust	6,647	5,964	6,057	6,417	5,752	5,784	6,194	5,803
AK Target Date 2015 Trust	84,469	81,242	77,846	83,027	82,614	82,376	85,174	88,383
AK Target Date 2020 Trust	34,412	33,333	31,251	33,520	33,644	33,534	35,837	37,180
AK Target Date 2025 Trust	15,871	15,118	14,377	15,853	16,033	16,196	17,672	18,598
AK Target Date 2030 Trust	5,316	4,998	4,840	5,831	5,892	6,121	6,636	7,142
AK Target Date 2035 Trust	5,199	5,068	4,822	5,500	5,615	5,845	6,305	6,858
AK Target Date 2040 Trust	4,438	4,365	4,431	5,044	5,061	5,384	5,923	6,366
AK Target Date 2045 Trust	3,971	3,950	3,941	4,576	4,757	5,098	5,628	6,141
AK Target Date 2050 Trust	4,072	4,177	4,093	4,910	5,136	5,358	5,955	6,502
AK Target Date 2055 Trust	1,942	2,250	2,258	2,779	2,592	2,852	3,192	3,919
Investments with State Street Global Advisors								
State Street Treasury Money Market Fund - Inst.	37,730	38,037	37,636	38,085	38,422	37,723	36,343	34,950
S&P 500 Stock Index Fund Series A	224,458	212,540	198,227	219,397	218,537	218,768	228,360	237,021
Russell 3000 Index	12,066	11,219	10,741	12,182	12,347	12,486	14,090	15,767
US Real Estate Investment Trust Index	24,290	22,031	18,603	21,302	20,707	21,354	24,016	26,100
World Equity Ex-US Index	12,393	11,150	9,576	10,807	9,950	9,639	10,481	12,036
Long US Treasury Bond Index	6,274	14,980	19,947	15,293	20,541	21,813	20,695	17,685
US Treasury Inflation Protected Securities Index	17,366	18,996	18,235	17,950	18,280	19,060	19,665	20,759
World Govt Bond Ex-US Index	5,622	5,590	5,265	5,047	4,966	4,879	5,074	4,920
Global Balanced Fund	51,620	50,392	47,598	51,447	50,516	50,893	52,419	53,576
Investments with BlackRock								
Government Bond Fund	50,261	50,950	52,294	52,440	52,350	53,474	54,267	54,086
Intermediate Bond Fund	11,871	13,396	13,264	13,062	14,147	13,808	13,993	14,338
Investments with Brandes Investment Partners								
International Equity Fund Fee	74,909	67,515	62,982	68,413	65,352	62,645	65,225	69,466
Investments with RCM								
Sustainable Opportunities Fund	29,348	26,326	24,643	28,501	28,566	27,521	28,568	29,370
Total Invested Assets	<u>\$ 2,540,592</u>	<u>\$ 2,477,935</u>	<u>\$ 2,390,656</u>	<u>\$ 2,519,747</u>	<u>\$ 2,513,104</u>	<u>\$ 2,527,247</u>	<u>\$ 2,597,014</u>	<u>\$ 2,648,172</u>
<u>Change in Invested Assets</u>								
Beginning Assets	\$ 2,552,982	\$ 2,540,592	\$ 2,477,935	\$ 2,390,656	\$ 2,519,747	\$ 2,513,104	\$ 2,527,247	\$ 2,597,014
Investment Earnings	(11,959)	(63,592)	(88,791)	126,143	(8,733)	14,088	70,272	53,607
Net Contributions (Withdrawals)	(431)	935	1,512	2,948	2,090	55	(505)	(2,449)
Ending Invested Assets	<u>\$ 2,540,592</u>	<u>\$ 2,477,935</u>	<u>\$ 2,390,656</u>	<u>\$ 2,519,747</u>	<u>\$ 2,513,104</u>	<u>\$ 2,527,247</u>	<u>\$ 2,597,014</u>	<u>\$ 2,648,172</u>

Deferred Compensation Plan
Schedule of Invested Assets and Changes in Invested Assets
for the Month Ended
February 29, 2012

	<u>Beginning Invested Assets</u>	<u>Investment Income</u>	<u>Net Contributions (Withdrawals)</u>	<u>Transfers in (out)</u>	<u>Ending Invested Assets</u>
Participant Options					
T. Rowe Price					
Interest Income Fund	\$ 174,050,490	\$ 438,696	\$ (219,938)	\$ 29,646	\$ 174,298,894
Small Cap Stock Fund	70,095,910	2,591,621	(129,727)	481,241	73,039,045
Long Term Balanced Fund	35,228,845	998,463	(51,710)	292,448	36,468,046
Alaska Balanced Trust	6,469,144	109,379	(11,002)	459,492	7,027,013
AK Target Date 2010 Trust	1,726,500	40,930	1,840	15,407	1,784,677
AK Target Date 2015 Trust	3,742,913	104,409	27,793	331,955	4,207,070
AK Target Date 2020 Trust	3,581,525	113,946	49,219	39,514	3,784,204
AK Target Date 2025 Trust	1,823,822	64,356	30,801	(67,034)	1,851,945
AK Target Date 2030 Trust	1,150,394	43,928	16,482	20,657	1,231,461
AK Target Date 2035 Trust	977,547	39,317	9,626	6,176	1,032,666
AK Target Date 2040 Trust	552,316	22,721	13,039	(1,852)	586,224
AK Target Date 2045 Trust	230,297	9,404	10,250	175	250,126
AK Target Date 2050 Trust	206,509	8,493	4,578	-	219,580
AK Target Date 2055 Trust	948,940	38,057	2,688	(17,683)	972,002
Total Investments with T. Rowe Price	<u>300,785,152</u>	<u>4,623,720</u>	<u>(246,061)</u>	<u>1,590,142</u>	<u>306,752,953</u>
State Street Global Advisors					
State Street Treasury Money Market Fund - Inst.	7,652,499	-	5,287	(451,901)	7,205,885
Russell 3000 Index	5,699,075	243,603	16,677	241,657	6,201,012
US Real Estate Investment Trust Index	8,180,647	(105,998)	4,663	392,061	8,471,373
World Equity Ex-US Index	4,153,538	241,106	8,558	298,758	4,701,960
Long US Treasury Bond Index	5,765,771	(123,290)	13,376	(719,319)	4,936,538
US Treasury Inflation Protected Securities Index	9,736,312	(32,251)	8,643	676,184	10,388,888
World Government Bond Ex-US Index	1,981,347	(20,154)	4,964	(33,975)	1,932,182
Global Balanced Fund	37,565,240	1,114,060	(41,373)	(223,837)	38,414,090
Total Investments with SSGA	<u>80,734,429</u>	<u>1,317,076</u>	<u>20,795</u>	<u>179,628</u>	<u>82,251,928</u>
BlackRock					
S&P 500 Index Fund	122,970,089	5,299,188	(415,196)	(1,073,136)	126,780,945
Government/Credit Bond Fund	33,354,036	(30,672)	(146,665)	(151,892)	33,024,807
Intermediate Bond Fund	16,453,987	(71,568)	5,883	(6,917)	16,381,385
Total Investments with Barclays Global Investors	<u>172,778,112</u>	<u>5,196,948</u>	<u>(555,978)</u>	<u>(1,231,945)</u>	<u>176,187,137</u>
Brandes Institutional					
International Equity Fund Fee	37,695,232	1,946,724	2,417	(389,551)	39,254,822
RCM					
Sustainable Core Opportunities Fund	10,888,293	379,393	23,074	(148,274)	11,142,486
Total All Funds	<u>\$ 602,881,218</u>	<u>\$ 13,463,861</u>	<u>\$ (755,753)</u>	<u>\$ -</u>	<u>\$ 615,589,326</u>

Source data provided by the record keeper, Great West Life.

Deferred Compensation Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
February 29, 2012
\$ (Thousands)

Invested Assets (at fair value)	July	August	September	October	November	December	January	February
Investments with T. Rowe Price								
Interest Income Fund								
Cash and cash equivalents	\$ 14,523	\$ 13,862	\$ 12,858	\$ 14,318	\$ 13,355	\$ 13,623	\$ 12,003	\$ 12,505
Synthetic Investment Contracts	158,211	159,215	159,461	160,073	161,186	161,770	162,047	161,794
Small Cap Stock Fund	71,095	63,402	56,494	65,732	65,835	65,253	70,096	73,039
Long Term Balanced Fund	34,734	33,452	31,160	33,291	33,527	33,828	35,229	36,468
Alaska Balanced Trust	5,710	5,500	5,133	5,366	5,348	5,767	6,469	7,027
AK Target Date 2010 Trust	1,186	1,581	1,515	1,590	1,652	1,669	1,727	1,785
AK Target Date 2015 Trust	3,430	3,275	3,178	3,208	3,358	3,321	3,743	4,207
AK Target Date 2020 Trust	2,547	2,567	2,449	2,741	2,924	2,951	3,582	3,784
AK Target Date 2025 Trust	1,426	1,365	1,307	1,480	1,641	1,630	1,824	1,852
AK Target Date 2030 Trust	805	804	760	919	960	1,096	1,150	1,231
AK Target Date 2035 Trust	911	838	766	918	975	973	978	1,033
AK Target Date 2040 Trust	452	425	403	450	480	508	552	586
AK Target Date 2045 Trust	127	135	135	168	200	227	230	250
AK Target Date 2050 Trust	187	159	150	172	179	191	207	220
AK Target Date 2055 Trust	818	776	720	834	801	884	949	972
State Street Global Advisors								
State Street Treasury Money Market Fund - Inst.	6,909	7,219	7,174	8,081	8,905	7,823	7,652	7,206
Russell 3000 Index	4,839	4,708	4,224	5,163	5,253	5,200	5,699	6,201
US Real Estate Investment Trust Index	8,769	7,638	6,414	7,021	7,019	7,787	8,181	8,471
World Equity Ex-US Index	4,742	4,220	3,608	4,084	3,794	3,644	4,154	4,702
Long US Treasury Bond Index	2,096	4,661	5,711	4,888	5,612	6,482	5,766	4,937
US Treasury Inflation Protected Securities Index	7,863	8,588	8,629	8,878	9,091	9,529	9,736	10,389
World Government Bond Ex-US Index	2,104	2,286	2,125	1,991	1,940	1,950	1,981	1,932
Global Balanced Fund	38,066	36,875	34,806	37,240	36,484	36,342	37,565	38,414
Investments with BlackRock								
S&P 500 Index Fund	119,165	112,540	105,259	116,497	115,549	116,891	122,970	126,781
Government/Credit Bond Fund	31,263	31,347	31,881	32,023	31,926	32,800	33,354	33,025
Intermediate Bond Fund	15,848	16,370	16,305	16,031	16,185	16,383	16,454	16,381
Investments with Brandes Institutional								
International Equity Fund Fee	42,051	38,770	35,870	38,390	37,116	36,279	37,695	39,255
Investments with RCM								
Sustainable Opportunities Fund	10,481	9,723	8,996	10,238	10,362	10,432	10,888	11,142
Total Invested Assets	\$ 590,358	\$ 572,301	\$ 547,491	\$ 581,785	\$ 581,657	\$ 585,233	\$ 602,881	\$ 615,589
Change in Invested Assets								
Beginning Assets	\$ 596,690	\$ 590,358	\$ 572,301	\$ 547,491	\$ 581,785	\$ 581,657	\$ 585,233	\$ 602,881
Investment Earnings	(5,314)	(19,842)	(23,155)	32,447	(1,483)	2,034	17,524	13,464
Net Contributions (Withdrawals)	(1,018)	1,785	(1,655)	1,847	1,355	1,542	124	(756)
Ending Invested Assets	\$ 590,358	\$ 572,301	\$ 547,491	\$ 581,785	\$ 581,657	\$ 585,233	\$ 602,881	\$ 615,589

Defined Contribution Retirement - Participant Directed PERS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
February 29, 2012

	<u>Beginning Invested Assets</u>	<u>Investment Income</u>	<u>Net Contributions (Withdrawals)</u>	<u>Transfers in (out)</u>	<u>Ending Invested Assets</u>
Interim Transit Account					
Treasury Division ⁽¹⁾					
Cash and Cash Equivalents	\$ 8,763,204	\$ 5,846	\$ (1,436,541)	\$ -	\$ 7,332,509
Participant Options ⁽²⁾					
T. Rowe Price					
Alaska Money Market	3,140,539	253	22,565	(170,247)	2,993,110
Small-Cap Stock Fund	34,939,829	1,289,405	481,362	1,162,992	37,873,588
Long Term Balanced Fund	3,789,879	112,213	60,685	686,854	4,649,631
Alaska Balanced Fund	424,626	7,197	16,636	(741)	447,718
AK Target Date 2010 Trust	509,211	12,249	26,203	4,814	552,477
AK Target Date 2015 Trust	2,028,293	57,609	94,327	(42,921)	2,137,308
AK Target Date 2020 Trust	3,666,618	117,893	200,961	201	3,985,673
AK Target Date 2025 Trust	4,826,142	172,153	280,955	(22,064)	5,257,186
AK Target Date 2030 Trust	4,863,925	187,416	242,518	3,570	5,297,429
AK Target Date 2035 Trust	5,225,447	213,677	315,778	56,527	5,811,429
AK Target Date 2040 Trust	7,823,492	324,529	418,887	(2,903)	8,564,005
AK Target Date 2045 Trust	8,252,491	342,867	489,798	4,611	9,089,767
AK Target Date 2050 Trust	9,431,005	391,442	514,773	29,457	10,366,677
AK Target Date 2055 Trust	3,066,045	127,627	213,509	(3,545)	3,403,636
Total Investments with T. Rowe Price	<u>91,987,542</u>	<u>3,356,530</u>	<u>3,378,957</u>	<u>1,706,605</u>	<u>100,429,634</u>
State Street Global Advisors					
Money Market	472,618	-	(4,534)	25,040	493,124
S&P 500 Stock Index Fund Series A	35,083,386	1,483,155	474,819	(4,107,976)	32,933,384
Russell 3000 Index	459,631	20,140	12,799	60,571	553,141
US Real Estate Investment Trust Index	537,196	(6,671)	12,897	13,821	557,243
World Equity Ex-US Index	297,652	16,458	9,052	(14,601)	308,561
Long US Treasury Bond Index	536,387	(11,123)	9,704	(34,530)	500,438
US Treasury Inflation Protected Sec Index	338,380	(1,049)	7,608	129,075	474,014
World Government Bond Ex-US Index	257,523	(3,853)	6,271	400,801	660,742
Global Balanced Fund	12,214,782	351,550	165,366	(1,511,820)	11,219,878
Total Investments with SSGA	<u>50,197,555</u>	<u>1,848,607</u>	<u>693,982</u>	<u>(5,039,619)</u>	<u>47,700,525</u>
BlackRock					
Government Bond Fund	9,790,874	(10,923)	139,222	(865,396)	9,053,777
Intermediate Bond Fund	319,020	(1,353)	6,533	(188)	324,012
Total Investments with BlackRock	<u>10,109,894</u>	<u>(12,276)</u>	<u>145,755</u>	<u>(865,584)</u>	<u>9,377,789</u>
Brandes Institutional					
International Equity Fund Fee	44,735,537	2,351,787	638,140	1,764,387	49,489,851
RCM					
Sustainable Opportunities Fund	4,344,989	166,603	81,029	2,434,211	7,026,832
Total Externally Managed Funds	<u>201,375,517</u>	<u>7,711,251</u>	<u>4,937,863</u>	<u>-</u>	<u>214,024,631</u>
Total All Funds	\$ <u>210,138,721</u>	\$ <u>7,717,097</u>	\$ <u>3,501,322</u>	\$ <u>-</u>	\$ <u>221,357,140</u>

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.

Defined Contribution Retirement - Participant Directed PERS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
February 29, 2012
\$ (Thousands)

<u>Invested Assets (At Fair Value)</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>
Investments with Treasury Division								
Cash and cash equivalents	\$ 6,118	\$ 5,758	\$ 6,892	\$ 6,668	\$ 9,035	\$ 8,843	\$ 8,763	\$ 7,333
Investments with T. Rowe Price								
Alaska Money Market	3,987	3,654	3,448	3,333	3,298	3,327	3,141	2,993
Small-Cap Stock Fund	30,937	29,193	26,836	32,172	32,400	32,387	34,940	37,874
Long Term Balanced Fund	11,358	9,535	7,773	6,529	5,216	3,970	3,790	4,650
Alaska Balanced Fund	339	368	352	383	365	388	425	448
AK Target Date 2010 Trust	335	348	354	404	438	472	509	552
AK Target Date 2015 Trust	1,373	1,415	1,425	1,631	1,722	1,842	2,028	2,137
AK Target Date 2020 Trust	2,448	2,503	2,530	2,942	3,118	3,360	3,667	3,986
AK Target Date 2025 Trust	3,237	3,282	3,299	3,870	4,090	4,355	4,826	5,257
AK Target Date 2030 Trust	3,358	3,349	3,312	3,875	4,104	4,430	4,864	5,297
AK Target Date 2035 Trust	3,472	3,492	3,463	4,096	4,346	4,680	5,225	5,811
AK Target Date 2040 Trust	5,512	5,496	5,467	6,416	6,719	7,136	7,823	8,564
AK Target Date 2045 Trust	5,452	5,502	5,473	6,492	6,875	7,422	8,252	9,090
AK Target Date 2050 Trust	6,231	6,275	6,273	7,443	7,908	8,492	9,431	10,367
AK Target Date 2055 Trust	1,834	1,918	1,948	2,344	2,500	2,741	3,066	3,404
Investments with State Street Global Advisors								
Money Market	327	257	349	388	392	420	473	493
S&P 500 Stock Index Fund Series A	32,075	30,646	28,694	32,338	32,714	33,779	35,083	32,933
Russell 3000 Index	323	319	298	356	368	375	460	553
US Real Estate Investment Trust Index	456	475	429	478	414	443	537	557
World Equity Ex-US Index	320	302	245	263	273	280	298	308
Long US Treasury Bond Index	153	297	399	321	447	538	536	500
US Treasury Inflation Protected Sec Index	225	244	220	252	293	306	338	474
World Government Bond Ex-US Index	168	195	171	167	175	174	258	661
Global Balanced Fund	3,307	4,942	6,301	8,759	10,258	11,823	12,215	11,220
Investments with BlackRock								
Government Bond Fund	9,546	9,277	9,024	8,984	9,387	9,895	9,791	9,054
Intermediate Bond Fund	244	308	327	332	334	353	319	324
Investments with Brandes Investment Partners								
International Equity Fund Fee	42,803	39,486	37,680	40,981	40,752	40,957	44,736	49,490
Investments with RCM								
Sustainable Opportunities Fund	2,440	2,941	3,185	3,967	3,806	3,624	4,345	7,027
Total Invested Assets	\$ 178,378	\$ 171,777	\$ 166,167	\$ 186,184	\$ 191,747	\$ 196,812	\$ 210,139	\$ 221,357
Change in Invested Assets								
Beginning Assets	\$ 180,109	\$ 178,378	\$ 171,777	\$ 166,167	\$ 186,184	\$ 191,747	\$ 196,812	\$ 210,139
Investment Earnings	(3,541)	(10,141)	(11,358)	15,270	(1,478)	(57)	8,761	7,717
Net Contributions (Withdrawals)	1,810	3,540	5,748	4,747	7,041	5,122	4,566	3,501
Ending Invested Assets	\$ 178,378	\$ 171,777	\$ 166,167	\$ 186,184	\$ 191,747	\$ 196,812	\$ 210,139	\$ 221,357

**Defined Contribution Retirement - Participant Directed TRS
Schedule of Investment Income and Changes in Invested Assets**

**for the Month Ended
February 29, 2012**

	<u>Beginning Invested Assets</u>	<u>Investment Income</u>	<u>Net Contributions (Withdrawals)</u>	<u>Transfers in (out)</u>	<u>Ending Invested Assets</u>
Interim Transit Account					
Treasury Division ⁽¹⁾					
Cash and Cash Equivalents	\$ 2,629,073	\$ 2,097	\$ (14,346)	\$ -	\$ 2,616,824
Participant Options ⁽²⁾					
T. Rowe Price					
Alaska Money Market	1,404,346	114	29,828	(83,221)	1,351,067
Small-Cap Stock Fund	14,834,687	547,815	192,611	383,813	15,958,926
Long Term Balanced Fund	1,455,933	43,769	15,274	466,858	1,981,834
Alaska Balanced Fund	120,107	2,037	4,996	-	127,140
AK Target Date 2010 Trust	260,353	6,074	(14,549)	-	251,878
AK Target Date 2015 Trust	793,924	22,454	35,975	-	852,353
AK Target Date 2020 Trust	1,438,392	45,732	31,077	-	1,515,201
AK Target Date 2025 Trust	1,743,287	61,799	90,475	-	1,895,561
AK Target Date 2030 Trust	1,666,926	63,841	91,628	-	1,822,395
AK Target Date 2035 Trust	2,801,615	113,309	124,173	650	3,039,747
AK Target Date 2040 Trust	3,106,227	127,503	132,191	-	3,365,921
AK Target Date 2045 Trust	5,662,445	233,276	271,507	-	6,167,228
AK Target Date 2050 Trust	7,284,915	300,270	357,711	(19,210)	7,923,686
AK Target Date 2055 Trust	426,853	17,962	49,214	-	494,029
Total Investments with T. Rowe Price	<u>43,000,010</u>	<u>1,585,955</u>	<u>1,412,111</u>	<u>748,890</u>	<u>46,746,966</u>
State Street Global Advisors					
Money Market	48,013	-	1,042	1,300	50,355
S&P 500 Stock Index Fund Series A	14,545,424	612,666	186,720	(1,729,849)	13,614,961
Russell 3000 Index	171,665	7,747	3,296	62,324	245,032
US Real Estate Investment Trust Index	158,188	(1,777)	2,639	(175)	158,875
World Equity Ex-US Index	59,647	3,364	1,585	519	65,115
Long US Treasury Bond Index	49,239	(1,012)	1,532	3,251	53,010
US Treasury Inflation Protected Sec Index	82,110	(238)	1,487	35,288	118,647
World Government Bond Ex-US Index	29,237	(702)	935	202,866	232,336
Global Balanced Fund	6,150,315	180,510	64,659	(368,917)	6,026,567
Total Investments with SSGA	<u>21,293,838</u>	<u>800,558</u>	<u>263,895</u>	<u>(1,793,393)</u>	<u>20,564,898</u>
BlackRock					
Government Bond Fund	4,137,952	(4,240)	44,668	(249,541)	3,928,839
Intermediate Bond Fund	79,270	(348)	1,171	-	80,093
Total Investments with BlackRock	<u>4,217,222</u>	<u>(4,588)</u>	<u>45,839</u>	<u>(249,541)</u>	<u>4,008,932</u>
Brandes Institutional					
International Equity Fund Fee	18,512,995	968,284	256,452	518,848	20,256,579
RCM					
Sustainable Opportunities Fund	1,618,718	61,660	30,482	775,196	2,486,056
Total Externally Managed Funds	<u>88,642,783</u>	<u>3,411,869</u>	<u>2,008,779</u>	<u>-</u>	<u>94,063,431</u>
Total All Funds	\$ <u>91,271,856</u>	\$ <u>3,413,966</u>	\$ <u>1,994,433</u>	\$ <u>-</u>	\$ <u>96,680,255</u>

Notes: (1) Represents net contributions in transit to/from the record keeper. (2) Source data provided by the record keeper, Great West Life.

Defined Contribution Retirement - Participant Directed TRS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
February 29, 2012
\$ (Thousands)

<u>Invested Assets (At Fair Value)</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>
Investments with Treasury Division								
Cash and cash equivalents	\$ 1,992	\$ 1,955	\$ 2,117	\$ 2,279	\$ 2,767	\$ 2,831	\$ 2,629	\$ 2,617
Investments with T. Rowe Price								
Alaska Money Market	1,717	1,475	1,359	1,309	1,338	1,322	1,404	1,351
Small-Cap Stock Fund	13,648	12,618	11,418	13,704	13,822	13,854	14,835	15,959
Long Term Balanced Fund	4,767	3,967	3,162	2,548	1,999	1,460	1,456	1,982
Alaska Balanced Fund	88	88	89	97	106	112	120	127
AK Target Date 2010 Trust	216	204	198	220	233	251	260	252
AK Target Date 2015 Trust	639	611	596	671	700	733	794	852
AK Target Date 2020 Trust	1,041	1,000	989	1,143	1,223	1,316	1,438	1,515
AK Target Date 2025 Trust	1,249	1,219	1,195	1,398	1,480	1,589	1,743	1,895
AK Target Date 2030 Trust	1,201	1,125	1,096	1,295	1,390	1,525	1,667	1,822
AK Target Date 2035 Trust	2,153	2,014	1,938	2,234	2,316	2,555	2,802	3,040
AK Target Date 2040 Trust	2,318	2,195	2,063	2,456	2,597	2,815	3,106	3,366
AK Target Date 2045 Trust	4,350	4,105	3,866	4,544	4,790	5,150	5,663	6,167
AK Target Date 2050 Trust	5,457	5,116	4,865	5,760	6,106	6,610	7,285	7,924
AK Target Date 2055 Trust	198	175	182	252	300	360	427	494
Investments with State Street Global Advisors								
Money Market	15	15	15	16	28	47	48	50
S&P 500 Stock Index Fund Series A	13,583	12,753	11,793	13,361	13,633	14,105	14,546	13,615
Russell 3000 Index	145	138	141	160	159	165	172	245
US Real Estate Investment Trust Index	139	130	117	147	141	146	158	159
World Equity Ex-US Index	51	51	45	51	52	53	60	65
Long US Treasury Bond Index	19	21	23	35	45	48	49	53
US Treasury Inflation Protected Sec Index	109	113	106	74	73	76	82	119
World Government Bond Ex-US Index	9	10	2	3	1	1	29	232
Global Balanced Fund	1,918	2,676	3,189	4,436	4,965	5,702	6,150	6,027
Investments with BlackRock								
Government Bond Fund	4,149	4,015	3,841	3,765	3,884	4,091	4,138	3,929
Intermediate Bond Fund	70	71	71	72	76	78	79	80
Investments with Brandes Investment Partners								
International Equity Fund Fee	18,584	16,705	15,697	17,008	17,019	17,130	18,513	20,257
Investments with RCM								
Sustainable Opportunities Fund	1,326	1,374	1,418	1,636	1,531	1,435	1,619	2,486
Total Invested Assets	\$ 81,151	\$ 75,939	\$ 71,591	\$ 80,674	\$ 82,774	\$ 85,560	\$ 91,272	\$ 96,680
Change in Invested Assets								
Beginning Assets	\$ 81,208	\$ 81,151	\$ 75,939	\$ 71,591	\$ 80,674	\$ 82,774	\$ 85,560	\$ 91,272
Investment Earnings	(1,643)	(4,710)	(5,065)	6,709	(626)	(36)	3,868	3,414
Net Contributions (Withdrawals)	1,586	(503)	717	2,374	2,726	2,822	1,844	1,994
Ending Invested Assets	\$ 81,151	\$ 75,939	\$ 71,591	\$ 80,674	\$ 82,774	\$ 85,560	\$ 91,272	\$ 96,680

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT

(Supplement to the Treasury Division Report)

As of February 29, 2012

Prepared by the Division of Retirement & Benefits

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF NON-INVESTMENT CHANGES BY FUND
(Supplement to the Treasury Division Report)
For the Eight Months Ending February 29, 2012

	Contributions				Expenditures				Net Contributions/ (Withdrawals)
	Contributions EE and ER	State of Alaska	Other	Total Contributions	Benefits	Refunds	Administrative & Investment	Total Expenditures	
Public Employees' Retirement System (PERS)									
<u>Defined Benefit Plans:</u>									
Retirement Trust	187,142,693	130,911,946	22,460	318,077,099	(370,838,591)	(8,016,180)	(21,232,772)	(400,087,543)	(82,010,444)
Retirement Health Care Trust	148,045,916	111,697,451	35,590,228	295,333,595	(230,030,395)	-	(5,387,488)	(235,417,883)	59,915,712
Total Defined Benefit Plans	<u>335,188,609</u>	<u>242,609,397</u>	<u>35,612,688</u>	<u>613,410,694</u>	<u>(600,868,986)</u>	<u>(8,016,180)</u>	<u>(26,620,260)</u>	<u>(635,505,426)</u>	<u>(22,094,732)</u>
<u>Defined Contribution Plans:</u>									
Participant Directed Retirement	44,325,538	-	1,680,319	46,005,857	-	(8,586,656)	(1,342,672)	(9,929,328)	36,076,529
Health Reimbursement Arrangement	(a) 11,977,077	-	-	11,977,077	-	-	-	-	11,977,077
Retiree Medical Plan	(a) 1,752,418	-	-	1,752,418	-	-	-	-	1,752,418
Occupational Death and Disability:	(a)	-	-	-	-	-	-	-	-
¹ Public Employees	632,837	-	-	632,837	-	-	-	-	632,837
¹ Police and Firefighters	378,633	-	-	378,633	(31,577)	-	-	(31,577)	347,056
Total Defined Contribution Plans	<u>59,066,503</u>	<u>-</u>	<u>1,680,319</u>	<u>60,746,822</u>	<u>(31,577)</u>	<u>(8,586,656)</u>	<u>(1,342,672)</u>	<u>(9,960,905)</u>	<u>50,785,917</u>
Total PERS	<u>394,255,112</u>	<u>242,609,397</u>	<u>37,293,007</u>	<u>674,157,516</u>	<u>(600,900,563)</u>	<u>(16,602,836)</u>	<u>(27,962,932)</u>	<u>(645,466,331)</u>	<u>28,691,185</u>
Teachers' Retirement System (TRS)									
<u>Defined Benefit Plans:</u>									
Retirement Trust	51,020,480	157,387,504	13,916	208,421,900	(240,918,731)	(2,051,920)	(9,102,842)	(252,073,493)	(43,651,593)
Retirement Health Care Trust	37,142,000	77,129,829	14,067,607	128,339,436	(89,908,544)	-	(2,026,800)	(91,935,344)	36,404,092
Total Defined Benefit Plans	<u>88,162,480</u>	<u>234,517,333</u>	<u>14,081,523</u>	<u>336,761,336</u>	<u>(330,827,275)</u>	<u>(2,051,920)</u>	<u>(11,129,642)</u>	<u>(344,008,837)</u>	<u>(7,247,501)</u>
<u>Defined Contribution Plans:</u>									
Participant Directed Retirement	16,629,613	-	739,984	17,369,597	-	(3,356,910)	(451,588)	(3,808,498)	13,561,099
Health Reimbursement Arrangement	(a) 3,366,201	-	-	3,366,201	-	-	-	-	3,366,201
Retiree Medical Plan	(a) 651,271	-	-	651,271	-	-	-	-	651,271
Occupational Death and Disability:	(a) 44,444	-	-	44,444	-	-	-	-	44,444
Total Defined Contribution Plans	<u>20,691,529</u>	<u>-</u>	<u>739,984</u>	<u>21,431,513</u>	<u>-</u>	<u>(3,356,910)</u>	<u>(451,588)</u>	<u>(3,808,498)</u>	<u>17,623,015</u>
Total TRS	<u>108,854,009</u>	<u>234,517,333</u>	<u>14,821,507</u>	<u>358,192,849</u>	<u>(330,827,275)</u>	<u>(5,408,830)</u>	<u>(11,581,230)</u>	<u>(347,817,335)</u>	<u>10,375,514</u>
Judicial Retirement System (JRS)									
Defined Benefit Plan Retirement Trust	2,625,851	2,205,898	11	4,831,760	(6,394,525)	-	(233,250)	(6,627,775)	(1,796,015)
Defined Benefit Retirement Health Care Trust	585,328	125,827	188,437	899,592	(853,848)	-	(14,807)	(868,655)	30,937
Total JRS	<u>3,211,179</u>	<u>2,331,725</u>	<u>188,448</u>	<u>5,731,352</u>	<u>(7,248,373)</u>	<u>-</u>	<u>(248,057)</u>	<u>(7,496,430)</u>	<u>(1,765,078)</u>
National Guard/Naval Militia Retirement System (NGNMRS)									
Defined Benefit Plan Retirement Trust	(a) 895,611	-	-	895,611	(848,858)	-	(143,218)	(992,076)	(96,465)
Other Participant Directed Plans									
Supplemental Annuity Plan	98,893,905	-	-	98,893,905	-	(91,732,019)	(3,006,991)	(94,739,010)	4,154,895
Deferred Compensation Plan	24,822,699	-	-	24,822,699	-	(20,917,778)	(681,047)	(21,598,825)	3,223,874
Total All Funds	<u>630,932,515</u>	<u>479,458,455</u>	<u>52,302,962</u>	<u>1,162,693,932</u>	<u>(939,825,069)</u>	<u>(134,661,463)</u>	<u>(43,623,475)</u>	<u>(1,118,110,007)</u>	<u>44,583,925</u>

(a) Employer only contributions.

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF NON-INVESTMENT CHANGES BY FUND
(Supplement to the Treasury Division Report)
For the Month Ended February 29, 2012

	Contributions			Total Contributions	Expenditures			Net Contributions/ (Withdrawals)	
	Contributions EE and ER	State of Alaska	Other		Benefits	Refunds	Administrative & Investment		Total Expenditures
Public Employees' Retirement System (PERS)									
<u>Defined Benefit Plans:</u>									
Retirement Trust	18,078,960	-	306	18,079,266	(47,271,417)	(1,048,154)	(2,240,671)	(50,560,242)	(32,480,976)
Retirement Health Care Trust	16,072,772	-	320,264	16,393,036	(33,292,632)	-	(645,091)	(33,937,723)	(17,544,687)
Total Defined Benefit Plans	34,151,732	-	320,570	34,472,302	(80,564,049)	(1,048,154)	(2,885,762)	(84,497,965)	(50,025,663)
<u>Defined Contribution Plans:</u>									
Participant Directed Retirement	4,475,593	-	-	4,475,593	-	(915,789)	(58,482)	(974,271)	3,501,322
Health Reimbursement Arrangement	(a) 1,269,167	-	-	1,269,167	-	-	-	-	1,269,167
Retiree Medical Plan	(a) 176,314	-	-	176,314	-	-	-	-	176,314
Occupational Death and Disability:	(a)								
¹ Public Employees	61,015	-	-	61,015	-	-	-	-	61,015
¹ Police and Firefighters	40,483	-	-	40,483	(3,947)	-	-	(3,947)	36,536
Total Defined Contribution Plans	6,022,572	-	-	6,022,572	(3,947)	(915,789)	(58,482)	(978,218)	5,044,354
Total PERS	40,174,304	-	320,570	40,494,874	(80,567,996)	(1,963,943)	(2,944,244)	(85,476,183)	(44,981,309)
Teachers' Retirement System (TRS)									
<u>Defined Benefit Plans:</u>									
Retirement Trust	6,844,951	-	56	6,845,007	(30,399,626)	(148,021)	(982,043)	(31,529,690)	(24,684,683)
Retirement Health Care Trust	5,857,802	-	118,816	5,976,618	(13,748,581)	-	(254,284)	(14,002,865)	(8,026,247)
Total Defined Benefit Plans	12,702,753	-	118,872	12,821,625	(44,148,207)	(148,021)	(1,236,327)	(45,532,555)	(32,710,930)
<u>Defined Contribution Plans:</u>									
Participant Directed Retirement	2,337,756	-	-	2,337,756	-	(320,592)	(22,731)	(343,323)	1,994,433
Health Reimbursement Arrangement	(a) 476,167	-	-	476,167	-	-	-	-	476,167
Retiree Medical Plan	(a) 90,131	-	-	90,131	-	-	-	-	90,131
Occupational Death and Disability:	(a) (533)	-	-	(533)	-	-	-	-	(533)
Total Defined Contribution Plans	2,903,521	-	-	2,903,521	-	(320,592)	(22,731)	(343,323)	2,560,198
Total TRS	15,606,274	-	118,872	15,725,146	(44,148,207)	(468,613)	(1,259,058)	(45,875,878)	(30,150,732)
Judicial Retirement System (JRS)									
Defined Benefit Plan Retirement Trust	311,926	-	-	311,926	(797,965)	-	(24,016)	(821,981)	(510,055)
Defined Benefit Retirement Health Care Trust	92,657	-	876	93,533	(125,680)	-	(1,960)	(127,640)	(34,107)
Total JRS	404,583	-	876	405,459	(923,645)	-	(25,976)	(949,621)	(544,162)
National Guard/Naval Militia Retirement System (NGNMRS)									
Defined Benefit Plan Retirement Trust	(a) -	-	-	-	(129,319)	-	(16,081)	(145,400)	(145,400)
Other Participant Directed Plans									
Supplemental Annuity Plan	12,797,952	-	-	12,797,952	-	(14,005,918)	(1,240,986)	(15,246,904)	(2,448,952)
Deferred Compensation Plan	1,896,096	-	-	1,896,096	-	(2,566,477)	(85,371)	(2,651,848)	(755,752)
Total All Funds	70,879,209	-	440,318	71,319,527	(125,769,167)	(19,004,951)	(5,571,716)	(150,345,834)	(79,026,307)

(a) Employer only contributions.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: IFS Report Recommendation ACTION: X
Task Area B.5, Recommendation #1, 3,
and 4
DATE: Real Estate Guidelines INFORMATION: _____
April 19, 2012

BACKGROUND

AS 37.10.220(a)(11) and (12) require that the Alaska Retirement Management Board (Board) contract for an independent audit of the state's performance consultant not less than once every four years, obtain an external performance review to evaluate the investment policies of each fund entrusted to the board and report the results of the review. The Board entered into a contract with Independent Fiduciary Services (IFS) to provide the required reviews. IFS presented its final report at the December 2, 2010 Board meeting. At the conclusion of the presentation, CIO Gary Bader advised the trustees that each individual recommendation would be brought before the trustees at future meetings with a staff recommendation on action or implementation.

STATUS – IFS Task Area B.5 Real Estate Guidelines

IFS Report Recommendation #1, page 65, states:

Consider revising the introductory language to the Real Estate Policy to describe more clearly the range of different types of real estate investments that are made, rather than focus on separate accounts.

Staff concurs with this recommendation. The introductory language in the Real Estate guidelines will be revised to recognize both separate accounts and pooled vehicles.

IFS Report Recommendation #3, page 65, states:

Ensure that the Real Estate Policy reflects the type of returns (e.g., IRR versus time-weighted) that are actually being analyzed by staff and ARMB.

Staff does not concur with this recommendation. The type of return used depends on the vehicle and purpose and it is unnecessary to incorporate this into the Real Estate Policy. One, both, or other methods may be used depending on the analysis and use of the data. As a result of IFS Task Area A.1.b Investment Performance Reporting to the Board, Recommendation #8, page 23, ARMB's Real Estate consultant is reporting both time-weighted return and IRR for all managers.

IFS Report Recommendation #4, page 65, states:

Consider setting leverage limits or restrictions for commingled fund investments, by strategy type, i.e., core versus non-core in the Real Estate Policy.

Staff concurs with this recommendation. The Real Estate guidelines will be revised to recognize leverage limits of 35% for core investments and 65% for non-core investments, at the time of investment.

RECOMMENDATION

The ARMB approve Resolution 2012-03 implementing IFS recommendations relating to the Real Estate Guidelines which expand the introductory language to include pooled vehicles and set leverage limits by strategy type.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Investment Guidelines for
Domestic and International Equities

Resolution 2012-03

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in real estate assets for the Public Employees' Retirement System, Teachers' Retirement System, and Judicial Retirement System, including investments for those systems in the State of Alaska Retirement and Benefit Plans Trust; and

WHEREAS, the Board establishes and from time to time as necessary, modifies investment policies, procedures and guidelines for real estate;

NOW THEREFORE BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopt the Real Estate Investment Policies, Procedures, and Guidelines, attached hereto and made a part hereof.

This resolution repeals and replaces Resolution 2011-16

DATED at Anchorage, Alaska this 19th day of April, 2012.

Chair

ATTEST:

Secretary

**ALASKA RETIREMENT MANAGEMENT BOARD
REAL ESTATE INVESTMENT
POLICIES, PROCEDURES AND GUIDELINES**

TABLE OF CONTENTS

	Page #
<i>I. INVESTMENT OBJECTIVES</i> _____	<i>1</i>
A. Investments in Real Estate and Other Real Estate Related Assets _____	1
B. Asset Allocation _____	1
C. Portfolio Return Objective _____	1
<i>II. PROGRAM RISK MANAGEMENT AND IMPLEMENTATION</i> _____	<i>2</i>
A. Institutional Quality _____	2
B. Diversification _____	2
C. Implementation Approach _____	6
D. Prudent Leverage _____	7
E. Lease Structure _____	7
F. Separate Account Investment Manager Business Plan; Annual Strategic/Tactical Plan; Disposition/Exit Strategy _____	7
G. Fee Structure _____	7
H. Single Asset Ownership Structure (Applies to Separate Accounts Only) _____	8
I. Reporting System _____	8
J. Distribution of Current Income _____	8
K. Lines of Responsibility _____	8
<i>III. CONFLICTS OF INTEREST</i> _____	<i>10</i>
A. Property Valuation _____	10
B. Property Management _____	10
<i>IV. INSURANCE COVERAGE</i> _____	<i>10</i>
<i>V. UNRELATED BUSINESS INCOME TAX</i> _____	<i>10</i>
<i>VI. ENVIRONMENTAL EVALUATIONS</i> _____	<i>11</i>
<i>VII. PROCEDURES FOR INVESTMENT</i> _____	<i>11</i>
A. Delegation of Responsibilities _____	11
B. Investment Procedure _____	13
<i>VIII. DELEGATION OF AUTHORITY</i> _____	<i>14</i>
<i>IX. CONFIDENTIALITY</i> _____	<i>14</i>
<i>X. REVISIONS</i> _____	<i>13</i>
<i>XI. REAL ESTATE SEPARATE ACCOUNT INVESTMENT MANAGERS</i> _____	<i>15</i>
<i>XII. REAL ESTATE COMMINGLED ACCOUNT INVESTMENT MANAGERS</i> _____	<i>15</i>

ATTACHMENTS

Attachment 1 – Delegation of Responsibilities

**ALASKA RETIREMENT MANAGEMENT BOARD
REAL ESTATE INVESTMENT
POLICIES, PROCEDURES AND GUIDELINES**

I. INVESTMENT OBJECTIVES

A. Investments in Real Estate and Other Real Estate Related Assets

The Alaska Retirement Management Board (ARMB) will invest in real estate with the goals of portfolio diversification and attaining the optimum return on the portfolio, consistent with the assumption of prudent risk and safety of principal. ARMB recognizes the need to use active investment management in order to obtain the highest attainable total investment return (measured as income plus appreciation) within ARMB's framework of prudence and managed risk.

ARMB will select ~~Separate Account~~[Real Estate](#) Investment Managers who have the discretion to invest in publicly traded equity and/or privately placed equity sectors, subject to ARMB's approval of an Annual Strategic/Tactical Plan and an Annual Investment Plan. In order for real estate investments to be considered, the ~~Separate Account~~[Investment Manager](#) must demonstrate that it is able to: add value through its real estate knowledge, experience and strategy; underwrite the risks of the investment which is contemplated; and [at the time of investment](#), comply with the intent of the Real Estate Investment Policies, Procedures and Guidelines (**Guidelines**).

Single property and multi property strategies will be considered [as well as "pooled/commingled" fund investment vehicles](#).

B. Asset Allocation

The ARMB allocation to real estate investments shall be determined by the Board of Trustees and reviewed annually. The target allocation is 10% +/- 4% of ARMB's total Assets, based on market value.

Allocated capital to ~~Separate Account~~ Investment Managers will be defined as invested capital based on ARMB's cost.

C. Portfolio Return Objective

1. Total Return

Over rolling 5 year periods, the equity real estate investment portfolio is expected to generate a minimum total real rate of return (net of investment management fees) of 5% using a time-weighted rate of return calculation. The inflation index used to calculate the actual real rate of return is the CPI All Urban.

2. Income Return

Income, which is defined as cash distributed to ARMB, is expected to produce 50-60% of the total return over rolling five-year periods.

3. Index

The overall portfolio is expected to exceed the target index. The target index is composed of 90% NCREIF Property Index and 10% NAREIT Equity Index.

II. PROGRAM RISK MANAGEMENT AND IMPLEMENTATION

The selection and management of assets in the real estate portfolio of the ARMB will be guided by the principles of preserving investment capital, attaining the optimum return on the portfolio consistent with the assumption of prudent risk, generating current income, being sensitive to inflation, maintaining diversification of assets and diversification of management responsibility.

In real estate investment, there is an inherent risk that the actual income and return of capital will vary from the amounts expected. The ARMB will manage the investment risk associated with real estate in several ways:

A. Institutional Quality

All assets must be of institutional investment quality as evidenced by a precedent of institutional investment in similar properties; expert analysis which supports the economic viability of the market; high quality construction and design features; and a potential competitive position within the property's immediate market area.

B. Diversification

The real estate portfolio will be diversified as to style group, property type, industry sector, life cycle, economic driver, investment manager and geographical location. Diversification reduces the impact on the portfolio of any one investment or any single manager's investment style to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio. Portfolios for core investment managers and non-core or value added investment managers will carry the diversification characteristics set forth in the allocations and definitions set out below. Diversification compliance will be monitored on a quarterly basis for compliance with ARMB's Guidelines by staff and the real estate consultant.

For purposes of calculating diversification compliance, the overall real estate portfolio size will be considered the product of the greater of projected or target real estate allocation times the projected fiscal year-end overall plan assets as established in the Annual Investment Plan. The projected fiscal year-end overall plan assets will take into account the target allocations and projected returns of all asset classes in which plan assets are invested, and estimated net pay-outs to plan beneficiaries. Unless exceptional circumstances justify a deviation, the maximum percentage of the real estate portfolio investment for each of the identified categories is as follows:

Controlled Investments:	85 %
<i>(ARMB can liquidate within 180 days)</i>	
Non-Controlled Investments:	50%
<i>(ARMB cannot liquidate within 180 days)</i>	

Core Investments (See definition below):	85 %
Non-Core Investments (See definition below):	50%

Single Manager Limit:	35 %
<i>(value of both Separate Account and Commingled Fund combined, if applicable)</i>	

Public Equity:	50 %
Public Debt:	0 %
Private Equity:	100 %
Private Debt:	0 %

Geographic:

ARMB will avoid over-concentration in areas of similar real estate performance. The consultant will monitor ARMB's concentrations in this area, considering indicators such as NCREIF sub-region, metropolitan areas and economic drivers. The consultant will report its conclusions regarding the acceptability of ARMB's concentration limits quarterly.

Outside United States:	20 %
------------------------	------

Single Property Investment:	5 %
<i>(acquisition cost plus projected capital additions and improvements)</i>	

Single-Tenant (any one firm):	10 %
-------------------------------	------

Property Type:	40 %
----------------	------

Manager Allocation – It is understood that Separate Account Investment Managers may exceed their Board-approved allocations by up to 5% for the purposes of capital improvements on existing assets and/or for the completion of an acquisition. A core Separate Account Investment Manager’s portfolio may be invested up to 15% in core-plus style properties to assemble a core portfolio. A value-added Separate Account Investment Manager’s portfolio shall include 70%-100% in value-added style properties, and may include up to 30% in opportunistic style properties.

Subject to CIO approval, upon the sale of a property held by a Separate Account Investment Manager in which the net sales proceeds are in excess of the property’s cumulative basis, the advisor’s allocation will increase in an amount equal to the lesser of the excess of the net sales proceeds over the property’s cumulative basis or the aggregate portfolio net asset value over the aggregate portfolio cumulative basis adjusted to reflect actual sale proceeds. The CIO will also consider whether an allocation increase should be adjusted for any past realized losses incurred by the Separate Account Investment Manager. The intent of this provision is to allow a Separate Account Investment Manager to reinvest realized gains but only to the extent gains are greater than losses which have been experienced in other property investments in the Separate Account Investment Manager’s portfolio.

Exceptional circumstances justifying a deviation – When circumstances arise of a temporary nature, such as an unexpected re-valuation of assets, a transfer of assets among managers, or an event in which it would be in the fiduciary interest of the ARMB to do so, the limits set forth in paragraph II.B of ARMB Policies may be exceeded provided that ARMB concurs.

Contingent Allocation – The authority of the CIO to exercise discretion in allocating funds within investment bands shall include authority to add funds to the allocation of real estate Separate Account Investment Managers. Exercise of this discretion shall be for:

- (i) acquisition of a particular real estate asset which is, in the opinion of the CIO, attractive and the acquisition of which is constrained by the allocation to the investment Separate Account Investment Manager;
- (ii) not exceed \$150 MM for acquisitions in high barrier markets and not exceed the single property investment limit (Section IIB) for acquisitions in other markets. High barrier markets exhibit constraints (i.e. physical, political, financial) on supply growth that restrict new construction and therefore create an environment conducive to real rent growth in response to increasing space demand. High barrier markets tend to be located in both coasts of the United States. Low barrier markets lack supply constraints and are typically prone to over supply as developers can quickly react to anticipated demand growth. Low barrier markets dominate in the Midwest, South, and Mountain states.
- (iii) not exceed \$150 MM in any fiscal year period.

The CIO may also exercise the following discretion pertaining to real estate investments:

- (i) Commit to investments up to \$100 million with existing managers, and former managers in good standing;
- (ii) Commit to investments related to co-investment opportunities, up to \$100 million, with existing managers; and,
- (iii) Commit to investments with new managers up to \$75 million, with the concurrence of ARMB’s real estate consultant.

The CIO will provide prior notification to the chairs of the ARMB and Real Estate Committee 7 days before committing to any real estate investments under this authority.

Definitions

Core Investments

- Primary Characteristics:
- Fully or substantially leased (85% occupancy or greater)
 - Inconsequential turnover near term
 - Inconsequential physical issues or renovation required
 - Credit tenants
 - Primary markets
 - Quality property
 - Income produces 50% or more of expected return
 - Typically longer term holds
 - Properties in markets with stable or improving economic conditions

Core-plus Investments

- Primary Characteristics:
- Limited renovation, primarily deferred maintenance, limited physical issues or repositioning needed
 - Modest near term lease roll over; modest vacant lease up
 - Expected growth through increasing rents
 - Poor prior management
 - A- to B- quality
 - Income produces 50% or more of expected return

Non-Core Investments

Value-Added Investments

- Primary Characteristics:
- Asset renovation – lobbies, corridors, deferred maintenance
 - Intermediate term (6-9 months) physical issues
 - Current vacancies or rent loss
 - Near term roll over exposure
 - Repositioning, re-tenanting
 - Distressed prior management
 - Purchase of adjacent land to develop
 - Alternative, turnaround markets and property types
 - Income produces 50% or less of total return

Opportunistic Investments – These investments involve significant redevelopment risk, high leasing risk, and high development risk.

- Primary Characteristics:
- Empty Buildings
 - High near term turnover
 - New development – spec or limited pre-leasing
 - Significant rehabilitation and leasing, redevelopment into alternative uses
 - Capital displacement in maligned markets: lack of investment capital due to level of risk
 - Non-traditional asset type (mezzanine debt, land, etc.)
 - Wide ranging investment structures
 - Investing in non-performing notes
 - Cross-border investing
 - Holding periods typically 1 to 5 years
 - Income produces less than 50% of total return

Note: *Properties within a multi-property investment will be categorized as either core or non-core.*

C. Implementation Approach

The ARMB will implement an investment process for real estate which will, over time, include a minimum of three (3) qualified Separate Account Investment Managers who have been selected on a competitive basis. The ARMB will endeavor to allocate specific funds to qualified managers on a separate account basis. Selected managers will seek real estate investment opportunities in publicly-traded equity and/or privately-placed equity sectors. Investments will be made on a discretionary basis subject to Staff approval of the Annual Strategic/Tactical Plans prepared by Separate Account Investment Managers and ARMB's approval of the Annual Investment Plan prepared by Staff. In addition to separate accounts, ARMB will selectively consider investments in "pooled/commingled" investment vehicles.

All allocation of funds to a manager (including additional investment with existing accounts) and investment strategy must be recommended to ARMB by Staff and the Real Estate Consultant and be accompanied by an investment report which, at a minimum, includes the following: market information; investment alternatives; fee structure and comparison to other alternatives; demonstration of compliance with Guidelines and the then current Annual Investment Plan; historical performance of Separate Account Investment Manager (cash-based internal rates of return and industry standard); projected returns (income and appreciation); and positive and negative attributes of the investment strategy.

On a selective basis, a member of ARMB may visit the site of a real estate investment for the purpose of rendering a report to ARMB supplementing reports provided by Staff, the Real Estate Consultant, or others.

D. Prudent Leverage

The total amount of leverage placed on the aggregate separate account assets will not exceed thirty five percent (35%) of the total market value of the real estate separate account portfolio. Directly-owned properties will not be leveraged by the Separate Account Investment Manager. Property encumbered by debt at the time of purchase, if justified on a risk-return basis by the Separate Account Investment Manager, may be acquired subject to Chief Investment Officer approval. With authorization by the ARMB, the Chief Investment Officer may place leverage on a pool of existing core real estate assets held in ARMB's separate account portfolio in a manner consistent with the ARMB's Guidelines.

The total amount of fund level leverage, at the time of investment, will not exceed 35% for core commingled funds investing in a core equity diversified asset strategy. The total amount of fund level leverage, at the time of investment, will not exceed 65% for non-core commingled funds investing in a value add or opportunistic equity diversified asset strategy.

E. Lease Structure

Multi-tenant and single tenant properties will be considered. When acquiring single tenant properties, consideration will be given to avoid multiple single-tenant exposure to any firm if those single tenant properties constitute more than 10% of the portfolio. A staggered lease structure for commercial properties will be emphasized.

F. Separate Account Investment Manager Business Plan; Annual Strategic/Tactical Plan; Disposition/Exit Strategy

A Business Plan (including property operating budgets) will be completed by each manager for each asset under its management. The Business Plan will identify the current and anticipated competitive position for each property in order to set tactical and strategic objectives and will prescribe in appropriate detail a disposition and exit strategy respecting the particular investments. Part of this process is to evaluate the potential timing of dispositions. A property is considered for sale when it is believed that the equity in the existing investment can achieve a higher return in another real estate investment of similar risk. The Annual Strategic/Tactical Plan will describe the expectation of the manager with respect to acquisitions and dispositions.

G. Fee Structure

Involvement in any venture will be done on a fee basis that is competitive. The preferred method of calculating manager fees will be based upon a formula, which considers both 1) the cost basis of assets under management and 2) investment performance. All fee structures will be approved by ARMB. For core managers, the return-based portion of a fee will emphasize actual cash available for distribution to ARMB.

H. Single Asset Ownership Structure (Applies to Separate Accounts Only)

Provided that the goals of these guidelines are followed, ARMB may invest in separate, specific real estate assets. However, such investments will be undertaken in a fashion structured to limit ARMB's liability to the amount of its investment.

I. Reporting System

Staff and the Real Estate Consultant will develop and implement a comprehensive and responsive reporting and monitoring system for the entire portfolio, individual investments and individual managers. The reporting and monitoring system will endeavor to identify under-performing investments, controlled portfolio diversification deficiencies and inherent conflicts of interest, thereby facilitating active portfolio management. A cash-based internal rate of return (IRR) will be used when evaluating the long-term performance of an investment. Time-weighted returns will be used to measure comparative performance.

J. Distribution of Current Income

All separate account income will be distributed immediately to ARMB or its designee and not automatically reinvested in the account.

K. Lines of Responsibility

Well defined lines of responsibility and accountability will be required of all participants in ARMB's real estate investment program. Participants are identified as:

ARMB – The fiduciaries appointed by the Governor to represent the beneficiaries' interest which shall retain final authority over all real estate investment decisions.

Real Estate Committee – Comprised of at least three (3) members of ARMB who continually review the role and performance of real estate.

Staff – Investment professionals on the staff of the Department of Revenue and assigned ARMB responsibilities who will assist in the Real Estate equity investment program's design, policy implementation and administration.

Real Estate Consultant – Professionals retained to support Staff and ARMB through the provision of expert real estate strategic planning, implementation and performance monitoring support.

Separate Account Investment Managers – Qualified entities who provide institutional real estate investment management services and maintain a discretionary relationship with ARMB subject to Staff's approval of Annual Business Plans and Annual Strategic/Tactical plans, prepared by Separate Account Investment Managers, and ARMB's approval of the Annual Investment Plan.

Commingled Fund Managers – Qualified entities who provide institutional real estate investment management services through open-end and closed-end real estate pools and other pooled/commingled vehicles.

III. CONFLICTS OF INTEREST

In real estate investment, separate and distinct from other asset classes, the Manager of a Separate Account or Commingled Fund may have direct or significant control over the operations of the assets. This inherent or potential conflict of interest if openly described and regulated may contribute to the lower volatility associated with the asset class, but it also creates a need for a higher oversight standard by the plan sponsor. Staff and ARMB will maintain this oversight in at least the following ways:

A. Property Valuation

The Separate Account Investment Manager will provide ARMB with annual appraisal valuations for all properties for which it has asset management responsibility as of the quarter ending March 31. Unless otherwise directed by ARMB, the appraisal will be prepared by a qualified independent third party entity in accordance with industry standards. Staff may waive the appraisal requirement for recent acquisitions or pending dispositions following a recommendation by the Separate Account Investment Manager that such appraisal would not be a cost effective exercise. For development assets, appraisals are to be conducted in the manner described above after substantial completion payment by ARMB is made. In addition, the Separate Account Investment Manager will mark each asset to market each quarter based on asset conditions and leasing, operations and capital market conditions for comparable properties in that market.

B. Property Management

The selection of on-site property management will generally be left to the discretion of the Separate Account Investment Manager. It is expected that the Separate Account Investment Manager will retain the highest caliber, market rate property management service either through a third party fee manager or the Separate Account Investment Manager's affiliated property management division. This business relationship will be periodically reviewed by Staff, the Real Estate Consultant and ARMB.

IV. INSURANCE COVERAGE

The Separate Account Investment Manager will obtain insurance for the physical properties and assets under its control. The coverage will be in such amounts and against such risks as, in the Separate Account Investment Manager's professional judgment, shall be in accordance with sound institutional practices applicable to such properties or assets in the specific geographic area. It is expected that such insurance will include, but not be limited to, casualty loss, including where deemed appropriate by the Separate Account Investment Manager, earthquake, flood and any other disaster-type insurance coverage; comprehensive general liability; and title insurance. Separate Account Investment Managers will provide proof of insurance to Staff annually.

V. UNRELATED BUSINESS INCOME TAX

Prior to entering into any transaction, the Manager will assess whether income generated from the property under consideration could qualify as unrelated business taxable income. If this risk exists, the Manager will provide ARMB with an opinion of counsel satisfactory to ARMB that the transaction will not generate unrelated business taxable income under the

federal income tax law or any other tax provisions that could affect ARMB's tax-exempt status existing at the time. The Manager shall investigate as to whether ARMB shall be entitled to any property tax exemptions. Managers will provide letters of opinion on UBIT and property tax exemptions to Staff.

VI. ENVIRONMENTAL EVALUATIONS

As a standard procedure during the pre-acquisition analysis, the Separate Account Investment Manager will initiate a formal evaluation for each property through the selection of an environmental consultant. In carrying out the review, appropriate procedures based on standards of the locale and conditions known to exist in the locale shall be undertaken and such procedures should at a minimum include:

- Appointment of an environmental consultant with specific experience in testing and removal of asbestos and other environmental hazards.
- A site survey will be conducted to determine from the available evidence whether hazardous chemicals or environmentally dangerous materials exist or have existed on the subject property, including, at a minimum, a Phase I report.

ARMB may invest in properties, which contain asbestos and other toxic substances, only if the following conditions are met:

- The substance and potential risks are thoroughly disclosed.
- The property is not in violation of any federal, state or local law, ordinance, or regulation relating to the property's environmental condition.
- The estimated cost of the removal or containment programs will be reflected in the purchase assumptions.
- The substance can be properly contained or removed in accordance with the then current Environmental Protection Agency Standards.
- The leasing rollover pattern in the property will accommodate a removal program in the future.

Separate Account Investment Managers will provide the environmental evaluation reports to staff

VII. PROCEDURES FOR INVESTMENT

A. Delegation of Responsibilities

The real estate investment program will be implemented and monitored through the coordinated efforts of the ARMB; the Real Estate Committee; Staff; the Real Estate Consultant and; the qualified Manager(s). Delegation of responsibilities for each participant is described in the following sections: A summary of the delegation is attached:

1. ARMB

ARMB will retain final authority over all real estate investment strategy decisions except for Business Plan variances as set forth in the Guidelines Section VIII; approve the Guidelines, the Annual Investment Plan and any periodic revisions to these documents which ARMB deems to be appropriate and prudent for the

investment of ARMB assets; retain qualified investment managers and real estate consultants; and set investment limits.

2. Real Estate Committee

Review and report the status of real estate portfolio annually to ARMB; participate in the selection of real estate consultants and investment managers; serve as ARMB's liaison with the Real Estate Consultant; recommend revisions to the Guidelines; review and recommend the Annual Investment Plan to Board for approval; and attend industry conferences at least every other year in order to keep abreast of industry trends.

3. Staff

Staff will coordinate program compliance among all participants and communicate the investment policies, objectives and performance criteria to the Separate Account Investment Managers and monitor diversification compliance on a quarterly basis. Staff will also coordinate the receipt and distribution of capital. Staff, in cooperation with the Real Estate Consultant, will periodically review the Separate Account Investment Managers' and portfolio's performance in relation to target returns; review and approve the Separate Account Investment Manager's Annual Business Plan and Annual Strategic/Tactical Plan; review and recommend investments in commingled vehicles; prepare and recommend an Annual Investment Plan; and recommend revisions to the Real Estate Investment Policy Procedures and Guidelines. Staff will also review and approve the detailed property operating budgets prior to the start of each fiscal year and revisions to the property operating budgets in accordance with Section VIII of these Guidelines.

4. Real Estate Consultant

In cooperation with Staff and as deemed appropriate by the Real Estate Committee and ARMB, the Real Estate Consultant will ensure program compliance; assist in the implementation of a multiple manager program; review all program documentation and management relationships; conduct manager searches when requested; provide performance measurement analysis of the portfolio; review the Annual Investment Plan as set forth in the Investment Procedures outlined below; and provide special project research pertaining to technical real estate issues.

The Real Estate Consultant will, as requested by ARMB, provide periodic reports for the real estate program including a performance evaluation of the total portfolio to include both ARMB's commingled fund investments and ARMB's separate account investments. The analysis will include both income and capital accounting; comparison to industry performance benchmarks (such as NCREIF); Manager reviews, and effects of "Pooled Leverage" on the real estate portfolio. The Real Estate Consultant will prepare a quarterly performance analysis report which will provide after-fee realized and unrealized gains/losses; monitor and report quarterly diversification compliance and the geographic concentration limits; time weighted returns including both current quarter returns and annualized returns since portfolio inception; and internal rates of return since inception based on actual cash flow from and to ARMB.

Additional responsibilities may include developing selection criteria in manager search efforts, coordinating/conducting manager searches, conducting manager reviews, and other special projects.

5. Managers

Separate Account Investment Managers will acquire and manage real estate investments on behalf of ARMB and in accordance with the then current and approved Annual Business, Annual Strategic/Tactical Plans, and the objectives set forth in the Annual Investment Plan and the Guidelines. Managers will prepare Annual Business (including property operating budgets) and Annual Strategic/Tactical Plans for Staff review and approval.

Commingled fund investment managers will acquire and manage real estate investments on behalf of ARMB and in accordance with the terms of any and all agreements between each respective Manager and ARMB.

B. Investment Procedure

Real estate investments, in compliance with ARMB's Policies, shall be acquired through the following process:

1. Separate Accounts:

Annually, Staff will prepare an Investment Plan after reviewing the Annual Business and Strategic/Tactical Plans of the Separate Account Investment Managers. This document will recommend, as appropriate, revisions to the ARMB Guidelines, additional allocations to existing managers, and revisions to the Annual Business and Strategic/Tactical Plans of each respective Separate Account Investment Manager. Any searches that may be recommended will be outlined. The Investment Plan will then be reviewed by the consultant and submitted, along with the Real Estate Committee's recommendations to ARMB for final approval. Staff and the Real Estate Consultant shall review the Separate Account Investment Manager's Annual Business Plans and Annual Strategic/Tactical Plans for consistency with the Annual Investment Plan. Staff will approve all Plans prepared by Separate Account Investment Managers.

Investments will be made on a discretionary basis by Separate Account Investment Managers in accordance with their approved Annual Business and Strategic/Tactical Plans. Separate Account Investment Managers must provide staff with copies of their internal "Investment Committee" reports for each asset purchased on ARMB's behalf.

2. Commingled Funds:

Investments in commingled funds will be recommended by Staff and the Real Estate Consultant on an individual fund basis in accordance with the Annual Investment Plan and the ARMB Guidelines.

Formatted: Normal + Green, Indent: Left: 0.75", First line: 0"

Formatted: Indent: Left: 0"

VIII. DELEGATION OF AUTHORITY

ARMB shall delegate authority to Staff to approve the following:

- Each Separate Account Investment Manager's detailed property operating budgets for each fiscal year;
- Annual Business Plans and Annual Tactical/Strategic Plans prepared by ARMB's Separate Account Investment Managers;
- Revised property operating budgets and variances in approved Annual Business Plans for unanticipated, significant leasing activity; and
- Line item variances in approved capital expenditure budgets in amounts up to \$300,000 with a cumulative fiscal year maximum of \$3,000,000 per Separate Account Investment Manager for other capital expenditures not related to leasing activity (such as repairs for building damage or defects).

IX. CONFIDENTIALITY

Pursuant to 15 AAC 112.770, ARMB shall withhold from other persons all information furnished to it by Manager(s) or Consultant(s) which is reasonably designated by Manager(s) or Consultant(s) as being confidential or proprietary, within the meaning of Alaska Statutes regarding rights to public information, except to the extent that the information is needed by ARMB in order to adequately report on the status and performance of the portfolio, or to comply with a court subpoena or with an official criminal investigation.

Those portions of reports provided pursuant to Part II section I (Reporting System) of these Guidelines shall be considered confidential pursuant to 15 AAC 112.770 to the extent that information is reasonably designated by Manager(s) as being confidential or proprietary, or to the extent the disclosure of which would unfairly prejudice the ability of Manager(s) or ARMB to manage, lease, market or sell such property or Assets.

X. REVISIONS

This document replaces and consolidates the policies, procedures, and guidelines as of ~~September~~~~October~~ 22~~1~~, 201~~1~~09. This document is to be reviewed no less than annually and revised as appropriate.

XI. REAL ESTATE SEPARATE ACCOUNT INVESTMENT MANAGERS

The following investment managers acquire institutional-grade properties on a discretionary basis for the Alaska Retirement Management Board:

UBS Realty Investors LLC

Property type – Core/apartments, industrial, retail and office
Contact - Jeffrey G. Maguire
Managing Director
242 Trumbull Street
Hartford, CT 06103-1212
Telephone: 860-616-9086
Fax: 860-616-9104
E-mail: jeffrey.maguire@ubs.com
Web site: www.ubs.com

Sentinel Realty Advisors Corp.

Property type – Core/apartments only
Contact – David Weiner
Managing Director
1251 Avenue of the Americas
New York, NY 10020
Telephone: 212-408-2913
Fax: 212-603-5961
E-mail: weiner@sentinelcorp.com
Web site: www.sentinelcorp.com

LaSalle Investment Management

Property type – Core/apartments, industrial, retail and office (includes Takeover Assets)
Attn: George Duke
Managing Director
100 East Pratt Street, 20th Floor
Baltimore, MD 21202
Telephone: (410) 878-4810
Facsimile: (410) 878-4910
E-mail: George.Duke@lasalle.com
Web site: www.lasalle.com

Cornerstone Real Estate Advisers LLC

Property type – Core/apartments, industrial, retail and office
Attn: Denise Stake
Portfolio Manager
One Financial Plaza, Suite 1700
Hartford, CT 06103-2604
Telephone: (860) 509-2311
Facsimile: (860) 509-2296
Email: dstake@Cornerstoneadvisers.com
Web site: www.cornerstoneadvisers.com

XII. REAL ESTATE COMMINGLED ACCOUNT INVESTMENT MANAGERS

UBS Realty Investors LLC

Contact: Thomas J. Anathan,
Managing Director
242 Trumbull Street
Hartford, CT 06103-1212
Telephone: 860-616-9128;
Facsimile: 860-616-9104
E-mail: thomas.anathan@ubs.com

J.P. Morgan Asset Management

Contact: Anne S. Pfeiffer, VP & Portfolio Manager, Strategic Property Fund
522 Fifth Avenue, 9th Floor
New York, NY 10036
Telephone: 212-837-1240
Facsimile: 212-837-1696
anne.pfeiffer@jpmorganfleming.com

Clarion Partners

Contact: Bill Krauch
Managing Director
230 Park Avenue
New York, NY 10169
Telephone: 212-883-2602
Facsimile: 212-883-2902
E-mail:
bill.krauch@clarionpartners.com

Tishman Speyer Properties

Contact: Julie Lurie
45 Rockefeller Plaza, 7th Floor
New York, NY 10020
Telephone: 212-715-0329
Facsimile: 212-895-0129
E-mail: JRLurie@tishmanspeyer.com

Rothschild Realty Inc.

Contact: John Ryan, Director
600 Abbey Court
Alpharetta, GA 30004
Telephone: 770-442-8020
Facsimile: 770-442-8034
E-mail: john.ryan@us.rothschild.com

ColonyCapital, LLC

Contact: Brent Elkins
Two International Place
Suite 2500
Boston, MA 02110
Telephone: 617-235-6310
Facsimile: 617-235-6999
E-mail: belkins@colonyinc.com

LaSalle Investment Management

Contact: Steve Bolen, President
100 East Pratt Street, 20th Floor
Baltimore, MD 21202
Telephone: 410-347-0660
Facsimile: 410-347-0612 fax
E-mail: steve.bolen@lasalle.com

Silverpeak Legacy Partners

Contact: Tanya M. Tarar-Oblak,
Managing Director
1330 Avenue of the Americas, Suite 1200
New York, NY 10019
Telephone: 212-716-2025
Facsimile: (646) 285-9271
E-mail: investorrelations@silverpeakre.com

Cornerstone Real Estate Advisers LLC

Contact: Patrick T. Kendall, Vice President
One Financial Plaza, Suite 1700
Hartford, CT 06103
Telephone: 310-234-2525
Facsimile: 949-852-9804
E-mail: pkendall@Cornerstoneadvisors.com

Coventry Real Estate Fund II, LLC

Contact: Peter Henkel
888 Seventh Avenue, 12th Floor
New York, NY 10019
Telephone: 212-699-4109
Facsimile: 212-699-4124
E-mail: phenkel@coventryadvisors.com

BlackRock, Inc.

Contact: Ted Koros, Managing Director
50 California Street, Suite 300
San Francisco, CA 94111
Telephone: 415-670-6210
Facsimile: 646-521-4982
E-mail: theodore.koros@blackrock.com

Lowe Hospitality Investment Partners, LLC

Contact: Bleecker P. Seaman, Executive VP
11777 San Vicente Boulevard, Suite 900
P.O. Box 49021
Los Angeles, CA 90049-6615
Telephone: 310-571-4263
Facsimile: 310-207-1132
bseaman@loweenterprises.com

Attachment 1

REAL ESTATE INVESTMENT POLICY and PROCEDURES - Delegation of Responsibilities Attachment

	Frequency	Separate Account Investment Managers	Consultant	Staff	Real Estate Committee	Board
Real State Investment Policy, Procedures, and Guidelines			R	P&R	R	A
Review and Revise	Annually		R	R	R	A
Separate Account Investment Manager Selection	Periodically		G&R	G&R	G&R*	A
Request For Proposal (RFP)			P&R	P&R	R	A
Real Estate Consultant Selection	Tri-Annually			G&R	G&R*	A
Request For Proposal (RFP)				P&R	R	A
Commingled Fund Selection**	Periodically		R	R	R	A
Real Estate Investment Plan**	Annually		R	P&R	R	A
Separate Account Business Plan**	Annually	P	R	R&A	RT	
Detailed Property Operating Budget	Annually	P	R	R&A		
Separate Account Strategic/Tactical Plan**	Annually	P	R	R&A	RT	RT
Quarterly Performance	Quarterly		P	RT		RT
Portfolio/Property Diversification Compliance	Quarterly		M	M		
Geographic Concentration Limit	Quarterly		M	RT		

A = Approves
 G = Grade
 P = Prepares
 R = Recommends

RT = Reported To
 M = Monitor

* Grade Semi-finalists only
 ** Investment Decision (Shaded)

**ALASKA RETIREMENT MANAGEMENT BOARD
REAL ESTATE INVESTMENT
POLICIES, PROCEDURES AND GUIDELINES**

TABLE OF CONTENTS

	Page #
<i>I. INVESTMENT OBJECTIVES</i> _____	<i>1</i>
A. Investments in Real Estate and Other Real Estate Related Assets _____	1
B. Asset Allocation _____	1
C. Portfolio Return Objective _____	1
<i>II. PROGRAM RISK MANAGEMENT AND IMPLEMENTATION</i> _____	<i>2</i>
A. Institutional Quality _____	2
B. Diversification _____	2
C. Implementation Approach _____	6
D. Prudent Leverage _____	7
E. Lease Structure _____	7
F. Separate Account Investment Manager Business Plan; Annual Strategic/Tactical Plan; Disposition/Exit Strategy _____	7
G. Fee Structure _____	7
H. Single Asset Ownership Structure (Applies to Separate Accounts Only) _____	7
I. Reporting System _____	8
J. Distribution of Current Income _____	8
K. Lines of Responsibility _____	8
<i>III. CONFLICTS OF INTEREST</i> _____	<i>9</i>
A. Property Valuation _____	9
B. Property Management _____	9
<i>IV. INSURANCE COVERAGE</i> _____	<i>9</i>
<i>V. UNRELATED BUSINESS INCOME TAX</i> _____	<i>9</i>
<i>VI. ENVIRONMENTAL EVALUATIONS</i> _____	<i>10</i>
<i>VII. PROCEDURES FOR INVESTMENT</i> _____	<i>10</i>
A. Delegation of Responsibilities _____	10
B. Investment Procedure _____	12
<i>VIII. DELEGATION OF AUTHORITY</i> _____	<i>13</i>
<i>IX. CONFIDENTIALITY</i> _____	<i>13</i>
<i>X. REVISIONS</i> _____	<i>13</i>
<i>XI. REAL ESTATE SEPARATE ACCOUNT INVESTMENT MANAGERS</i> _____	<i>14</i>
<i>XII. REAL ESTATE COMMINGLED ACCOUNT INVESTMENT MANAGERS</i> _____	<i>14</i>

ATTACHMENTS

Attachment 1 – Delegation of Responsibilities

**ALASKA RETIREMENT MANAGEMENT BOARD
REAL ESTATE INVESTMENT
POLICIES, PROCEDURES AND GUIDELINES**

I. INVESTMENT OBJECTIVES

A. Investments in Real Estate and Other Real Estate Related Assets

The Alaska Retirement Management Board (ARMB) will invest in real estate with the goals of portfolio diversification and attaining the optimum return on the portfolio, consistent with the assumption of prudent risk and safety of principal. ARMB recognizes the need to use active investment management in order to obtain the highest attainable total investment return (measured as income plus appreciation) within ARMB's framework of prudence and managed risk.

ARMB will select Real Estate Investment Managers who have the discretion to invest in publicly traded equity and/or privately placed equity sectors, subject to ARMB's approval of an Annual Strategic/Tactical Plan and an Annual Investment Plan. In order for real estate investments to be considered, the Investment Manager must demonstrate that it is able to: add value through its real estate knowledge, experience and strategy; underwrite the risks of the investment which is contemplated; and at the time of investment, comply with the intent of the Real Estate Investment Policies, Procedures and Guidelines (**Guidelines**).

Single property and multi property strategies will be considered as well as "pooled/commingled" fund investment vehicles.

B. Asset Allocation

The ARMB allocation to real estate investments shall be determined by the Board of Trustees and reviewed annually. The target allocation is 10% +/- 4% of ARMB's total Assets, based on market value.

Allocated capital to Investment Managers will be defined as invested capital based on ARMB's cost.

C. Portfolio Return Objective

1. Total Return

Over rolling 5 year periods, the equity real estate investment portfolio is expected to generate a minimum total real rate of return (net of investment management fees) of 5% using a time-weighted rate of return calculation. The inflation index used to calculate the actual real rate of return is the CPI All Urban.

2. Income Return

Income, which is defined as cash distributed to ARMB, is expected to produce 50-60% of the total return over rolling five-year periods.

3. Index

The overall portfolio is expected to exceed the target index. The target index is composed of 90% NCREIF Property Index and 10% NAREIT Equity Index.

II. PROGRAM RISK MANAGEMENT AND IMPLEMENTATION

The selection and management of assets in the real estate portfolio of the ARMB will be guided by the principles of preserving investment capital, attaining the optimum return on the portfolio consistent with the assumption of prudent risk, generating current income, being sensitive to inflation, maintaining diversification of assets and diversification of management responsibility.

In real estate investment, there is an inherent risk that the actual income and return of capital will vary from the amounts expected. The ARMB will manage the investment risk associated with real estate in several ways:

A. Institutional Quality

All assets must be of institutional investment quality as evidenced by a precedent of institutional investment in similar properties; expert analysis which supports the economic viability of the market; high quality construction and design features; and a potential competitive position within the property's immediate market area.

B. Diversification

The real estate portfolio will be diversified as to style group, property type, industry sector, life cycle, economic driver, investment manager and geographical location. Diversification reduces the impact on the portfolio of any one investment or any single manager's investment style to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio. Portfolios for core investment managers and non-core or value added investment managers will carry the diversification characteristics set forth in the allocations and definitions set out below. Diversification compliance will be monitored on a quarterly basis for compliance with ARMB's Guidelines by staff and the real estate consultant.

For purposes of calculating diversification compliance, the overall real estate portfolio size will be considered the product of the greater of projected or target real estate allocation times the projected fiscal year-end overall plan assets as established in the Annual Investment Plan. The projected fiscal year-end overall plan assets will take into account the target allocations and projected returns of all asset classes in which plan assets are invested, and estimated net pay-outs to plan beneficiaries. Unless exceptional circumstances justify a deviation, the maximum percentage of the real estate portfolio investment for each of the identified categories is as follows:

Controlled Investments: <i>(ARMB can liquidate within 180 days)</i>	85 %
Non-Controlled Investments: <i>(ARMB cannot liquidate within 180 days)</i>	50%
Core Investments (See definition below):	85 %
Non-Core Investments (See definition below):	50%
Single Manager Limit: <i>(value of both Separate Account and Commingled Fund combined, if applicable)</i>	35 %
Public Equity:	50 %
Public Debt:	0 %
Private Equity:	100 %
Private Debt:	0 %
Geographic:	
ARMB will avoid over-concentration in areas of similar real estate performance. The consultant will monitor ARMB's concentrations in this area, considering indicators such as NCREIF sub-region, metropolitan areas and economic drivers. The consultant will report its conclusions regarding the acceptability of ARMB's concentration limits quarterly.	
Outside United States:	20 %
Single Property Investment: <i>(acquisition cost plus projected capital additions and improvements)</i>	5 %
Single-Tenant (any one firm):	10 %
Property Type:	40 %

Manager Allocation – It is understood that Separate Account Investment Managers may exceed their Board-approved allocations by up to 5% for the purposes of capital improvements on existing assets and/or for the completion of an acquisition. A core Separate Account Investment Manager’s portfolio may be invested up to 15% in core-plus style properties to assemble a core portfolio. A value-added Separate Account Investment Manager’s portfolio shall include 70%-100% in value-added style properties, and may include up to 30% in opportunistic style properties.

Subject to CIO approval, upon the sale of a property held by a Separate Account Investment Manager in which the net sales proceeds are in excess of the property’s cumulative basis, the advisor’s allocation will increase in an amount equal to the lesser of the excess of the net sales proceeds over the property’s cumulative basis or the aggregate portfolio net asset value over the aggregate portfolio cumulative basis adjusted to reflect actual sale proceeds. The CIO will also consider whether an allocation increase should be adjusted for any past realized losses incurred by the Separate Account Investment Manager. The intent of this provision is to allow a Separate Account Investment Manager to reinvest realized gains but only to the extent gains are greater than losses which have been experienced in other property investments in the Separate Account Investment Manager’s portfolio.

Exceptional circumstances justifying a deviation – When circumstances arise of a temporary nature, such as an unexpected re-valuation of assets, a transfer of assets among managers, or an event in which it would be in the fiduciary interest of the ARMB to do so, the limits set forth in paragraph II.B of ARMB Policies may be exceeded provided that ARMB concurs.

Contingent Allocation – The authority of the CIO to exercise discretion in allocating funds within investment bands shall include authority to add funds to the allocation of real estate Separate Account Investment Managers. Exercise of this discretion shall be for:

- (i) acquisition of a particular real estate asset which is, in the opinion of the CIO, attractive and the acquisition of which is constrained by the allocation to the investment Separate Account Investment Manager;
- (ii) not exceed \$150 MM for acquisitions in high barrier markets and not exceed the single property investment limit (Section IIB) for acquisitions in other markets. High barrier markets exhibit constraints (i.e. physical, political, financial) on supply growth that restrict new construction and therefore create an environment conducive to real rent growth in response to increasing space demand. High barrier markets tend to be located in both coasts of the United States. Low barrier markets lack supply constraints and are typically prone to over supply as developers can quickly react to anticipated demand growth. Low barrier markets dominate in the Midwest, South, and Mountain states.
- (iii) not exceed \$150 MM in any fiscal year period.

The CIO may also exercise the following discretion pertaining to real estate investments:

- (i) Commit to investments up to \$100 million with existing managers, and former managers in good standing;
- (ii) Commit to investments related to co-investment opportunities, up to \$100 million, with existing managers; and,
- (iii) Commit to investments with new managers up to \$75 million, with the concurrence of ARMB’s real estate consultant.

The CIO will provide prior notification to the chairs of the ARMB and Real Estate Committee 7 days before committing to any real estate investments under this authority.

Definitions

Core Investments

Primary
Characteristics:

- Fully or substantially leased (85% occupancy or greater)
- Inconsequential turnover near term
- Inconsequential physical issues or renovation required
- Credit tenants
- Primary markets
- Quality property
- Income produces 50% or more of expected return
- Typically longer term holds
- Properties in markets with stable or improving economic conditions

Core-plus Investments

Primary
Characteristics:

- Limited renovation, primarily deferred maintenance, limited physical issues or repositioning needed
- Modest near term lease roll over; modest vacant lease up
- Expected growth through increasing rents
- Poor prior management
- A- to B- quality
- Income produces 50% or more of expected return

Non-Core Investments

Value-Added Investments

Primary
Characteristics:

- Asset renovation – lobbies, corridors, deferred maintenance
- Intermediate term (6-9 months) physical issues
- Current vacancies or rent loss
- Near term roll over exposure
- Repositioning, re-tenanting
- Distressed prior management
- Purchase of adjacent land to develop
- Alternative, turnaround markets and property types
- Income produces 50% or less of total return

Opportunistic Investments – These investments involve significant redevelopment risk, high leasing risk, and high development risk.

Primary
Characteristics:

- Empty Buildings
- High near term turnover
- New development – spec or limited pre-leasing
- Significant rehabilitation and leasing, redevelopment into alternative uses
- Capital displacement in maligned markets: lack of investment capital due to level of risk
- Non-traditional asset type (mezzanine debt, land, etc.)
- Wide ranging investment structures
- Investing in non-performing notes
- Cross-border investing
- Holding periods typically 1 to 5 years
- Income produces less than 50% of total return

Note: *Properties within a multi-property investment will be categorized as either core or non-core.*

C. Implementation Approach

The ARMB will implement an investment process for real estate which will, over time, include a minimum of three (3) qualified Separate Account Investment Managers who have been selected on a competitive basis. The ARMB will endeavor to allocate specific funds to qualified managers on a separate account basis. Selected managers will seek real estate investment opportunities in publicly-traded equity and/or privately-placed equity sectors. Investments will be made on a discretionary basis subject to Staff approval of the Annual Strategic/Tactical Plans prepared by Separate Account Investment Managers and ARMB's approval of the Annual Investment Plan prepared by Staff. In addition to separate accounts, ARMB will selectively consider investments in "pooled/commingled" investment vehicles.

All allocation of funds to a manager (including additional investment with existing accounts) and investment strategy must be recommended to ARMB by Staff and the Real Estate Consultant and be accompanied by an investment report which, at a minimum, includes the following: market information; investment alternatives; fee structure and comparison to other alternatives; demonstration of compliance with Guidelines and the then current Annual Investment Plan; historical performance of Separate Account Investment Manager (cash-based internal rates of return and industry standard); projected returns (income and appreciation); and positive and negative attributes of the investment strategy.

On a selective basis, a member of ARMB may visit the site of a real estate investment for the purpose of rendering a report to ARMB supplementing reports provided by Staff, the Real Estate Consultant, or others.

D. Prudent Leverage

The total amount of leverage placed on the aggregate separate account assets will not exceed thirty five percent (35%) of the total market value of the real estate separate account portfolio. Directly-owned properties will not be leveraged by the Separate Account Investment Manager. Property encumbered by debt at the time of purchase, if justified on a risk-return basis by the Separate Account Investment Manager, may be acquired subject to Chief Investment Officer approval. With authorization by the ARMB, the Chief Investment Officer may place leverage on a pool of existing core real estate assets held in ARMB's separate account portfolio in a manner consistent with the ARMB's Guidelines.

The total amount of fund level leverage, at the time of investment, will not exceed 35% for core commingled funds investing in a core equity diversified asset strategy. The total amount of fund level leverage, at the time of investment, will not exceed 65% for non-core commingled funds investing in a value add or opportunistic equity diversified asset strategy.

E. Lease Structure

Multi-tenant and single tenant properties will be considered. When acquiring single tenant properties, consideration will be given to avoid multiple single-tenant exposure to any firm if those single tenant properties constitute more than 10% of the portfolio. A staggered lease structure for commercial properties will be emphasized.

F. Separate Account Investment Manager Business Plan; Annual Strategic/Tactical Plan; Disposition/Exit Strategy

A Business Plan (including property operating budgets) will be completed by each manager for each asset under its management. The Business Plan will identify the current and anticipated competitive position for each property in order to set tactical and strategic objectives and will prescribe in appropriate detail a disposition and exit strategy respecting the particular investments. Part of this process is to evaluate the potential timing of dispositions. A property is considered for sale when it is believed that the equity in the existing investment can achieve a higher return in another real estate investment of similar risk. The Annual Strategic/Tactical Plan will describe the expectation of the manager with respect to acquisitions and dispositions.

G. Fee Structure

Involvement in any venture will be done on a fee basis that is competitive. The preferred method of calculating manager fees will be based upon a formula, which considers both 1) the cost basis of assets under management and 2) investment performance. All fee structures will be approved by ARMB. For core managers, the return-based portion of a fee will emphasize actual cash available for distribution to ARMB.

H. Single Asset Ownership Structure (Applies to Separate Accounts Only)

Provided that the goals of these guidelines are followed, ARMB may invest in separate, specific real estate assets. However, such investments will be undertaken in a fashion structured to limit ARMB's liability to the amount of its investment.

I. Reporting System

Staff and the Real Estate Consultant will develop and implement a comprehensive and responsive reporting and monitoring system for the entire portfolio, individual investments and individual managers. The reporting and monitoring system will endeavor to identify under-performing investments, controlled portfolio diversification deficiencies and inherent conflicts of interest, thereby facilitating active portfolio management. A cash-based internal rate of return (IRR) will be used when evaluating the long-term performance of an investment. Time-weighted returns will be used to measure comparative performance.

J. Distribution of Current Income

All separate account income will be distributed immediately to ARMB or its designee and not automatically reinvested in the account.

K. Lines of Responsibility

Well defined lines of responsibility and accountability will be required of all participants in ARMB's real estate investment program. Participants are identified as:

ARMB – The fiduciaries appointed by the Governor to represent the beneficiaries' interest which shall retain final authority over all real estate investment decisions.

Real Estate Committee – Comprised of at least three (3) members of ARMB who continually review the role and performance of real estate.

Staff – Investment professionals on the staff of the Department of Revenue and assigned ARMB responsibilities who will assist in the Real Estate equity investment program's design, policy implementation and administration.

Real Estate Consultant – Professionals retained to support Staff and ARMB through the provision of expert real estate strategic planning, implementation and performance monitoring support.

Separate Account Investment Managers – Qualified entities who provide institutional real estate investment management services and maintain a discretionary relationship with ARMB subject to Staff's approval of Annual Business Plans and Annual Strategic/Tactical plans, prepared by Separate Account Investment Managers, and ARMB's approval of the Annual Investment Plan.

Commingled Fund Managers – Qualified entities who provide institutional real estate investment management services through open-end and closed-end real estate pools and other pooled/commingled vehicles.

III. CONFLICTS OF INTEREST

In real estate investment, separate and distinct from other asset classes, the Manager of a Separate Account or Commingled Fund may have direct or significant control over the operations of the assets. This inherent or potential conflict of interest if openly described and regulated may contribute to the lower volatility associated with the asset class, but it also creates a need for a higher oversight standard by the plan sponsor. Staff and ARMB will maintain this oversight in at least the following ways:

A. Property Valuation

The Separate Account Investment Manager will provide ARMB with annual appraisal valuations for all properties for which it has asset management responsibility as of the quarter ending March 31. Unless otherwise directed by ARMB, the appraisal will be prepared by a qualified independent third party entity in accordance with industry standards. Staff may waive the appraisal requirement for recent acquisitions or pending dispositions following a recommendation by the Separate Account Investment Manager that such appraisal would not be a cost effective exercise. For development assets, appraisals are to be conducted in the manner described above after substantial completion payment by ARMB is made. In addition, the Separate Account Investment Manager will mark each asset to market each quarter based on asset conditions and leasing, operations and capital market conditions for comparable properties in that market.

B. Property Management

The selection of on-site property management will generally be left to the discretion of the Separate Account Investment Manager. It is expected that the Separate Account Investment Manager will retain the highest caliber, market rate property management service either through a third party fee manager or the Separate Account Investment Manager's affiliated property management division. This business relationship will be periodically reviewed by Staff, the Real Estate Consultant and ARMB.

IV. INSURANCE COVERAGE

The Separate Account Investment Manager will obtain insurance for the physical properties and assets under its control. The coverage will be in such amounts and against such risks as, in the Separate Account Investment Manager's professional judgment, shall be in accordance with sound institutional practices applicable to such properties or assets in the specific geographic area. It is expected that such insurance will include, but not be limited to, casualty loss, including where deemed appropriate by the Separate Account Investment Manager, earthquake, flood and any other disaster-type insurance coverage; comprehensive general liability; and title insurance. Separate Account Investment Managers will provide proof of insurance to Staff annually.

V. UNRELATED BUSINESS INCOME TAX

Prior to entering into any transaction, the Manager will assess whether income generated from the property under consideration could qualify as unrelated business taxable income. If this risk exists, the Manager will provide ARMB with an opinion of counsel satisfactory to ARMB that the transaction will not generate unrelated business taxable income under the

federal income tax law or any other tax provisions that could affect ARMB's tax-exempt status existing at the time. The Manager shall investigate as to whether ARMB shall be entitled to any property tax exemptions. Managers will provide letters of opinion on UBIT and property tax exemptions to Staff.

VI. ENVIRONMENTAL EVALUATIONS

As a standard procedure during the pre-acquisition analysis, the Separate Account Investment Manager will initiate a formal evaluation for each property through the selection of an environmental consultant. In carrying out the review, appropriate procedures based on standards of the locale and conditions known to exist in the locale shall be undertaken and such procedures should at a minimum include:

- Appointment of an environmental consultant with specific experience in testing and removal of asbestos and other environmental hazards.
- A site survey will be conducted to determine from the available evidence whether hazardous chemicals or environmentally dangerous materials exist or have existed on the subject property, including, at a minimum, a Phase I report.

ARMB may invest in properties, which contain asbestos and other toxic substances, only if the following conditions are met:

- The substance and potential risks are thoroughly disclosed.
- The property is not in violation of any federal, state or local law, ordinance, or regulation relating to the property's environmental condition.
- The estimated cost of the removal or containment programs will be reflected in the purchase assumptions.
- The substance can be properly contained or removed in accordance with the then current Environmental Protection Agency Standards.
- The leasing rollover pattern in the property will accommodate a removal program in the future.

Separate Account Investment Managers will provide the environmental evaluation reports to staff

VII. PROCEDURES FOR INVESTMENT

A. Delegation of Responsibilities

The real estate investment program will be implemented and monitored through the coordinated efforts of the ARMB; the Real Estate Committee; Staff; the Real Estate Consultant and; the qualified Manager(s). Delegation of responsibilities for each participant is described in the following sections: A summary of the delegation is attached:

1. ARMB

ARMB will retain final authority over all real estate investment strategy decisions except for Business Plan variances as set forth in the Guidelines Section VIII; approve the Guidelines, the Annual Investment Plan and any periodic revisions to these documents which ARMB deems to be appropriate and prudent for the

investment of ARMB assets; retain qualified investment managers and real estate consultants; and set investment limits.

2. Real Estate Committee

Review and report the status of real estate portfolio annually to ARMB; participate in the selection of real estate consultants and investment managers; serve as ARMB's liaison with the Real Estate Consultant; recommend revisions to the Guidelines; review and recommend the Annual Investment Plan to Board for approval; and attend industry conferences at least every other year in order to keep abreast of industry trends.

3. Staff

Staff will coordinate program compliance among all participants and communicate the investment policies, objectives and performance criteria to the Separate Account Investment Managers and monitor diversification compliance on a quarterly basis. Staff will also coordinate the receipt and distribution of capital. Staff, in cooperation with the Real Estate Consultant, will periodically review the Separate Account Investment Managers' and portfolio's performance in relation to target returns; review and approve the Separate Account Investment Manager's Annual Business Plan and Annual Strategic/Tactical Plan; review and recommend investments in commingled vehicles; prepare and recommend an Annual Investment Plan; and recommend revisions to the Real Estate Investment Policy Procedures and Guidelines. Staff will also review and approve the detailed property operating budgets prior to the start of each fiscal year and revisions to the property operating budgets in accordance with Section VIII of these Guidelines.

4. Real Estate Consultant

In cooperation with Staff and as deemed appropriate by the Real Estate Committee and ARMB, the Real Estate Consultant will ensure program compliance; assist in the implementation of a multiple manager program; review all program documentation and management relationships; conduct manager searches when requested; provide performance measurement analysis of the portfolio; review the Annual Investment Plan as set forth in the Investment Procedures outlined below; and provide special project research pertaining to technical real estate issues.

The Real Estate Consultant will, as requested by ARMB, provide periodic reports for the real estate program including a performance evaluation of the total portfolio to include both ARMB's commingled fund investments and ARMB's separate account investments. The analysis will include both income and capital accounting; comparison to industry performance benchmarks (such as NCREIF); Manager reviews, and effects of "Pooled Leverage" on the real estate portfolio. The Real Estate Consultant will prepare a quarterly performance analysis report which will provide after-fee realized and unrealized gains/losses; monitor and report quarterly diversification compliance and the geographic concentration limits; time weighted returns including both current quarter returns and annualized returns since portfolio inception; and internal rates of return since inception based on actual cash flow from and to ARMB.

Additional responsibilities may include developing selection criteria in manager search efforts, coordinating/conducting manager searches, conducting manager reviews, and other special projects.

5. Managers

Separate Account Investment Managers will acquire and manage real estate investments on behalf of ARMB and in accordance with the then current and approved Annual Business, Annual Strategic/Tactical Plans, and the objectives set forth in the Annual Investment Plan and the Guidelines. Managers will prepare Annual Business (including property operating budgets) and Annual Strategic/Tactical Plans for Staff review and approval.

Commingled fund investment managers will acquire and manage real estate investments on behalf of ARMB and in accordance with the terms of any and all agreements between each respective Manager and ARMB.

B. Investment Procedure

Real estate investments, in compliance with ARMB's Policies, shall be acquired through the following process:

1. Separate Accounts:

Annually, Staff will prepare an Investment Plan after reviewing the Annual Business and Strategic/Tactical Plans of the Separate Account Investment Managers. This document will recommend, as appropriate, revisions to the ARMB Guidelines, additional allocations to existing managers, and revisions to the Annual Business and Strategic/Tactical Plans of each respective Separate Account Investment Manager. Any searches that may be recommended will be outlined. The Investment Plan will then be reviewed by the consultant and submitted, along with the Real Estate Committee's recommendations to ARMB for final approval. Staff and the Real Estate Consultant shall review the Separate Account Investment Manager's Annual Business Plans and Annual Strategic/Tactical Plans for consistency with the Annual Investment Plan. Staff will approve all Plans prepared by Separate Account Investment Managers.

Investments will be made on a discretionary basis by Separate Account Investment Managers in accordance with their approved Annual Business and Strategic/Tactical Plans. Separate Account Investment Managers must provide staff with copies of their internal "Investment Committee" reports for each asset purchased on ARMB's behalf.

2. Commingled Funds:

Investments in commingled funds will be recommended by Staff and the Real Estate Consultant on an individual fund basis in accordance with the Annual Investment Plan and the ARMB Guidelines.

VIII. DELEGATION OF AUTHORITY

ARMB shall delegate authority to Staff to approve the following:

- Each Separate Account Investment Manager's detailed property operating budgets for each fiscal year;
- Annual Business Plans and Annual Tactical/Strategic Plans prepared by ARMB's Separate Account Investment Managers;
- Revised property operating budgets and variances in approved Annual Business Plans for unanticipated, significant leasing activity; and
- Line item variances in approved capital expenditure budgets in amounts up to \$300,000 with a cumulative fiscal year maximum of \$3,000,000 per Separate Account Investment Manager for other capital expenditures not related to leasing activity (such as repairs for building damage or defects).

IX. CONFIDENTIALITY

Pursuant to 15 AAC 112.770, ARMB shall withhold from other persons all information furnished to it by Manager(s) or Consultant(s) which is reasonably designated by Manager(s) or Consultant(s) as being confidential or proprietary, within the meaning of Alaska Statutes regarding rights to public information, except to the extent that the information is needed by ARMB in order to adequately report on the status and performance of the portfolio, or to comply with a court subpoena or with an official criminal investigation.

Those portions of reports provided pursuant to Part II section I (Reporting System) of these Guidelines shall be considered confidential pursuant to 15 AAC 112.770 to the extent that information is reasonably designated by Manager(s) as being confidential or proprietary, or to the extent the disclosure of which would unfairly prejudice the ability of Manager(s) or ARMB to manage, lease, market or sell such property or Assets.

X. REVISIONS

This document replaces and consolidates the policies, procedures, and guidelines as of September 22, 2011. This document is to be reviewed no less than annually and revised as appropriate.

XI. REAL ESTATE SEPARATE ACCOUNT INVESTMENT MANAGERS

The following investment managers acquire institutional-grade properties on a discretionary basis for the Alaska Retirement Management Board:

UBS Realty Investors LLC

Property type – Core/apartments, industrial, retail and office
Contact - Jeffrey G. Maguire
Managing Director
242 Trumbull Street
Hartford, CT 06103-1212
Telephone: 860-616-9086
Fax: 860-616-9104
E-mail: jeffrey.maguire@ubs.com
Web site: www.ubs.com

Sentinel Realty Advisors Corp.

Property type – Core/apartments only
Contact – David Weiner
Managing Director
1251 Avenue of the Americas
New York, NY 10020
Telephone: 212-408-2913
Fax: 212-603-5961
E-mail: weiner@sentinelcorp.com
Web site: www.sentinelcorp.com

LaSalle Investment Management

Property type – Core/apartments, industrial, retail and office (includes Takeover Assets)
Attn: George Duke
Managing Director
100 East Pratt Street, 20th Floor
Baltimore, MD 21202
Telephone: (410) 878-4810
Facsimile: (410) 878-4910
E-mail: George.Duke@lasalle.com
Web site: www.lasalle.com

Cornerstone Real Estate Advisers LLC

Property type – Core/apartments, industrial, retail and office
Attn: Denise Stake
Portfolio Manager
One Financial Plaza, Suite 1700
Hartford, CT 06103-2604
Telephone: (860) 509-2311
Facsimile: (860) 509-2296
Email: dstake@Cornerstoneadvisers.com
Web site: www.cornerstoneadvisers.com

XII. REAL ESTATE COMMINGLED ACCOUNT INVESTMENT MANAGERS

UBS Realty Investors LLC

Contact: Thomas J. Anathan,
Managing Director
242 Trumbull Street
Hartford, CT 06103-1212
Telephone: 860-616-9128;
Facsimile: 860-616-9104
E-mail: thomas.anathan@ubs.com

J.P. Morgan Asset Management

Contact: Anne S. Pfeiffer, VP & Portfolio
Manager, Strategic Property Fund
522 Fifth Avenue, 9th Floor
New York, NY 10036
Telephone: 212-837-1240
Facsimile: 212-837-1696
anne.pfeiffer@jpmorganfleming.com

Clarion Partners

Contact: Bill Krauch
Managing Director
230 Park Avenue
New York, NY 10169
Telephone: 212-883-2602
Facsimile: 212-883-2902
E-mail:
bill.krauch@clarionpartners.com

Tishman Speyer Properties

Contact: Julie Lurie
45 Rockefeller Plaza, 7th Floor
New York, NY 10020
Telephone: 212-715-0329
Facsimile: 212-895-0129
E-mail: JRLurie@tishmanspeyer.com

Rothschild Realty Inc.

Contact: John Ryan, Director
600 Abbey Court
Alpharetta, GA 30004
Telephone: 770-442-8020
Facsimile: 770-442-8034
E-mail: john.ryan@us.rothschild.com

ColonyCapital, LLC

Contact: Brent Elkins
Two International Place
Suite 2500
Boston, MA 02110
Telephone: 617-235-6310
Facsimile: 617-235-6999
E-mail: belkins@colonyinc.com

LaSalle Investment Management

Contact: Steve Bolen, President
100 East Pratt Street, 20th Floor
Baltimore, MD 21202
Telephone: 410-347-0660
Facsimile: 410-347-0612 fax
E-mail: steve.bolen@lasalle.com

Silverpeak Legacy Partners

Contact: Tanya M. Tarar-Oblak,
Managing Director
1330 Avenue of the Americas, Suite 1200
New York, NY 10019
Telephone: 212-716-2025
Facsimile: (646) 285-9271
E-mail: investorrelations@silverpeakre.com

Cornerstone Real Estate Advisers LLC

Contact: Patrick T. Kendall, Vice President
One Financial Plaza, Suite 1700
Hartford, CT 06103
Telephone: 310-234-2525
Facsimile: 949-852-9804
E-mail: pkendall@Cornerstoneadvisors.com

Coventry Real Estate Fund II, LLC

Contact: Peter Henkel
888 Seventh Avenue, 12th Floor
New York, NY 10019
Telephone: 212-699-4109
Facsimile: 212-699-4124
E-mail: phenkel@coventryadvisors.com

BlackRock, Inc.

Contact: Ted Koros, Managing Director
50 California Street, Suite 300
San Francisco, CA 94111
Telephone: 415-670-6210
Facsimile: 646-521-4982
E-mail: theodore.koros@blackrock.com

Lowe Hospitality Investment Partners, LLC

Contact: Bleecker P. Seaman, Executive VP
11777 San Vicente Boulevard, Suite 900
P.O. Box 49021
Los Angeles, CA 90049-6615
Telephone: 310-571-4263
Facsimile: 310-207-1132
bseaman@loweenterprises.com

Attachment 1

REAL ESTATE INVESTMENT POLICY and PROCEDURES - Delegation of Responsibilities Attachment

	Frequency	Separate Account Investment Managers	Consultant	Staff	Real Estate Committee	Board
Real State Investment Policy, Procedures, and Guidelines			R	P&R	R	A
Review and Revise	Annually		R	R	R	A
Separate Account Investment Manager Selection	Periodically		G&R	G&R	G&R*	A
Request For Proposal (RFP)			P&R	P&R	R	A
Real Estate Consultant Selection	Tri-Annually			G&R	G&R*	A
Request For Proposal (RFP)				P&R	R	A
Commingled Fund Selection**	Periodically		R	R	R	A
Real Estate Investment Plan**	Annually		R	P&R	R	A
Separate Account Business Plan**	Annually	P	R	R&A	RT	
Detailed Property Operating Budget	Annually	P	R	R&A		
Separate Account Strategic/Tactical Plan**	Annually	P	R	R&A	RT	RT
Quarterly Performance	Quarterly		P	RT		RT
Portfolio/Property Diversification Compliance	Quarterly		M	M		
Geographic Concentration Limit	Quarterly		M	RT		

A = Approves
 G = Grade
 P = Prepares
 R = Recommends

RT = Reported To
 M = Monitor

* Grade Semi-finalists only
 ** Investment Decision (Shaded)

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: IFS Report Recommendation ACTION: X
Task Area A.1.b, Recommendation #10
DATE: Real Estate Benchmark Disclosure INFORMATION: _____
April 19, 2012

BACKGROUND

AS 37.10.220(a)(11) and (12) require that the Alaska Retirement Management Board (Board) contract for an independent audit of the state's performance consultant not less than once every four years, obtain an external performance review to evaluate the investment policies of each fund entrusted to the board and report the results of the review. The Board entered into a contract with Independent Fiduciary Services (IFS) to provide the required reviews. IFS presented its final report at the December 2, 2010 Board meeting. At the conclusion of the presentation, CIO Gary Bader advised the trustees that each individual recommendation would be brought before the trustees at future meetings with a staff recommendation on action or implementation.

STATUS – IFS Task Area A.1.b Investment Performance Reporting to the Board

IFS Report Recommendation #10, page 24, states:

ARMB should consider asking Townsend to show property diversification and geographic diversification for the real estate benchmarks (i.e., NCREIF Property Index and FTSE NAREIT Index).

Staff does not concur with this recommendation. Townsend has and will continue to report property type and geographic diversification data for the NCREIF Property Index. Regarding the FTSE NAREIT Index, aggregate level index data reflecting the property level holdings of these public companies is not reported by the index provider and therefore unavailable for Townsend to include in the ARMB performance report. Property type categorizations within the FTSE NAREIT Index are monitored by Staff as part of its ongoing management of the REIT portfolio and geographic information can be reviewed via third party research and company disclosures.

RECOMMENDATION

The ARMB take no action regarding IFS' Task Area A.1.b Recommendation #10, to show property and geographic diversification for the real estate benchmarks.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: IFS Report Recommendation ACTION: X
Task Area A.1.b, Recommendation #9
Real Estate Country Allocation INFORMATION: _____
DATE: April 19, 2012

BACKGROUND

AS 37.10.220(a)(11) and (12) require that the Alaska Retirement Management Board (Board) contract for an independent audit of the state's performance consultant not less than once every four years, obtain an external performance review to evaluate the investment policies of each fund entrusted to the board and report the results of the review. The Board entered into a contract with Independent Fiduciary Services (IFS) to provide the required reviews. IFS presented its final report at the December 2, 2010 Board meeting. At the conclusion of the presentation, CIO Gary Bader advised the trustees that each individual recommendation would be brought before the trustees at future meetings with a staff recommendation on action or implementation.

STATUS – IFS Task Area A.1.b Investment Performance Reporting to the Board

IFS Report Recommendation #9, page 24, states:

ARMB should consider asking Townsend to show the country allocation for those managers with properties located internationally.

Staff does not concur with this recommendation. ARMB's real estate portfolio currently has a very small (3.3% as of 12/31/11) exposure to international real estate and has no strategic plans to increase that exposure. The current international exposure is expected to decrease in the future and therefore country allocation is not expected to be a material reporting category. Staff receives quarterly reports from ARMB's investment managers to monitor these positions.

RECOMMENDATION

The ARMB take no action regarding IFS' Task Area A.1.b Recommendation #9, to expand the Townsend performance report to include country allocation for those managers with properties located internationally.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: IFS Report Recommendation ACTION: X
Task Area B.1., Recommendation #1
Equity Investment Guidelines INFORMATION: _____
DATE: April 19, 2012

BACKGROUND

AS 37.10.220(a) (11) and (12) require that the Alaska Retirement Management Board (Board) contract for an independent audit of the state's performance consultant not less than once every four years, obtain an external performance review to evaluate the investment policies of each fund entrusted to the Board and report the results of the review. The Board entered into a contract with Independent Fiduciary Services (IFS) to provide the required reviews. IFS presented its final report at the December 2, 2010 Board meeting. At the conclusion of the presentation, CIO Gary Bader advised the trustees that each individual recommendation would be brought before the trustees at future meetings with a staff recommendation on action or implementation.

STATUS – IFS Task Area B.1. – Publicly Traded Asset Classes

IFS Report Recommendation #1, page 41, states:

ARMB should identify asset class and sub-asset class (if appropriate) level benchmarks in the Investment Guidelines for Domestic and International Equities.

Staff concurs with the recommendation of adding asset class level benchmarks to the Investment Guidelines.

RECOMMENDATION

The Alaska Retirement Management Board approve Resolution 2012-08 which implements the IFS recommendation relating to the addition of asset class level benchmarks to the Investment Guidelines for Domestic and International Equities.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Investment Guidelines for
Domestic and International Equities

Resolution 2012-08

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in domestic and international equities; and

WHEREAS, the Board will establish and from time to time as necessary modify guidelines for domestic and international equities.

NOW THEREFORE BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopt the Investment Guidelines for Domestic and International Equities, attached hereto and made a part hereof, regarding investment in domestic and international equities.

This resolution repeals and replaces Resolution 2011-21

DATED at Anchorage, Alaska this ___ day of April, 2012.

Chair

ATTEST:

Secretary

ALASKA RETIREMENT MANAGEMENT BOARD (ARMB)

INVESTMENT GUIDELINES FOR DOMESTIC AND INTERNATIONAL EQUITIES

- A. Purpose.** The portfolio will have a primary emphasis on diversification to minimize risk.
- B. Investment Structure.** Permissible equity investments include:
1. Common and preferred stock of corporations incorporated in the United States that are listed on the New York or American exchanges or are NASDAQ listed;
 2. International equity and equity related securities listed on recognized stock exchanges, or securities of closed-end funds listed on other recognized stock exchanges and whose primary purpose is to invest in securities listed on recognized stock exchanges and where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund;
 3. American Depository Receipts, American Depository Securities and Global Depository Securities; and
 4. Convertible Debentures; and
 5. Publicly traded partnerships listed on recognized stock exchanges, where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund; and
 6. Securities delisted and/or deregistered, owned as a result of a corporate action and not a direct purchase, and held at a value deemed to be de minimis.
- C. External Equity Management.** The manager must represent and warrant:
1. that it is an "investment advisor" or "bank" as defined in the Investment Advisors Act of 1940 as amended; and
 2. that it has completed, obtained and performed all registrations, filings, approvals, authorizations, consents or examinations required by any government or governmental authority for acts contemplated by this contract;
 3. that it is a "Fiduciary", as that term is defined in Section 3(21)(a)(ii) of ERISA with respect to the securities, and that it will discharge its duties with respect to the securities solely in the interest of the ARMB and the beneficiaries of the funds administered by the ARMB; and
 4. that it has and will maintain all forms of insurance and other prerequisites required by the ARMB.

D. Investment Management Service to be Performed. From time to time, equity managers shall invest and reinvest the cash and securities allocated to it and deposited in their account, without distinction between principal and income, in a portfolio consisting of stocks or other securities when market conditions warrant alternatives to stock. These securities will be selected and retained by the manager solely on the basis of their independent judgment relating to economic conditions, financial conditions, market timing, or market analysis, and will not be subject to direction from the ARMB; provided, however, that in the event the aggregate total of any security held by the ARMB exceeds five percent (5%) of total shares outstanding, the ARMB may direct portfolio managers to sell securities to the extent the aggregate is below five percent (5%). Other securities shall be limited to:

1. obligations of the United States government;
2. obligations of United States government agencies;
3. certificates of deposit;
4. corporate debt obligations;
5. commercial paper;
6. warrants;
7. bankers acceptances; and
8. repurchase agreements.

E. Managers will be Authorized. Managers are authorized to invest or reinvest or dispose of any cash or securities held in their account or invest the proceeds of any disposition, provided that:

1. no more than ten percent of the voting stock of any corporation is acquired or held;
2. certificates of deposit have been issued by domestic United States banks or trust companies which are members of the Federal Deposit Insurance Corporation, and are readily saleable in a recognized secondary market for such instruments;
3. corporate debt obligations are rated A or better by Moody's, Standard & Poor's or Fitch rating services (Note: This rating restriction does not apply to convertible debentures);
4. commercial paper bears the highest rating assigned by Moody's, Standard & Poor's or Fitch rating services;
5. bankers' acceptances must have been drawn on and accepted by United States banks which have capital and surplus of at least \$200 million each;

6. repurchase agreements must be secured by the debt obligations set forth in 2 through 5 above;
7. future contracts for sale of investments or for the sale of currencies may be entered into only for the purpose of hedging an existing ownership in these investments;
8. futures and options will be authorized for the purposes of implementing a portfolio reallocation to gain immediate exposure to the appropriate country weighting:
 - a. contracts are traded on recognized exchanges, or that OTC instruments are traded with AA rated or equivalent counterparts and no contracts exceed a period of twelve months;
 - b. futures and options are not used to leverage the portfolio; and
 - c. all futures and options positions must be reported to the client each month. The report must show both the nominal position and the “economic impact” of all derivative positions;
9. standardized equity index futures and ETFs will be authorized for the purpose of cash equitization;
10. purchases in commodities or the commodities of futures market of any kind are specifically prohibited;
11. no more than ten percent of any international small cap portfolio benchmarked against the MSCI EAFE Small Cap Index may be invested in emerging markets.

F. Cash Held in Portfolio. Managers are expected to maintain fully invested equity portfolios. The ARMB considers a portfolio to be fully invested as long as cash levels are below a maximum of 5 percent for small capitalization and international equity managers and 3 percent for all other equity managers, calculated using a 10-day moving average. In implementing this portion of the equity guidelines, the Chief Investment Officer will consider any cash in an individual equity account in excess of the maximum to be available for use as a funding source for other ARMB needs. Any manager that expects to exceed the maximum cash level in the short-term as the result of a specific strategy must notify ARMB in writing in advance. Such notice will temporarily exempt the manager from the maximum cash rebalancing threshold. Staff shall regularly report all equity manager net cash holdings.

G. Performance Standards. Managers are expected to have returns, over time, in excess of their appropriate contractual benchmark, net of fees.

H. Performance Benchmarks. ARMB’s asset class level benchmarks for domestic and international equities are as follows:

Broad Domestic Equity – Russell 3000 Index

~~G.~~ Global Equity ex US – MSCI ACWI ex US Index

Formatted: List Paragraph, Left, No bullets or numbering

Formatted: Font: Bold

Formatted: List Paragraph, Left, No bullets or numbering

Formatted: Indent: Left: 0.25", No bullets or numbering

III. Brokerage and Commissions. In carrying out its functions, a manager will use its best efforts to obtain prompt execution of orders at the most favorable prices reasonably obtainable, and in doing so, will consider a number of factors, including, without limitation, the overall direct net economic result to the ARMB (including commissions, which may not be the lowest available but which ordinarily will not be higher than the generally prevailing competitive range), the financial strength and stability of the broker, the efficiency with which the transaction is effected, the ability to effect the transaction at all where a large block is involved, the availability of the broker to stand ready to execute possible difficult transactions in the future and other matters involved in the receipt of “brokerage and research services” as defined in and in compliance with Section 28(e) of the Securities Exchange Act of 1934, as amended, and regulations thereunder.

Provided that, in the judgment of the manager, purchase or sale execution and transactions are competitive, approximately 30% of all listed large capitalization domestic equity trades will be executed with a brokerage firm participating in a commission recapture program with the ARMB.

The Chief Investment Officer will evaluate and report the commission recapture program to the ARMB that will include:

1. total commission dollars recaptured;
2. actual percentage of commissions recaptured; and
3. a full analysis of the commission recapture program with recommendations for expanding the program.

IV. Voting and Other Action. The managers shall vote any or all of the securities held by or for the account of the ARMB, unless written instructions to the contrary have been proved by ARMB. In voting securities of the ARMB, the managers shall act prudently in the interest and for the benefit of the ARMB and the beneficiaries of the funds administered by the ARMB. The manager is to furnish, on an annual basis, copies of the contractor’s policy and voting records in regards to voting proxies.

ALASKA RETIREMENT MANAGEMENT BOARD (ARMB)

INVESTMENT GUIDELINES FOR DOMESTIC AND INTERNATIONAL EQUITIES

- A. Purpose.** The portfolio will have a primary emphasis on diversification to minimize risk.
- B. Investment Structure.** Permissible equity investments include:
1. Common and preferred stock of corporations incorporated in the United States that are listed on the New York or American exchanges or are NASDAQ listed;
 2. International equity and equity related securities listed on recognized stock exchanges, or securities of closed-end funds listed on other recognized stock exchanges and whose primary purpose is to invest in securities listed on recognized stock exchanges and where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund;
 3. American Depository Receipts, American Depository Securities and Global Depository Securities; and
 4. Convertible Debentures; and
 5. Publicly traded partnerships listed on recognized stock exchanges, where recognized stock exchanges are those acknowledged by a manager as a source of prudent investments for the fund; and
 6. Securities delisted and/or deregistered, owned as a result of a corporate action and not a direct purchase, and held at a value deemed to be de minimis.
- C. External Equity Management.** The manager must represent and warrant:
1. that it is an "investment advisor" or "bank" as defined in the Investment Advisors Act of 1940 as amended; and
 2. that it has completed, obtained and performed all registrations, filings, approvals, authorizations, consents or examinations required by any government or governmental authority for acts contemplated by this contract;
 3. that it is a "Fiduciary", as that term is defined in Section 3(21)(a)(ii) of ERISA with respect to the securities, and that it will discharge its duties with respect to the securities solely in the interest of the ARMB and the beneficiaries of the funds administered by the ARMB; and
 4. that it has and will maintain all forms of insurance and other prerequisites required by the ARMB.

D. Investment Management Service to be Performed. From time to time, equity managers shall invest and reinvest the cash and securities allocated to it and deposited in their account, without distinction between principal and income, in a portfolio consisting of stocks or other securities when market conditions warrant alternatives to stock. These securities will be selected and retained by the manager solely on the basis of their independent judgment relating to economic conditions, financial conditions, market timing, or market analysis, and will not be subject to direction from the ARMB; provided, however, that in the event the aggregate total of any security held by the ARMB exceeds five percent (5%) of total shares outstanding, the ARMB may direct portfolio managers to sell securities to the extent the aggregate is below five percent (5%). Other securities shall be limited to:

1. obligations of the United States government;
2. obligations of United States government agencies;
3. certificates of deposit;
4. corporate debt obligations;
5. commercial paper;
6. warrants;
7. bankers acceptances; and
8. repurchase agreements.

E. Managers will be Authorized. Managers are authorized to invest or reinvest or dispose of any cash or securities held in their account or invest the proceeds of any disposition, provided that:

1. no more than ten percent of the voting stock of any corporation is acquired or held;
2. certificates of deposit have been issued by domestic United States banks or trust companies which are members of the Federal Deposit Insurance Corporation, and are readily saleable in a recognized secondary market for such instruments;
3. corporate debt obligations are rated A or better by Moody's, Standard & Poor's or Fitch rating services (Note: This rating restriction does not apply to convertible debentures);
4. commercial paper bears the highest rating assigned by Moody's, Standard & Poor's or Fitch rating services;
5. bankers' acceptances must have been drawn on and accepted by United States banks which have capital and surplus of at least \$200 million each;

6. repurchase agreements must be secured by the debt obligations set forth in 2 through 5 above;
7. future contracts for sale of investments or for the sale of currencies may be entered into only for the purpose of hedging an existing ownership in these investments;
8. futures and options will be authorized for the purposes of implementing a portfolio reallocation to gain immediate exposure to the appropriate country weighting:
 - a. contracts are traded on recognized exchanges, or that OTC instruments are traded with AA rated or equivalent counterparts and no contracts exceed a period of twelve months;
 - b. futures and options are not used to leverage the portfolio; and
 - c. all futures and options positions must be reported to the client each month. The report must show both the nominal position and the “economic impact” of all derivative positions;
9. standardized equity index futures and ETFs will be authorized for the purpose of cash equitization;
10. purchases in commodities or the commodities of futures market of any kind are specifically prohibited;
11. no more than ten percent of any international small cap portfolio benchmarked against the MSCI EAFE Small Cap Index may be invested in emerging markets.

F. Cash Held in Portfolio. Managers are expected to maintain fully invested equity portfolios. The ARMB considers a portfolio to be fully invested as long as cash levels are below a maximum of 5 percent for small capitalization and international equity managers and 3 percent for all other equity managers, calculated using a 10-day moving average. In implementing this portion of the equity guidelines, the Chief Investment Officer will consider any cash in an individual equity account in excess of the maximum to be available for use as a funding source for other ARMB needs. Any manager that expects to exceed the maximum cash level in the short-term as the result of a specific strategy must notify ARMB in writing in advance. Such notice will temporarily exempt the manager from the maximum cash rebalancing threshold. Staff shall regularly report all equity manager net cash holdings.

G. Performance Standards. Managers are expected to have returns, over time, in excess of their appropriate contractual benchmark, net of fees.

H. Performance Benchmarks. ARMB’s asset class level benchmarks for domestic and international equities are as follows:

Broad Domestic Equity – Russell 3000 Index

Global Equity ex US – MSCI ACWI ex US Index

I. Brokerage and Commissions. In carrying out its functions, a manager will use its best efforts to obtain prompt execution of orders at the most favorable prices reasonably obtainable, and in doing so, will consider a number of factors, including, without limitation, the overall direct net economic result to the ARMB (including commissions, which may not be the lowest available but which ordinarily will not be higher than the generally prevailing competitive range), the financial strength and stability of the broker, the efficiency with which the transaction is effected, the ability to effect the transaction at all where a large block is involved, the availability of the broker to stand ready to execute possible difficult transactions in the future and other matters involved in the receipt of “brokerage and research services” as defined in and in compliance with Section 28(e) of the Securities Exchange Act of 1934, as amended, and regulations thereunder.

Provided that, in the judgment of the manager, purchase or sale execution and transactions are competitive, approximately 30% of all listed large capitalization domestic equity trades will be executed with a brokerage firm participating in a commission recapture program with the ARMB.

The Chief Investment Officer will evaluate and report the commission recapture program to the ARMB that will include:

1. total commission dollars recaptured;
2. actual percentage of commissions recaptured; and
3. a full analysis of the commission recapture program with recommendations for expanding the program.

J. Voting and Other Action. The managers shall vote any or all of the securities held by or for the account of the ARMB, unless written instructions to the contrary have been proved by ARMB. In voting securities of the ARMB, the managers shall act prudently in the interest and for the benefit of the ARMB and the beneficiaries of the funds administered by the ARMB. The manager is to furnish, on an annual basis, copies of the contractor’s policy and voting records in regards to voting proxies.

ALASKA RETIREMENT MANAGEMENT BOARD

Private Equity 2012 Tactical Plan

Staff Summary and Overview

Zachary Hanna, CFA
State Investment Officer

ARMB Private Equity Program

- Program Overview
- Performance and Cash Flow
- Diversification
- 2011 Commitments
- 2012 Outlook & Tactical Plan
- Appendix: Private Equity Background and Market Trends

ARMB Private Equity Program

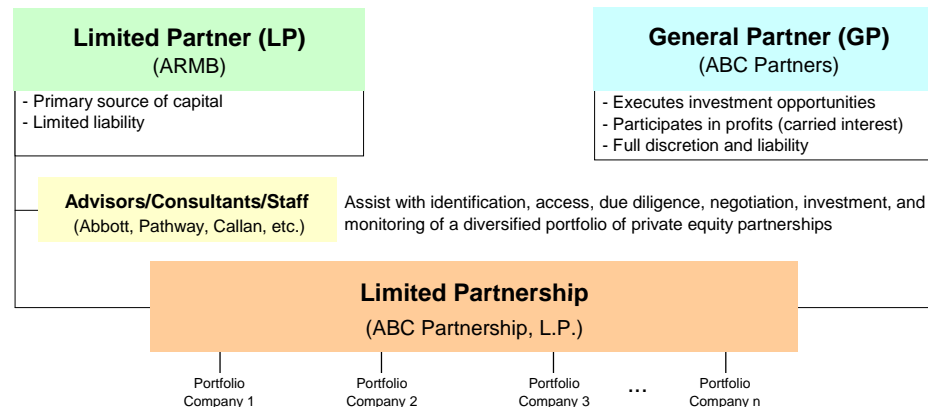
- The ARMB makes private equity investments in unregistered operating companies through limited partnerships.
- Private equity is expected to deliver long term returns in excess of the public market.

Thomson Reuters Private Equity Returns through September 30, 2011

Investment Type	5 Year	10 Year	20 Year
Venture Capital	3.1%	1.6%	16.2%
Buyouts	4.5%	8.4%	10.0%
All Private Equity	4.6%	6.7%	11.1%
Russell 3000	-0.9%	3.5%	7.8%

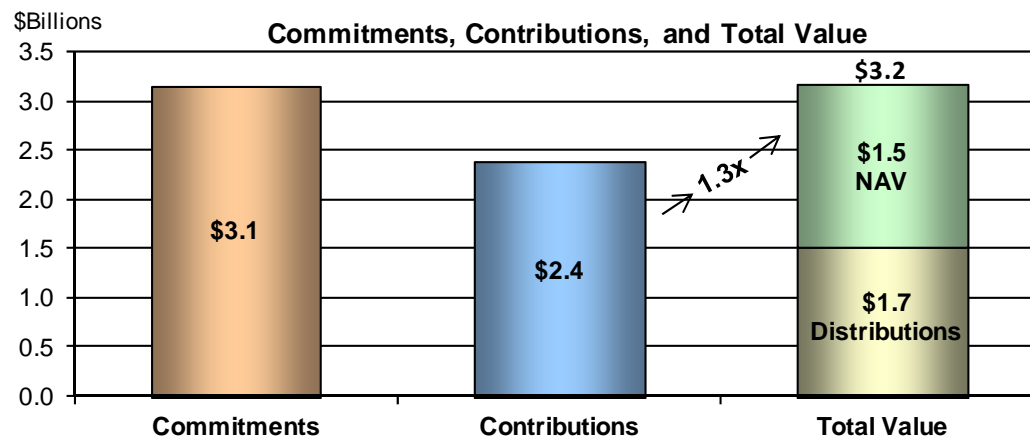
Source: Thomson Reuters. The private equity returns are pooled averages and do not represent top quartile performance. The time-weighted S&P 500 returns are provided for reference and are not directly comparable to the dollar-weighted equity returns.

- The ARMB directly invests in private equity and uses gatekeepers, Abbott Capital Management (1998) and Pathway Capital Management (2001). The allocation has increased from 3% to 8%, but is expected to return to 7% over the longer term.



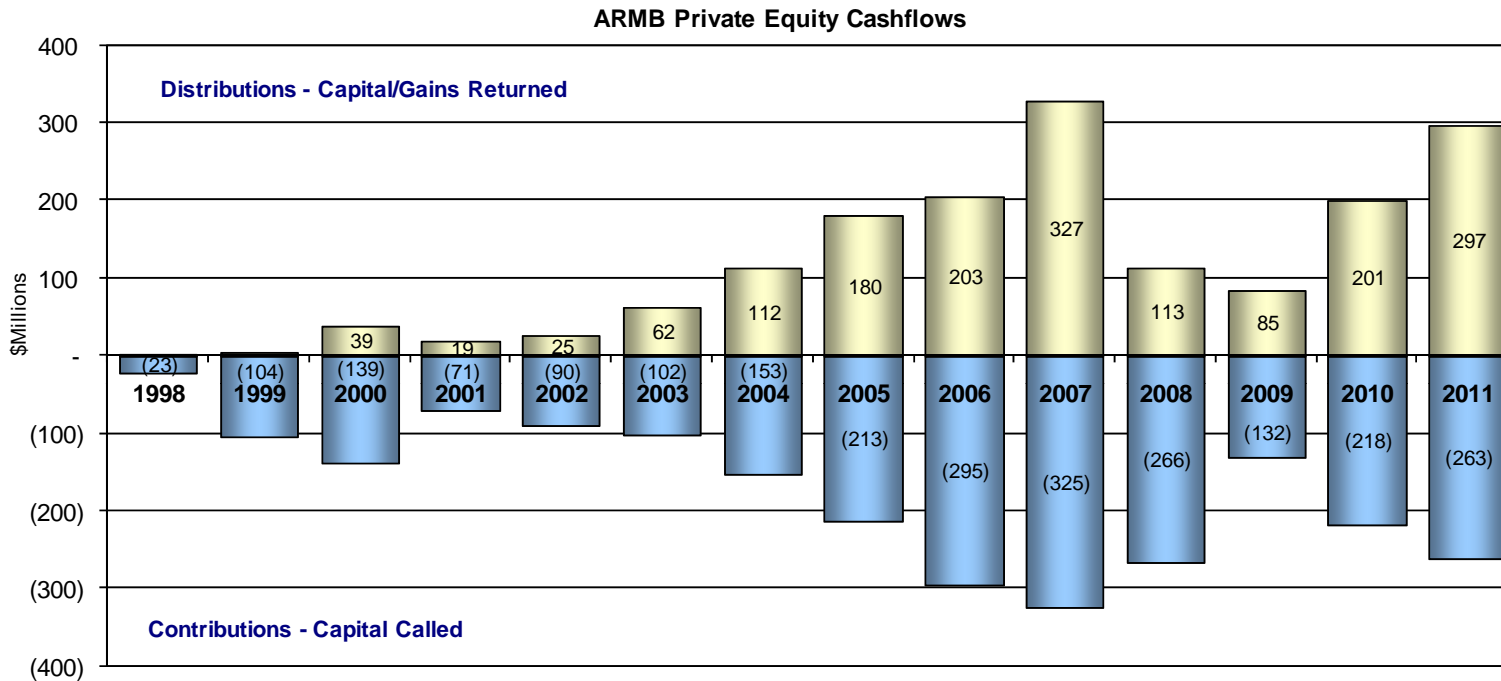
Portfolio Performance

- Private equity has been volatile since the ARMB first invested in 1998. Technology and venture capital excesses of the late 90's gave way to a buyout dominated market. The market peak in 2007 was characterized by strong returns, but also by high prices and leverage. Private equity didn't fall as far as the public markets through the recent downturn and has had a more modest recovery.
- The ARMB and its advisors have built a diversified portfolio of quality partnerships. Manager selection has been strong. Callan recently reported on ten vintage years through 2006 – six were top quartile and four were second quartile. Overall the program is in the top quartile.
- Portfolio performance is relatively strong. The internal rate of return through 2011 is 8.4% versus a public market equivalent of 2.4% for the S&P 500 and 2.8% for the Russell 3000. The calendar year 2011 return for the portfolio was 12.9%.

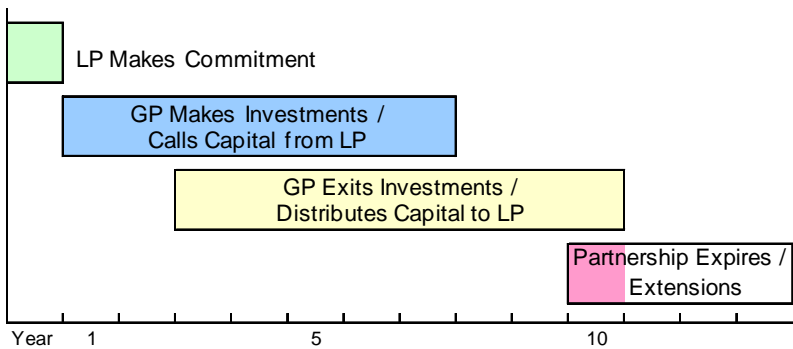


Portfolio Cash Flow

- Both distributions and contributions increased in 2011.

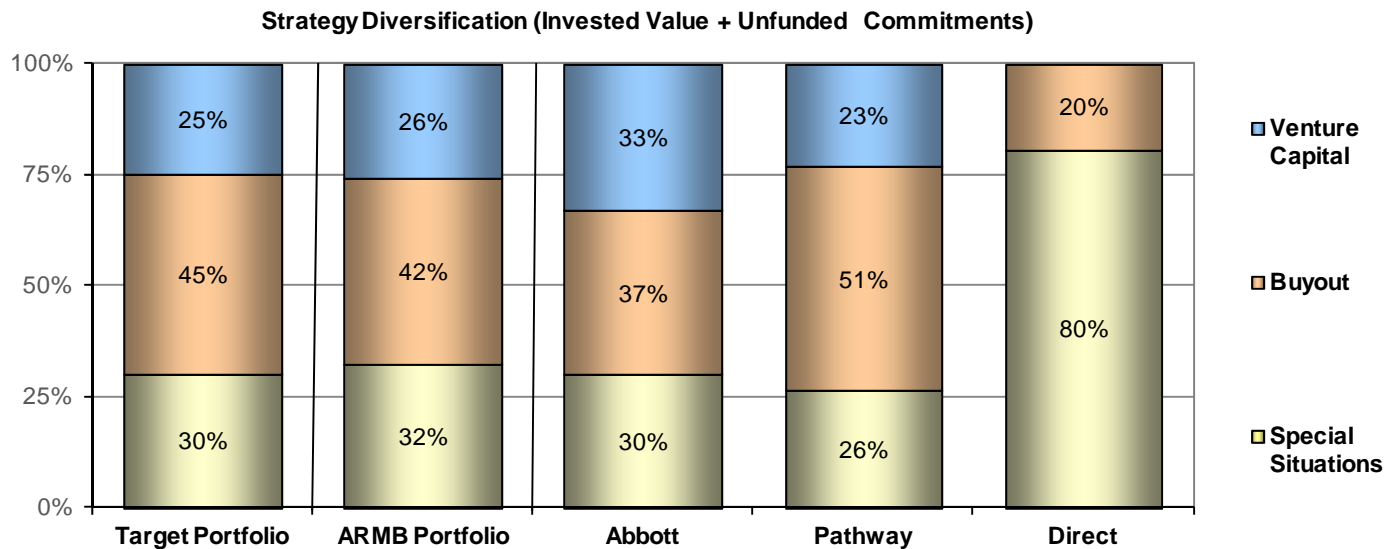


Private equity partnership liquidity and cash flow characteristics



Diversification by Strategy

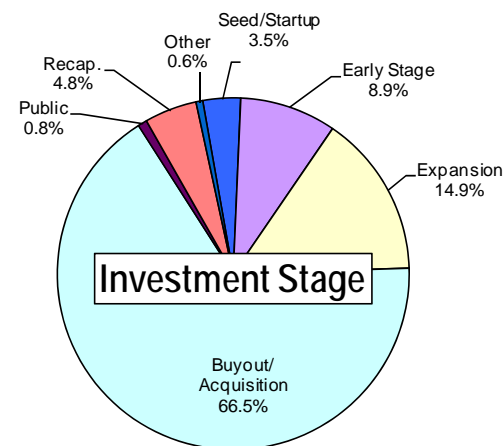
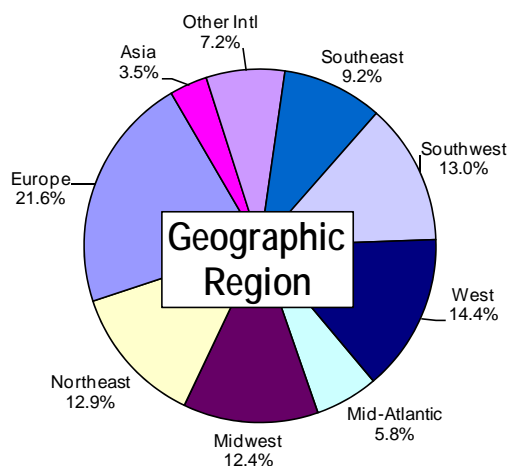
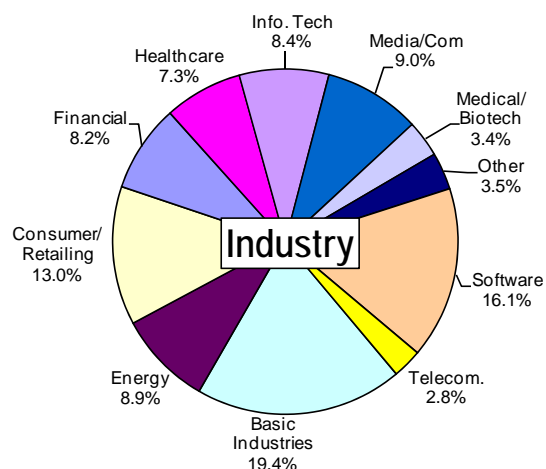
- The portfolio is well diversified by private equity strategy.
- Strategy exposure is well within the policy bands.
- The direct partnership portfolio will become more diversified as it matures.



Diversification by Portfolio Company

Diversification analysis of the over 2,000 companies in the portfolio as of 9/30/11:

- **Industry** – The portfolio is well diversified by industry, with no sector making up more than 19.4% of the portfolio.
- **Geographic Region** – The portfolio is well diversified geographically. International is 32.3% of the portfolio.
- **Investment Stage** – By investment stage, buyout/acquisition is the highest at 66.5% due to the relatively high levels of activity by buyout and special situations funds.



2011 Commitments

- The commitment target for 2011 was \$335 million.
- \$187.0 million was committed during the year.
- \$108.6 million by Abbott, \$53.4 million by Pathway, and \$25.0 million directly.
- Commitments were highest for buyout and special situations funds.

New Commitments for 2011 (\$millions)

Manager	Target	Actual	Number of Investments	Investment Strategy					
				Venture	%	Buyout	%	Special Situations	%
Abbott	\$135.0	\$108.6	12	\$31.8	29%	\$48.9	45%	\$27.9	26%
Pathway	\$125.0	\$53.4	5	\$0.0	0%	\$30.3	57%	\$23.1	43%
Direct	\$75.0	\$25.0	1	\$0.0	0%	\$0.0	0%	\$25.0	100%
Total	\$335.0	\$187.0	18	\$31.8	17%	\$79.2	42%	\$76.0	41%

2012 Outlook

Private equity is expected to continue to improve along with increased economic and capital market stability, but remains exposed to the potentially fragile global recovery.

- ***Reasonable exit environment.*** The exit environment for private equity is expected to be similar to 2011 – potentially volatile with windows of opportunity. A reasonable exit environment will continue to reduce the large build-up of private equity companies.
- ***Strong investment pace.*** The investment pace should remain moderately strong since the economic environment is more stable, debt financing is generally available, and private equity firms have considerable uninvested capital. A continued increase in deal pricing is a downside risk.
- ***Measured fundraising recovery.*** Fundraising should recover for tenured groups with decent track records since allocation issues for limited partners have lessened as private equity sponsors have returned capital and the investment pace has reduced the overhang of uninvested capital.

2012 Tactical Plan

- Staff is recommending a 2012 commitment target of \$340 million. \$140 million for Abbott, \$125 million for Pathway, and \$75 million in direct partnership investments with a gradual increase in the total over the next five years.
- Private equity is currently over the 7% long term allocation, but well within the $\pm 5\%$ band. The forward commitment pacing should allow the ARMB private equity portfolio to return to its allocation of 7% over the ten year planning horizon.

Private Equity Funding Schedule	2011	2012	2013	2014	2015	2016
Beginning Fund Assets (\$MM)	15,709,955	15,650,932	16,576,171	17,571,910	18,602,052	19,635,823
Fund Net Growth Rate	-0.4%	5.9%	6.0%	5.9%	5.6%	5.3%
Additions from Net Fund Growth	(59,024)	925,240	995,739	1,030,142	1,033,771	1,035,444
Ending Fund Assets	15,650,932	16,576,171	17,571,910	18,602,052	19,635,823	20,671,267
Target Private Equity %	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Private Equity Asset Value Target	1,095,565	1,160,332	1,230,034	1,302,144	1,374,508	1,446,989
Asset Value by Manager (\$MM)						
Abbott	694,954	669,882	647,289	630,739	625,534	634,605
Pathway	699,409	664,303	626,398	588,879	566,079	558,006
Direct Investments	113,685	134,228	157,922	185,065	215,009	244,602
Total Projected Asset Value	1,508,048	1,468,414	1,431,609	1,404,683	1,406,622	1,437,214
Private Equity % of Fund	9.6%	8.9%	8.1%	7.6%	7.2%	7.0%
Annual Net Commitments (\$MM)						
Abbott	108,493	140,000	145,000	155,000	170,000	175,000
Pathway	63,909	125,000	125,000	135,000	150,000	155,000
Direct Investments	25,000	75,000	80,000	85,000	90,000	95,000
Total Commitments by Year	197,402	340,000	350,000	375,000	410,000	425,000

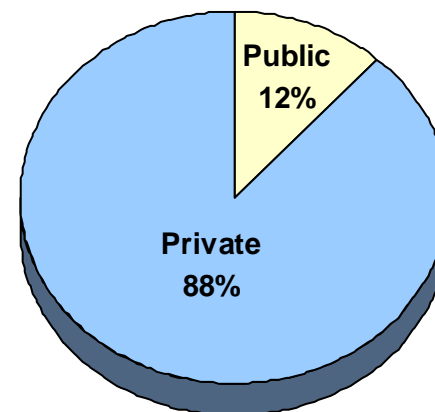
Appendix A: Private Equity Background

Unique Private Equity Characteristics

- Positive Characteristics:

- Larger, more diverse investment universe
- Less efficient companies – opportunity to create value
- Less efficient markets – pricing opportunities
- Control and alignment of interests
- Managed for long-term value

Dun & Bradstreet: Public/Private Percentage
35,920 Companies \$25+ million in Revenue

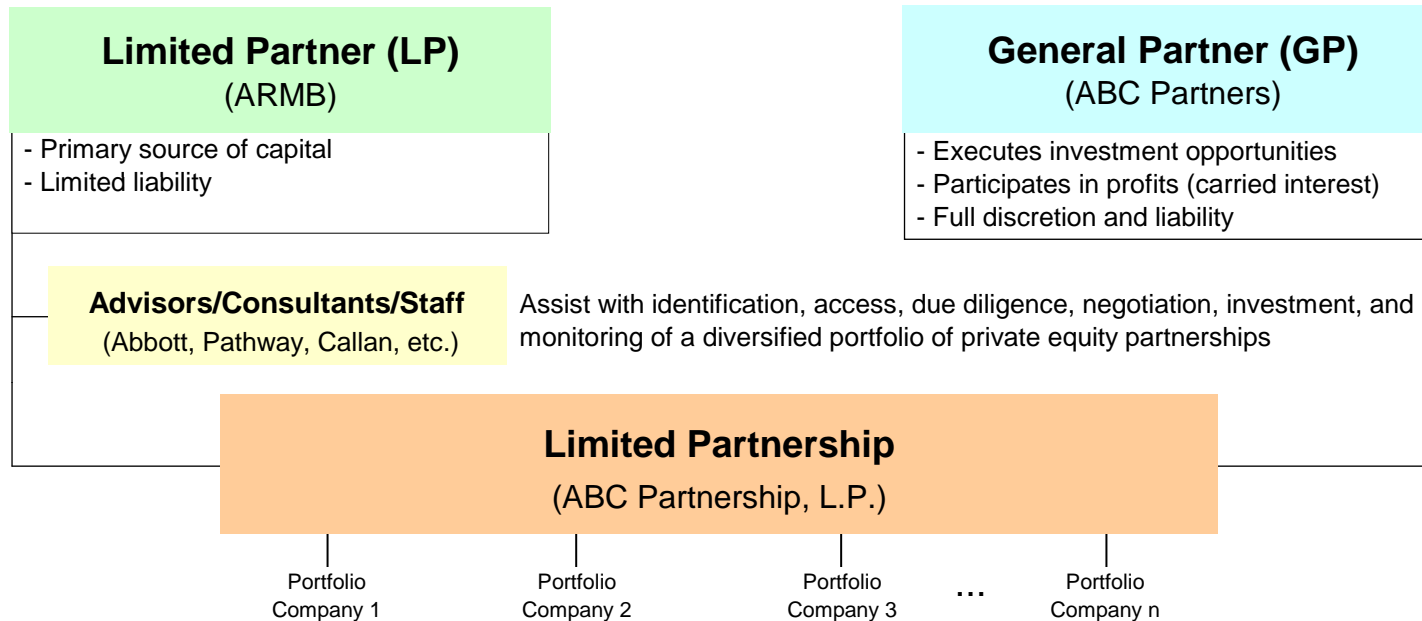


- Other Characteristics:

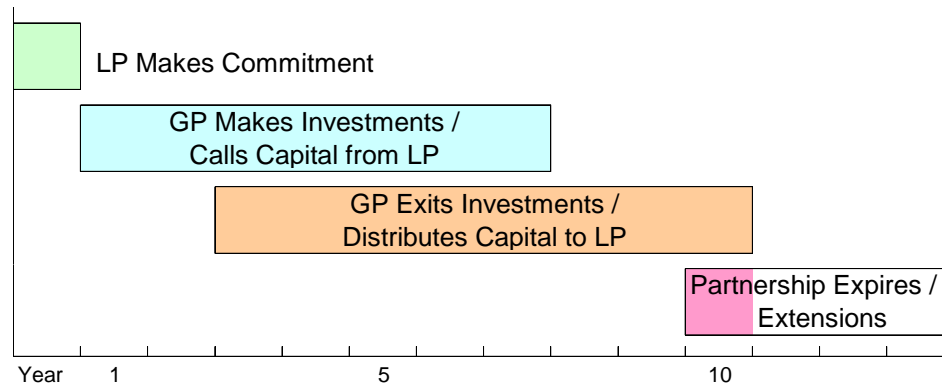
- Illiquid, long-term investments
- High fees and J-curve
- Potential for high leverage
- Portfolio transparency and valuation issues
- Incomplete data and benchmarks

Private Equity Structure

- Private equity investments are typically made through limited partnerships:



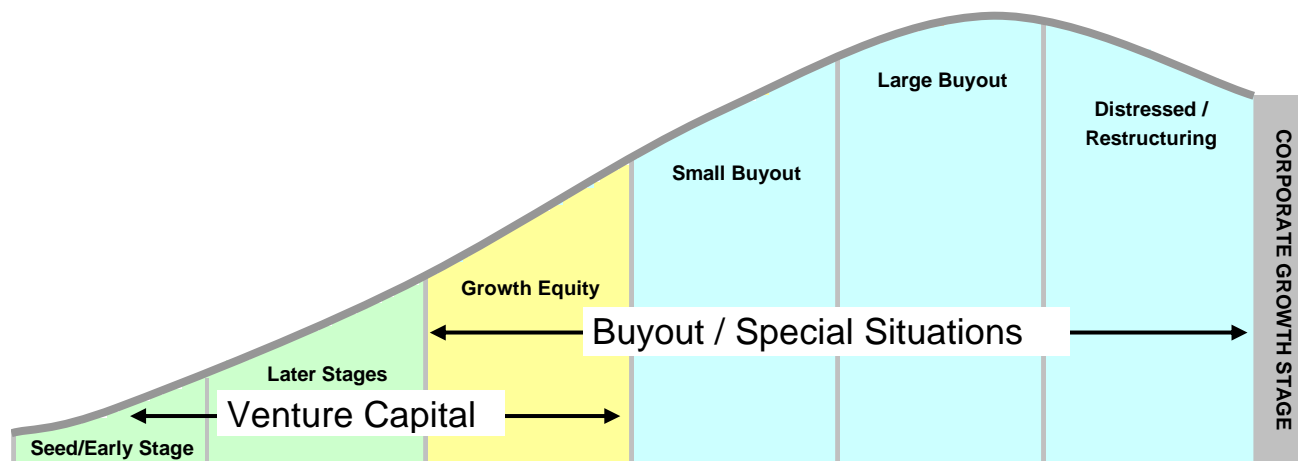
- Private equity liquidity and cash flow characteristics:



Private Equity Strategies

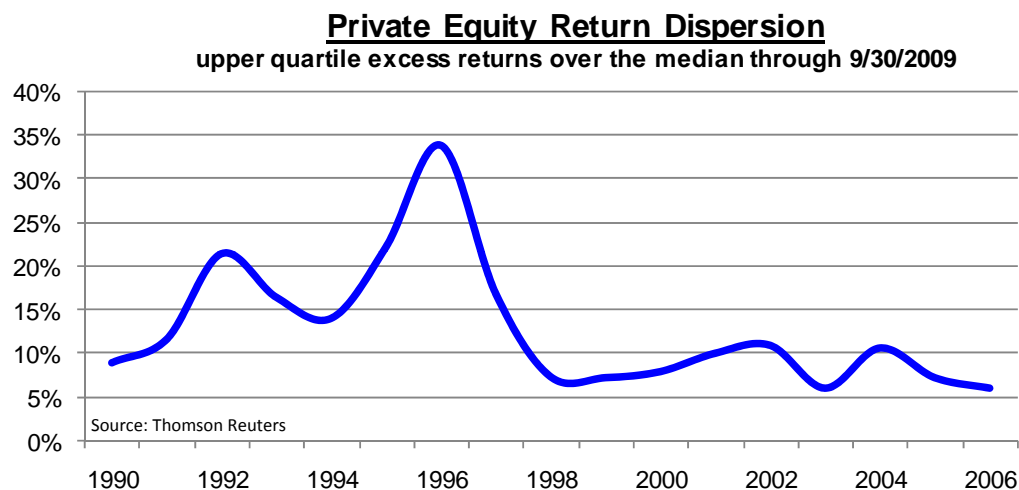
Private equity partnerships are classified into three primary groups:

- Venture Capital** Investments in companies that are developing new products. Value creation focuses on managing entrepreneurial companies through high growth.
- Buyout** Control investments in more mature operating companies. Value creation generally focuses on driving operational and capital structure efficiency.
- Special Situations** Generally buyout style investments with a specialty focus; including groups that have a specific industry, investment style, or capital structure focus. Value creation focuses on specialized skills and efficiency.

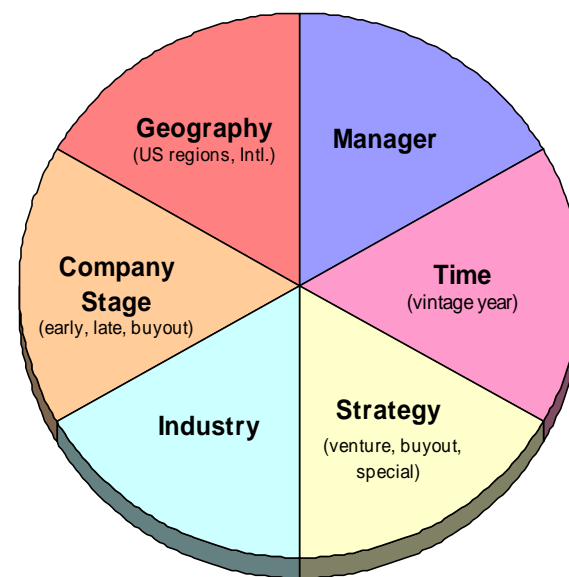


Private Equity Program Implementation

- Manager access, selection, and diligence are critical – there is high return dispersion between manager quartiles. Investing consistently with top quartile managers is necessary.



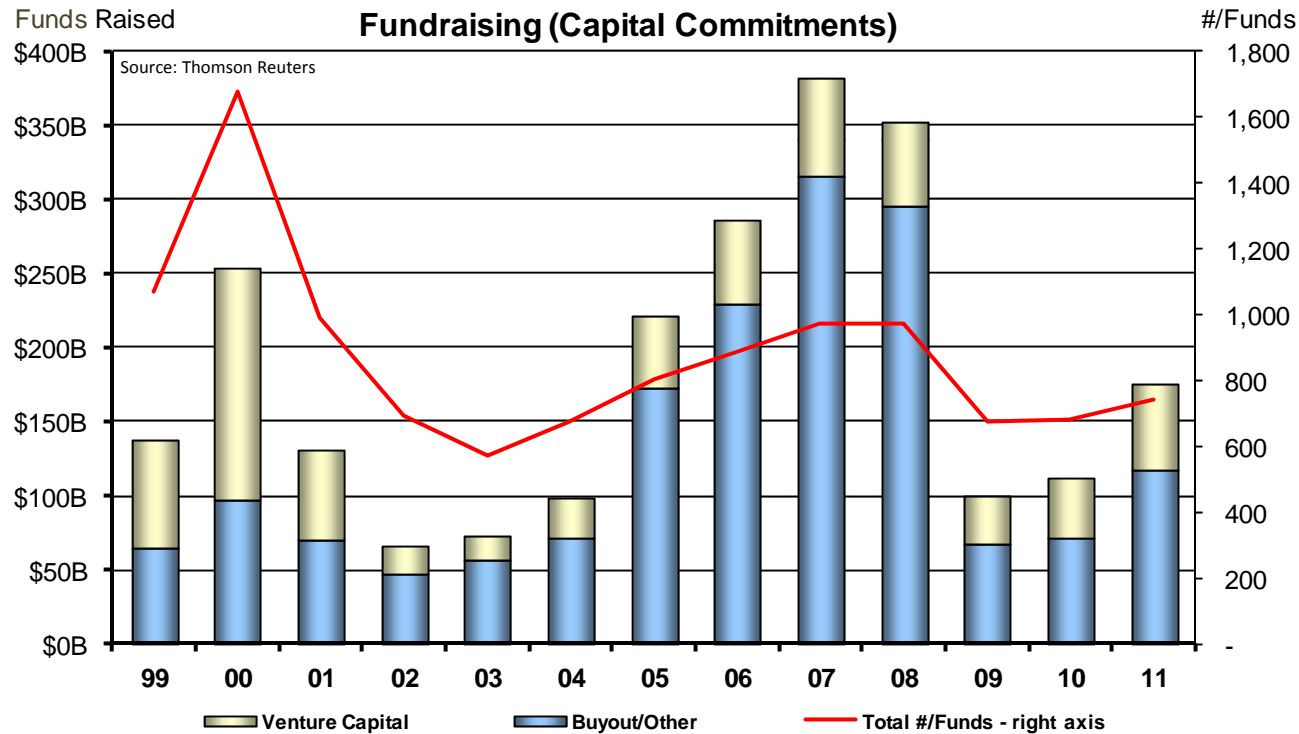
- Long-term diversification is important.
- The goal is to build a portfolio of quality partnerships reasonably diversified by strategy, industry, geography, investment stage, manager, and time.



Appendix B: Private Equity Market

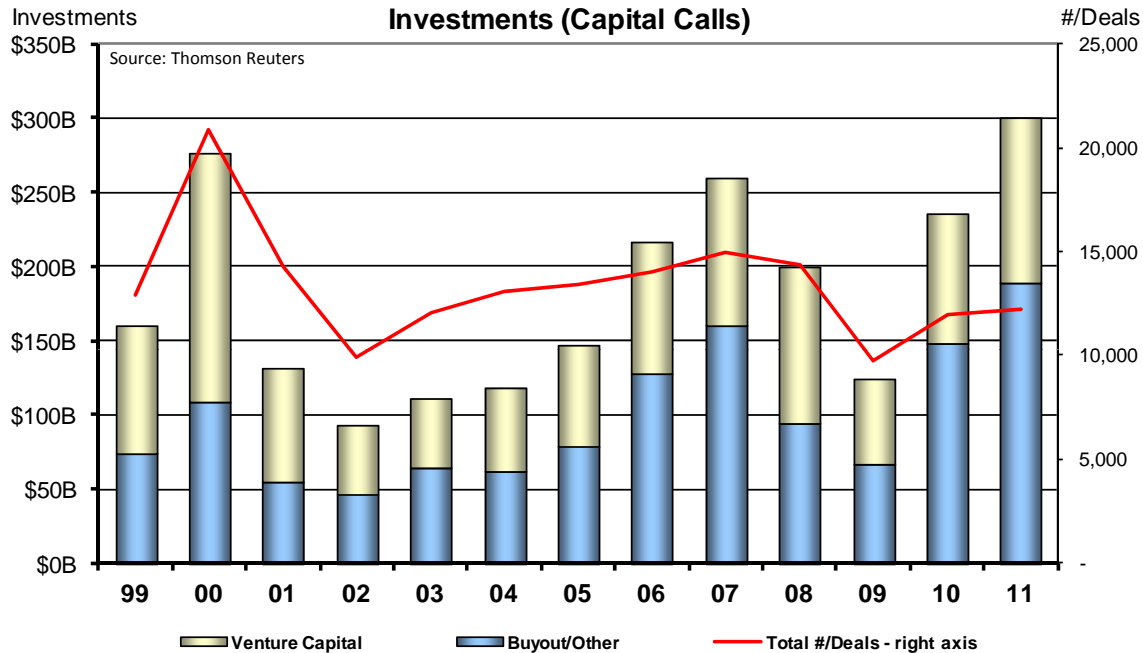
Fundraising

- Fundraising picked up in 2011 for both buyout and venture funds due to the high level of investment activity, increased distributions to limited partners and improving performance.

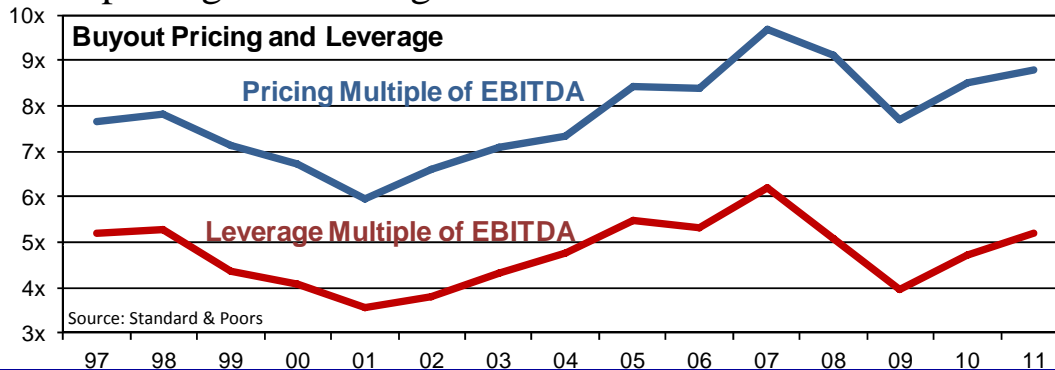


Investing

- Investment activity increased for both buyout and venture funds as deal pricing was at market clearing levels and credit was available.

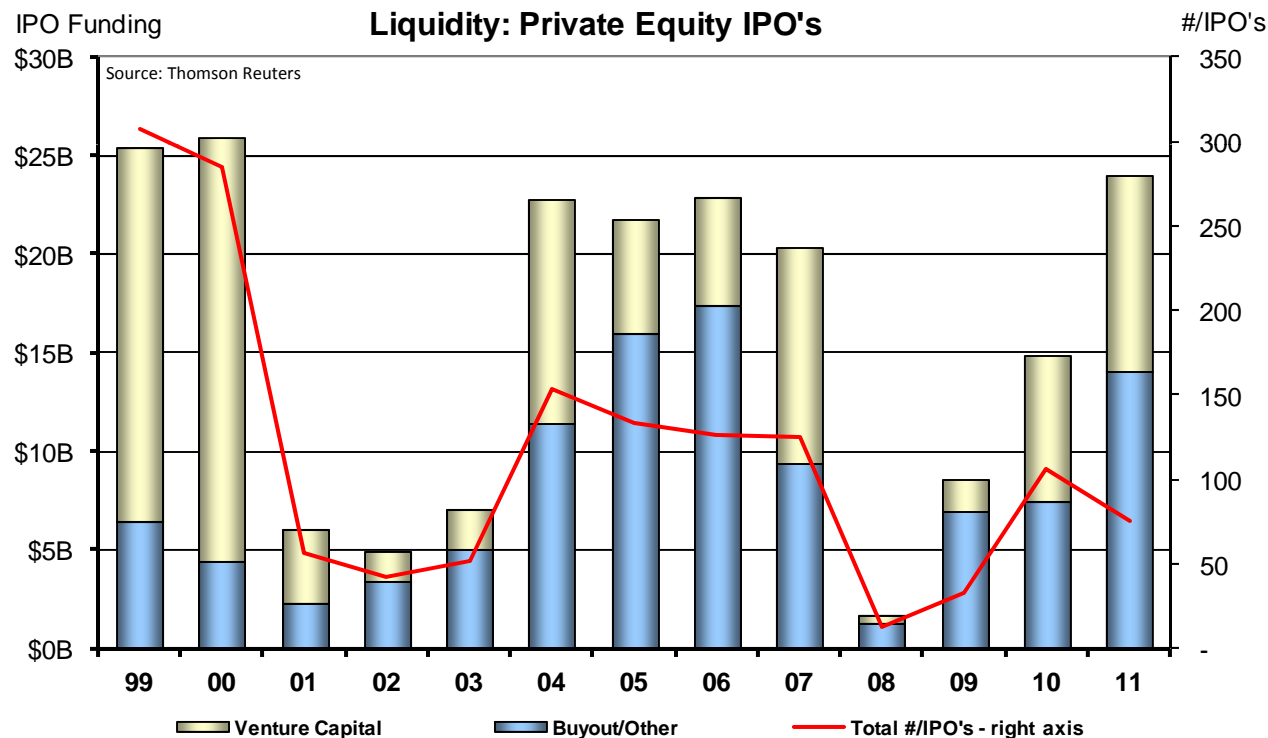


- Deal pricing and leverage increased.



Exit Opportunities

- Corporate acquisitions and secondary private equity sales were strong in 2011 and are the largest sources of liquidity for private equity sponsors.
- The IPO market was volatile in 2011, but provided for strong exits overall with a good mix between venture capital and buyout sponsors.



ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Annual Tactical Plan for Private Equity ACTION: X
Resolution 2012-04
DATE: April 19, 2012 INFORMATION: _____

BACKGROUND:

The Alaska Retirement Management Board's (ARMB) "Private Equity Partnerships Portfolio Policies and Procedures" calls for the preparation and adoption of an "Annual Tactical Plan" (Plan). The Plan reviews the current status of the portfolio, historical and prospective market conditions, and the annual investment strategy designed to further the ARMB's goals and objectives for the private equity program.

STATUS:

The Plan consists of an overview and summary prepared by staff with integrated tactical plans prepared by the ARMB's private equity investment managers. Staff's overview and summary of the ARMB's consolidated private equity portfolio addresses the following:

- I. 2011 Investment Activity
- II. Funding Position
- III. Diversification
- IV. Market Conditions
- V. 2012 Tactical Plan

RECOMMENDATION:

That the Alaska Retirement Management Board adopt Resolution 2012-04 approving the 2012 Annual Tactical Plan.

Attachment: ARMB 2012 Annual Tactical Plan for Private Equity

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD

Relating to Private Equity Annual Tactical Plan
Resolution 2012-04

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in private equity assets for the State of Alaska Retirement and Benefits Plans; and

WHEREAS, the Board will establish, and on an annual basis review, an investment plan for private equity;

NOW THEREFORE, BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the 2012 Annual Tactical Plan for Private Equity which is attached hereto and made a part hereof.

DATED at Anchorage, Alaska this _____ day of April, 2012.

Chair

ATTEST:

Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

2012 ANNUAL TACTICAL PLAN FOR PRIVATE EQUITY

The Alaska Retirement Management Board's (ARMB) "Private Equity Partnerships Portfolio Policies and Procedures" calls for the preparation and adoption of an "Annual Tactical Plan" (Plan). The Plan reviews the current status of the portfolio, historical and prospective market conditions, and the annual investment strategy designed to further the ARMB's goals and objectives for the private equity program.

The Plan consists of an overview and summary prepared by staff with integrated tactical plans prepared by the ARMB's private equity investment managers. Staff's overview and summary of the ARMB's consolidated private equity portfolio addresses the following:

- I. 2011 Investment Activity
- II. Funding Position
- III. Diversification
- IV. Market Conditions
- V. 2012 Tactical Plan

OVERVIEW AND SUMMARY

Quality private equity portfolios have historically provided high long-term returns with lower correlation to bonds and public equities. The Alaska retirement systems started investing in private equity in 1998 to enhance returns and further diversify the portfolio. The ARMB makes direct partnership investments and employs investment managers (gatekeepers) who have discretion to make investments in private equity partnerships on the systems' behalf.

The initial gatekeeper, Abbott Capital Management, was hired in 1998 with an allocation of 3% of the Fund. In 2001, the allocation to private equity was increased to 6% and an additional gatekeeper, Pathway Capital Management, was hired. In 2005, the ARMB started making investments directly in private equity partnerships. The following year, the allocation to private equity was increased to the current level of 7%. In 2007, the ARMB delegated authority to the CIO to make additional direct investments in private equity partnerships. The asset allocation for private equity increased to 8% in 2011, but 7% remains the long term planning target.

The ARMB and its advisors have discretion to carefully select and invest in high quality partnerships while preserving reasonable diversification across strategy, industry, geography, and investment stage. Through 2011, the Alaska retirement systems have committed \$3.1 billion to private equity partnerships. This capital is typically drawn down over 5-7 year periods and 76% has been drawn through 2011. The invested value at the end of calendar year 2011 was \$1.5 billion, or 9.6% of the funds' asset allocation.

The private equity landscape has been dynamic since Alaska's initial investment in 1998. The collapse of the technology-related market of the late 1990's gave way to a period of slow rebuilding in the early 2000's. By 2005, private equity was again realizing high returns driven

largely by buyout-oriented investments. The market peak in 2007 was characterized by strong returns, but also by high prices and leverage. In 2008, the severe dislocation in the credit and capital markets slowed private equity activity and lowered returns. The capital market rebound in 2009 and 2010 benefited private equity portfolios, but has also reduced the buying opportunity that usually accompanies a recession. 2011 was a volatile year for the capital markets, but pockets of stability provided for a high level of private equity realizations and investments.

Throughout this dynamic period, the ARMB has assembled a strong and diversified portfolio of high quality partnerships using a disciplined investment approach. The portfolio has performed well when compared with the Thomson Reuters private equity universe. For the ten vintage years from 1998 through 2007, the ARMB portfolio was in the top quartile for six years and the second quartile for four years. Overall, taking into account investment pacing and the performance of each vintage year, the compound performance of the portfolio is in the top quartile for this ten year period.

The internal rate of return (IRR) for the portfolio was 8.4% from inception through 2011. The ARMB's private equity return compares favorably with public market equity investments. A public market equivalent return analysis treats the ARMB's private equity cash flows as if they had been used to buy or sell shares of a public market index. The 8.4% IRR for the ARMB private equity portfolio compares well with public market equivalent returns of 2.4% for the S&P 500 and 2.8% for the Russell 3000. The ARMB's long term benchmark for private equity is a premium to the Russell 3000 public market index of 350 basis points and the actual outperformance has been 560 basis points. The time-weighted return for the ARMB's private equity portfolio for calendar year 2011 is 12.9%.

Private equity remains exposed to the ongoing and potentially fragile global economic recovery, but has recovered meaningfully from the turmoil of 2008 and 2009. Over the past year, largely receptive capital markets have provided liquidity and investment opportunities to private equity firms. The fundraising pace has also picked up as limited partners receive an increase in capital distributions and some general partners finish investing capital from 2005-2007 funds.

For 2012, staff is recommending an allocation of \$340 million in new commitments to be placed in quality, well diversified partnerships by Abbott, Pathway and the ARMB. This commitment pace should allow the ARMB private equity portfolio to return to its allocation of 7% over the ten year planning horizon.

I. 2011 INVESTMENT ACTIVITY

A. COMMITMENTS

The commitment target for 2011 was \$335 million and the ARMB closed on a combined total of \$187.0 million in 18 new commitments.

New Commitments for 2011 (\$millions)

Manager	Target	Actual	Number of Investments	Investment Strategy					
				Venture	%	Buyout	%	Special Situations	%
Abbott	\$135.0	\$108.6	12	\$31.8	29%	\$48.9	45%	\$27.9	26%
Pathway	\$125.0	\$53.4	5	\$0.0	0%	\$30.3	57%	\$23.1	43%
Direct	\$75.0	\$25.0	1	\$0.0	0%	\$0.0	0%	\$25.0	100%
Total	\$335.0	\$187.0	18	\$31.8	17%	\$79.2	42%	\$76.0	41%

The ARMB made 18 investments across 14 partnership groups and Abbott and Pathway invested with two of the same funds. The following table summarizes commitments made during 2011.

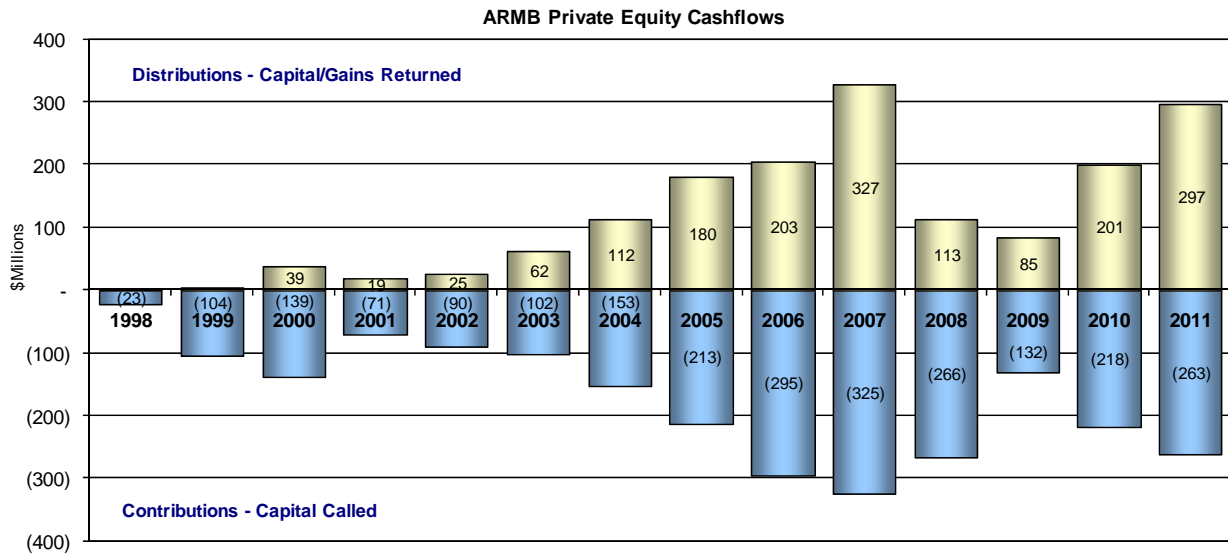
New Commitments for 2011 (\$millions)

Strategy	Partnership Fund	Description	Amount	% Total	Date	Advisor
Venture Capital	ABS Capital Partners VII	Late-stage growth companies in four sectors: business services and education; healthcare information systems; media and communications; and technology/software.	\$9.0	4.8%	10/27/11	Abbott
	Summit Partners Growth Equity Fund VIII	Private and profitable emerging growth companies in the technology, communications, healthcare, education, business services, financial and consumer products sectors.	\$20.0	10.7%	3/11/11	Abbott
	Summit Partners Venture Capital Fund III	Private and profitable emerging growth companies in the technology, communications, healthcare, education, business services, financial and consumer products sectors.	\$2.8	1.5%	3/11/11	Abbott
Venture Capital Subtotals			\$31.8	17.0%		
Buyouts	Green Equity Investors VI	Capital transactions of upper middle market businesses across the U.S., primarily investing in consumer/retail sectors.	\$20.0	10.7%	12/23/11	Abbott
	BC Capital IX	Equity and equity-related investments in buy-outs, buy-ins or similar investment opportunities, primarily with significant businesses or operations in Europe.	\$15.3	8.2%	2/28/11	Pathway
	Cinven Fifth Fund	Investments in leading companies in Western Europe.	\$18.9	10.1%	12/23/11	Abbott
	Harvest Partners VI	Investments in middle market firms including basic industries, retail/consumer, midstream energy and community banking.	\$10.0	5.3%	5/31/11	Abbott
	Quad-C VIII	Control positions through leveraged acquisitions and recapitalizations of middle-market companies.	\$15.0	8.0%	6/29/11	Pathway
	Buyout Subtotals			\$79.2	42.3%	
Special Situations	ABRY Partners VII	Invests in senior equity/mezzanine securities in broadly defined media, communications, and information sectors.	\$3.0	1.6%	4/19/11	Abbott
	Berkshire Fund VIII	Invests in mid-market companies in retail and consumer, business services, industrial manufacturing, transportation and communications.	\$6.5	3.5%	5/11/11	Abbott
	EIF United States Power Fund IV	Invests with a primary focus in the U.S. to create diversified portfolios of electric power-related assets. EIF will mitigate commodity risk by focusing on acquiring power assets with long-term off-take contracts.	\$7.0	3.7%	6/1/11	Abbott
	EnCap Energy Capital Fund VIII	Investments in the independent sector of the oil and gas industry in the U.S. and Canada.	\$3.5	1.9%	1/31/11	Abbott
	EnCap Energy Capital Fund VIII - Co-Investor	Investments in the independent sector of the oil and gas industry in the U.S. and Canada.	\$0.9	0.5%	12/8/11	Abbott
	EnCap Energy Capital Fund VIII - Co-Investor	Investments in the independent sector of the oil and gas industry in the U.S. and Canada.	\$3.9	2.1%	12/20/11	Pathway
	Energy Spectrum Partners VI	Invests in midstream energy assets in North America including build-ups in conventional areas as well as development projects surrounding unconventional reserves.	\$7.0	3.7%	3/31/11	Abbott
	Lexington Capital Partners VII	Invests in a diversified portfolio of secondary interests in established global buyout, mezzanine and venture capital funds.	\$25.0	13.4%	7/1/11	Direct
	Summit Partners Growth Equity Fund VIII	Private and profitable emerging growth companies in the technology, communications, healthcare, education, business services, financial and consumer products sectors.	\$15.0	8.0%	4/15/11	Pathway
Thoma Bravo X	Platform investments made in partnerships with experienced CEOs to build companies through acquisition and internal growth.	\$4.3	2.3%	12/30/11	Pathway	
Special Situations Subtotals			\$76.1	40.7%		
Abbott Subtotal			\$108.6	58.1%		
Pathway Subtotal			\$53.4	28.6%		
Direct Subtotal			\$25.0	13.4%		
TOTAL (\$MM)			\$187.0	100.0%		

B. INVESTMENT ACTIVITY

The ARMB's capital commitments are called by private equity partnerships as they make investments in underlying portfolio companies. Capital calls made during 2011 by the ARMB's private equity groups totaled \$262.6 million, 21% greater than 2010 investments. This reflects the improved investment environment in 2011. Capital calls by strategy were 36% buyout, 35% special situations, and 29% venture capital.

The ARMB received \$296.8 million in distributions from private equity partnerships in 2011 – more than 2009 and 2010 combined. The distributions were split 49%, 47% and 4% between Abbott, Pathway and Direct portfolios respectively.



C. STOCK DISTRIBUTIONS

During 2011, the ARMB received stock distributions from the Abbott portfolio valued at \$5.9 million. The ARMB had a 2.0% loss on distributed stock sold from the Abbott portfolio in 2011. The Pathway portfolio received stock distributions from two partnerships in 2011 valued at \$1.7 million. The stock sales resulted in a 4.8% gain on the distributed value. Overall, 2011 stock distributions to the ARMB portfolio were sold at close to distributed value.

II. FUNDING POSITION

A. FUNDING POSITION AS OF DECEMBER 31, 2011

The net asset value of the ARMB's private equity portfolio was \$1.5 billion as of 12/31/11, an increase of \$136 million from 2010. The private equity portfolio was 9.6% of plan assets at the end of 2011, 160 basis points over the 8% target. The long term asset allocation target for private equity remains 7% and the current over-allocation is expected to correct itself over the long term with the recommended commitment pacing.

Total Fund Market Value 12/31/11 (\$MM)	\$15,650.9
<u>Target Percent for Private Equity</u>	<u>8.0%</u>
Target Private Equity Allocation	\$1,252.1
Abbott Net Asset Value	\$694.9
Pathway Net Asset Value	699.4
Direct Net Asset Value	113.7
Total Private Equity Portfolio Value	\$1,508.0
Fund Percent 12/31/11	9.6%

Private equity is an illiquid, long-term asset class and the economic environment can significantly affect asset values and cash flows from year-to-year. For these reasons, private equity has a wide 5% band above and below the ARMB's allocation.

B. PROJECTED FUNDING POSITION 2016 – BASED ON FUNDING MODEL IN APPENDIX I

Projected Fund Market Value Year End 2016 (\$MM):	\$20,671.3
Projected Private Equity Asset Value:	\$1,437.2
Percent of Total Fund:	7.0%

C. FUNDING BY STRATEGY

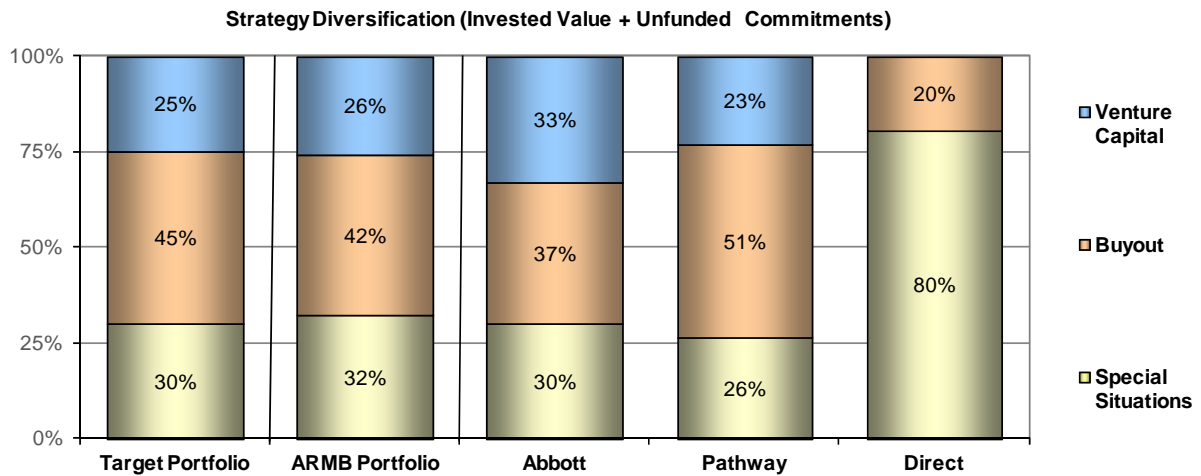
The private equity portfolio has long-term strategy diversification targets with a broad range between minimum and maximum exposure. The portfolio is close to the targets and well within acceptable strategy ranges.

Strategy	Target	Min	Max	Commitments	Invested Value	Unfunded + Invested Value
Venture Capital	25%	15%	40%	26.6%	28.0%	26.1%
Buyouts	45%	30%	60%	40.9%	42.0%	41.6%
Special Situations/Other	30%	20%	40%	32.5%	30.0%	32.3%
Total	100%			100.0%	100.0%	100.0%

III. DIVERSIFICATION

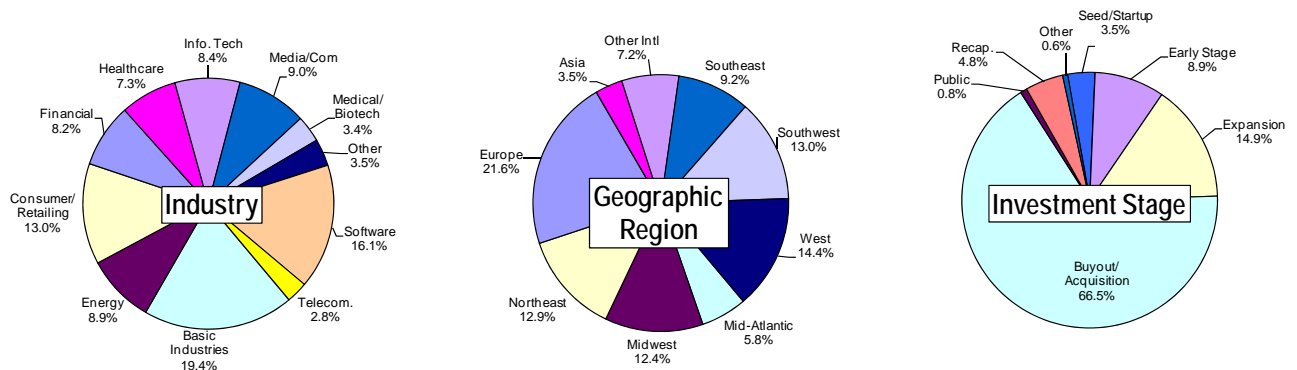
A. INVESTMENT STRATEGY BY PARTNERSHIP AS OF 12/31/2011

As of 12/31/11, the net asset value of the ARMB's private equity portfolio was \$1.5 billion, with Abbott representing 46%, Pathway 46%, and direct investments 8%. The portfolio is well diversified by investment strategy. Both the Abbott and Pathway portfolios are well diversified and the direct partnership portfolio will become more diversified as it matures. Staff expects that long term diversification will be maintained since managers are focused on making new commitments to a diverse set of high quality funds.



B. INDUSTRY, GEOGRAPHIC REGION, AND INVESTMENT STAGE AS OF 9/30/2011

The portfolio is well diversified by industry, with no more than 19.4% of the portfolio concentrated in any one industry. By geography, the portfolio is well diversified within the United States and has strong international exposure at 32.3% of the portfolio. By investment stage, buyout/acquisition is the highest at 66.5% due to the high level of activity by buyout and special situations funds.

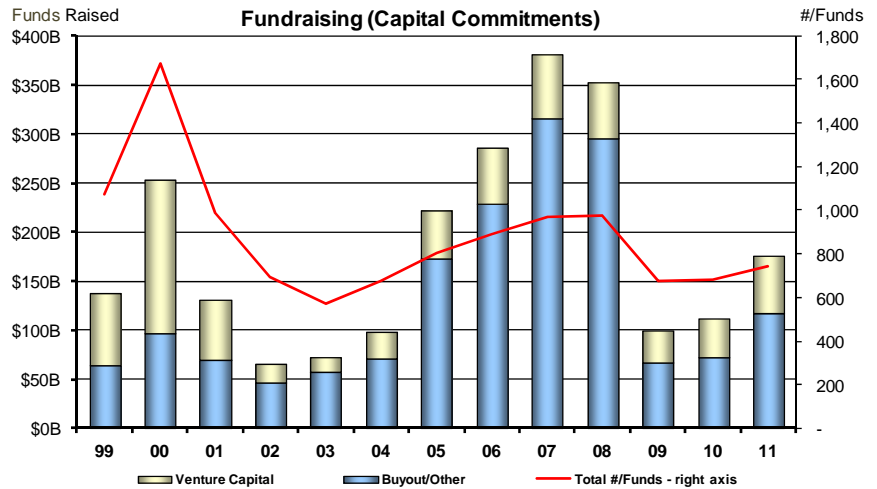


IV. MARKET CONDITIONS

A. 2011 SUMMARY

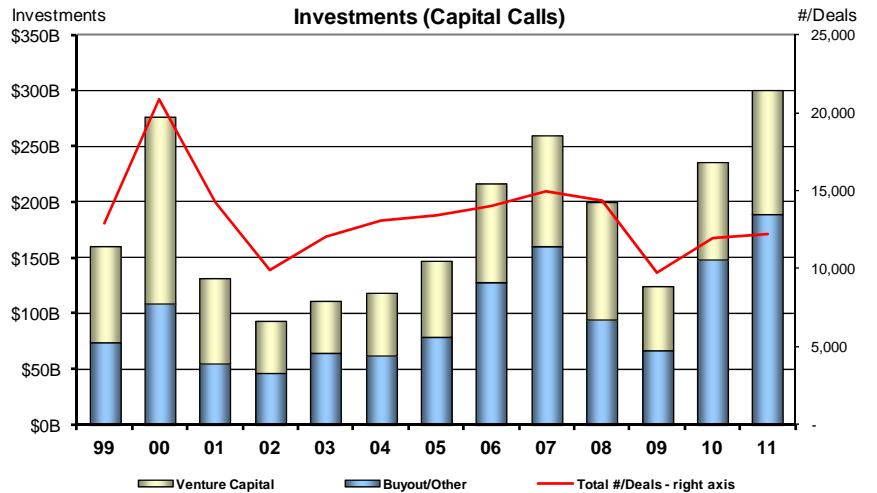
FUNDRAISING

- Fundraising increased from 2009 and 2010 for both buyout and venture funds due to the high level of investment activity, strong distributions, and general improvement in performance over the last two years.



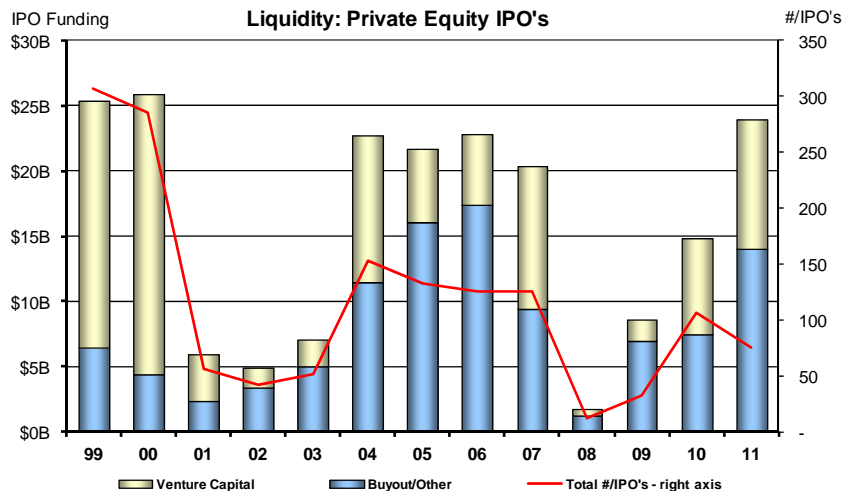
INVESTMENT ACTIVITY

- Investment activity was high since there is an overhang of uninvested capital from funds raised in 2006-2008, deal pricing was at market clearing levels, and credit was available.
- Pricing multiples for buyout deals averaged 8.8x EBITDA for 2011, slightly higher than the 8.5x of 2010. (S&P)
- Leverage multiples were 5.2x EBITDA, similar to 2005. In general, GP's continue to use a higher proportion of equity at 42% than in past years. (S&P)



EXIT OPPORTUNITIES

- Liquidity was mainly driven by M&A activity from cash-rich corporate acquirers seeking acquisitions to accelerate growth.
- Overall IPO issuance by private equity firms was strong in 2011. The activity was a significant increase from the prior three years and was close to all-time highs, but better balanced between buyout and venture backed firms.



Source: Thomson Reuters – Fundraising and Investment data as of 4/3/12
 – IPO data as of 12/31/2011
 – Excludes secondary and fund-of-funds

B. FORWARD OUTLOOK FOR 2012

Private equity is expected to continue to improve along with increased economic and capital market stability, but remains exposed to the potentially fragile global economic recovery.

- **Reasonable exit environment.** The exit environment for private equity is expected to be similar to 2011 – good overall, but potentially volatile with windows of opportunity. Corporations have healthy balance sheets and record levels of cash, which combined with a lower growth environment, should lead to continued acquisitions. Private acquisitions should also increase since there are many older private equity funds with a need to return capital to limited partners and younger funds with significant capital to invest. The initial public offering market is also expected to be a reasonable source of exits.
- **Strong investment pace.** The investment pace is expected to remain moderately strong since the economic environment is more stable, buyer and seller price expectations have converged, debt financing is generally available, and private equity firms have considerable uninvested capital. Deal pricing may continue to increase and could impact return expectations.
- **Measured fundraising recovery.** Fundraising should recover for tenured groups with decent track records since allocation issues for limited partners have lessened as private equity sponsors have returned capital and the investment pace has reduced the overhang of uninvested capital.

V. 2012 TACTICAL PLAN

Staff recommends a commitment target of \$340 million for 2012 with a gradual increase over the next five years as detailed in Appendix I.

A. TARGET COMMITMENTS FOR 2012

Manager	Target Commitments	Number	Size per Fund	Strategies
Abbott	\$140 million	8-14	\$10-\$30M	Venture capital, buyout, special situations, other
Pathway	\$125 million	8-14	\$10-\$30M	
Direct Investments	\$75 million	2-4	\$10-\$50M	
Total	\$340 million	18-32	\$10-\$50M	

The gatekeepers have the ability to commit up to 10% beyond their target allocation with staff approval to access additional opportunities. The chief investment officer also has the delegated authority to commit up to \$50 million in addition to the targeted amount for direct partnership investments.

B. TARGET STRATEGIES FOR 2012

The investment opportunities are expected to be balanced by strategy and by the ARMB's other diversification guidelines. **The absolute quality of the underlying manager continues to be more important than strict adherence to diversification characteristics.** The manager specific tactical plans for Abbott and Pathway follow in Appendix II and III.

APPENDIX I – PRIVATE EQUITY FUNDING PROJECTIONS

Private Equity Funding Schedule	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Beginning Fund Assets (\$MM)	15,709,955	15,650,932	16,576,171	17,571,910	18,602,052	19,635,823	20,671,267	21,713,911	22,757,723	23,811,267	24,877,778
Fund Net Growth Rate	-0.4%	5.9%	6.0%	5.9%	5.6%	5.3%	5.0%	4.8%	4.6%	4.5%	4.3%
Additions from Net Fund Growth	(59,024)	925,240	995,739	1,030,142	1,033,771	1,035,444	1,042,644	1,043,813	1,053,543	1,066,511	1,080,785
Ending Fund Assets	15,650,932	16,576,171	17,571,910	18,602,052	19,635,823	20,671,267	21,713,911	22,757,723	23,811,267	24,877,778	25,958,563
Target Private Equity %	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Private Equity Asset Value Target	1,095,565	1,160,332	1,230,034	1,302,144	1,374,508	1,446,989	1,519,974	1,593,041	1,666,789	1,741,444	1,817,099
Asset Value by Manager (\$MM)											
Abbott	694,954	669,882	647,289	630,739	625,534	634,605	628,749	627,411	676,138	719,444	755,055
Pathway	699,409	664,303	626,398	588,879	566,079	558,006	551,462	556,973	596,584	635,590	670,467
Direct Investments	113,685	134,228	157,922	185,065	215,009	244,602	285,201	324,450	355,600	380,600	398,250
Total Projected Asset Value	1,508,048	1,468,414	1,431,609	1,404,683	1,406,622	1,437,214	1,465,413	1,508,834	1,628,323	1,735,634	1,823,772
Private Equity % of Fund	9.6%	8.9%	8.1%	7.6%	7.2%	7.0%	6.7%	6.6%	6.8%	7.0%	7.0%
Annual Net Commitments (\$MM)											
Abbott	108,493	140,000	145,000	155,000	170,000	175,000	185,000	190,000	195,000	200,000	205,000
Pathway	63,909	125,000	125,000	135,000	150,000	155,000	165,000	170,000	175,000	180,000	185,000
Direct Investments	25,000	75,000	80,000	85,000	90,000	95,000	100,000	100,000	100,000	100,000	100,000
Total Commitments by Year	197,402	340,000	350,000	375,000	410,000	425,000	450,000	460,000	470,000	480,000	490,000

NOTES ON FUNDING PROJECTION MODEL

- The Fund projected net growth rates are based on the latest Actuarial Valuation Report (6/30/2010) projections adjusted for actual 12/31/11 Fund values.
- Investment commitment drawdowns are modeled over a seven-year period.
- Return of capital is modeled over a twelve-year period, with less than 5% of the distributions occurring during the first three years of a partnership.
- The beginning market value includes unrealized capital gains or losses to date. Additional unrealized gains or losses are not modeled due to inherent volatility.
- Commitments are modeled at a pace to achieve the ARMB's long term private equity allocation and preserve reasonable vintage year time diversification.

Abbott Capital Management Annual Tactical Plan

I. 2011 INVESTMENT ACTIVITY

Primary Activity

In 2011, Abbott closed on 12 primary commitments totaling \$108.6 million on ARMB’s behalf as listed below:

Primary Fund Commitments: 2011		
Fund	Strategy	Commitment
ABS Capital Partners VII	VC & GE – Later-stage	\$9.0 million
Summit Partners Growth Equity Fund VIII	VC & GE – Later-stage	20.0 million
Summit Partners Venture Capital Fund III	VC & GE – Later-stage	2.8 million*
Cinven Fifth Fund	Buyouts – Large	18.9 million**
Green Equity Investors VI	Buyouts – Medium	20.0 million
Harvest Partners VI	Buyouts – Medium	10.0 million
ABRY Partners VII	Special Situations – Industry Focus	3.0 million
Berkshire Fund VIII	Special Situations – Hybrid	6.5 million
EIF United States Power Fund IV	Special Situations – Industry Focus	7.0 million
EnCap Energy Capital Fund VIII	Special Situations – Industry Focus	3.5 million
EnCap Energy Capital Fund VIII Co-Investors	Special Situations – Industry Focus	0.9 million
Energy Spectrum Partners VI	Special Situations – Industry Focus	7.0 million
		\$108.6 million

* The total commitment to this fund is \$9.5 million of which \$2.8 million had closed as of 12/31/2011.

** Commitments were made in Euros. Commitments with respect to Partnerships denominated in non-U.S. currency reflect the amount funded (in U.S. dollars) plus the unfunded portion of the foreign-denominated commitment amount converted to U.S. dollars at the relevant December 31, 2011 exchange rates.

Secondary Activity

The secondary market was extremely active during 2011 reaching an all-time record of \$25 billion in transactions. This marked the second consecutive year where total secondary transaction volume was greater than \$20 billion. According to Cogent Partners’ January 2012 Secondary Pricing Trends & Analysis, pricing for buyout funds was relatively strong with average high first round bids of 87.0% of NAV and 85.9% of NAV during the first half and second half of 2011, respectively. Given the higher inherent risk within venture portfolios, the average high first round bid for venture funds in 2011 was 70.6% of NAV. The transaction activity in 2011 was driven to new peaks as buyer and seller expectations converged, and markets and the economy showed signs of improvement for most of the year. Secondary firms flush with capital from prior years of fundraising were active in deploying capital, while sellers took advantage of normalized valuations to rebalance their portfolios or divest assets for regulatory reasons. The market volatility in the third quarter slowed transactions somewhat, but overall volume in the second half of the year was a still healthy \$11 billion, compared to \$14 billion in the first half of 2011. Expectations for 2012 are for transaction activity to continue at a high level provided that the macroeconomic environment remains stable. Secondary supply will likely build from pensions and other institutional investors that continue to consolidate capital to a subset of private equity managers as well as financial institutions that are faced with regulatory changes which restrict their ability to invest in the asset class. In 2011, Abbott committed to two secondary opportunities on behalf of ARMB: Advent International GPE V, which closed on January 31, 2012, and Oak XII, which closed at the end of the first quarter.

Secondary Fund Commitments: 2011			
Fund	Strategy	Original Commitment	Max. Cash Outlay*
Advent International GPE V-B**	Global Medium Buyout	\$3.2 million	\$2.5 million
Oak Investment Partners XII	VC – Multi-Stage	\$5.0 million	\$3.2 million
		\$8.2 million	\$5.7 million

* Max. Cash Outlay = purchase price + unfunded commitments at the time of purchase.

** Commitments were made in Euros. The amount reflected above reflects the amount funded (in U.S. dollars) plus the unfunded portion of the foreign-denominated commitment amount converted to U.S. dollars at the relevant January 31, 2012 exchange rate.

Review and Analysis of ARMB's Program Activity

From the inception of ARMB's private equity program in 1998 through December 31, 2011, Abbott has committed \$1.64 billion to 142 private equity funds through primary commitments across the three broad categories of diversification (venture capital and growth equity, buyouts and special situations). ARMB's average commitment amount to these partnerships is approximately \$11.5 million. Two of these partnerships, Alta Communications VII and M/C Venture Partners IV, were fully liquidated in 2011. ARMB has also purchased 13 secondary commitments to 12 funds totaling \$22.3 million in commitments and \$11.1 million in max cash outlay. As of December 31, 2011, ARMB has cumulatively made 155 partnership investments representing \$1.66 billion in commitments.

Abbott believes that ARMB's portfolio can achieve the year-end 2016 Net Asset Value Target of \$634.6 million through continued deployment of capital over the next five tactical plan periods. The year-end 2011 Net Asset Value (including distributed stock pending sale or settlement) of \$696.5 million is approximately \$61.9 million above the 2016 target. As evidenced in prior years, investment activity combined with valuation changes may cause the portfolio to be somewhat over or under its target allocation depending on the economic cycle. However, provided that the portfolio experiences a consistent level of commitments and distributions, ARMB's private equity funding projections suggests that the Net Asset Value will remain near its targeted level as the portfolio matures.

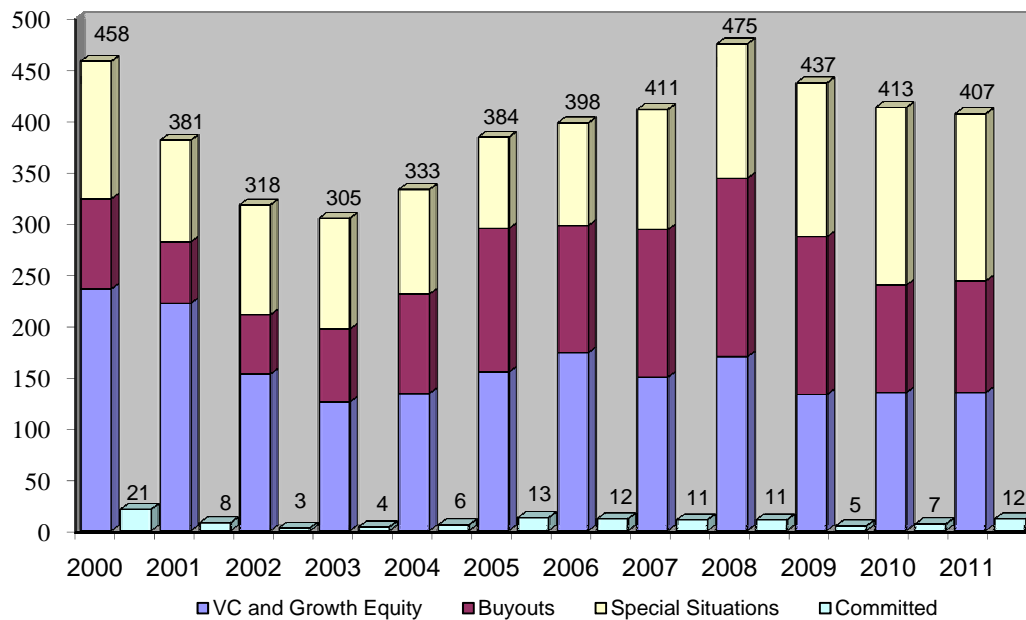
Portfolio Performance

At December 31, 2011, the estimated pooled net IRR on ARMB's portfolio since inception was 8.4%, an increase of approximately 64 basis points from year-end 2010¹. Although private equity is an asset class that should be measured over the long term, ARMB's one-year return on the portfolio was 18.2%.

¹ Pooled net IRR was calculated by Abbott using the fair values of the partnership investments based on the last available report provided by the general partners or managing entities of the ARMB partnership investments at December 31, 2011, adjusted by Abbott to reflect cash flow activity between the date of that report and December 31, 2011, and net monthly cash flows between ARMB and the partnership investments. Pooled net IRR is net of underlying partnership investment management fees, expenses and carried interest and net of gains and losses realized upon the sale of distributed stock, but does not take into account advisory fees paid by ARMB to Abbott.

Deal Flow

Abbott reviewed 407 primary fund opportunities across all categories in 2011. Abbott committed to 12 of these funds on behalf of ARMB, which represents a meaningful increase in activity compared to the prior two years.



II. PROSPECTIVE INVESTMENTS

A. Investment Objectives:

Strategy	Estimated 12/31/11 NAV	Year-End 2016 Target	Difference	2012 Emphasis
Venture Capital and Growth Equity				
Equity	\$239,167,439	\$158,651,250	(\$80,516,189)	
Early	99,840,649	31,730,250	(\$68,110,399)	
Multi	93,933,516	63,460,500	(\$30,473,016)	
Late	45,393,274	63,460,500	\$18,067,226	
Buyouts	263,262,771	253,842,000	(\$9,420,771)	
Restructuring	4,521,136	15,865,125	\$11,343,989	
Special Situations	175,493,390	190,381,500	\$14,888,110	
Subordinated Debt	7,475,462	15,865,125	\$8,389,663	
Secondary Interests	6,400,392	N/A	N/A	
Distributed Stock Currently Held	175,138	N/A	N/A	
Total	\$696,495,728	\$634,605,000	N/A	

Venture Capital and Growth Equity

ARMB has accumulated a well-diversified portfolio of 60 venture and growth equity funds (not including 13 secondary commitments to existing funds). Abbott will continue to identify opportunities to build on ARMB's existing relationships with top-performing groups while selectively pursuing relationships with high-quality groups not currently in the ARMB portfolio.

Fundraising for U.S. venture capital and growth equity firms rebounded in 2011, reaching its highest total in three years. For the year, 207 funds closed on \$20.5 billion, which was approximately 35% more than the amount raised in 2010 and 22% more than the amount raised in 2009. The pace of investments also increased

as venture investors gained confidence in the markets and witnessed a few signature exits. In January 2012, the NVCA reported that U.S. venture capitalists invested \$28.4 billion in 3,673 companies in 2011, representing increases of 22% and 4%, respectively, over 2010.

IPOs continued to generate liquidity for venture capital investors in 2011. According to Thomson Reuters, 52 venture-backed businesses raised approximately \$9.9 billion through initial public offerings. While the market instability in the third quarter effectively closed the IPO window for a short period of time, companies were able to go public again in November and December as the markets began to stabilize. Overall, IPOs in 2011 raised more than the \$7.0 billion of offerings in 2010, though through fewer company listings (72 in 2010). The resumption of exit activity through public markets in Q4 enabled some liquidity to flow back to investors, and raises hopes that the IPO window will remain open in 2012. Venture investors also found liquidity through an improving transaction environment. There were 429 venture-backed M&A deals in 2011 which was similar to the 436 transactions in 2010. However, the total disclosed transaction value increased from \$18.8 billion in 2010 to \$23.0 billion in 2011, which implies a stabilized if not more robust market.

Buyouts and Special Situations

ARMB has a well-diversified portfolio of 77 buyout and special situation partnerships. Abbott will continue to develop relationships with strong performing groups and selectively seek high-quality firms that can augment the ARMB portfolio and add incremental diversification. We anticipate a strong pipeline of buyout and special situations groups in 2012 as many general partners finish investing prior funds, and attempt to rebuild capital bases that were last raised in 2007 and 2008. As mentioned in prior correspondence, Abbott has recently combined the buyout and special situations partnerships into one reporting category. Note, however, that we will continue to identify each partnership as either a buyout or special situation fund within our internal systems to ensure that we effectively monitor portfolio diversification.

Continuing the strong recovery that began in 2010, private equity investors and their underlying portfolio companies had ample access to credit markets, which bolstered investment and refinancing activity. For the full year, buyout and special situations funds, globally, invested approximately 25% more than in the prior year. Global high yield volume in the first half of the year was the highest volume for any first half since records began in 1980. The second half of 2011, however, witnessed tremendous market volatility as sovereign debt issues became preminent concerns. Financing markets were, in effect, closed for most of the third quarter and investment activity was sharply curtailed. As investors worked through the issues and potential ramifications, investment activity increased in the fourth quarter.

For the full year, 2011 marked a strong fundraising vintage relative to 2010. Domestic fundraising increased 31% while global fundraising rose 52%. While the overall year-over-year gains appear strong, the fundraising market was bifurcated as higher quality funds raised capital quickly while others struggled to attract limited partner interest. In the second half, capital flows (as measured by commitments) declined, though less severely than the pace of investments, as uncertainty tempered investors' confidence. Unlike investment activity, which is directly affected by financing options, fundraising is indirectly correlated to macroeconomic events, which mitigates the effects of temporary market volatility. However, should macro issues remain unresolved, fundraising will likely falter and also feel the full effects of a lack of confidence in the markets.

International

ARMB's Private Equity Partnerships Portfolio Policies and Procedures provide target ranges for the eligible investment strategies. Global/International is currently allocated a range of up to 35%. In 2011, ARMB made one new international commitment to Cinven Fifth Fund, a European large-market buyout fund. As of December 31, 2011, ARMB held 19 international partnership commitments (all of which are focused on Western Europe) of which 18 are buyout funds, and one is a mezzanine fund. It is anticipated that Abbott will identify two to three additional attractive international opportunities over the next 12 months, including potential commitments in the emerging markets.

B. Candidates Abbott is aware of and/or planning on pursuing:

Abbott will continue to review partnerships that meet the guidelines of ARMB's strategic portfolio structure across all three broad categories of diversification. We anticipate several top-tier venture capital and growth equity, buyout and special situations groups currently in ARMB's portfolio will return to the market to raise fresh capital in 2012. Abbott expects new quality partnership opportunities will also arise, which will

selectively be added to ARMB's portfolio mix. Whether a new or existing relationship, we will continue to apply our rigorous due diligence process to each opportunity.

Abbott will continue to focus on larger dollar commitments to top-tier private equity partnerships. It should be noted, however, that access to high-quality funds is frequently a significant barrier for limited partners, particularly those new to the asset class. As such, Abbott recommends that ARMB remain flexible with respect to commitment sizes, which will provide the portfolio the widest possible access to high-quality private equity partnerships. Subject to an acceptable pipeline of opportunities, Abbott will seek to prudently commit capital on ARMB's behalf at an average annual level of \$157 million over the next five years. We note, however, that the fundraising market is cyclical and no assurances can be made that the stated commitment goals will be attained in any given year.

III. DIVERSIFICATION – SEE STAFF SUMMARY

IV. MONITORING

A. Specific situations being monitored:

Abbott has made 155 commitments (primary and secondary) to 142 partnerships on behalf of ARMB as of December 31, 2011. Abbott actively monitors these funds on an ongoing basis.

Among the partnership groups in ARMB's portfolio, many have advisory or valuation committees. Abbott serves on a majority of these committees, which generally meet formally two to four times per year. Abbott also seeks to attend each annual meeting held for partnerships in the ARMB portfolio. Abbott regularly visits general partners in their offices as part of our ongoing due diligence, and general partners frequently visit Abbott to provide us with updates. Outside of formal meetings, Abbott speaks to general partners on a regular basis to deepen our understanding of the portfolio investments as well as the dynamics of the general partner groups. This process enables Abbott to make informed decisions regarding whether groups in the portfolio should be supported in the future. Abbott has periodic conference calls with ARMB staff to review and discuss current issues affecting the portfolio.

V. EXITING

A. Pending distributions or liquidations:

Following ARMB's sharply increased liquidity in 2010, distribution activity continued to improve in 2011 as the economy stabilized and debt and equity markets were accessible for most of the year. While the equity markets faced severe volatility in the second half of the year, markets appear to be steadying and the U.S. economy has not shown much impact from the market turbulence. Increased stability engenders optimism for continued positive activity for the upcoming year.

B. Any other relevant considerations relating to exiting ARMB's investments:

In 2011, ARMB received cash distributions of \$140.8 million compared to \$102.9 million received in 2010. During 2011, ARMB also received securities valued at \$5.9 million with a cost basis of \$3.9 million. Distributed stock liquidated in 2011 (including distributed stock held as of December 31, 2010 pending sale or settlement) was converted into net cash proceeds of \$5.9 million during 2011. In aggregate, ARMB ultimately received \$146.7 million in net cash proceeds² in 2011.

² Net of related brokerage commissions, fees and expenses and any gain or loss realized upon the sale of distributed stock.

VI. SUMMARY

Private equity activity was relatively robust in 2011 as both fundraising, investment pace and liquidity continued to rebound following the Great Recession. Supported by the improving industry dynamics, Abbott closed on 12 primary commitments on ARMB's behalf during the year totaling \$108.6 million. The ARMB portfolio enjoyed a 35% increase in net cash proceeds received in 2011, to \$146.7 million, which followed a 205% jump in net cash proceeds received in 2010. The healthy market environment helped nudge ARMB's estimated portfolio net IRR to 8.4% at December 31, 2011, an increase of 64 basis points versus the prior year. At 2011 year-end, the plan's estimated NAV of \$696.5 million was approximately \$61.9 million above the year-end 2016 NAV Target.

In 2012, Abbott will continue developing ARMB's strategic portfolio with a focus on committing larger dollar amounts to top-tier private equity partnerships, while retaining the flexibility to commit lesser amounts to certain opportunities should the situation warrant. As always, we will maintain our rigorous selection criteria with the goal of building a high-performing, diversified portfolio across all three board categories of private equity.

Pathway Capital Management Annual Tactical Plan

Pathway Portfolio Overview

From the inception of the Pathway/ARMB private equity program in 2002 through December 31, 2011, Pathway committed \$1.2 billion to 92 private equity partnerships across 47 managers on behalf of the Alaska Retirement Management Board (ARMB). Of the \$1.2 billion committed, \$942 million had been drawn and invested, and \$547 million had been received in distributions, as of year-end 2011. In the program's 10-year history to December 31, 2011, the portfolio has produced a total value of \$1.3 billion, which represents 135% of cumulative contributions, and has generated a since-inception net IRR of 12.1%.¹

The portfolio performed well in 2011, generating a gain of \$56.7 million and a return of 8.5% for the 1-year period ended December 31, 2011. Notably, all four of the portfolio's core strategies posted positive results during the year. Following the severe decline in the equity and real estate markets and the shutdown of the credit markets in 2008, the portfolio has posted positive returns in 10 of the past 11 quarters, generating \$239.5 million in gains and driving a 360-basis-point improvement in the portfolio's since-inception net IRR.

Both contribution and distribution activity increased significantly during 2011. ARMB contributed \$127.2 million during the year, which represents a 26% increase over the \$100.8 million contributed in 2010 and the second consecutive year of increased contributions. Driven by robust M&A exit activity, \$137.7 million in distributions was received during 2011, a 68% increase from the \$81.9 million received in 2010. Notably, the \$137.7 million received in 2011 represents the highest annual total received by the portfolio since the inception of the program and helped mark the first year that the program had a positive net cash flow. Looking forward, strong distributions are expected to continue since several of the portfolio's top holdings have recently held public offerings.

2011 Review

Commitments

Table 1 provides a summary of 2011 commitment activity by investment strategy compared with the 2011 Tactical Plan allocation targets. Pathway continued to maintain its rigorous due diligence process and selective investment criteria during 2011, reviewing 468 partnership opportunities before ultimately selecting just five to be included in the ARMB portfolio. As shown in the table, Pathway committed \$53.4 million on behalf of ARMB in 2011 and was within the target ranges for each investment strategy.

Pathway reviewed a large number of opportunities during the year but did not identify a sufficient number of opportunities that met its strict investment criteria. Rather than compromise its disciplined process and highly selective approach, Pathway elected not to commit the full allocation during the year. As such, commitment activity fell below the annual target of \$125 million.

1. NOTE: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this report, 76 of the portfolio's 89 active partnerships had provided year-end data.

Table 1. ARMB's 2011 Private Equity Activity vs. 2011 Annual Tactical Plan

Investment Strategy	2011 Plan		2011 Actual	
	No. of Partnerships	Total Commitments (\$MM)	No. of Partnerships	Total Commitments (\$MM)
Buyouts	Up to 6	Up to 85	2	30.3
Venture Capital	Up to 6	Up to 70	–	–
Special Situations	Up to 3	Up to 30	3	23.1
Restructuring	Up to 3	Up to 25	–	–
Subordinated Debt	–	–	–	–
Total	Up to 14	Up to 125	5	53.4

NOTE: Amounts may not foot due to rounding.

ARMB committed \$30.3 million to two buyout-focused partnerships during the year (BC Capital IX and Quad-C VIII), both of which represent new manager relationships. In terms of geographic segmentation, BC Capital IX will focus on opportunities in Europe and Quad-C VIII will focus on opportunities in the United States. Also during the year, ARMB committed \$23.1 million to three special situation funds, two of which (Summit GE VIII and Thoma Bravo X) represent new manager relationships. Summit GE VIII (\$15.0 million commitment) will pursue investments in profitable, emerging growth companies in the technology, healthcare, financial services, and consumer products sectors. Thoma Bravo X (\$4.3 million commitment) will make platform investments primarily in companies within the software and services sectors. The third special situation fund, EnCap VIII Coinvest (\$3.9 million commitment), will co-invest with EnCap VIII, another partnership in the ARMB portfolio, in investments in the oil and gas industry. ARMB did not make any new investments in restructuring/distressed partnerships or venture capital partnerships during the year, which was reflective of the dearth of high-quality opportunities in these investment strategies during the year.

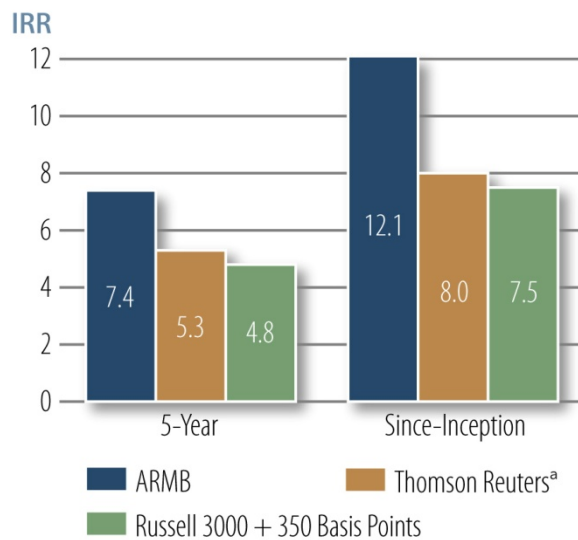
Performance

For the 1-year period ended December 31, 2011, the ARMB portfolio generated a net gain of \$56.7 million and a return of 8.5%. The portfolio posted positive performance in three of the four quarters during the year, and gains were relatively broad-based, coming from all strategies, multiple vintages, and numerous partnerships. In total, 62 of the portfolio's 89 active partnerships had generated 1-year gains as of December 31, 2011, of which 26 had generated gains in excess of \$1.0 million.

The portfolio's buyout partnerships accounted for the majority of gains by strategy, collectively increasing in value by \$25.7 million and generating a return of 7.5% during the year ended December 31, 2011. In addition, the portfolio's venture capital partnerships performed particularly well in 2011, generating a 1-year return of 13.9%, which represents the highest 1-year return of all strategies in the portfolio. On a vintage year basis, eight of the portfolio's 11 vintage years posted positive performance, and the 2005–2007 vintage years accounted for \$45.6 million, or 80.4%, of the portfolio's total 1-year gains.

The portfolio continues to post strong long-term performance relative to public and private equity benchmarks. As shown in figure 1, the portfolio outperforms its public benchmark (Russell 3000 plus 350 basis points) on a dollar-weighted basis for both the 5-year and since-inception time horizons, exceeding the benchmark by 460 basis points for the since-inception horizon. The portfolio also outperforms the Thomson Reuters pooled horizon returns for 2001- through 2011-vintage private equity funds over both time horizons, exceeding the benchmark by 410 basis points for the since-inception horizon. At the partnership level, the portfolio's mature vintages (2001–2006) continued to perform well: five of the six generations exceeded their upper quartile vintage year benchmarks, and all six generations exceeded their median benchmarks, as of December 31, 2011.²

Figure 1. ARMB Performance vs. Private and Public Market Benchmarks At December 31, 2011

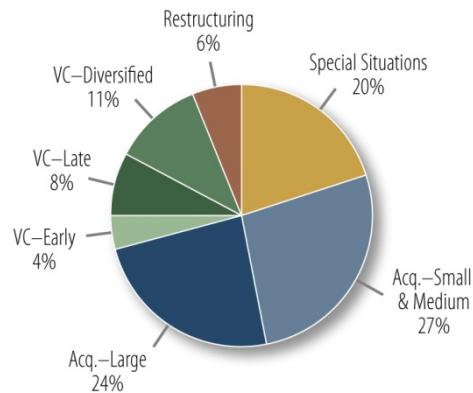


^aThomson Reuters All Regions All Private Equity pooled horizon returns for 2001- through 2011-vintage funds as of September 30, 2011, the most-recent data available.

Diversification

Pathway believes that diversification across various metrics, including time, investment strategy, industry, and geographic region, can reduce portfolio risk. ARMB’s portfolio has been constructed with these metrics in mind and is currently well diversified: the portfolio consists of 92 partnerships across 47 managers and of more than 1,400 current underlying portfolio companies, as of December 31, 2011. Figure 2 illustrates the current diversification of ARMB’s private equity portfolio by investment strategy at the partnership level, based on partnership market value plus unfunded commitments through December 31, 2011.

Figure 2. Investment Strategy Diversification



NOTE: Based on partnership market values and unfunded partnership commitments through December 31, 2011.

2. The portfolio’s vintage year performance as of December 31, 2011, compared with Thomson Reuters All Regions All Private Equity benchmarks as of September 30, 2011 (the most-recent data available).

Buyouts & Special Situations

As intended, the largest portion of the ARMB portfolio has been invested in acquisition partnerships, which currently represent 51% of total exposure (partnership market value plus unfunded commitments). This exposure falls within the recommended target range of 30%–60%. The acquisitions strategy is further diversified by industry and regional focus, as well as by transaction types and sizes. The portfolio currently consists of commitments to 22 partnerships that target small- and mid-cap companies, and to 19 partnerships that target large-cap companies (i.e., having enterprise values over \$1 billion). Thirteen of the acquisition partnerships focus primarily on investments across various countries within Western Europe. Pathway committed \$30.3 million to two acquisition funds during the year—€1.3 million (\$15.3 million) to BC Capital IX and \$15.0 million to Quad-C VIII—both of which represent new manager relationships for the portfolio.

ARMB's special situation investments currently represent 20% of the total portfolio and are also within Pathway's recommended target range. The special situations strategy consists of 20 partnerships of varying sizes and with different areas of focus: 11 that utilize industry-focused approaches, seven that implement multiple investment strategies, and two that specialize in turnaround opportunities. During the year, Pathway made commitments to three special situation partnerships: \$15.0 million to Summit GE VIII (a new manager relationship), \$4.3 million to Thoma Bravo X (a new manager relationship), and \$3.9 million to EnCap VIII Coinvest (an existing manager relationship).

The portfolio's buyout and special situation partnerships generated a combined return of 8.1% during the year ended December 31, 2011, and collectively accounted for \$34.3 million of the portfolio's \$56.7 million in 1-year gains. The portfolio's buyout and special situation partnerships also showed a significant increase in distribution activity during 2011, returning \$71.6 million and \$29.4 million, respectively, which represents a 53% and 159% increase, respectively, from their 2010 distribution levels. Notably, in 2011, the portfolio's special situation partnerships distributed their highest annual total in the history of the program. Over longer time horizons, ARMB's buyout and special situation partnerships continue to perform well, collectively generating a 5-year return of 6.6% and a since-inception return of 11.8%.

Venture Capital

As of December 31, 2011, the ARMB portfolio included 22 venture capital partnerships that utilize a variety of early-, late-, and multistage investment strategies. These partnerships represented 23% of the portfolio's total exposure, which is comfortably within its recommended target range of 15%–40%. While Pathway continued to focus on selectively adding new manager relationships and increasing commitments to existing managers during the year, no opportunities were identified that met its selective investment criteria.

ARMB's venture capital partnerships posted the strongest 1-year performance (on a returns basis) of any of the investment strategies in the portfolio, generating a 13.9% return over the year ended December 31, 2011. This performance was driven by the portfolio's eight late-stage-focused partnerships, which accounted for 51% of the \$20.3 million in gains generated by the strategy over the period and which posted a 1-year return of 20.2%. Distribution activity was also strong during the year: a record \$21.4 million was received, which represents a 33% increase from the strategy's previous record amount of \$16.1 million received in 2010. The portfolio's venture capital partnerships have generated 5-year and since-inception returns of 9.7% and 10.0%, respectively.

Restructuring

As of December 31, 2011, the portfolio contained nine distressed debt partnerships, which accounted for 6% of the total portfolio—the same as in 2010. These partnerships target debt or other securities of distressed or troubled companies and are generally less correlated to traditional buyout and venture capital investments. Pathway did not identify any restructuring/distressed partnerships that met its investment criteria during 2011, and thus did not add any new partnerships within the strategy during the year.

The portfolio's distressed debt partnerships generated a 1-year return of 3.7% in 2011 (in 2010, these partnerships generated a 1-year return of 17.6%). The strategy's somewhat muted performance during the year is attributable to the passing of the distressed cycle related to the financial crisis and the continued stabilization of the economic environment. Although performance within this strategy compared less favorably with that of recent years, distributions were strong in 2011; the portfolio's distressed debt managers were able to take advantage of stabilizing credit markets and began liquidating fully priced positions. A total of \$15.2 million was received during 2011, which represents a 97% increase from 2010 and the strategy's highest annual distribution total since the inception of the program. The restructuring strategy continues to perform well over the long term, generating a since-inception net IRR of 22.9%, as of December 31, 2011.

International

Pathway has diversified ARMB's portfolio by geographic region by committing to partnerships that target a variety of regions outside the United States. As of December 31, 2011, the ARMB international portfolio comprised 14 partnerships (13 acquisition funds and one special situation fund) across seven managers focused on Europe. The portfolio's international exposure represented 13% of total exposure (at December 31, 2011) and was within the portfolio's long-term target allocation range of 0%–35%. Pathway added one international partnership to the portfolio during 2011, which also represented a new manager relationship: BC Capital IX (€1.3 million commitment).

Collectively, the portfolio's 14 international-focused funds performed well during the year ended December 31, 2011, posting a 7.1% return (including currency exchange-rate fluctuations). These partnerships produced a since-inception return of 8.2%, as of December 31, 2011.

2012 Investment Plan

In 2012, Pathway will continue to further expand and diversify ARMB's portfolio, adding commitments to both existing managers and new managers that meet Pathway's strict investment criteria and that complement the existing portfolio. Pathway's objective for 2012 is to target commitments of \$125 million in up to 14 partnerships, subject to the availability of high-quality investment opportunities. Pathway expects to commit between \$10 million and \$20 million per partnership. Consistent with its approach to date, Pathway will focus primarily on newly formed limited partnerships but will also selectively consider secondary partnership interests. ARMB's 2012 Tactical Plan is summarized in table 2.

Table 2. ARMB's 2012 Annual Tactical Plan

By Strategy

Investment Strategy	No. of Partnerships	Total Commitments (\$MM)
Buyouts	Up to 6	Up to 85
Venture Capital	Up to 6	Up to 70
Special Situations	Up to 3	Up to 30
Restructuring	Up to 3	Up to 30
Subordinated Debt	None	None
Total	Up to 14	Up to 125

When selecting partnerships for the ARMB portfolio, Pathway will continue to follow an opportunistic investment philosophy while maintaining its disciplined investment process and rigorous selection criteria to ensure that each partnership is of the highest quality. Because Pathway seeks only the highest-quality investment opportunities in the market, the amount committed to any one strategy may vary from year to year depending on what opportunities are perceived to be the most attractive at the time. Under no

circumstance will Pathway commit ARMB's capital to a partnership that does not meet its high-quality standards.

2012 Plan to Date

Through March 31, 2012, Pathway has committed \$20 million on behalf of ARMB to two partnerships: \$10 million to Canaan IX (an early-stage venture capital fund focused on the information technology and healthcare industries) and \$10 million to Centerbridge SCP II (a distressed debt fund focused on non-control investments). These commitments, which closed in January and March, respectively, both represent existing manager relationships for ARMB. Pathway anticipates that the flow of new opportunities will be robust for the remainder of 2012. Currently, Pathway has identified a number of potential commitments to funds, including seven funds being raised by existing general partners and several funds from new general partners. It is too early, however, to determine whether these funds will be included in ARMB's portfolio in 2012; some may not meet Pathway's rigorous investment criteria and others may postpone fundraising until the following year, depending on market conditions and investment pace.

Monitoring

Pathway's goals in monitoring ARMB's private equity portfolio are (1) to protect the portfolio's investments by reducing the occurrence of negative events within the portfolio; (2) to take full advantage of the rights offered to ARMB through its limited partnership agreements; and (3) to enhance the portfolio's returns. In 2012, Pathway will continue to fulfill its role as an active investor by maintaining an active dialogue with general partners, attending regular meetings, and representing ARMB on advisory boards. Pathway will continue to monitor the investment pace of the portfolio and the partnerships' adherence to their stated investment strategies to ensure that the investments stay within the guidelines set forth by ARMB. Pathway will also continue to closely monitor the compliance of ARMB's partnerships with regard to ASC 820 (formerly SFAS 157) accounting standards.

Pathway will keep ARMB informed of developments in the portfolio by maintaining regular contact with ARMB staff and by providing quarterly reports on the performance and status of ARMB's private equity investments, as well as through Pathway's Online Management System (POMS™), which provides a database of ARMB investments that is regularly updated with cash flows, market values, portfolio company valuations, and performance measurements.

Exiting

Distribution activity was particularly strong during 2011: the portfolio's partnerships distributed \$137.7 million, which represents a 68% increase from the prior year and the highest level of annual distributions received since the portfolio's inception. Notably, this activity was strong throughout the year and was spread across all strategies as a result of general partners taking advantage of strong exit markets in liquidating mature positions. Additionally, three of the portfolio's top four quarterly distribution totals since inception occurred in 2011. All strategies, with the exception of acquisitions, posted their highest annual distribution totals during the year.

Summary

Over the past 10 years, Pathway has developed a strong foundation for its portion of ARMB's private equity portfolio. In order to continue the development of the portfolio, Pathway recommends that ARMB adopt the following 2012 Tactical Plan:

- Target commitments of \$125 million during the 2012 calendar year, subject to the availability of high-quality investment opportunities.
- Invest up to \$20 million per partnership in up to 14 partnerships during 2012, in opportunities from both existing managers and new managers. Investments will typically range between \$10 million and \$20 million; however, Pathway may invest smaller amounts in highly sought-after, oversubscribed funds if there is a strong likelihood that ARMB will be able to commit a larger amount in these general partners' next funds.
- Continue to adhere to the long-term target allocation ranges by strategy (buyouts, 30%–60%; venture capital, 15%–40%; and special situations, 20%–40%³) and by geographic region (up to 35% in international partnerships), while maintaining a flexible posture in order to invest in only the highest-quality partnerships.

Pathway will continue to maintain a highly selective approach, with an emphasis on identifying cohesive management teams that possess significant investment experience and that have demonstrated strong performance across multiple business and economic cycles.

3. Includes restructuring and distressed debt partnerships.

Pathway Capital Management

Mandate: Invest in private equity limited partnerships to achieve superior long-term rates of return and portfolio diversification.

Hired: March 2002

Firm Information	Investment Approach	Total ARMB Mandate & Fees
<p>Founded in 1991, Pathway creates and manages private equity separate accounts and funds of funds for institutional investors worldwide. Pathway manages capital on behalf of some of the largest corporate and public pension plans, government entities, and financial institutions around the globe. The firm manages assets of \$24.2 billion and since its formation; the firm has committed over \$50 billion to more than 300 private equity partnerships.</p> <p>Pathway is registered as an investment advisor with the SEC in the United States and as a portfolio manager and exempt market dealer in Ontario, Quebec, and Saskatchewan, Canada. Pathway's wholly owned UK subsidiary is regulated in the UK by the Financial Services Authority.</p> <p>Key Executives: Al Clerc, Senior Managing Director Jim Chambliss, Managing Director Canyon Lew, Senior Vice President</p>	<p>Pathway's decision-making process uses a team approach; no one individual has authority to make decisions regarding portfolio management without the input of other senior professionals.</p> <p>Final investment decisions are made by the Investment Committee comprised of four senior managing directors and four managing directors.</p> <p>Pathway is extremely selective in choosing private equity investment funds. Every partnership must meet rigid standards regarding the overall quality of the investment opportunity, such as:</p> <ul style="list-style-type: none"> ▪ Target markets that can support private equity investing; ▪ Long-term and proven private equity business model; ▪ Stable management team operating under a consistent firm culture; ▪ Proven access to high-quality investment opportunities and resources; ▪ Strong track record. <p>Benchmark: Russell 3000 +350 basis points and the Thomson Reuters vintage year peer comparison.</p>	<p>Assets Under Management: Commitments: \$1,245.3 million Market Value: \$727.0 million</p> <p>Fee Schedule: 2012 \$2,230,000 2013 \$2,260,000 2014 \$2,290,000</p>

Concerns:

Performance

The since inception internal rate of return (IRR) for Pathway's ARMB portfolio is 12.1%, which compares favorably with the public market equivalent return for the Russell 3000 of 3.8%.

In Callan's December 2011 vintage year comparison of the Pathway portfolio and the Thomson Reuters database for the seven years from 2001 through 2007, the Pathway portfolio is in the top quartile for 5 years and in the second quartile for 2 years.

Presentation Prepared For

Alaska Retirement Management Board

April 19, 2012





- Pathway Update
- Private Equity Environment
- 2011 Review & 2012 Tactical Plan
- Portfolio Update
- Summary
- Appendix



Pathway Update



Pathway Overview

- **Established**—1991
- **Assets Under Management**—\$24.2 billion¹
- **Global Investor Base**—Institutions across North America, Europe, and Asia
 - Corporate Pension Funds
 - Financial Institutions
 - Public Pension Funds and Trusts
- **Ownership**—Independent, 100% employee owned
- **Personnel**—111 employees, including 35 investment professionals, supported by a deep team of legal, accounting, client services, information technology, and administrative personnel
- **Locations**—California • Rhode Island • London • Tokyo²
- **Global Private Equity Specialist**—Pathway creates specialized private equity funds for institutional investors.

SEC-Registered ■ FSA-Regulated

1. Represents roll-forward market value plus undrawn capital at December 31, 2011.

2. Strategic alliance with Tokio Marine Asset Management, a Japanese investment adviser.



Private Equity Environment

A large graphic element consisting of two vertical rectangular blocks. The left block is dark blue and contains the text 'Private Equity Environment'. The right block is gold and is empty.



Overview

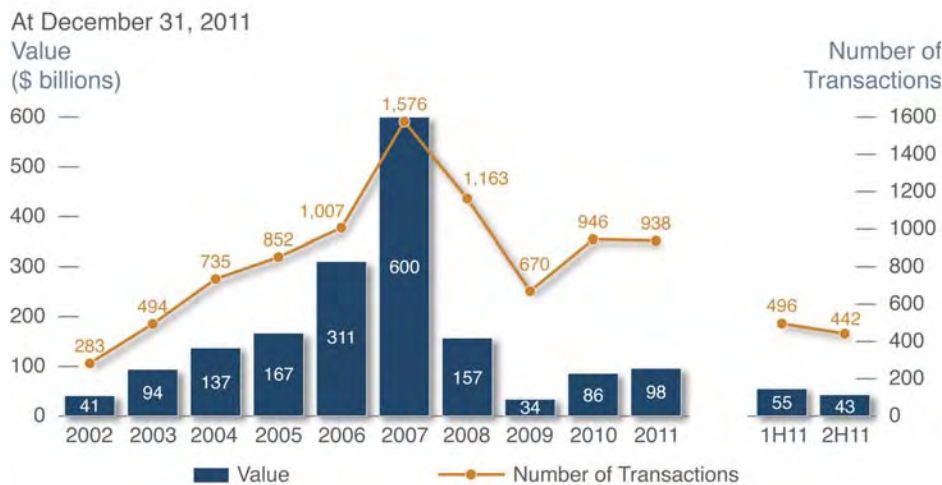
- M&A exit markets for private equity–backed companies were strong in 2011 despite significant volatility in the financial markets.
- U.S. debt markets have been robust since the end of 2011. European high-yield market is recovering, although European bank loan market remains constrained.
- Pace of new buyout investment activity declined in 2H11, but overall trend remains positive.
- Default rates remain at extremely low levels due to stable operating performance and strength in the credit markets.
- Fundraising market is recovering as a result of increasing distributions, performance, and investment activity.
- Overall market sentiment in private equity has become more positive in recent months.



Global Buyout-Related Investment Activity Declined in 2H11

- Market volatility eroded confidence and negatively impacted deal-making activity in the second half of 2011.
 - Credit markets became more restrictive in 2H11, particularly in Europe, which further impacted new investment activity.
 - Continued volatility and/or weakening in global economic conditions may lead to attractive opportunities for general partners with capital to invest.
- Overall trend in acquisitions-related investment activity remains positive.
 - GPs took advantage of the large number of attractive opportunities to invest capital following the financial crisis and global recession: transaction value increased by 150% in 2010 over the prior year.
 - Notable acquisitions-related investment trends include corporate carveouts (RAC/Aviva, Capsugel/Pfizer, Taylor Wimpey); energy (Cheniere, El Paso E&P Assets, Samson); restructuring/distressed opportunities (Alinta, Innkeepers); and public-to-private buyouts (PPD, Emdeon, Blackboard, Immucor, BJ's Wholesale, SRA International).
- Purchase price multiples have increased from 2009 lows but remain below prior cycle highs.
 - Average purchase price multiple in 2011 was 8.8 times EBITDA (it was 9.7 in 2007 and 7.7 in 2009), according to S&P LCD.

U.S.-Based Buyout Transaction Value & Volume



SOURCE: Thomson Reuters.

European Buyout Transaction Value & Volume



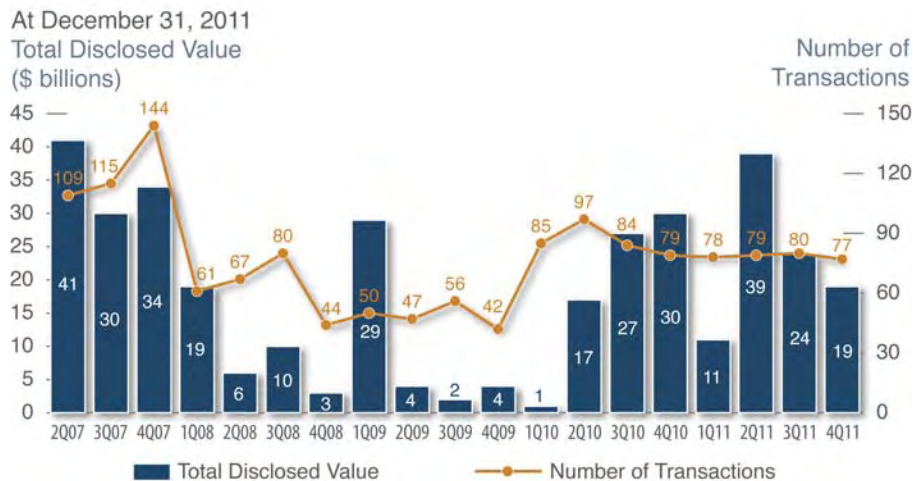
SOURCE: Incisive Media Private Equity Barometer.



High Level of Buyout-Backed M&A and IPO Exit Activity since the Credit Crisis

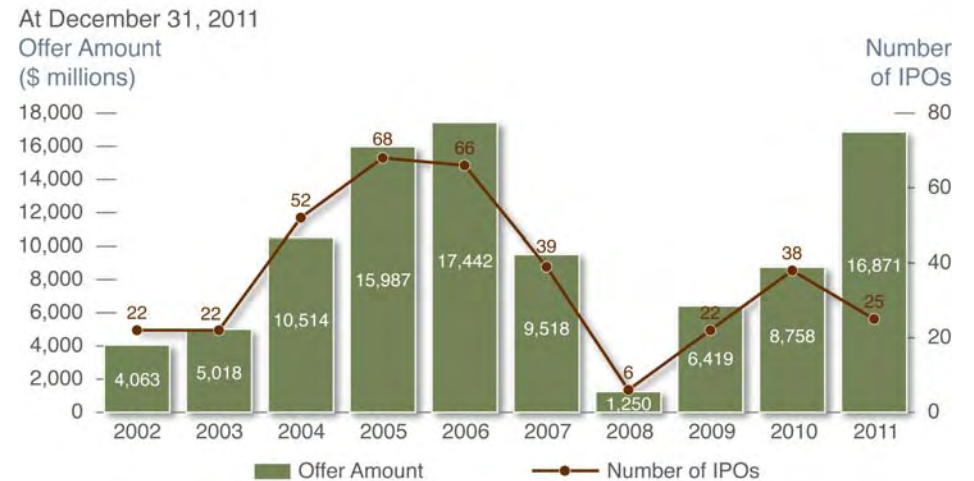
- Buyout industry has performed well coming out of the credit crisis.
 - The 1-year return for buyout funds worldwide was 11.5% as of September 30, 2011; MSCI World index was -5.5%.
 - Opportunistic investments made during the crisis have begun to generate liquidity for GPs (e.g., BankUnited, Skype).
- Strong level of private equity-backed M&A exits as a result of strategic acquirers with record-high cash balances opportunistically seeking acquisitions to drive growth and expand product offerings.
 - Notable examples include Caiman Energy (\$2.5bn), Cordillera (\$2.8bn), NDS Group (\$5.0bn), Liberty Dialysis (\$1.7bn), Talaris (\$1.0bn), Solo Cup (\$1.0bn), Insight Communications (\$3.0bn), Nycomed (\$13.7bn), Skype (\$8.6bn), and Taminco (\$1.6bn).
- IPO markets have been receptive to private equity-backed offerings.
 - Buyout-backed companies raised \$16.9 billion in 2011, just short of the all-time high of \$17.4 billion raised in 2006.
 - Notable examples include Dunkin' Brands (\$0.4bn), Glencore International (\$10.0bn), Kosmos Energy (\$0.6bn), HCA (\$4.4bn), Nielsen (\$1.9bn), BankUnited (\$0.9bn), and Kinder Morgan (\$3.3bn).

Buyout-Backed Exits from M&A



SOURCE: Pathway Capital Management and Thomson Reuters.

Buyout-Backed IPO Issuance



SOURCE: Bloomberg and Pathway Capital Management.



Venture Capital Industry Fundamentals Continue to Improve

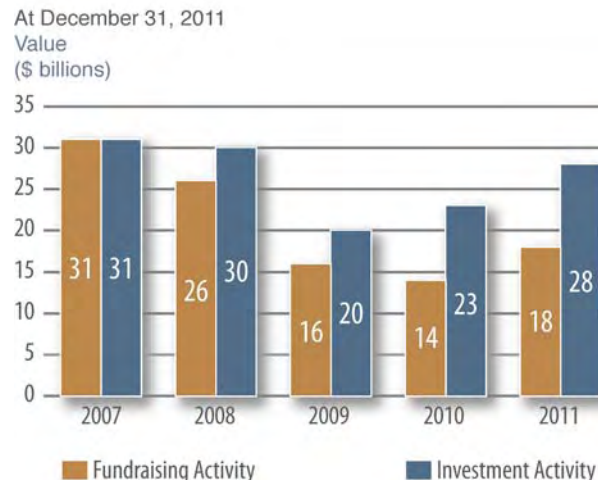
- Recent industry performance has been attractive, driven by strong exit markets for venture-backed companies in 2011.
 - Established technology and life sciences companies have been actively acquiring VC-backed companies to drive growth and expand their product offerings.
 - Recent acquisitions of VC-backed companies include OMGPOP (\$200mm), Seismic Micro-Technology (\$500mm), PayFlex (\$202mm), Advanced BioHealing (\$750mm), ITA Software (\$700mm), Quidsi (\$540mm), and Tiny Prints (\$333mm).
 - In 2011, VC-backed companies raised \$9.4 billion in 52 offerings; in 2010, \$6.7 billion was raised in 69 offerings.
- Venture capital industry has been *cash flow negative*: investment activity has outweighed fundraising activity each year since 2007.
- Capitalization of the industry has decreased significantly since reaching a peak in 2007.
- Pace of technological change and innovation will continue to drive opportunities over the long term; however, large disparity in performance among venture capital managers warrants continued emphasis on selectivity.

Venture-Backed Exits



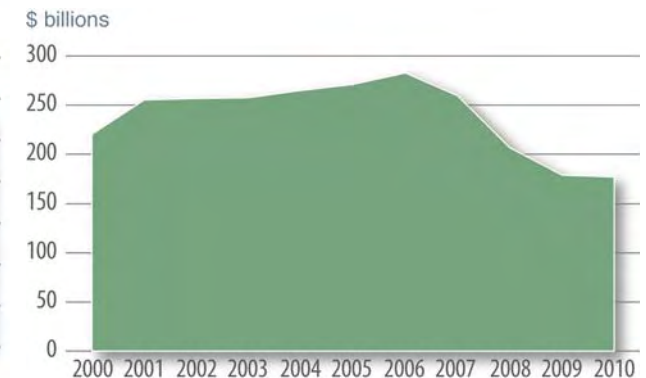
SOURCE: NVCA, Bloomberg, and Pathway Capital Management.
^aRepresents the total number of transactions with disclosed values.

U.S. Venture Capital Fundraising & Investment Activity



SOURCE: PricewaterhouseCoopers/NVCA MoneyTree™ Report, based on data from Thomson Reuters.

U.S. Venture Capital Industry Assets Under Management



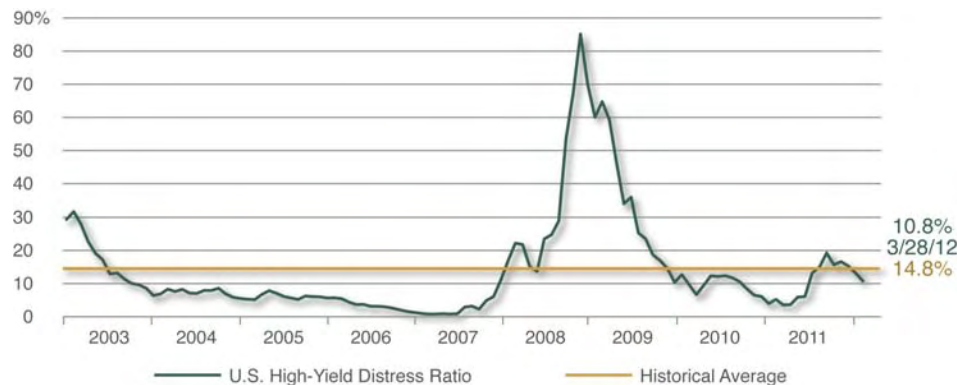
SOURCE: NVCA.



Default Rates Remain at Historically Low Levels

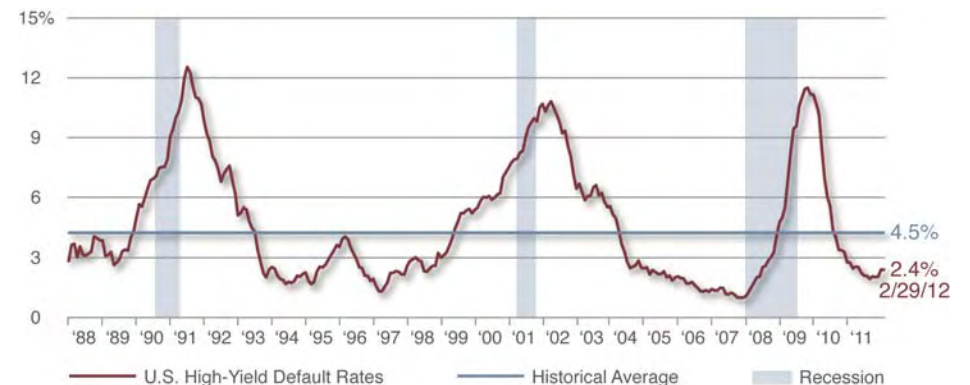
- Traditional distressed debt opportunity set (e.g., corporate bonds, bank loans) is a fraction of what it was in 2009.
 - Default rates were 2.4% as of February 2012 vs. prior cycle peak of 11.5% in November 2009.
 - Dollar value of global defaulted debt was \$76 billion in 2011 vs. \$628 billion in 2009.
 - Companies have exhibited stable operating performance and have benefitted from strong credit markets in the U.S.
- High-yield distress ratio has declined since reaching a 2-year high of 19.3% in October 2011.
 - Distress ratio (percentage of bonds with spreads of 1,000 bps or higher over U.S. Treasuries) was 10.8% as of March 2012.
- Many distressed debt managers are anticipating an increase in investment opportunities as a result of Europe's debt crisis.
 - Investment activity in the region to date has been limited.

U.S. High-Yield Distress Ratio



SOURCE: S&P Ratings Direct.

U.S. High-Yield Default Rate



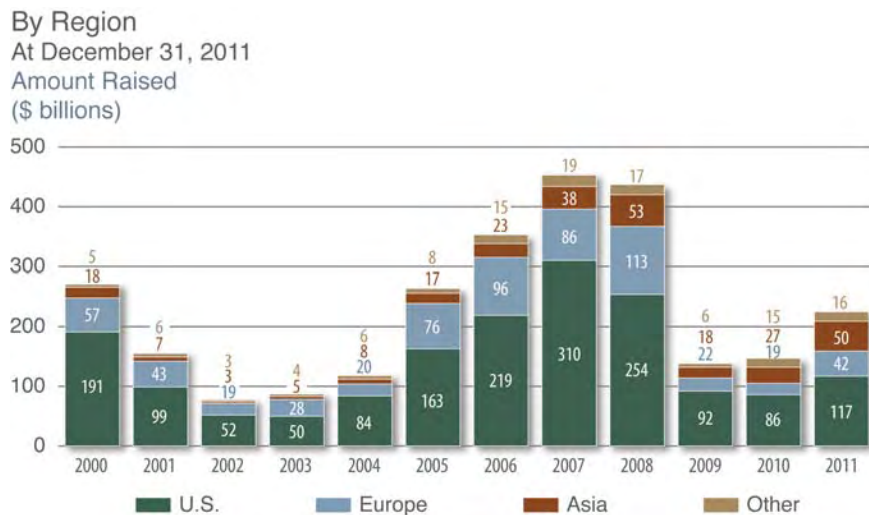
SOURCE: S&P Ratings Direct and National Bureau of Economic Research.



Fundraising Market Is Recovering

- Outlook for fundraising market is improving as a result of increasing industry performance, distributions, and investment activity.
- Private equity firms worldwide raised \$225 billion in 2011—a 53% increase over the prior year.
 - The year-over-year increase was driven by a 67% increase in buyout-focused fundraising.
 - All major substrategies except distressed debt showed increased fundraising activity in 2011.
- Private equity funds that focus on emerging markets are showing relative strength compared with funds that focus on developed markets.
 - Private equity funds focused on Asia and Latin America accounted for 29% of worldwide fundraising in 2011.
- Distressed debt fundraising, which peaked at 14% of the worldwide total in 2009, accounted for just 3% of worldwide fundraising in 2011.

Worldwide Private Equity Fundraising



SOURCE: Thomson Reuters.

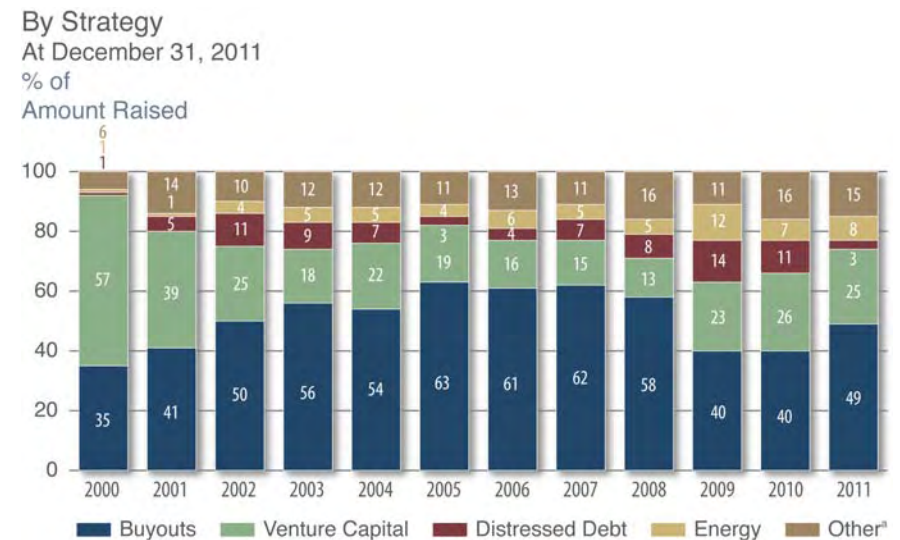
NOTES: Fundraising amounts are based on net amounts raised, which are adjusted for fund-size reductions.

Comprises buyout, venture capital, distressed and subordinated debt, energy, infrastructure, and other fund strategies.

Amounts may not foot due to rounding.

Data is continuously updated and is therefore subject to change.

Worldwide Private Equity Fundraising



SOURCE: Thomson Reuters.

NOTES: Fundraising amounts are based on net amounts raised, which are adjusted for fund-size reductions.

Amounts may not foot due to rounding.

Data is continuously updated and is therefore subject to change.

^aComprises subordinated debt, infrastructure, special situations, and other fund strategies not classified as either venture capital- or buyout-focused.



2011 Review & 2012 Tactical Plan



2011 Tactical Plan & Results

	Plan	Actual
Commitments	\$125 million	\$53.4 million
Number of Partnerships	Up to 14 partnerships	5 partnerships
Size of Investments	\$10–\$20 million	\$10.7 million avg. commitment
Investment Strategies	Venture Capital, Buyouts, Special Situations, and Restructuring	Buyouts (2) and Special Situations (3)

Strategy	2011 Plan		2011 Actual	
	No. of Psps.	Targeted Commitments (MM)	No. of Psps.	Commitments (MM)
Buyouts	Up to 6	Up to \$85	2	\$30.3
Venture Capital	Up to 6	Up to \$70	–	–
Special Situations	Up to 3	Up to \$30	3	\$23.1
Restructuring	Up to 3	Up to \$25	–	–
Total	Up to 14	\$125	5	\$53.4

NOTE: Amounts may not foot due to rounding.



ARMB 2012 Annual Tactical Plan

By Strategy

Strategy	No. of Partnerships	Total Commitments (MM)	2012 Commitments to Date ^a (MM)
Buyouts	Up to 6	Up to \$85	\$0.0
Venture Capital	Up to 6	Up to \$70	\$12.9 ^b
Special Situations	Up to 3	Up to \$30	\$0.0
Restructuring	Up to 3	Up to \$30	\$20.0 ^c
Total	Up to 14	Up to \$125	\$32.9

^aRepresents fund closings and pending commitments that have been approved by Pathway's Investment Committee through April 15, 2012.

^bRepresents a commitment to Canaan IX and a pending commitment to a diversified-stage venture capital fund.

^cRepresents a commitment to Centerbridge SCP II and a pending commitment to a control-oriented distressed debt fund.

- Adhere to target ranges by strategy and geographic region over the long term, while maintaining flexibility over the short term.
- Pathway anticipates that the flow of new opportunities will be robust for the remainder of 2012; opportunities include 7 funds being raised by existing general partners in the portfolio.



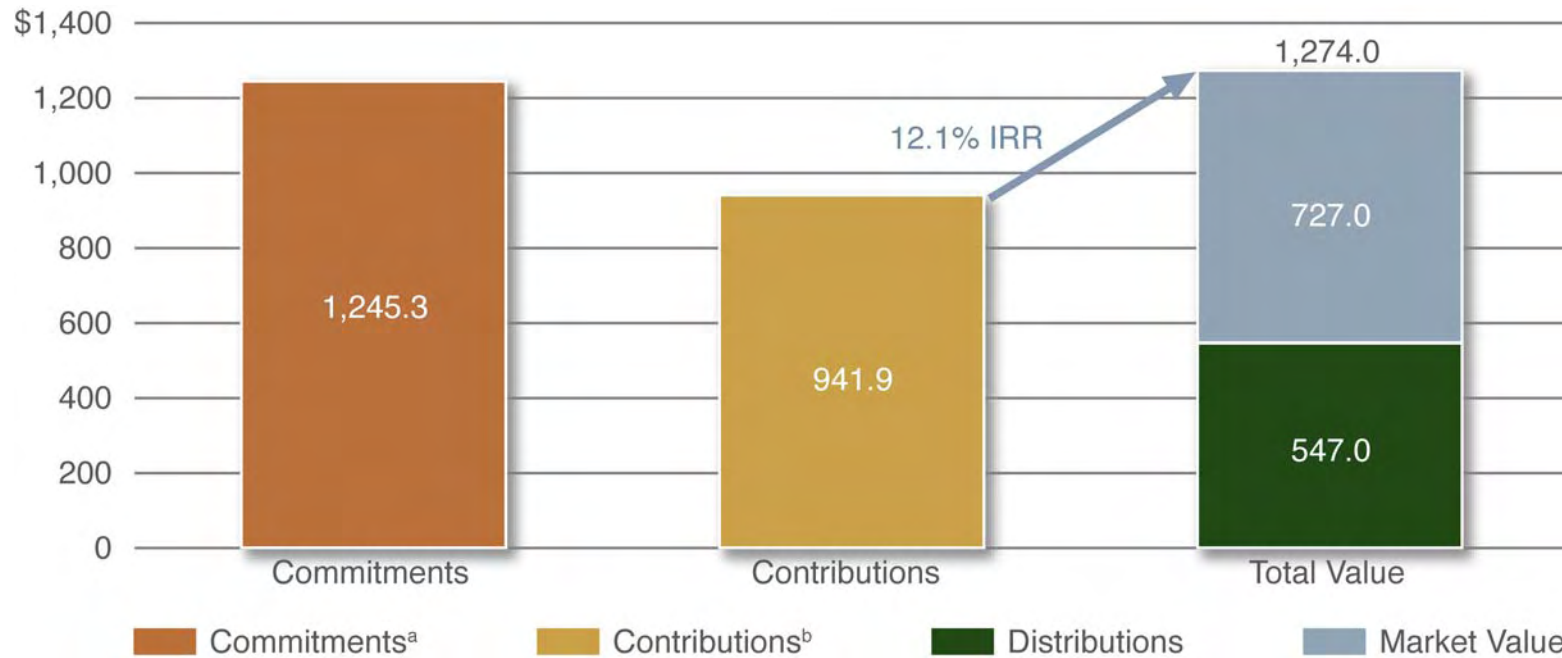
Portfolio Update



Financial Summary

At December 31, 2011

(\$ in millions)



Inception: 2002

Partnerships: 92

Managers: 47

Average Age: 3.9 Years

NOTE: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this presentation, 76 of the portfolio's 89 active partnerships had provided year-end data.

^aCommitments to non-USD-denominated partnerships are accounted for by multiplying unfunded commitments by the quarter-ending exchange rate, then adding the result to cumulative capital contributions, causing commitments to non-USD-denominated partnerships to fluctuate quarterly.

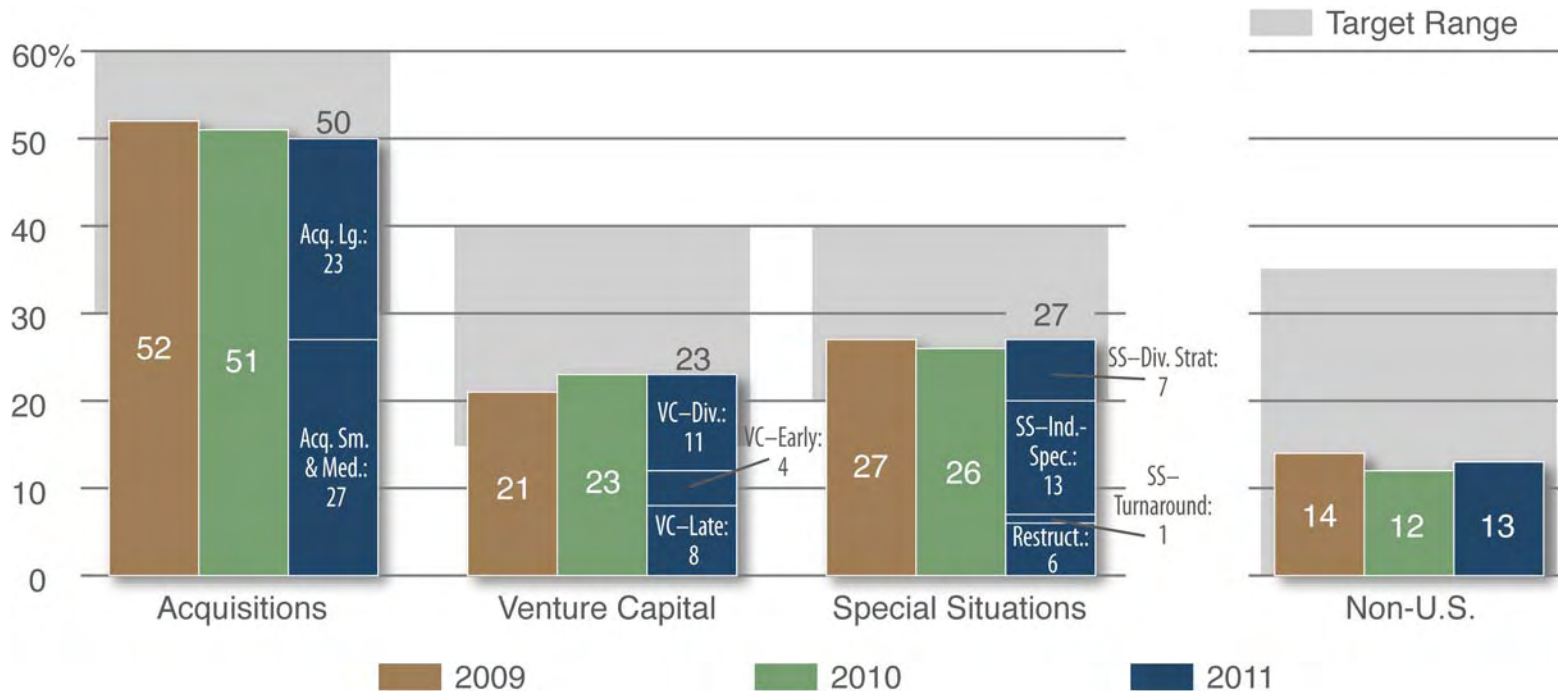
^bIncludes capital contributed for management fees called outside the total commitment.



Investment Strategy Diversification

Partnership Market Value plus Unfunded Commitments

At December 31, 2011



- Each investment strategy is within its long-term allocation target range, as of December 31, 2011.

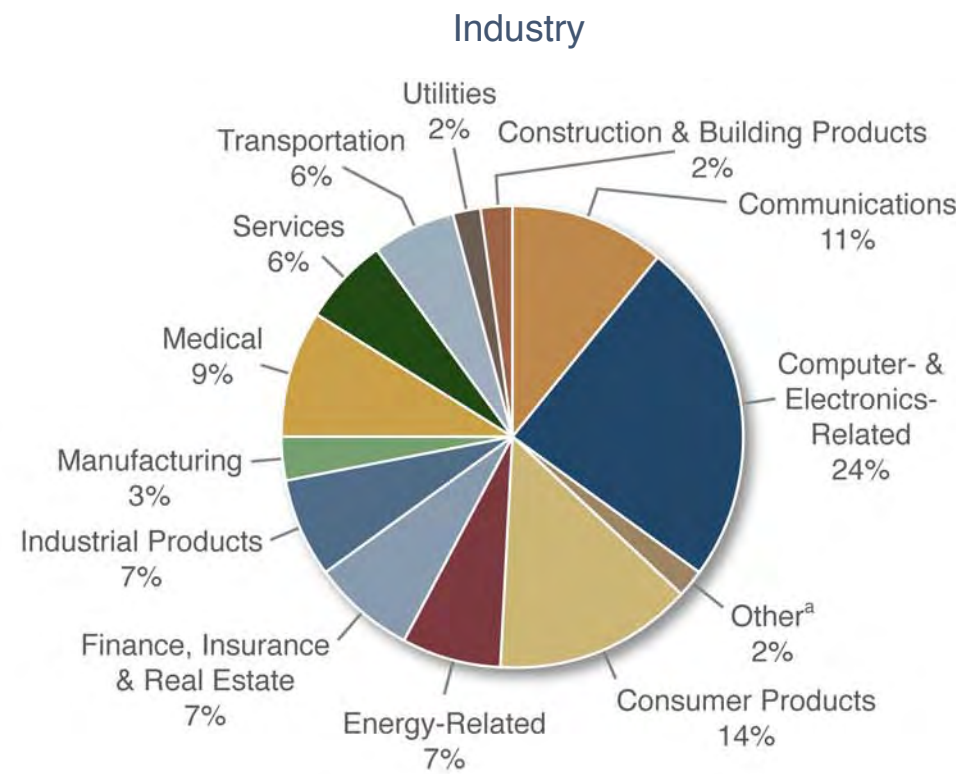
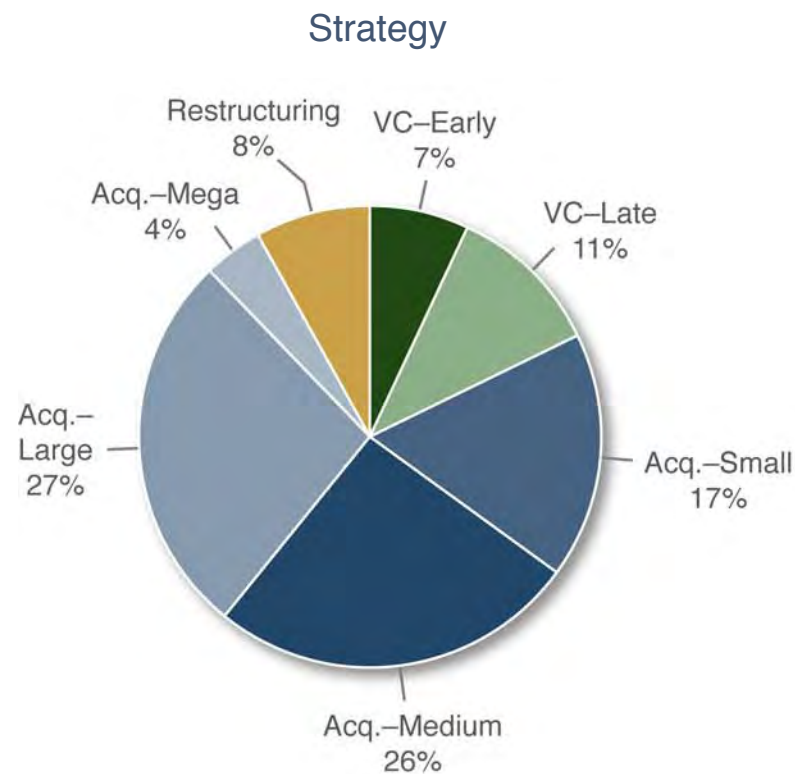
NOTE: Based on partnership market values and unfunded partnership commitments at September 30, plus new commitments made during the fourth quarter of each year.



Portfolio Diversification by Strategy & Industry

Company Market Value—1,441 Investments

At September 30, 2011



NOTES: Acquisition substrategies are based on the following ranges of total enterprise values: Mega >\$10 billion, Large \$1–\$10 billion, Medium \$200 million–\$1 billion, and Small <\$200 million. Excludes investments for which the general partners have not provided investment strategy classifications. These investments account for less than 0.1% of total portfolio market value.

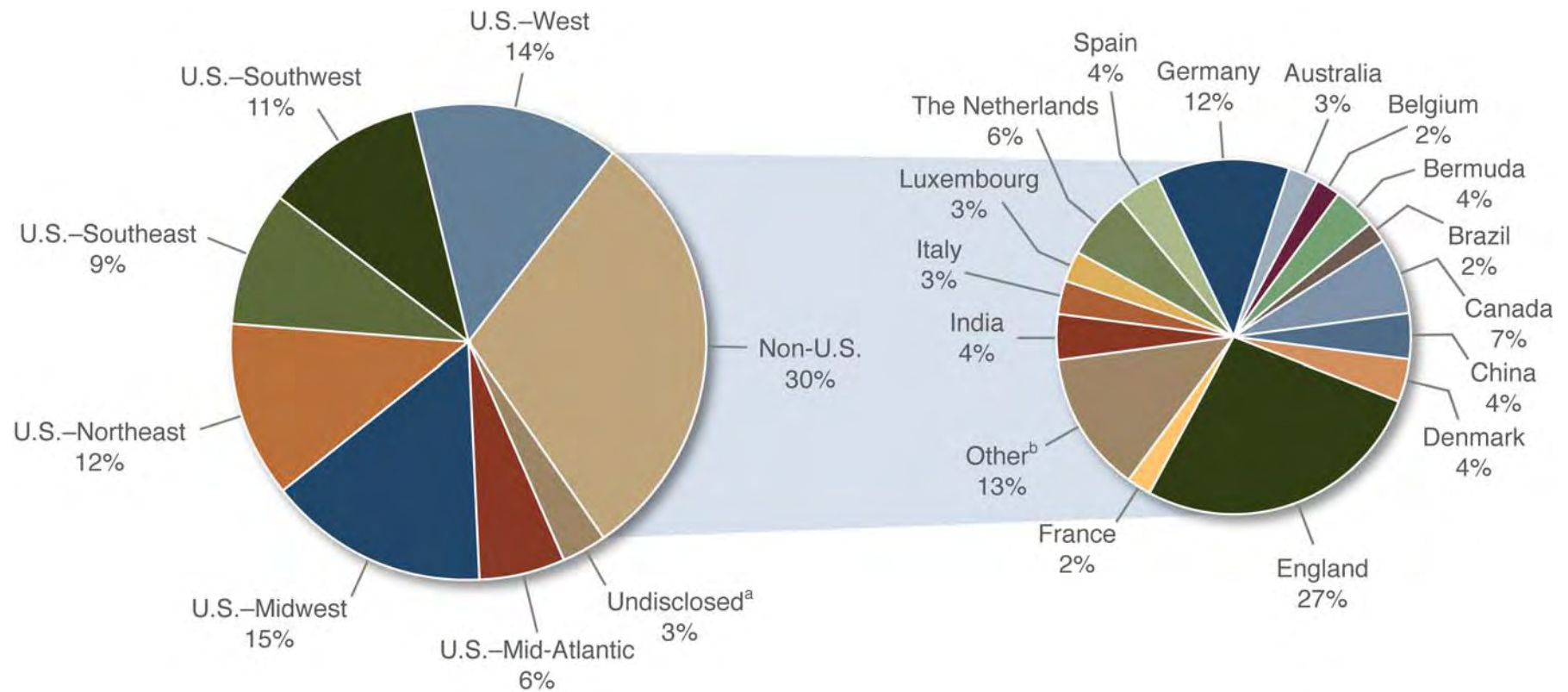
^aComprises agriculture-, forestry-, and fishing-related companies, as well as investments for which the general partners have not provided industry classifications.



Portfolio Diversification by Geographic Region

Company Market Value—1,441 Investments

At September 30, 2011



^aComprises investments for which geographic classifications have not been provided by the general partners.

^bComprises regions that each account for less than 2% of the portfolio's non-U.S. market value: Austria, Bahamas, British Virgin Islands, Cayman Islands, Czech Republic, Greece, Hong Kong, Hungary, Israel, Japan, Mauritius, Norway, Philippines, Poland, Republic of Ireland, Russian Federation, Singapore, Slovenia, South Korea, Sweden, Switzerland, Taiwan, Turkey, and Ukraine.

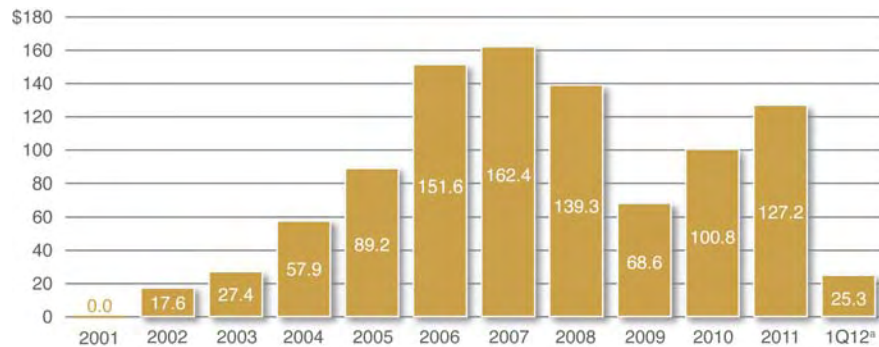


Contribution & Distribution Activity

At March 31, 2012

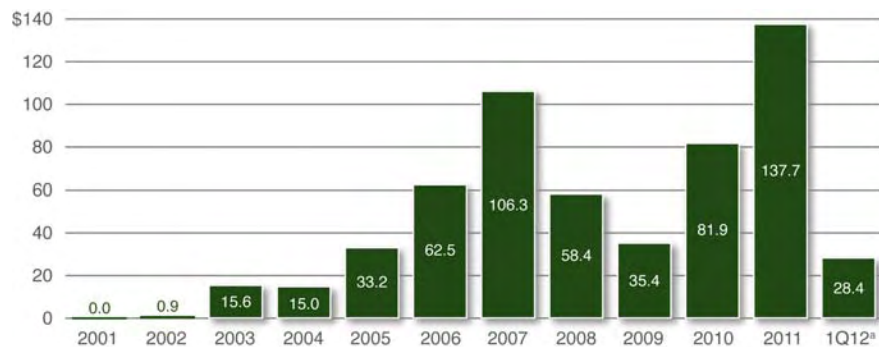
(\$ in millions)

Annual Contributions



- ARMB contributed \$127 million in 2011, an increase of 26% from the \$101 million contributed in 2010.
- The portfolio's acquisition- and venture capital-focused partnerships collectively accounted for 79% of total 2011 contributions.

Annual Distributions



- The \$138 million distributed by ARMB's partnerships in 2011 represents the largest annual distribution total since the portfolio's inception.
- Distribution activity exceeded contribution activity for the first time in 2011.
- All the portfolio's strategies experienced an increase in distribution activity over 2010 levels.

^aData preliminary and subject to change.



Year-over-Year Portfolio Performance

At December 31, 2011

(\$ in millions)

	No. of Partnerships	Commitments ^a	Contributions ^b	Market Value	Distributions	Total Value	Gain/(Loss)	Since-Incep. Net IRR
Dec 31, 2011	92	\$1,245.3	\$941.9	\$727.0	\$547.0	\$1,274.0	\$332.0	12.1%
Dec 31, 2010	87	1,192.4	814.7	680.8	409.3	1,090.0	275.3	12.9%
YOY Change	5	\$52.9	\$127.2	\$46.2	\$137.7	\$183.9	\$56.7	-0.8%

NOTES: Performance at December 31, 2011 is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this presentation, 76 of the portfolio's 89 active partnerships had provided year-end data.

Amounts may not foot due to rounding.

^aCommitments to non-USD-denominated partnerships are accounted for by multiplying unfunded commitments by the quarter-ending exchange rate, then adding the result to cumulative capital contributions, causing commitments to non-USD-denominated partnerships to fluctuate quarterly.

^bIncludes capital contributed for management fees called outside the total commitment.

- The ARMB portfolio performed well during the 1-year period ended December 31, 2011, generating a 1-year gain of \$56.7 million and a 1-year net return of 8.5%.
 - Positive investment performance was experienced across all the portfolio's various investment strategies.
 - Of the 79 partnerships in the portfolio active for more than 1 year, 61 generated positive 1-year returns; 26 of these 61 generated 1-year gains in excess of \$1.0 million.
 - The portfolio posted positive performance in 3 of the 4 quarters during the year.
 - The dollar-weighted return for the Russell 3000 index was 1.1% over this period.



Strong 1-Year Performers

By 1-Year Gain

At December 31, 2011
(\$ in millions)

Partnership	VY	1-Year Gain	1-Year IRR	S-I IRR	Strategy
Carlyle IV	2005	\$6.3	31.5%	11.5%	Acquisitions–Large
Insight VI	2007	\$5.8	44.0%	24.9%	Venture–Late
JMI V	2005	\$3.7	75.5%	26.2%	Venture–Diversified
TCV VI	2006	\$2.3	33.8%	11.4%	Venture–Late
CVC European IV	2005	\$2.3	17.0%	11.8%	Acquisitions–Large
Spectrum V	2005	\$2.2	15.3%	12.5%	Special Situations–Industry-Specific
Providence V	2005	\$2.2	14.2%	5.8%	Special Situations–Industry-Specific
Onex II	2006	\$2.1	18.6%	10.3%	Acquisitions–Medium
Wayzata II	2007	\$2.0	13.6%	16.1%	Debt–Distressed
Code V	2005	\$1.8	9.6%	6.8%	Acquisitions–Medium



Performance by Investment Strategy

At December 31, 2011

(\$ in millions)

Investment Strategy	Commit. ^a	Contrib. ^b	Total Value	Gain/(Loss)	Since-Incep. IRR	Total Value/Paid-In Capital	1-Year	
							Gain/(Loss)	IRR
Acquisitions—Large	\$318.9	\$266.2	\$370.8	\$104.6	13.5%	1.4x	\$16.0	9.6%
Acquisitions—Sm. & Med.	326.2	237.6	330.0	92.4	13.3%	1.4x	9.7	5.5%
Acquisitions—Total	645.1	503.8	700.8	197.0	13.4%	1.4x	25.7	7.5%
VC—Diversified	123.4	83.8	101.3	17.4	7.5%	1.2x	7.3	10.5%
VC—Early	43.6	31.6	35.6	3.9	4.6%	1.1x	2.6	10.6%
VC—Late	92.9	72.2	103.2	31.0	14.4%	1.4x	10.4	20.2%
VC—Total	259.9	187.7	240.0	52.3	10.0%	1.3x	20.3	13.9%
Special Situations	257.5	171.1	216.0	44.9	7.6%	1.3x	8.6	7.0%
Restructuring	82.8	79.3	117.2	37.9	22.9%	1.5x	2.1	3.7%
Grand Total	\$1,245.3	\$941.9	\$1,274.0	\$332.0	12.1%	1.4x	\$56.7	8.5%

NOTE: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this presentation, 76 of the portfolio's 89 active partnerships had provided year-end data.

Amounts may not foot due to rounding.

^aCommitment amount will fluctuate quarterly in accordance with foreign currency exchange rates.

^bIncludes outside management fees.

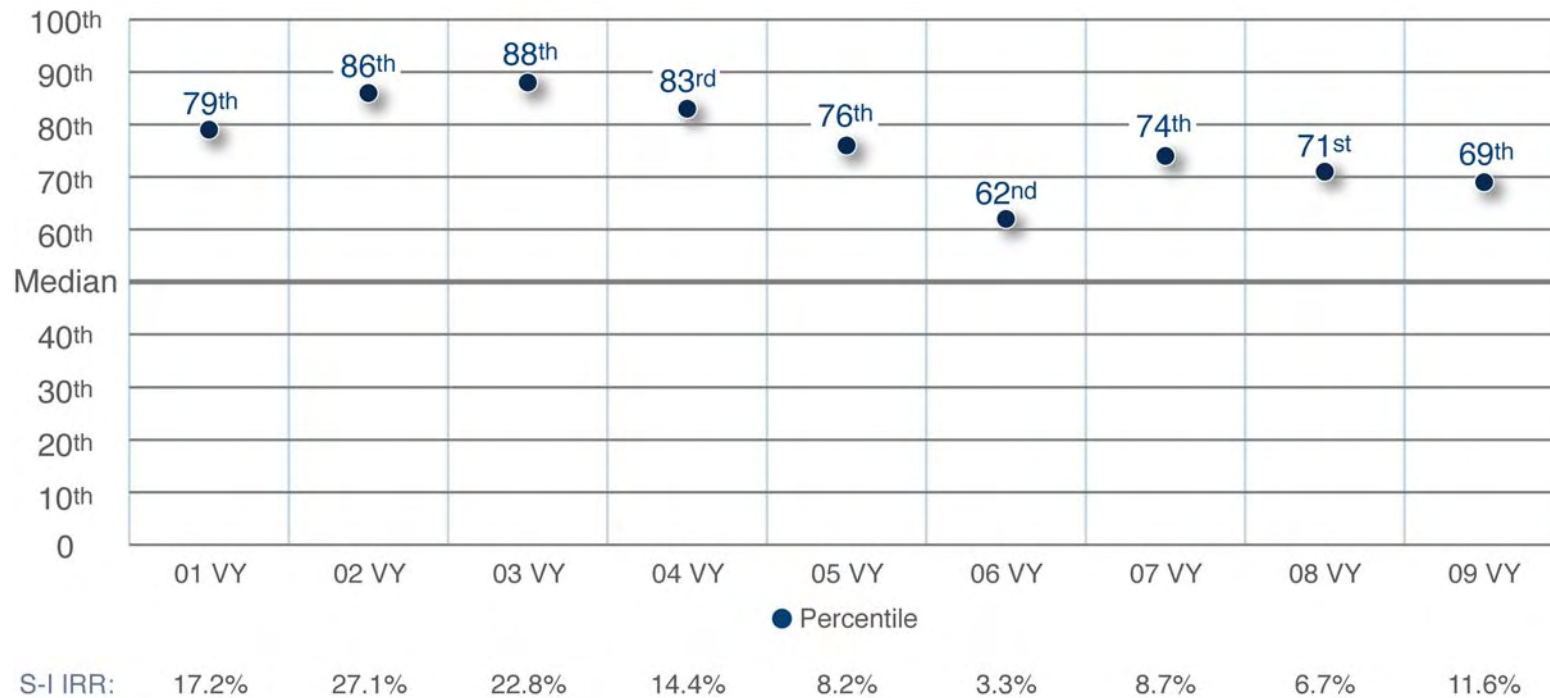
- Performance has been strong across multiple strategies; acquisitions accounted for the largest portion of the portfolio's total gain.
- Over the past year, all 4 of the portfolio's core strategies generated positive returns; the portfolio's venture capital partnerships generated the largest 1-year IRR.



Vintage Year Performance vs. Thomson Reuters PE Benchmarks

At December 31, 2011

- The portfolio outperforms the Thomson Reuters private equity industry benchmark in each vintage year.

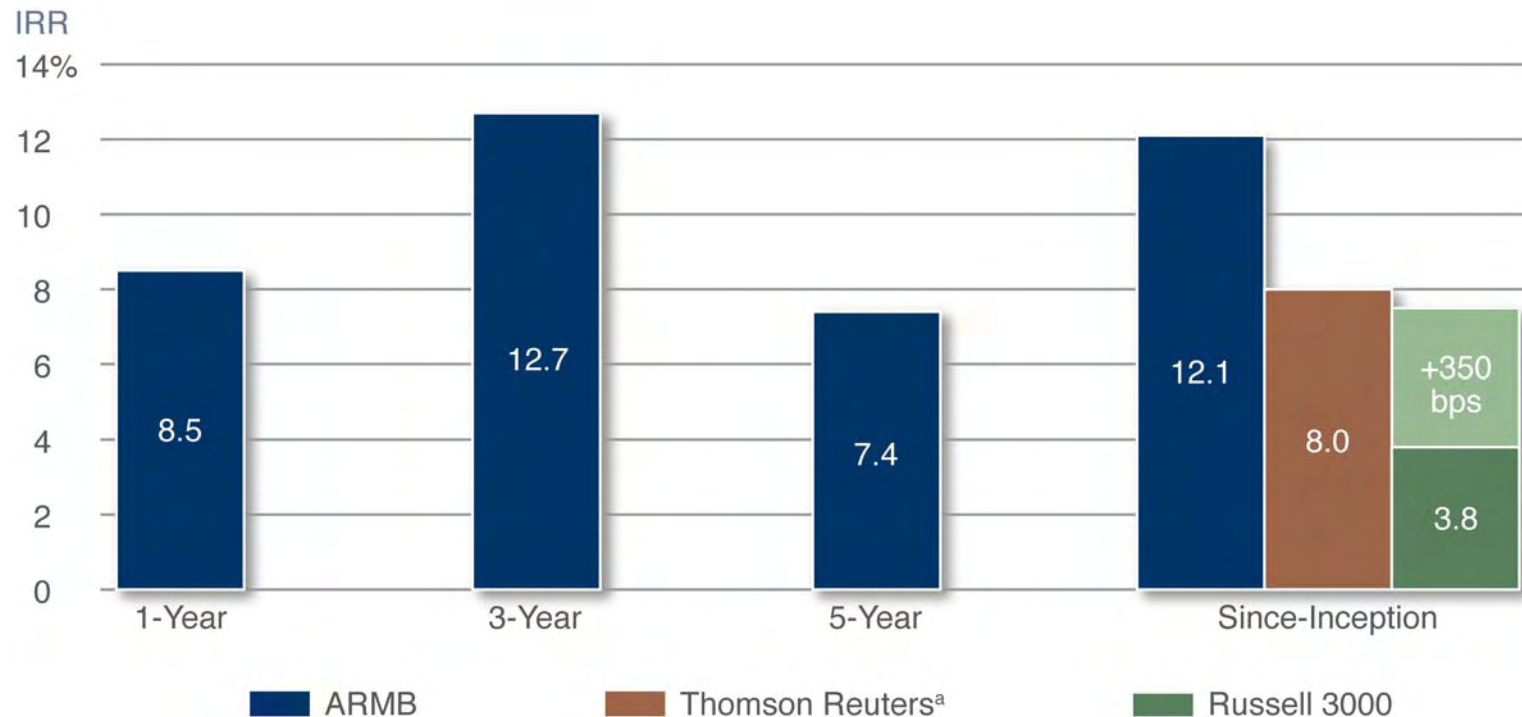


NOTES: Vintage year percentile rankings based on Thomson Reuters September 30, 2011, All Regions All Private Equity return benchmarks. Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this presentation, 76 of the portfolio's 89 active partnerships had provided year-end data.



Net Performance vs. Public & Private Market Indices

At December 31, 2011



NOTES: The performance of the Russell 3000 and the Russell 3000 + 350 basis points was derived by applying ARMB's cash inflows and outflows to the index's quarterly returns.

Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2011. As of the writing of this presentation, 76 of the portfolio's 89 active partnerships had provided year-end data.

^aThomson Reuters September 30, 2011, pooled All Regions All Private Equity returns for 2001- through 2011-vintage funds.



Recent Significant Events within the ARMB Portfolio

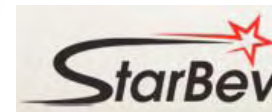
Notable IPO Filings



Notable IPO Pricings



Notable Exit Events





Summary



Summary

- Pathway's investment team is stable and experienced and continues to employ the same consistent, focused, and proven investment process.
- Private equity market conditions remain favorable as a result of stabilizing economic conditions, accommodative credit markets, and the reopening of M&A and IPO exit markets.
- The ARMB portfolio continues to perform well and is well diversified by strategy, manager, industry, and geographic region across 12 vintage years.
 - 1-year gain of \$57 million resulted in a 1-year net return of 8.5%.
 - Distribution activity reached record levels in 2011 and exceeded contribution activity for the first time.
 - The portfolio's long term performance remains strong: its since-inception return of 12.1% exceeds its public benchmark by over 450 basis points and its private equity benchmark by over 400 basis points.
- Pathway anticipates that the pipeline of high-quality, new investment opportunities will be robust for the remainder of 2012.



Appendix



Biographies



James R. Chambliss
Managing Director

Mr. Chambliss joined Pathway in 1994 and is a managing director in the California office. He is responsible for screening, analyzing, and conducting due diligence on private equity investment opportunities; negotiating and reviewing investment vehicle documents; and client servicing. Mr. Chambliss is a member of Pathway's Investment Committee and currently serves on the advisory boards and valuation committees of several private equity limited partnerships.

Mr. Chambliss received a BS in business administration, with an emphasis in finance, from Loyola Marymount University and an MBA from the University of Southern California.



Canyon J. Lew
Senior Vice President

Mr. Lew joined Pathway in 2004 and is a senior vice president in the California office. Mr. Lew is responsible for investment analysis, due diligence, investment monitoring, performance analysis, client reporting, and client servicing.

Prior to joining Pathway, Mr. Lew worked for Fleet Fund Investors as an associate, where he monitored investments within Fleet Bank's private equity portfolio and reviewed new investment opportunities. Mr. Lew received an AB in economics and engineering from Brown University and an MS, with high honors, in investment management from Boston University.



Pathway Contact Information

California

Pathway Capital Management, LLC
2211 Michelson Drive, Ninth Floor
Irvine, CA 92612
Tel: 949-622-1000
Fax: 949-622-1010
George Sands—Senior Vice President

Rhode Island

Pathway Capital Management, LLC
The Gardens Office Park II
1300 Division Road, Suite 305
West Warwick, RI 02893
Tel: 401-589-3400
Fax: 401-541-7246
Tom Laders—Managing Director

London

Pathway Capital Management (UK) Limited
15 Bedford Street
London WC2E 9HE
Tel: +44 (0) 20 7438 9700
Fax: +44 (0) 20 7240 9496
James Heath—Managing Director

Tokyo

Pathway Strategic Alliance Partner
Tokio Marine Asset Management Co., Ltd.
Tokyo Ginko Kyokai Building
1-3-1 Marunouchi
Chiyoda-ku, Tokyo 100-0005
Japan
Tel: +81 (0) 3 3212 8103
Fax: +81 (0) 3 3212 3094
Soichi “Sam” Takata—Deputy Head of Private Equity

Website

pathwaycapital.com

Email

mail@pathwaycapital.com



Important Legal Information

This confidential information is being provided to each recipient solely in response to each recipient's request. This confidential information is for internal reference purposes only and is not intended to provide any recommendation or solicitation with respect to any specific investment opportunity or fund product. Any offer of such interests will be made only by means of a confidential private placement memorandum or such other offering documents as may be provided to prospective investors, and any related governing documents. Each recipient of this document acknowledges and agrees that the contents hereof constitute proprietary and confidential information and a trade secret. Any reproduction or distribution of this presentation, in whole or in part, or the disclosure of its contents, without the prior written consent of Pathway Capital Management, LLC ("Pathway" or the "Adviser") is prohibited.

Neither the U.S. Securities and Exchange Commission nor any other U.S. agency, non-U.S. securities commission, or state agency has approved this presentation and none has confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is unlawful.

Each prospective investor should (i) make its own investigation and evaluation of the Adviser and the Adviser's specific investment products, including the merits and risks thereof, (ii) inform itself as to the legal requirements applicable to the acquisition, holding, and disposition of an interest in any investment vehicle, and as to the legal and tax consequences of such acquisition, and (iii) have the financial ability and willingness to accept the high risk and lack of liquidity inherent in any such investment.

The statements contained herein that are not historical facts are forward-looking statements within the meaning of the Federal securities laws. The forward-looking statements are based on current expectations, beliefs, assumptions, estimates, and projections about the industry and markets in which the Adviser expects to operate. Words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "estimate," variations of such words, and similar expressions identify such forward-looking statements. Forward-looking statements contained herein, or other statements made for or on behalf of the Adviser either orally or in writing from time to time, are not guarantees of future performance and involve certain risks, uncertainties, and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. These statements include, among other things, statements regarding the Adviser's intent, belief or expectations with respect to the type and quality of the investments the Adviser may recommend (the "Investments"); the target returns, IRR and distributions to investors; performance of any hypothetical portfolios, and the Adviser's investment strategy generally. All forward-looking statements are made as of the date of this summary, and the Adviser is under no obligation, and does not intend, to update any forward-looking statements to reflect changes in the underlying assumptions or factors, new information, future events, or other changes.

No representation is being made that the Adviser will or is likely to achieve comparable performance results to that shown herein. Past performance is not necessarily indicative of future results. Although valuations of unrealized investments are made on assumptions that the Adviser believes are reasonable under the circumstances, the actual realized return on unrealized investments will depend on, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ significantly from the assumptions on which the valuations used in the data contained herein are based. Accordingly, there can be no assurance that these valuations are accurate, and the actual realized return on these investments may differ materially from the returns indicated herein.

No representation is being made that a prospective investor will or is likely to have access to funds herein. The reference to such funds was made with the benefit of hindsight based on historical rates of return of such manager and on specific investments made by such funds. Accordingly, performance results of specified funds inevitably show positive rates of return or investment results.

Relational Investors LLC

Mandate: Large Cap

Hired: 2005

Firm Information	Investment Approach	Total ARMB Mandate & Fees										
<p>Relational Investors LLC, a Delaware limited liability company, is 100% owned by Relational Group LLC, owned 100% by Relational Holdings, which is 100% owned by David Batchelder, Ralph Whitworth, John Sullivan, Glenn Welling, Todd Leight, Henry Winship, Frank Hurst, Kirt Karros and David Demarest.</p> <p>As of 12/31/11, the firm's total assets under management were approximately \$6 billion.</p> <p>Key Executives: David Batchelder, Founder, Investment Committee Member Ralph Whitworth, Founder, Investment Committee Member John Sullivan, Founder, Investment Committee Member Sandi Christian, Director, Client Services & Marketing</p>	<p>Relational's investment approach is team oriented; the Investment Committee makes decisions based on extensive experience and information presented by the analyst team. Each prospective portfolio investment is analyzed and discussed thoroughly between the Investment Committee and the analyst team. Each prospective investment is reviewed for 1) potential value – assessing the intrinsic value of a business by emphasizing value parameters such as discounted cash flows, balance sheet structure, strategy and operating metrics; and 2) potential for change – careful analysis of a company's shareholders, board composition and incentives, management quality and incentives and interaction between board and management to assess the dynamics of effecting change at each organization.</p> <p>Benchmark: S&P 500 Index</p>	<p>Assets Managed</p> <table> <tr> <td>12/31/10</td> <td style="text-align: right;">\$304,113,221</td> </tr> <tr> <td>12/31/11</td> <td style="text-align: right;">\$294,426,045</td> </tr> </table> <p>Fee Schedule:</p> <p>Management Fee:</p> <table> <tr> <td>First \$100 million:</td> <td style="text-align: right;">1.00%</td> </tr> <tr> <td>Next \$400 million:</td> <td style="text-align: right;">0.85%</td> </tr> <tr> <td>Balance of Acct.:</td> <td style="text-align: right;">0.60%</td> </tr> </table> <p>Incentive Fee: 20% of benchmark outperformance (assuming no loss carryforward)</p>	12/31/10	\$304,113,221	12/31/11	\$294,426,045	First \$100 million:	1.00%	Next \$400 million:	0.85%	Balance of Acct.:	0.60%
12/31/10	\$304,113,221											
12/31/11	\$294,426,045											
First \$100 million:	1.00%											
Next \$400 million:	0.85%											
Balance of Acct.:	0.60%											

Concerns: Since inception performance has been disappointing, but shorter-term performance is encouraging.

12/31/2011 Performance (gross of fees)

	<u>Last Quarter</u>	<u>1 Year</u>	<u>3 Years</u> <u>Annualized</u>	<u>5 Years</u> <u>Annualized</u>	<u>Last 6-1/2 Years</u> <u>Annualized</u>
Relational	14.84%	1.70%	18.73%	-1.72%	1.32%
Benchmark	11.82%	2.11%	14.11%	-0.25%	2.97%



Relational Investors LLC

Presentation to the

Alaska Retirement Management Board

April 19, 2012



Disclaimer

The following materials are being provided to select institutional accredited investors in one-on-one presentations on a confidential basis for informational and discussion purposes only. These materials are designed to complement a verbal presentation and do not constitute an offer to sell or a solicitation of an offer to purchase an interest in Relational Investors LLC (“Relational”), or any of its affiliated funds. These materials are also not a solicitation for investment advisory services offered by Relational.

This presentation has been prepared by Relational for informational and discussion purposes only with respect to our investment activities and strategies. This presentation is not intended to serve as the basis for any investment decision.

An investment managed by Relational entails a high degree of risk and no assurance can be given that Relational Investors' investment objective will be achieved, its risk management strategy will be successful or that investors will receive any return on or of their capital.

Except as otherwise indicated herein, the information provided is based on matters as they exist as of the date of preparation and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof. Certain economic and market information contained herein has been obtained from published sources prepared by other parties. While such sources are believed to be reliable, Relational, and its respective affiliates assume no responsibility for and have not verified, such information and do not represent that such information is accurate or complete. Statements contained in this presentation that are not historical facts are based on current expectations, estimates, projections, opinions and/or beliefs of Relational. Due to various risks and uncertainties, actual events or results may differ materially from those reflected in such opinions. These materials should be read with reference to all footnotes which are provided on each page and in the Appendices.

Past performance is not necessarily indicative of future results. These materials may not be distributed in any jurisdiction where such distribution would constitute a violation of the applicable laws and regulations.

Confidential – Not for Distribution



Table of Contents

	<u>Page</u>
Introduction	3
Performance	4
Firm and Strategy Overview	6
Holdings	10
Case Study – Hewlett-Packard Company	12
Case Study – Caterpillar Inc.	19
Appendix	29



Relational Investors LLC

- ▶ Registered Investment Adviser; Founded in 1996
- ▶ Independent Employee Ownership
- ▶ 51 Employees, 24 Investment Professionals
- ▶ \$6 billion under management
- ▶ Since 1996 we have engaged¹ 106 companies, including current holdings, across the full market cap range and held Board positions at 14 of those companies
- ▶ Since inception, the Fund² has outperformed the S&P 500 Total Return Index³ by 3.95%⁴ annually

¹ Engaged is defined as any communication, whether by telephone, in person, or in writing, with members of the board of directors or management of a portfolio company through February 29, 2012.

² From 1996 until July 2008 the Relational Investors Fund ("Fund" or "Large-Cap") invested in both mid-cap and large-cap companies. As the Fund grew its assets under management the average market capitalization of companies the Fund invested in increased and the Fund now primarily invests in large-cap companies. Performance figures contained herein include all investments. Performance for the Fund is represented by the Relational Investors Composite, which is described below in footnote 4.

³ S&P 500 Total Return Index ("SPTR" or "S&P 500 Index") is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source:** IDC

⁴ The Relational Investors Composite ("Composite") time-weighted returns as of February 29, 2012, net of current management fees, performance fees (after recoupment of management fees) and expenses; fees on an accrual basis. See the GIPS compliant presentation in the Appendix for the Composite description. Results will vary based on actual fee structure and timing of investment. Past performance is no guarantee of future returns and investments in securities involve the risk of loss. There is no guarantee that potential investors will achieve comparable results or its stated objectives, nor is there any assurance that investors will receive any return on or of their capital.



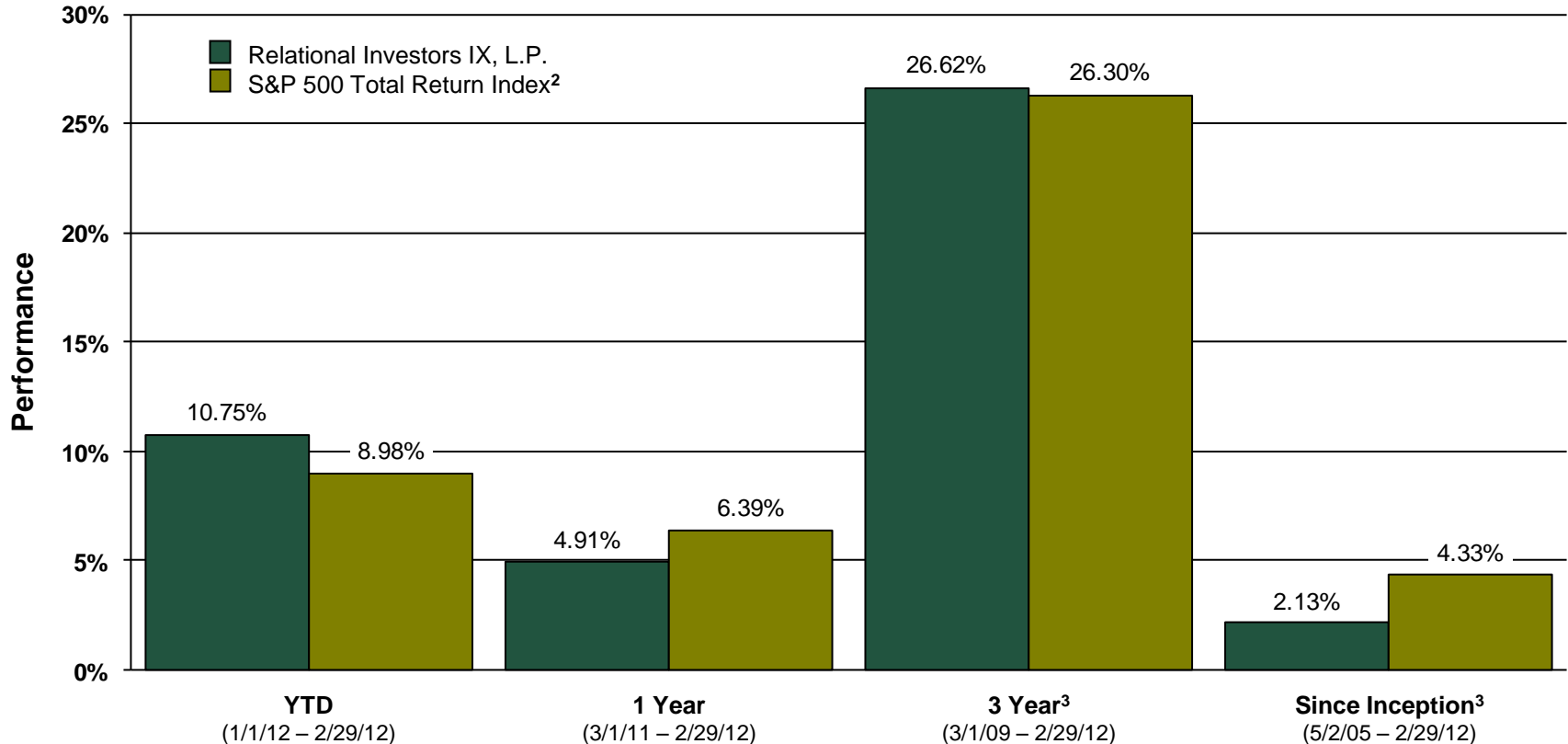
Performance

Relational Investors IX, L.P.¹

Realized and Unrealized Portfolio Performance

Through February 29, 2012

Internal Rate of Return (Net of Fees and Expenses, Fees on an Accrual Basis)



¹ Relational Investors IX, L.P. ("RI-9") internal rate of return ("IRR") net of management fee, performance fee (after recoupment of fees and expenses) and expenses; fees on an accrual basis.

² The S&P 500 Total Return Index ("SPTR") is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. The SPTR IRR has been calculated based on the purchases and sales of the underlying security trades of RI-9. The method assumes buying an equal dollar amount of index units against security purchases for RI-9, tracking the performance of those index units, and then selling the corresponding lots of index units when the related portfolio securities are sold. Purchases and sales of index units are assumed to be made at the end of the day price, cash balance is assumed to be at zero and there is no assessment of fee or commission charges. **Source:** IDC.

³ Returns are annualized.

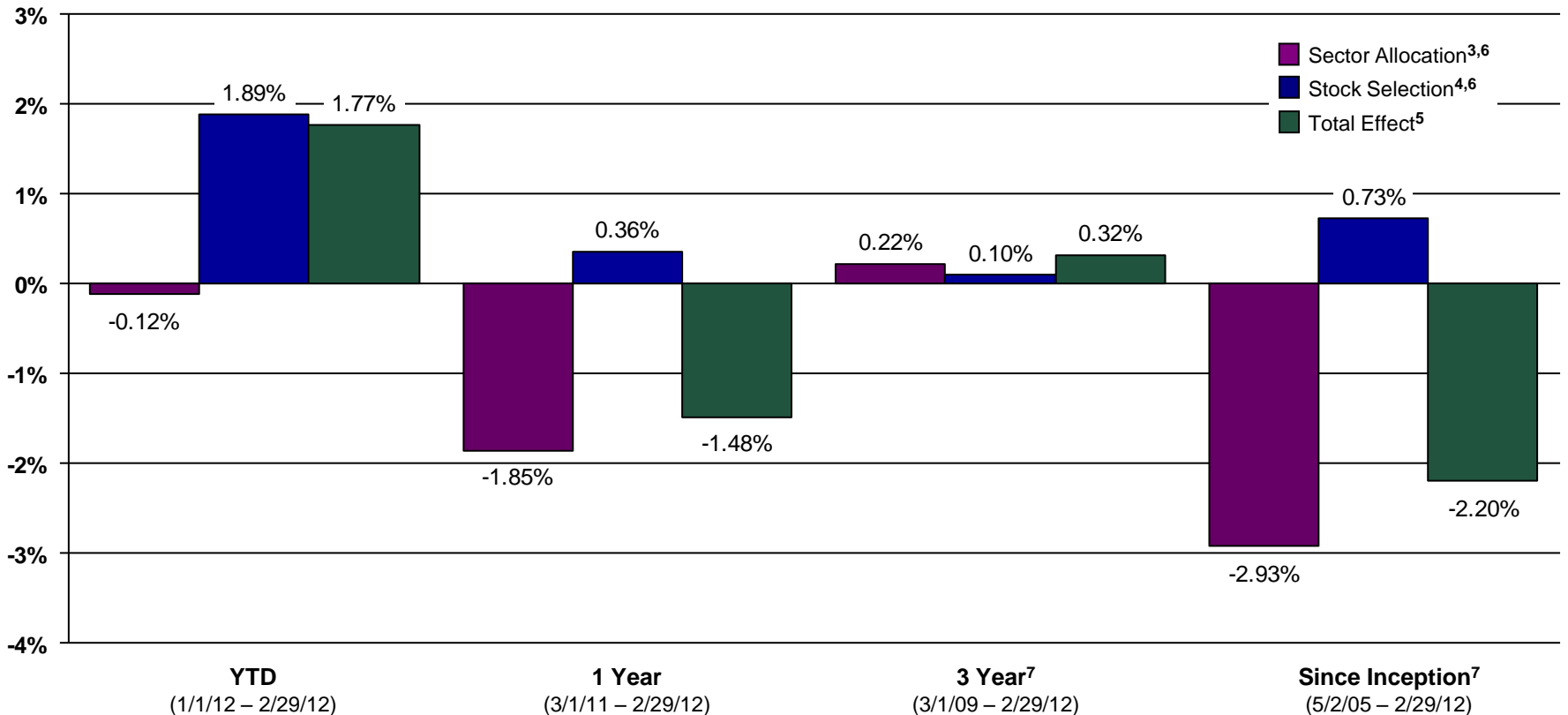


Return Attribution¹

Relational Investors IX, L.P. vs. S&P 500 Total Return Index²

Through February 29, 2012

Internal Rate of Return (Net of Fees and Expenses)



¹ The attribution figures include all RI-9 investments. The returns are calculated net of fees and expenses on an IRR basis.

² The SPTR is an unmanaged capitalization-weighted index comprised of 500 companies traded in the U.S. markets, and is intended to reflect general stock market performance rather than the particular strategy employed by Relational.

³ Sector Allocation measures a portfolio manager's decisions within the Single-Currency Attribution method.

⁴ Stock Selection measures the result of a portfolio manager's security selection within the Single-Currency Attribution method.

⁵ Total Effect is the sum of Sector Allocation and Stock Selection.

⁶ To calculate net IRR attributions: gross time-weighted Stock Selection and Sector Allocation returns are applied to net IRR Total Effect on a pro-rata basis; fees and expenses are pro-rata allocated based on each factor's gross contribution to gross time-weighted Total Effect.

⁷ Attribution is annualized

Source: Results generated by Relational Investors utilizing FactSet.



Major Strengths and Differentiators

- ▶ Pioneer in relational investing; over 25 years experience with strategy fundamentals
- ▶ Reputation for integrity, deep research, and constructive engagement
- ▶ 15-year fund track record during widely varying market conditions
- ▶ Positive references from engaged companies' managements and boards
- ▶ Principals have served as senior officers and executives of public companies
- ▶ Broad range of corporate board experience; Principals have served on 23 publicly traded company boards and as chairman of four:

Allwaste, Inc.

American Coin Merchandising, Inc.

Apria Healthcare Group Inc.

ConAgra Foods, Inc.

FARR Company

Genzyme Corporation

ICN Pharmaceuticals, Inc.

Hewlett-Packard Company

Intuit Inc.

Mac Frugal's Bargains•Close – Outs Inc.

Mattel, Inc.

Mesa, Inc.

Nuevo Energy Company

Santa Fe Pacific Gold Corporation

Sirius Satellite Radio, Inc./CD Radio

Sovereign Bancorp, Inc.

Sprint Nextel Corporation

Tektronix, Inc.

The Home Depot, Inc.

United Thermal Corporation

Washington Group International, Inc.

Waste Management, Inc.

Wilshire Technologies, Inc.

Current board member

Former board chairman



“Relational” Strategy

- ▶ Identify underperforming companies with clear deficiencies contributing to market discount
- ▶ Assess whether proactive engagement from a large shareholder might catalyze improvements leading to share price appreciation
- ▶ Accumulate shares in step-function over time while validating investment thesis and initiating engagement
- ▶ Engage management, board, and other constituencies to spur changes
- ▶ Exit over time as company improves and is fairly valued in the market
- ▶ Typical holding period is three to five years



Relational's "Sweet Spot"

Relational's best opportunities are found at companies with the following general characteristics:

- ▶ Share price implies low market expectations relative to historical growth and returns
- ▶ One or more mature and highly defensible business franchises with opportunity to improve business operations
- ▶ Significant and growing excess cash flows (relative to broader market), with opportunity to improve capital allocation discipline
- ▶ Balance sheet indicates a low likelihood of financial distress
- ▶ Weak or evolving board dynamics
- ▶ Compensation programs that are not adequately aligned with long-term shareholder value creation
- ▶ No structural impediments to an effective engagement program



Engagement Objectives

Improve Areas That May Cause Depressed Share Value

Engagement Focus	Relational Objectives
Business Strategy	Improve long-term focus on core business, while mitigating risk
Business Operations	Profit margin and working capital improvements
Capital Allocation	Maximize return on invested capital
Capital Structure	Optimal use of debt and equity
Governance	Transparent, responsive, and accountable
Compensation	Long-term alignment with shareholder interests
Communication	Timely, accurate, consistent, and realistic



Holdings

Relational Investors IX, L.P. February 29, 2012

Security	Initial Purchase	Quantity	Unit Cost (\$)	Total Cost (\$)	Current Price (\$)	Market Value (\$)	% of Portfolio	Gain/Loss (%)	RILLC % of Ownership
STREAM ¹	02/09/12	22,349.00	115.79	2,587,883	118.57	2,649,921	0.8	2.4	0.7
WIRE ¹	12/13/11	968,174.00	17.71	17,145,390	17.47	16,914,000	5.3	-1.3	2.8
POP ¹	09/22/11	534,094.00	63.06	33,681,493	62.94	33,615,876	10.5	-0.2	0.6
Hewlett-Packard Company	08/29/11	993,122.00	24.29	24,127,392	25.31	25,135,918	7.8	4.2	0.8
Medtronic, Inc.	08/24/11	334,326.00	34.15	11,417,075	38.12	12,744,507	4.0	11.6	0.5
Caterpillar Inc.	08/15/11	199,640.00	83.88	16,746,028	114.21	22,800,884	7.1	36.2	0.5
Illinois Tool Works Inc.	07/01/11	473,842.00	47.17	22,349,530	55.69	26,388,261	8.2	18.1	1.6
Quest Diagnostics Incorporated	05/16/11	261,642.00	50.83	13,299,987	58.05	15,188,318	4.7	14.2	2.7
MetLife, Inc.	03/03/11	786,879.00	41.91	32,975,176	38.55	30,334,185	9.4	-8.0	1.2
Applied Materials, Inc.	12/21/10	1,338,974.00	11.99	16,047,664	12.24	16,389,042	5.1	2.1	1.8
Zimmer Holdings, Inc.	12/16/10	256,207.00	58.03	14,868,240	60.75	15,564,575	4.8	4.7	2.4
CVS Caremark Corporation	11/06/09	563,173.00	29.96	16,875,333	45.10	25,399,102	7.9	50.5	0.7
Occidental Petroleum Corporation	02/09/09	402,628.00	58.16	23,415,739	104.37	42,022,284	13.1	79.5	0.8
Intuit Inc.	01/27/09	30,257.00	27.81	841,547	57.84	1,750,065	0.5	108.0	0.1
Unum Group	02/01/06	732,043.00	22.27	16,300,499	23.05	16,873,591	5.3	3.5	4.2
Baxter International Inc.	05/12/05	300,317.00	49.30	14,804,571	58.13	17,457,427	5.4	17.9	0.8
				277,483,547		321,227,958	100.0	15.8	
CASH AND EQUIVALENTS				10,014,819		10,014,819			
TOTAL PORTFOLIO				287,498,366		331,242,777		15.2	

¹ Code name. Investment not publicly disclosed.

Unaudited and Unreconciled



Investment Stages

As of February 29, 2012

Early Stage	Mid Stage	Late Stage
<p>Applied Materials Hewlett-Packard POP¹ STREAM¹ WIRE¹</p>	<p>Caterpillar Illinois Tool Works Medtronic MetLife Quest Zimmer</p>	<p>Baxter CVS Caremark Intuit Occidental Petroleum UNUM</p>

¹ Code name. Investment has not been publicly disclosed.



Case Study





HP Diverse Business Mix



- ▶ HP is the world's largest provider of information systems hardware and services to both consumers and businesses:
 - Consumer PC's and Printers
 - Commercial PC's, Printers and Workstations
 - Technology and Information Services & Outsourcing
 - Industry Standard and Enterprise Critical Servers
 - Enterprise Storage and Networking
 - Enterprise Software



Why We Invested in HP

- ▶ Breadth of technology and global footprint position HP for strong returns
 - Unique set of hardware, software, and service assets
 - Historical partner of choice for large enterprises

- ▶ History of returning cash to shareholders via dividends and share repurchases

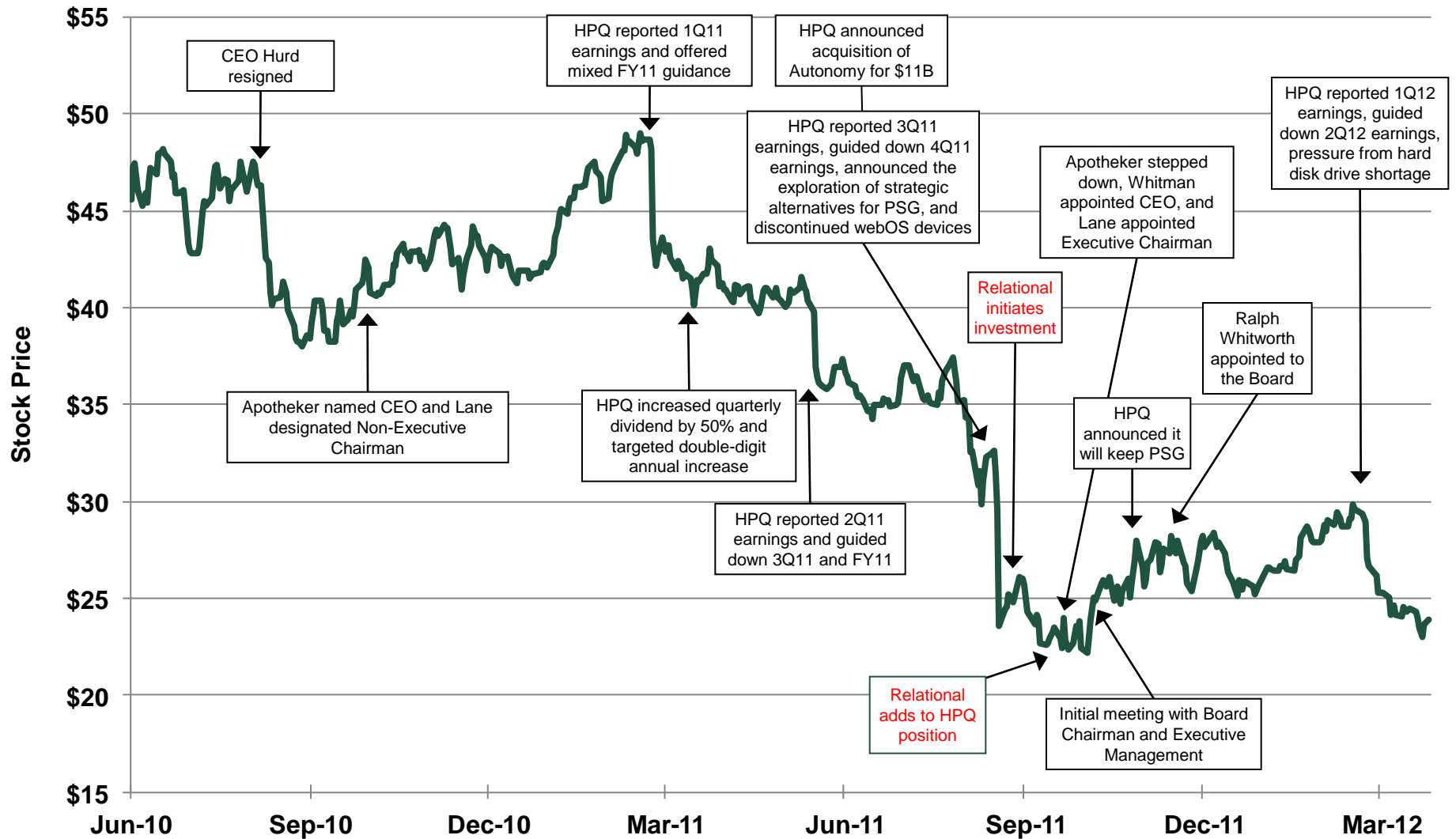
- ▶ Significant opportunity to remove the discount from HP shares
 - The market has penalized poor execution, poor communication, and questionable capital allocation
 - Governance missteps have added to lack of investor confidence

- ▶ Optimizing capital allocation discipline and restoring operational excellence can drive meaningful share price appreciation

- ▶ We appreciate the magnitude of strategic challenges and understand there are no easy answers – no silver bullet

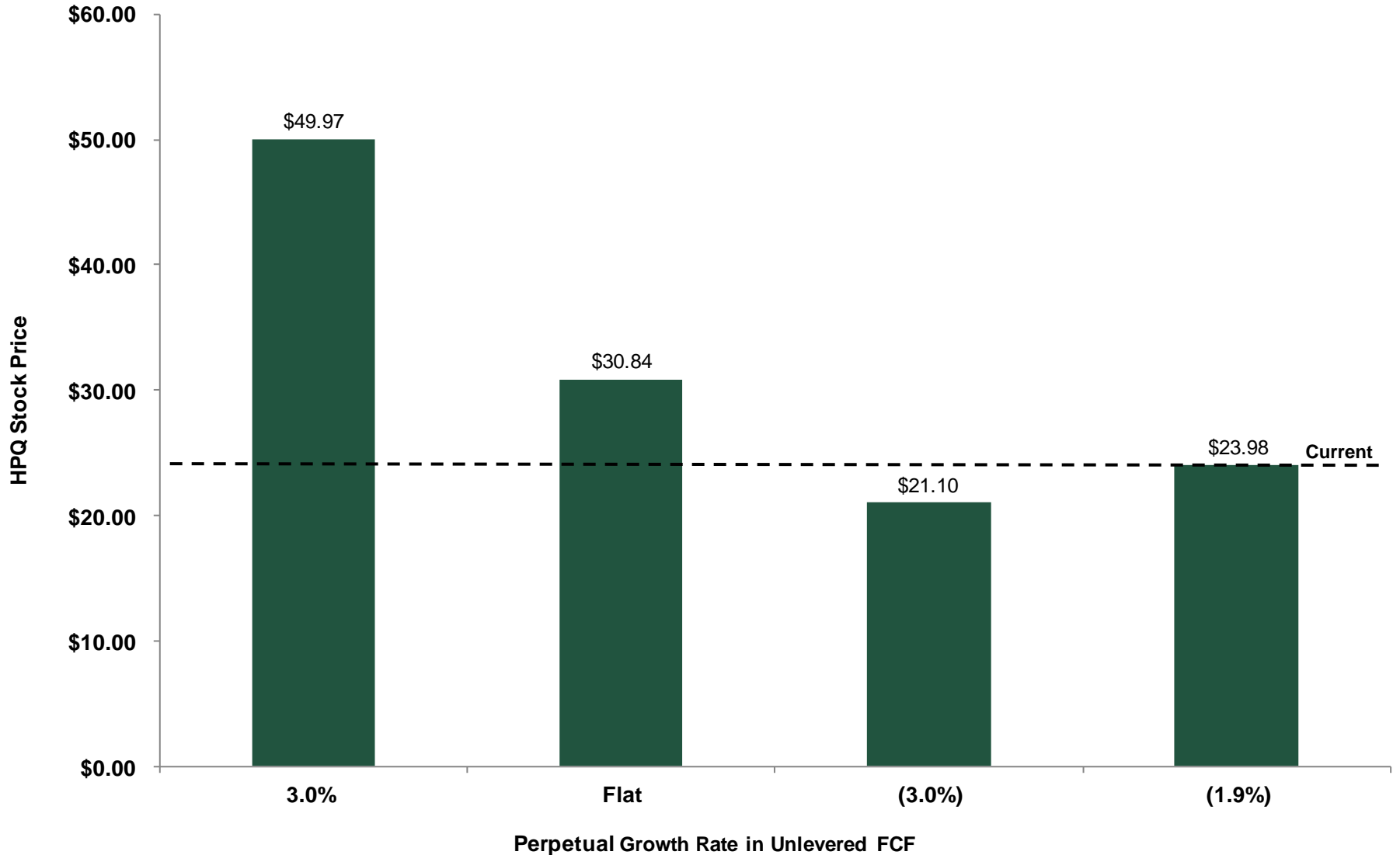


Hewlett-Packard Company (HPQ)





Implied DCF Value Under Various Free Cash Flow Growth Scenarios – Fully Taxed



Assumptions: FY12 consensus estimate of \$4.04 and indicated growth rate thereafter; 35% tax rate; 9% cost of capital



Relational's Agenda

- ▶ Improve capital allocation disciplines to ensure discretionary cash is allocated to the highest and best use
- ▶ Improve operational focus to better balance the tradeoff between returns and growth
- ▶ Improve executive incentives to better reflect maturing nature of business lines and improve alignment with shareholder value



Tradeoff Between Growth and Returns: Why Disciplined Capital Allocation Matters

Value of Growth and Returns: Implied P/E Ratios*

		Return on Invested Capital			
		5.0%	10.0%	15.0%	20.0%
Long-Term Growth	2.5%	7x	10x	11x	12x
	5.0%	0x	10x	13x	15x
	7.5%	(20x)	10x	20x	25x

Source: Adapted from McKinsey & Company analysis – assumes no leverage such that P/E = EV/NOPAT and ROIC = ROE; cost of capital is 10%



Case Study

CATERPILLAR



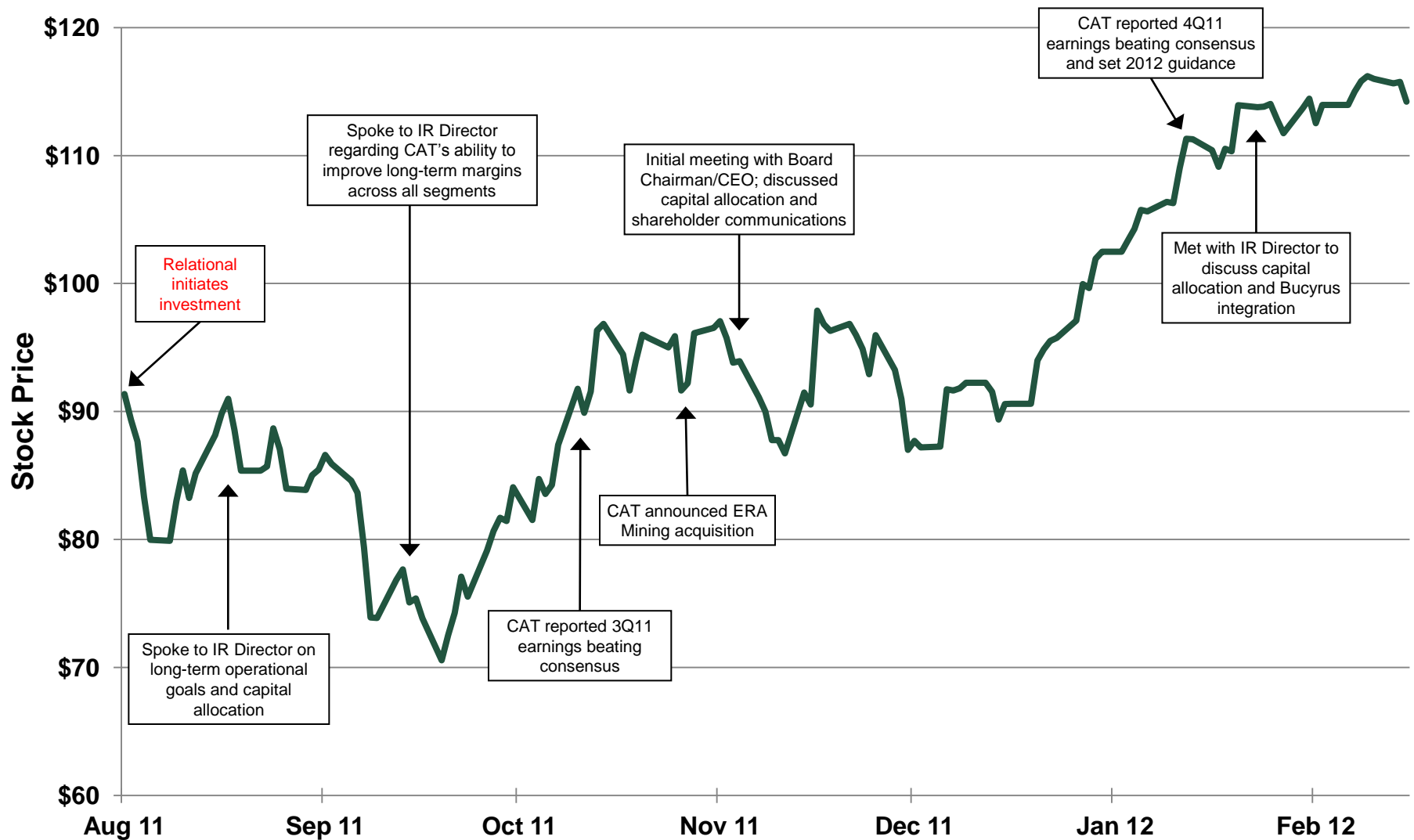
Caterpillar Business Lines

CATERPILLAR

- ▶ Construction Industries (Heavy Equipment)
- ▶ Resource Industries (Mining Equipment)
- ▶ Power Systems (Engines and Turbines)
 - Electric Power
 - Petroleum
 - Industrial
 - Transportation
- ▶ CAT Financial (Equipment Financing)



Caterpillar Inc. (CAT)





Why We Invested in Caterpillar

- ▶ Dominant market positions in Mining, Power, and Construction Equipment
- ▶ Premier brand name with high barriers to entry
- ▶ Capital investments and productivity improvements will drive higher cash flows and returns
- ▶ Trades at a discount to fair value
- ▶ Management has made commitment to significantly expand capacity
 - Market participants need assurance that investments into areas of high excess capacity will not dilute long-term return

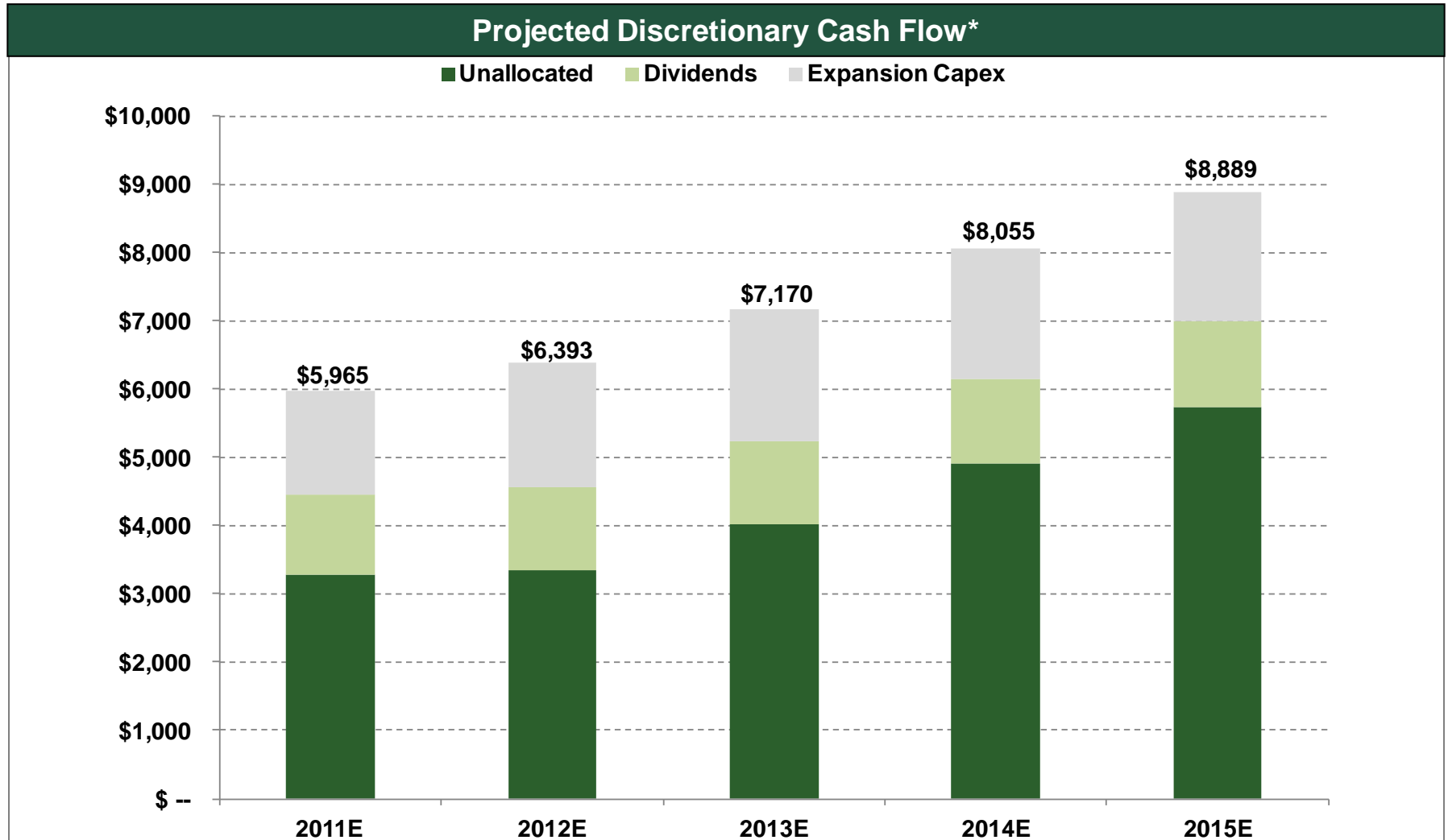


The Opportunity

- ▶ Enhance Shareholder Value by:
 - Successfully integrating Bucyrus (mining equipment) acquisition
 - Deploying capital into high-return mining and power businesses
 - Improving or divesting non-core, low-return business units
 - Improving inventory turns
 - Effectively managing capacity expansion
 - Refining capital allocation discipline



Caterpillar Will Generate Significant Discretionary Cash Flow

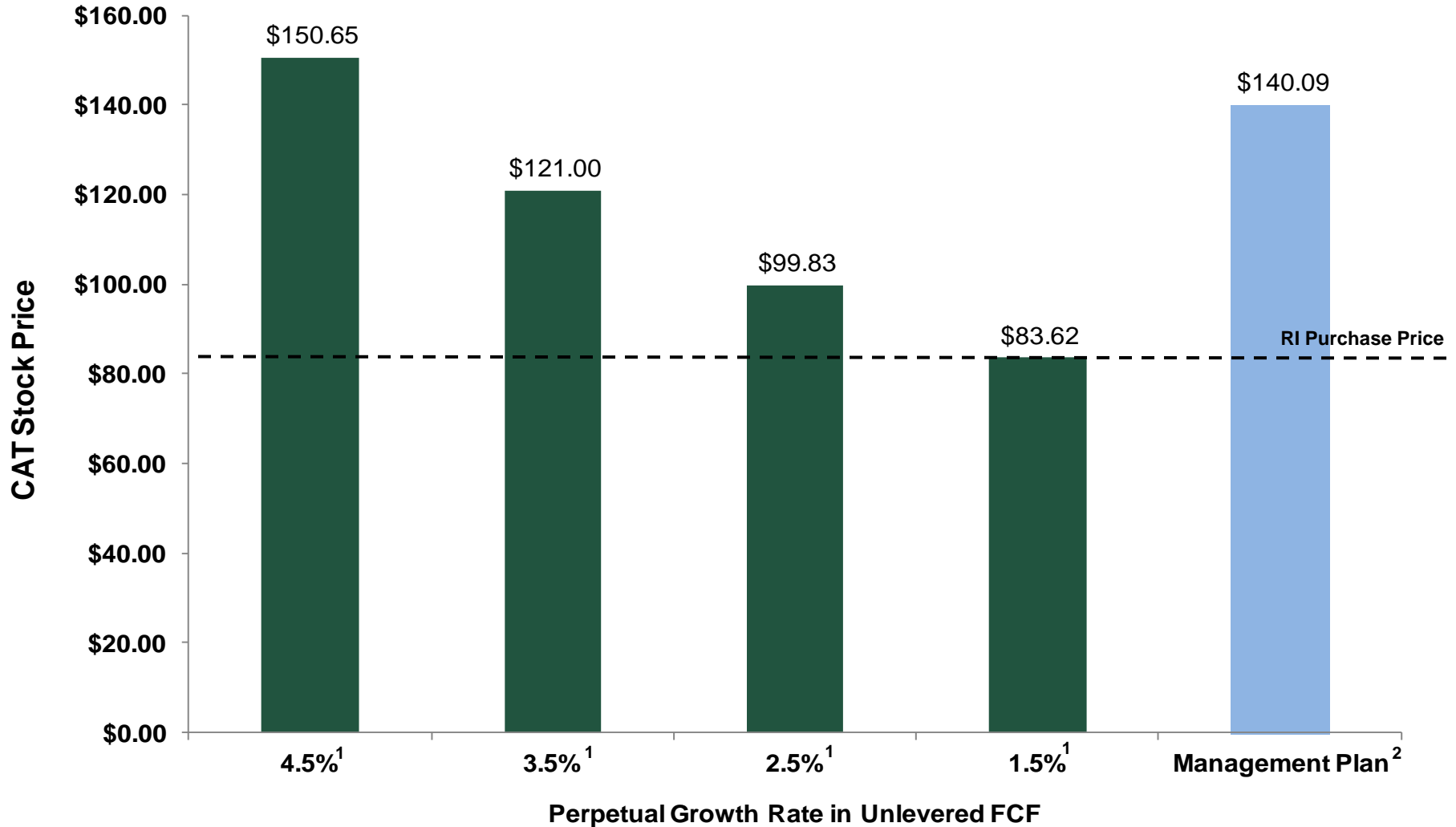


Management's plan implies Caterpillar will generate 59% of its market cap over next 5 years

* Discretionary cash flow defined as operating cash flow less maintenance capex.



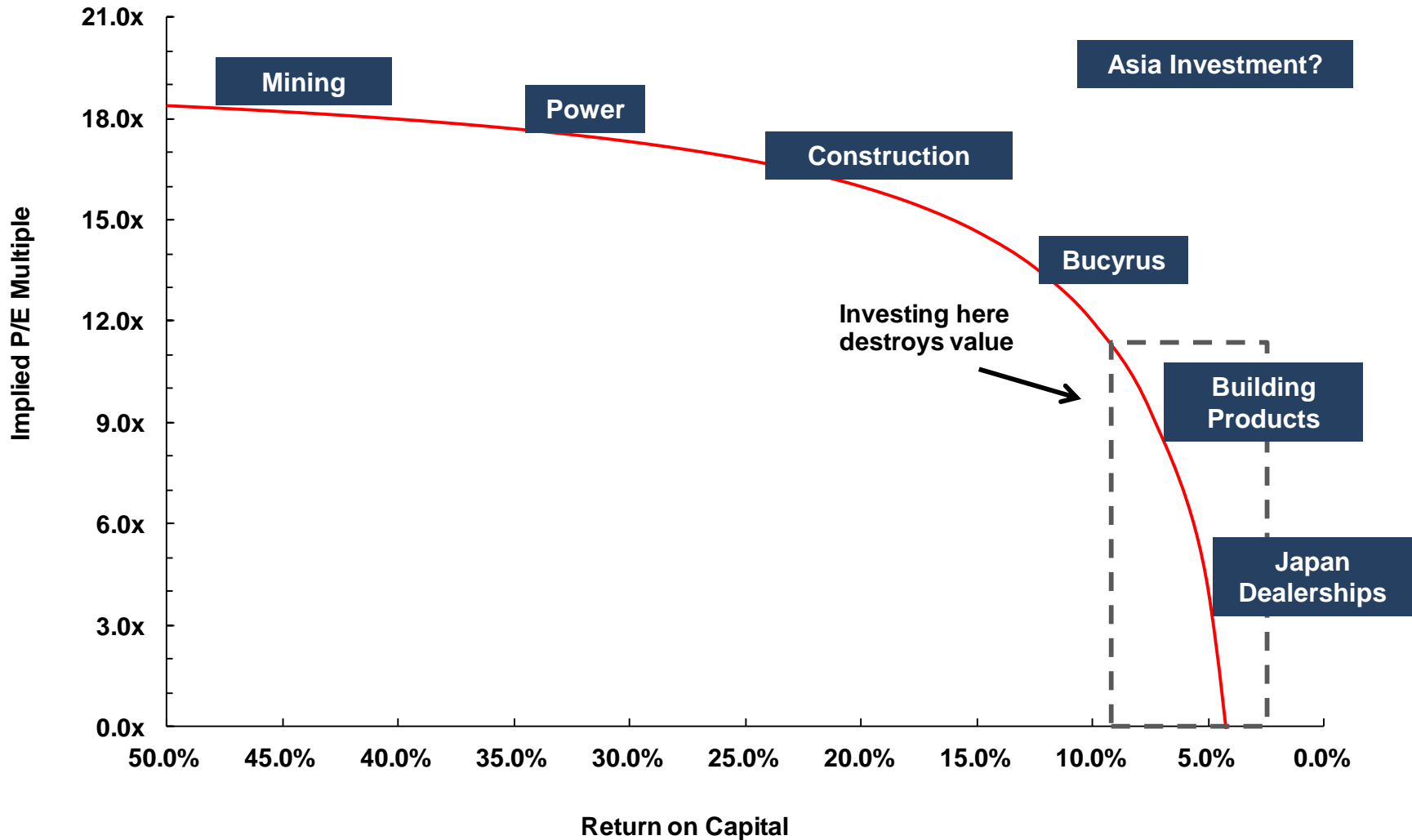
Implied DCF Value Under Various Free Cash Flow Growth Scenarios



Assumptions: 1) RI estimated 2011E free cash flow and indicated growth rate thereafter; 9.5% discount rate. 2) 11% growth for 4 years and 2.5% growth thereafter; 9.5% discount rate.



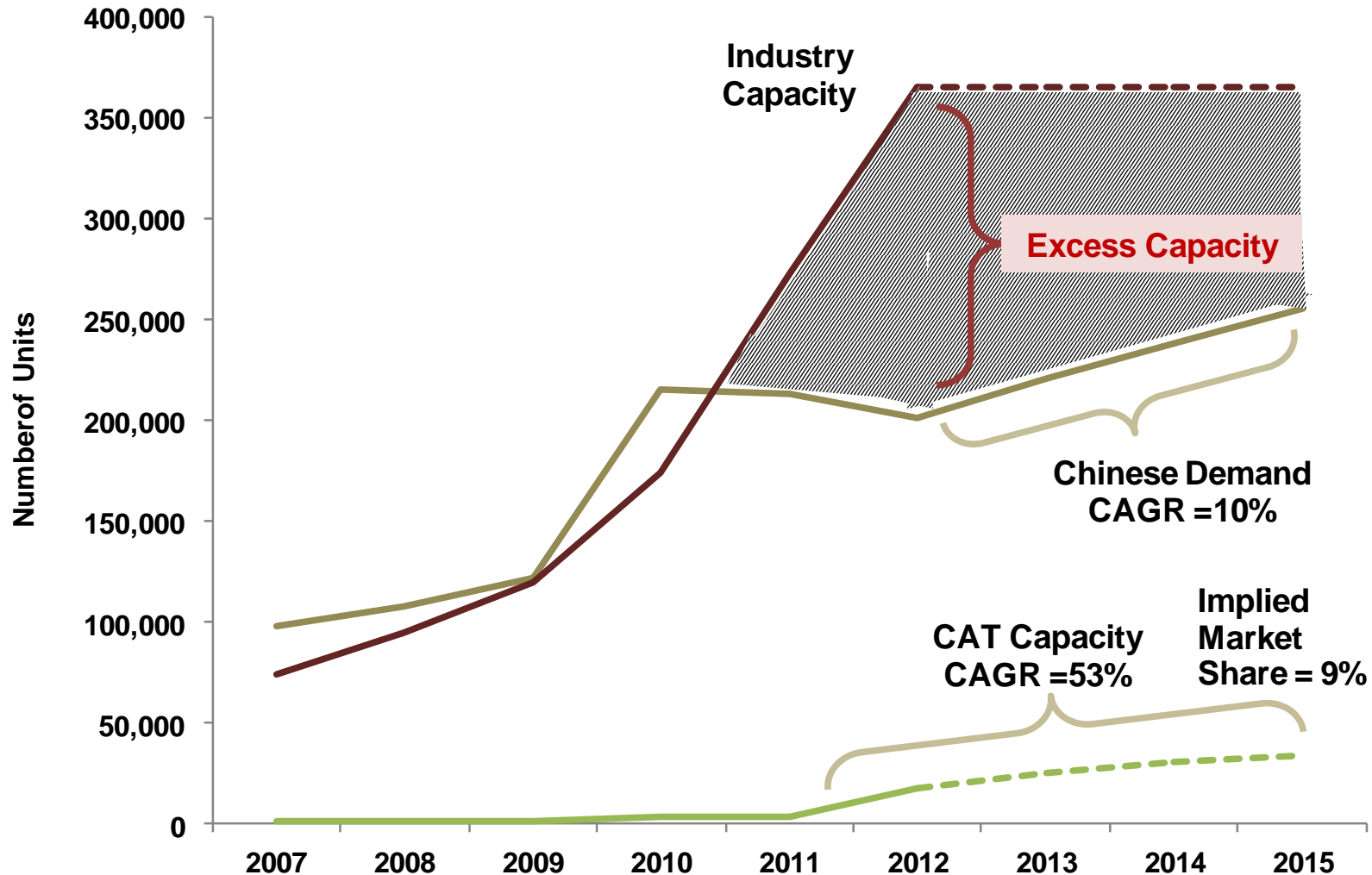
Growth At Lower Returns Destroys Value



Assumptions: 1) Building Products & Japan dealerships earn returns similar to 2010 performance. Bucyrus includes goodwill. 2) 9% cost of capital and 4% growth.



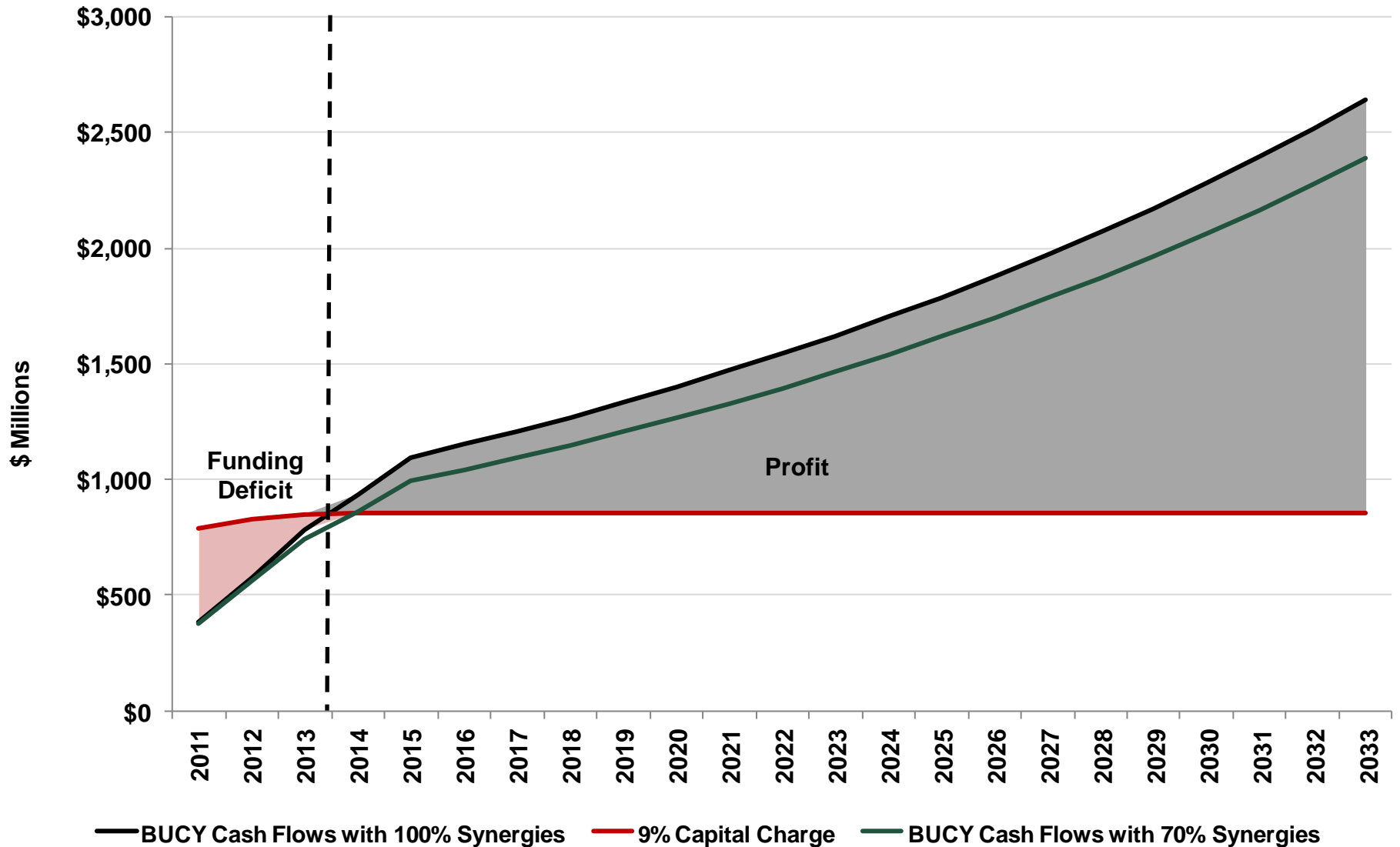
Excess Excavator Capacity In China



Source: BOA estimates and Caterpillar company reports; no industry capacity data available past 2012. Note: Assumes Caterpillar will meet its capacity targets by 2015.



Value of Bucyrus Acquisition Highly Dependent on Integration Execution



Note: Assumes 9% cost of capital and that cash flows grows at 5% beyond 2015.



APPENDIX



Investment Team

Investment Committee

David H. Batchelder¹
Founder

John A. Sullivan²
Senior Managing Director

Ralph V. Whitworth¹
Founder

Richard H. Moore
Managing Director

Kathleen M. Carney
Senior Legal Counsel

Alex M. Green
Head Trader

Sector Research Technology, Media, Telecom

Kirt P. Karros, CFA, CPA²
Managing Director

A. Michael Puangmalai
Analyst

Benjamin L. Herrick, CFA
Analyst

Danielle M. Mahan
Associate Analyst

Francesca R. Parini
Associate Analyst

Sector Research Consumer, Healthcare, Financials

H. Jay Winship, CFA, CPA²
Senior Managing Director

Brendan B. Springstubb, CFA
Senior Analyst

Chris B. Hetrick, CFA
Senior Analyst

Bryce S. McFerran
Analyst

Kenneth C. Kempf
Analyst

Ethan J. Turner, CFA
Analyst

Tyler M. Smith
Associate Analyst

Michael D. Carlson
Associate Analyst

Sector Research Industrials, Materials, Energy, Utilities

Matthew P. Hepler
Managing Director

Weston J. Ahlswede
Senior Analyst

Blake A. Zacharias
Analyst

Michael J. McCulloch
Analyst

Aanchal Kapoor
Associate Analyst

Prithvi M. Murthy
Associate Analyst



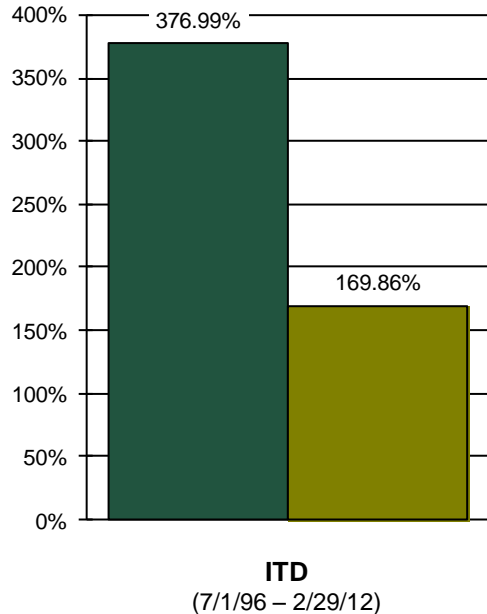
Large-Cap Performance and Excess Return

Relational Investors Composite¹

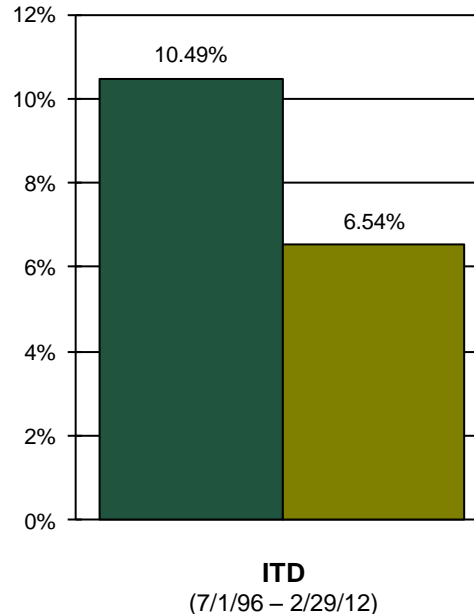
From July 1, 1996 (inception) through February 29, 2012

■ Relational Investors Composite
 ■ S&P 500 Total Return Index²

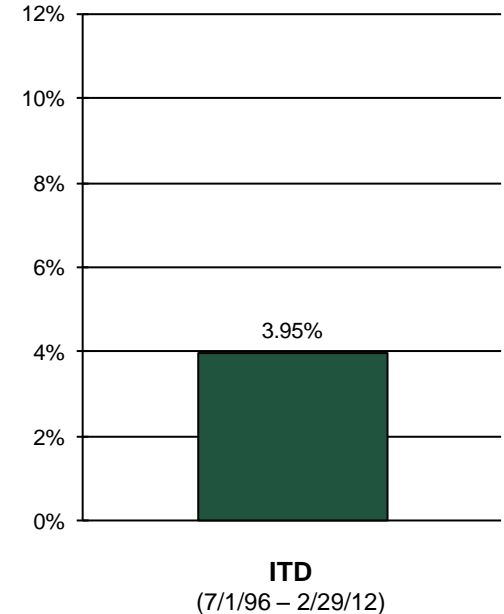
Cumulative Return Net of Fees



Annualized Return Net of Fees



Annualized Excess³ Return Net of Fees



¹ The Composite time-weighted returns net of current management fees, performance fees (after recoupment of management fees) and expenses; fees on an accrual basis. See GIPS compliant presentation in the Appendix for a description of the Composite. Results will vary based on actual fee structure and timing of investment. Past performance is no guarantee of future returns and investments in securities involve the risk of loss. There is no guarantee that potential investors will achieve comparable results or its stated objectives, nor is there any assurance that investors will receive any return on or of their capital. From 1996 until July 2008 the Fund invested in both mid-cap and large-cap companies. As the Fund grew its assets under management the average market capitalization of companies the Fund invested in increased and the Fund now primarily invests in large-cap companies. Performance figures contained herein include all investments.

² The SPTR is an unmanaged, capitalization-weighted index comprised of 500 companies traded in the U.S. markets and is intended to reflect general stock market performance rather than the particular strategy employed by Relational. **Source:** IDC.

³ "Excess" is defined as the difference between the returns of the Composite and the SPTR.



Presenters

Ralph V. Whitworth – Principal and Investment Committee Member



Mr. Whitworth is a Founder, Principal, and Investment Committee member of Relational Investors LLC ("Relational"), a \$6 billion investment fund specializing in strategic block investments.

Mr. Whitworth has served on the boards of eleven public companies: Apria Healthcare Group Inc., Genzyme Corporation, Hewlett-Packard Company, Mattel, Inc., Sirius Satellite Radio, Inc., Sovereign Bancorp, Inc., Sprint Nextel Corporation, Tektronix, Inc., United Thermal Corporation, Waste Management, Inc., and Wilshire Technologies, Inc. During his tenure seven of these companies were in the Fortune 500. He remains a Director of Hewlett-Packard. Mr. Whitworth has chaired numerous committees and led searches for directors and executive officers. He served as Chairman of the board of Apria and Waste Management.

Mr. Whitworth is considered an expert on corporate governance. He has been invited to present his views on corporate governance and shareholder rights matters before the United States Senate and House of Representatives, the U.S. Securities and Exchange Commission, the New York Stock Exchange Board, and the New York Federal Reserve. He served on five national Blue Ribbon Commissions sponsored by the National Association of Corporate Directors regarding director compensation and other corporate governance issues. He also served on a Joint Task Force assembled by the Council of Institutional Investors and the National Association of Corporate Directors to review and make recommendations for improving board-shareholder communications.

During 2007 and 2008, two of the most challenging years in U.S. banking history, Mr. Whitworth served as Chairman of Sovereign Bancorp's (the nation's largest savings and loan company) Credit and Risk Committee and its Capital Committee.

During 1999, Mr. Whitworth's service as Chairman of Waste Management was a major crisis management assignment in the midst of an accounting scandal, the breadth and magnitude of which were unprecedented. He was responsible for overall management of the company. He also led a 2,000 person strong, bottom-up audit of the company's financial statements and led the recruitment effort to replace the company's management team. During Mr. Whitworth's tenure as a board member of Waste Management (1998 to 2004), *BusinessWeek* recognized Waste Management as one of the five "Most Improved Boards" in 2002.

From 1998 to 2005, Mr. Whitworth played a similar role at Apria Healthcare Group (the world's largest home healthcare provider). During his tenure as Chairman of Apria (1998 to 2005), Apria's board was twice named by *BusinessWeek* (2000 and 2002) as one of the ten "Best Boards in America." Mr. Whitworth received prominent recognition when Institutional Shareholder Services selected Apria as the "Best Governed Company in North America" in 2000. Also, during his tenure Apria's board was recognized in *The Corporate Governance Advisor* article (September 1998) titled, "Apria's Designer Board May Be Model for Next Millennium." Mr. Whitworth was named "Director of the Year" by the Corporate Directors Forum in 2004 for his work at Apria.

From 1986 to 1994, Mr. Whitworth was the President of United Shareholders Association (pro bono). In 1990 he authored the petition for rulemaking which in 1992 culminated in a major overhaul of the U.S. Securities and Exchange Commission's shareholder communication and compensation disclosure rules.

From 1989 to 1992, Mr. Whitworth served as President of Development at United Thermal Corporation, which at that time was the largest operator of district heating and cooling systems in the nation. Mr. Whitworth served on the company's board of directors until December 1993 when he chaired the board's special committee representing minority shareholders during a sale transaction.

From 1985 to 1988, Mr. Whitworth served as Assistant to the General Partner at Mesa Limited Partnership. During that time Mesa was the nation's largest independent oil and gas company. He managed the executive staff, served on the company's operating committee, and participated in the company's investments, acquisitions, and financing activities.

From 1981 to 1984, Mr. Whitworth served on the U.S. Senate Judiciary Committee staff of Senator Paul Laxalt.

Mr. Whitworth holds a juris doctor degree from Georgetown University Law Center.



Presenters (continued)

Jay Winship – Principal and Senior Managing Director

Mr. Winship is a Principal and Senior Managing Director of Research for Relational. He is actively involved with Relational's Investment Committee, including developing and executing Relational's investment strategies. Mr. Winship leads the research team focusing on the Consumer, Healthcare, and Financials sectors. He participates in all aspects of Relational's research process and is active in the development and implementation of the engagement process with portfolio companies.



Mr. Winship joined Relational in early 2002. He was previously with Relational Advisors, where he was a Partner with broad responsibilities for mergers, acquisitions, and financings for a large number of public and private companies. Prior to becoming a Partner in Relational Advisors in 1999, he was an Associate and among other duties, provided research and analytical services to Relational Investors from 1996 to 1998. Prior to 1996, Mr. Winship was with Arthur Andersen LLP in Phoenix, Arizona where his expertise was focused on transaction-related engagements and equity offerings for public companies. Mr. Winship formerly served on the boards of Del Mar Database, Seaspan Containers Lines, Ltd., Seaspan Ship Management, Ltd., and McKay Creek Technologies, Ltd.

A Magna Cum Laude graduate from the University of Arizona, Mr. Winship holds a bachelor's degree in finance and a master's in business administration from the University of California, Los Angeles. He is a Certified Public Accountant and holds the professional designation of Chartered Financial Analyst.



Large-Cap Performance History

Relational Investors Composite ("RI")

July 1, 1996 (inception) through February 29, 2012 – Unaudited

Timeframe	Gross of Fees (in %)	Net of Actual Fees (in %)	Net of Current Fees with S&P Incentive Benchmark (in %)	S&P 500 Total Return Index (not examined) (in %)	Net of Current Fees with RI		Dispersion	Composite Market Value at Year-end (in millions)	Market Value of Firm Assets at Year-end (in millions)	Percentage of Composite Assets to Total Firm Assets at Year-end	Number of Accounts at Year-end
					Custom Incentive Benchmark (in %)	RI Custom Index (in %)					
1996	56.76	43.03	37.77	11.68	39.80	21.84	≤5 accounts	\$19.6	\$19.6	100.00%	1
1997	34.76	28.87	26.40	33.36	25.88	23.79	≤5 accounts	\$274.4	\$286.2	95.90%	5
1998	-31.59	-33.63	-34.61	28.58	-34.61	18.30	8.59%	\$221.8	\$221.8	100.00%	8
1999	44.92	42.99	41.08	21.04	41.08	19.94	17.30%	\$578.0	\$578.0	100.00%	8
2000	73.76	66.16	67.02	-9.10	67.17	9.58	12.54%	\$613.6	\$628.3	97.70%	9
2001	10.06	5.55	3.80	-11.89	4.76	-7.07	7.57%	\$814.3	\$890.0	91.50%	10
2002	-1.16	-7.02	-7.26	-22.10	-6.81	-19.84	5.61%	\$1,065.9	\$1,172.2	90.90%	13
2003	53.97	48.27	46.28	28.68	46.68	30.68	6.03%	\$1,620.4	\$1,973.3	82.10%	17
2004	20.30	17.66	16.61	10.88	16.46	10.14	2.28%	\$3,222.1	\$3,656.2	88.13%	20
2005	11.90	9.73	8.95	4.91	8.76	3.91	1.09%	\$5,615.4	\$6,242.2	89.96%	22
2006	12.06	10.58	9.90	15.80	9.90	12.97	1.45%	\$6,434.4	\$6,816.8	94.40%	21
2007	-8.83	-9.60	-10.19	5.49	-10.19	-5.02	2.13%	\$6,189.1	\$6,663.3	92.88%	22
2008	-40.64	-41.33	-41.93	-37.00	-41.93	-41.99	2.20%	\$3,062.4	\$3,853.1	79.48%	22
2009	28.99	27.35	26.38	26.46	26.38	27.24	1.95%	\$4,662.7	\$5,993.5	77.80%	19
2010	26.05	24.59	24.00	15.06	24.00	14.24	1.42%	\$5,261.3	\$6,473.7	81.27%	18
2011	1.32	0.29	-0.22	2.11	-0.22	2.17	0.20%	\$4,581.5	\$5,954.8	76.94%	16
2012 @ 2/29	11.28	11.02	10.87	9.00	10.88	8.83	n/a	\$5,155.6	\$6,398.0	80.58%	16

SINCE INCEPTION

Cumulative	812.21	465.70	376.99	169.86	389.17	162.88					
Annualized	15.15	11.70	10.49	6.54	10.66	6.36					



Relational Investors LLC

Notes to Schedules of Investment Performance Statistics

July 1, 1996 (inception) through February 29, 2012 – Unaudited

1. Compliance Statement

Relational Investors LLC ("Firm") is an investment advisory firm registered with the Securities and Exchange Commission and was founded in 1996. The accompanying Schedule of Investment Performance Statistics of the Relational Investors Composite ("Composite"), gross and net of management and performance fees, managed by the Firm from July 1, 1996 (inception) through February 29, 2012, is prepared and presented in compliance with the Global Investment Performance Standards (GIPS®). The Firm has been verified for the periods July 1, 1996 through March 31, 2011 by Ernst & Young LLP. In addition, Ernst & Young LLP has performed a performance examination of the Composite for the periods July 1, 1996 through March 31, 2011. The CFA Institute (formerly known as the Association for Investment Management and Research (AIMR ®)) has not been involved with the preparation or review of this report. A copy of the verification report is available upon request. Additional information regarding the Firm's policies and procedures for calculating and reporting performance results is available upon request.

2. Composite

The Firm utilizes a value-based investment strategy that emphasizes fundamental company-specific analysis. In the Composite, the Firm seeks to maintain investments in a concentrated portfolio of U.S. or Canadian securities with large-cap equity market capitalizations. With each investment, the Firm may seek to acquire a significant percentage of the subject company's shares outstanding. The Firm then initiates a program of communication with management, the board of directors and other shareholders designed to increase shareholder returns.

The Firm's advisory agreements with clients are generally structured on either capital call/distribution basis or fully funded basis. The capital call/distribution accounts call for or disburse cash as portfolio investments are made or disposed, thus generally maintaining minimal cash balances within the accounts. The fully funded accounts require contribution of the entire capital commitment into the account, reinvest sales proceeds and investment income, and typically restrict cash not utilized in the investment strategy to S&P index tracking instruments ("Spiders") or other highly liquid short-term investments, thus generally maintaining minimal cash balances within the accounts.

The Composite presented consists of all actual, fully discretionary Large-Cap accounts with a capital call/distribution structure and a carve-out of all actual, fully discretionary, actively managed portions (account assets excluding Spiders and short-term investment vehicles) of the fully funded accounts that were managed by the Firm from July 1, 1996 through February 29, 2012. The returns from the actively managed portions (accounts excluding Spiders and short-term investment vehicles) of the fully funded Large-Cap accounts have been carved-out as representative of the returns that would have been achieved in an account managed on a capital call/distribution basis. The Relational Investors Composite was created in August 2003. For a complete list and description of the Firm's composites, please contact Relational Investors LLC at (858) 704-3333.

The Composite includes leveraged accounts, which utilize the same investment strategy as the non leveraged accounts in the Composite, but gives the Firm the ability to purchase securities on margin. The extent of leveraging is dictated by terms of the individual investment management agreements and ranges from 20% to 50%.

The S&P 500 Total Return Index ("SPTR") is used as the benchmark of the Composite. The SPTR is an unmanaged index generally considered representative of the U.S. stock market. The index returns do not reflect fees, commissions or other expenses of investing. Investors may not make direct investments into any index.

At December 31, 1997 and 2005, the Composite included one non-fee paying account comprising 1.2% and 0.0% of the composite's assets, respectively. At December 31, 1998, 1999, 2000, 2001, 2002, and 2004, the Relational Investors Composite included two non-fee paying accounts comprising 0.8%, 0.6%, 0.8%, 0.6%, 0.5%, and 0.3%, respectively, of the composite's assets. At December 31, 2003, the Composite included three non-fee paying accounts comprising 0.5% of the composite's assets.

3. Management Fee, Performance Fee, and Expense Reimbursements

The standard annual management fee for accounts is up to 1.5%. Management fees are generally payable quarterly in advance based on one-fourth of annual rates and are based on capital commitment amounts or net asset value.

Depending on the specific terms of the investment agreements, accounts are subject to one of the following two types of performance fee charges:

1. Up to 20% of net realized profits for each investment, as profits are realized. All performance fee calculations for each account are cumulative from the date of the initial capital contribution to the account and are net of any unrealized losses.
2. Up to 20% of the net change in the account value relative to the applicable benchmark as defined in the Investor's agreement, at the end of each fiscal year, subject to loss carryforward from prior periods.

Prior to 2002, performance fees were accounted for on a cash basis. Beginning March 31, 2002, performance fees were accrued on a quarterly basis and beginning September 30, 2003, performance fees were accrued on a monthly basis.

Depending on the specific terms of the investment agreements, accounts generally reimburse the Firm on a quarterly basis for expenses paid by the Firm on behalf of the accounts. The expense reimbursements are reflected in the net-of-fee returns, but are not included in the gross-of-fee returns.

Special circumstances may cause fees to vary from this schedule and the Firm reserves the right to negotiate fees with clients.

(continued)



Relational Investors LLC

Notes to Schedules of Investment Performance Statistics

July 1, 1996 (inception) through February 29, 2012 – Unaudited

4. Calculation of Investment Performance Statistics

Returns are calculated on an asset-weighted, time-weighted, geometrically linked, total rate of return basis, including all dividends and interest, realized gains and losses, and net of trading expenses and without provision for income taxes. Investment security transactions are accounted for on the trade date. Prior to June 30, 2003, dividends were accounted for on a cash basis. On June 30, 2003, the Firm elected early adoption of the accrual accounting requirement for dividends. Other items of income are accounted for on an accrual basis. The accounts in the Composite are valued daily subsequent to December 31, 2003. Prior to that, the accounts were valued at least monthly and at various times throughout the month as significant cash flows or market action occur. The U.S. dollar is the currency used to calculate performance.

New accounts are added to the Composite in the first complete measurement period after the account has come under management. Terminated accounts are included in the Composite through the last full measurement period they are invested. Measurement periods are defined as calendar quarters prior to December 31, 2003 and calendar months thereafter.

The quarterly returns for the Composite are calculated by asset weighting the quarterly returns of the accounts in the Composite. The yearly returns of the Composite are computed by geometrically linking the returns of each quarter within the calendar year. The cumulative return of the Composite at the end of each calendar year is computed by geometrically linking the current year's return to the prior year's cumulative return. The annualized return of the Composite at the end of each calendar year is computed by taking the n th root of the year-end cumulative return, with n representing the number of years from the beginning of the Composite. This computation produces a constant rate of annual return for the applicable period.

Past performance may not be indicative of future results; other performance calculation methods may produce different results, and the performance results may vary for individual accounts and for different periods.

Prior to 2007, Composite dispersion was calculated as the asset-weighted standard deviation of net portfolio returns represented within the Composites for the full year. Beginning in December 2007, the Firm retroactively presented Composite dispersion calculated using gross portfolio returns. The Firm believes using gross portfolio returns will eliminate the effect of the varying fee schedules on the Composite dispersions presented. Composite dispersion has not been calculated for any presented year containing five or fewer accounts that were managed for that whole year.

▶ Prisma Capital Partners LP



An Alternative Investment Specialist

Portfolio Proposal for Alaska Retirement Management Board

April 19, 2012



PRISMA CAPITAL PARTNERS

CONFIDENTIAL

I. Firm Overview	4
II. Proposed Portfolio	8
III. Appendix	23
IV. Disclaimer	35

Firm Overview ◀



Experienced Team with a Long Track Record

- Created in 2004 by three former Goldman Sachs partners
- Absorbed the hedge fund assets and investment team of AEGON USA Investment Management, LLC (AUM), thereby acquiring a performance record from 1997
- Registered Investment Adviser with the SEC in the U.S. Its affiliate, Prisma Capital Management International LLP, is regulated by the FSA in the UK

Stable Asset and Client Base

- Approximately \$7.8 billion in assets under management; over 90% managed on behalf of institutional clients
- Investments from current and new clients have helped broaden and diversify our stable asset base during challenging market environments
- No gating or suspension of redemptions since inception

Strong Absolute and Relative Performance

- The Prisma Low Volatility Composite has consistently outperformed the HFRI Hedge Fund of Funds Index by 328 bps per year and US T-Bills by 411 bps per year since inception
- No frauds or operational blowups since inception
- Awarded the *2011 Large Fund of Hedge Funds Firm of the Year* by Institutional Investor

Stable, Committed Team

- No investment professional departures in five years
- Added resources in all of the last seven years, including 2008, 2009, 2010 and 2011, encompassing all areas of the business

Relationship with ARMB

- Currently managing \$147mm investment in Polar Bear Fund LP for ARMB
- Relationship with ARMB dating back to 2009 with first investment in Prisma in January 2010

Note: Data as of February 29, 2012. Performance data regarding the Prisma Low Volatility Composite is net of pro forma fees. Please see important notes at the end of this presentation regarding, among other things, the use of composites and indices.

Seasoned Investment Team ◀

Name	Title	Degree / Designation	Yrs Exp	Joined Prisma	Prior Experience
Founding Partners					
Girish V. Reddy	Managing Partner <i>Chairman of I.C.</i>	MBA, CFA	32	2004	Goldman Sachs (Partner and Co-Head of Equity Derivatives), LOR Asset Management (CIO), Travelers Investment Mgmt (Senior VP of Portfolio Construction)
Gavyn Davies	Board Member & Economist		32	2004	Goldman Sachs (Partner and Chief Economist), British Broadcasting Co. (Chairman), H.M Treasury's Forecasting Panel
Tom Healey	Board Member	MBA, CFA, CRE	35	2004	Goldman Sachs (Partner and Head of Pension Services), Reagan Administration (Ass't Treasury Secretary)
Portfolio Management					
William S. Cook	Senior Portfolio Manager <i>I.C. Member</i>	MBA, CFA	31	2004	AEGON USA (Head of Capital Market Strategies Group, Head of Derivatives Group, Head of Public Fixed Income)
Eric Wolfe	Senior Portfolio Manager <i>I.C. Member</i>	CFA	20	2004	Safra Bank (Portfolio Manager – Fund of Funds), JP Morgan Investment Management (VP, Global Balanced PM & GTAA Model Development)
Donna Heitzman	Portfolio Manager	CFA, CPA	31	2004	AEGON USA (Portfolio Manager – Market Strategies, Portfolio Manager – Private Placements and Credit)
Michael Rudzik	Portfolio Manager	MBA	24	2004	AEGON USA (Portfolio Manager – Equity & Event), Aeon (Chief Operating Officer), Tiedemann Investment Group (Partner, L/S Equity Hedge Funds)
Peter Zakowich	Portfolio Manager	MBA	13	2006	JP Morgan (Associate Portfolio Manager), Edge Capital (Equity Analyst), Putnam Investments (Global Equity Research Associate)
Daniel Lawee	Portfolio Manager	MBA, CFA	17	2008	Northwater Capital Management (Portfolio Manager), TD Canada Trust (VP – Corporate Foreign Exchange)
James Welch	Portfolio Manager		32	2010	Kisco Management Corporation (CEO, Executive Director), JP Morgan Alternative Asset Mgmt (Managing Director, Co-Head of Research and Portfolio Management)
Risk Management					
Shankar Nagarajan	Co-Head of Risk Management <i>I.C. Member</i>	PhD	25	2005	Risk Capital LLC (Managing Partner), Bankers Trust (Vice President), McGill University (Associate Professor)
Emanuel Derman	Co-Head of Risk Management	PhD	26	2004	Columbia University (Professor), Goldman Sachs (Managing Director in Firm-Wide Risk)
Arthur Richardson	Risk Manager	MBA	16	2011	Quattro Global Capital (Portfolio Manager), SG Cowen (Asst. Portfolio Manager), Oaktree Capital (Analyst)
Kartik Patel	VP – Risk & Technology	CFA	16	2005	Wooster Asset Management (Internship), Symbol Technologies (Consultant), Lucent Digital Radio (Senior DSP Engineer), AT&T Wireless (DSP Engineer)
Operational Due Diligence					
Francis J. Conroy	Chief Operating Officer <i>I.C. Member</i>	MBA, CPA	31	2004	Mezzacappa Management (CFO), Lazard Frères & Co. LLC (Director and Senior Vice President), McKinsey & Company (Director of Taxes, Global Tax Planning and Compliance)
Mark DeGaetano	Head of Op. Due Diligence		30	2006	Deutsche Bank Absolute Return (Head of Operations), Citibank Capital Markets LLC (Vice President)
John Brennan	Director of Operations		29	2007	Spear, Leeds, and Kellogg (Limited Partner), Goldman Sachs (Global Head of Futures Operations)
Queenie Chang	VP – Op. Due Diligence	MBA, CPA, CFA	18	2009	Deutsche Bank Absolute Return (Vice President), Julius Baer (Assistant Vice President)
Anne Wynne	General Counsel & Chief Compliance Officer	JD	13	2010	Ivy Asset Management (Senior Counsel and Vice President), Seward & Kissel (Associate), Stroock & Stroock & Lavan (Associate)

Note: The above table includes senior members (defined as Vice President level and above) of Prisma's investment team. Numbers represent the number of years of professional experience as of 3/1/2012.

Firm-Wide: Depth and Breadth of Experience ◀

Founding Partners

Gavyn Davies (32)
Board Member & Economist

Girish V. Reddy, CFA (32)
Board Member & Managing Partner

Tom Healey, CFA (35)
Board Member

Portfolio Management

Girish Reddy, CFA (32)
Managing Partner
Investment Committee Member

William S. Cook, CFA (31)
Senior Portfolio Manager
Investment Committee Member

Eric Wolfe, CFA (20)
Senior Portfolio Manager
Investment Committee Member

Donna Heitzman, CFA, CPA (31)
Portfolio Manager

Michael Rudzik (24)
Portfolio Manager

Daniel Lawee, CFA (17)
Portfolio Manager

Peter Zakowich (13)
Portfolio Manager

James Welch (32)
Portfolio Manager

Jonathan Rin, CFA (7)
Senior Investment Associate

Rahul Mehta (4)
Investment Associate

Sameer Buch (4)
Investment Analyst

Ori Hollander (1)
Investment Analyst

Griffin Meyer (1)
Investment Analyst

Risk Management

Shankar Nagarajan, PhD (25)
Co-Head of Risk Management
Investment Committee Member

Emanuel Derman, PhD (26)
Co-Head of Risk Management

Arthur Richardson (16)
Risk Manager

Kartik Patel, CFA (16)
Vice President – Risk & Technology

Yury Kurchin (17)
Senior Associate – Risk & Technology

Marcel Kei (9)
Senior Associate – Risk & Technology

Maxim Kovalchuk (5)
Senior Risk Associate

Viviann Chan (2)
Risk Analyst

Operations and Legal

Francis J. Conroy, CPA (31)
Chief Operating Officer
Investment Committee Member

Mark DeGaetano (30)
Head of Due Diligence

John Brennan (29)
Director of Operations

Anne Wynne, JD (13)
General Counsel & Chief Compliance Officer

Queenie Chang, CPA, CFA (18)
Vice President – Ops. Due Diligence

Kenneth Eagle, CPA (12)
Vice President & Controller

Sean Fang (9)
Senior Accountant

Kevin Kornobis, CPA (7)
Senior Accountant

Brandon Diez, CPA (5)
Senior Accountant

Natalie Giugliano, CPA (5)
Senior Accountant

Monica Tesi, CPA (4)
Accountant

RJ Tambellini (2)
Operations Analyst

Client Management

Tony Pennetti (29)
Managing Director

Paul Roberts (27)
Managing Director

Helenmarie Rodgers (26)
Managing Director

John Stimpson (19)
Managing Director

Elizabeth Saracco (11)
Senior Associate

John Diercksen (8)
Senior Associate

Patrick O'Sullivan, FIA, CFA (8)
Senior Associate

Jeffrey Peate (8)
Senior Associate

Emily Mason (4)
Associate

Technology Support

Mike Kerr (8)
IT Manager

AEGON IT

Etisbew Technology Group

Administration

Priscilla Gordon (15)
Vice President

Kim Do

Lydia Edmunds

Maryana Kagalovskaya

Trisha Kennedy

Daria Khitruk

Charlotte Laidman

Abigail Lakes

Amy Lawlor

Nicole Lloyd

Stephanie Pizer

Note: Numbers in parentheses represent the number of years of professional experience as of 3/1/2012.

Proposed Portfolio ◀



Description

- ◆ Create a portfolio of hedge funds with similar characteristics to Alaska Retirement Management Board's intermediate bond allocation.

Objectives

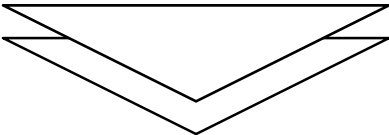
- ◆ Seeks to generate annualized returns of 4.5% in excess of 3-month T-Bills, with lower volatility than traditional asset classes (standard deviation of 4-6%) and low equity market participation.

Key Features

- ◆ Concentrated, multi-manager portfolio
- ◆ Short to medium-term portfolio liquidity
- ◆ Exposure to current yield opportunities via alternative credit strategies
- ◆ Protection from equity drawdowns

Prisma Proposal

- ◆ A portfolio of 12-18 hedge funds
- ◆ Strategic allocation between underlying sectors to combine higher income/yield than intermediate treasury bonds with protection from equity market beta
 - Diversification by manager type: Credit-Distressed, Fixed Income Arbitrage, Global Macro, Managed Futures



YIELD / INCOME

Credit Strategies

- ◆ **Credit-Distressed**
 - Access to current yield opportunities
 - Moderate equity beta
 - Low volatility
 - High sharpe
- ◆ **Fixed Income Arb**
 - Access to alternative income strategies
 - Low-moderate equity beta
 - Low volatility


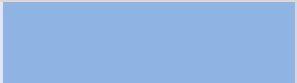




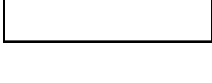




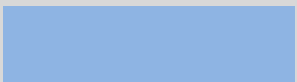










DOWNSIDE PROTECTION

Macro Strategies

- ◆ **Discretionary Macro**
 - Downside protection
 - Low correlation
 - High liquidity
 - High sharpe
- ◆ **Managed Futures**
 - Downside protection
 - Low equity beta
 - High liquidity

◇ **We believe that credit opportunities are evolving by investment instrument and geography**

- *To capture these opportunities we believe that it is important to utilize a dynamic investment approach*
- *We believe the following opportunities are vast, can potentially offer outsized returns, and can be captured by niche hedge fund managers:*

Opportunity	United States	Europe	Asia	
Structured Credit-MBS/CMBS/ABS				Timeframe to Enter: Current to 6 months  6-12 months  > 12 months  Not Applicable 
Mortgage Prepayment Strategies				
Relative Value Credit				
Asset Liquidations				
Asian Direct Lending				
Convertible Arbitrage				

Note: Forward-looking strategy views may change at any time in Prisma's discretion. Please see important disclaimers at the end of this presentation.

Characteristics of Global Macro Investing ◀

Flexibility

- ♦ Global Macro managers typically have more flexibility in how they invest in equities, fixed income securities, commodities and currencies than do traditional long-only managers

Diversification

- ♦ Global Macro managers are typically less correlated to major traditional asset class indices as well as to other hedge fund strategies
- ♦ Managers typically focus on liquid asset classes such as equities, fixed income securities, commodities and currencies

Better Sharpe Ratio

- ♦ Global Macro managers have historically generated higher returns and lower volatility compared to other major traditional asset classes

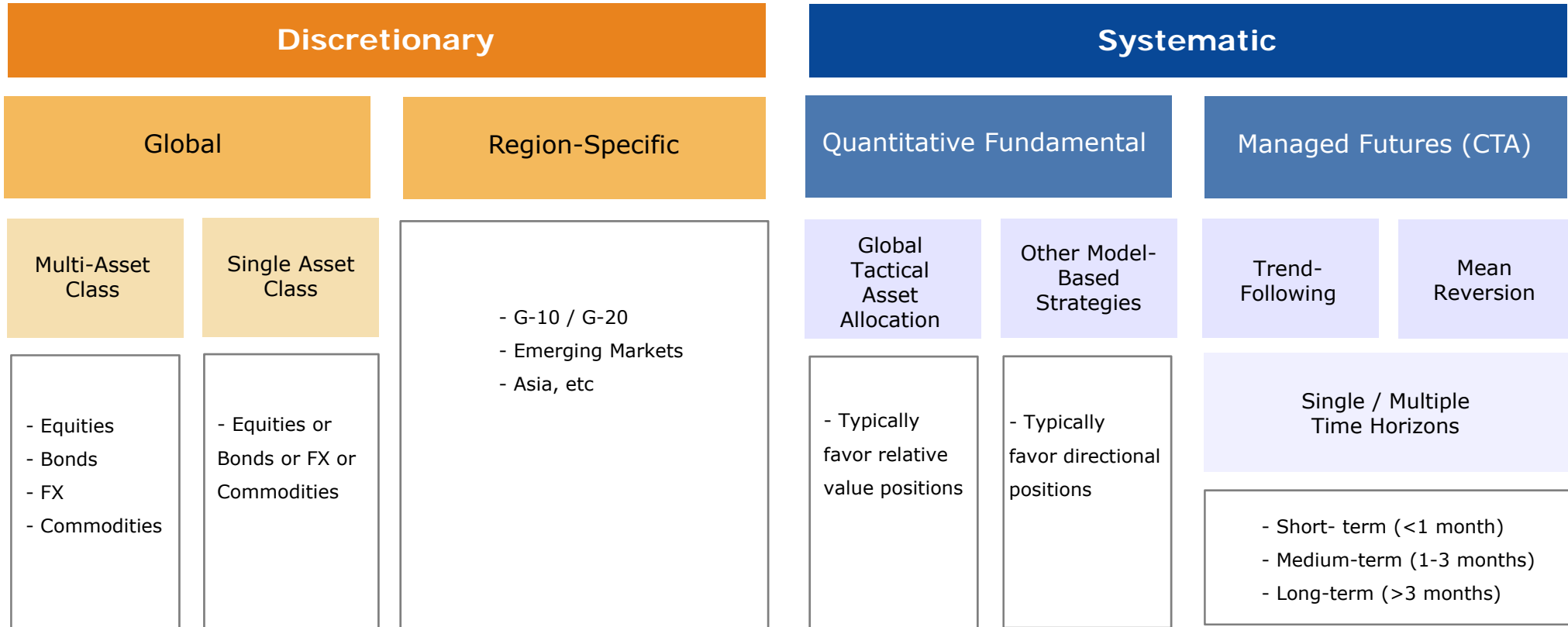
Protection Against Increased Volatility

- ♦ Global Macro managers have historically performed well in times of increased volatility and distress in markets



Categorization of Global Macro Managers ◀

Prisma generally categorizes Global Macro managers as follows:



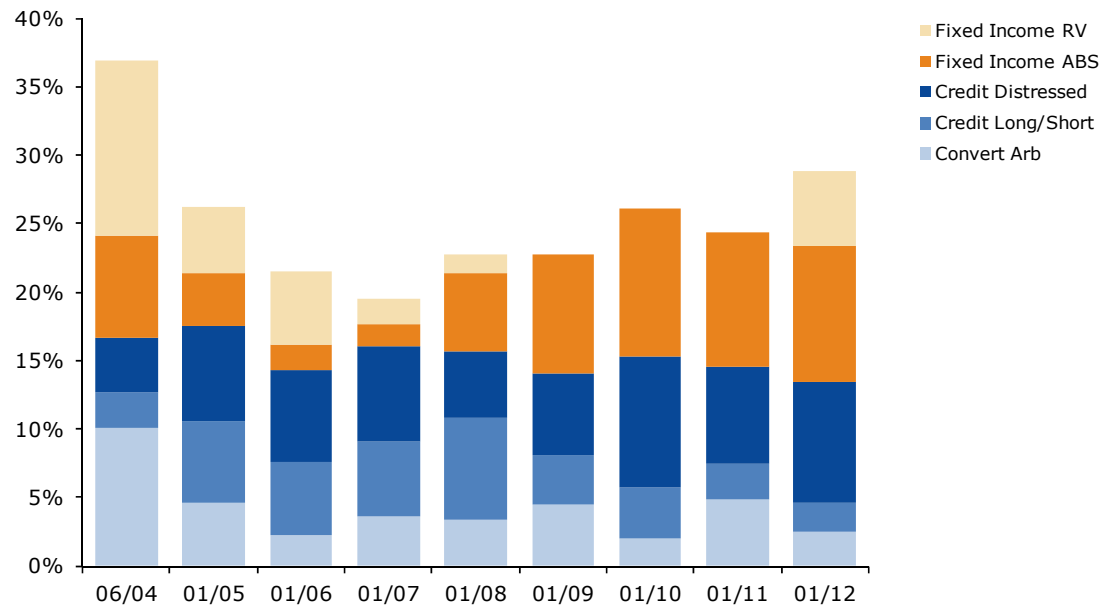
Note: Based on Prisma's general definition of Global Macro.

Strategy Allocation: Allocation Shifts In Credit Sub-Strategies Have Historically Added Value

◇ Prisma's investment team:

- Dynamically decreases exposures to strategies with too much uncompensated risk and increases allocations to strategies with compelling risk/return profiles as market conditions change; *and*
- Continually evaluates tactical and structural components within credit markets which can result in identifying attractive investment opportunities

Prisma's Credit, Distressed & Fixed Income Arb Allocation Shifts

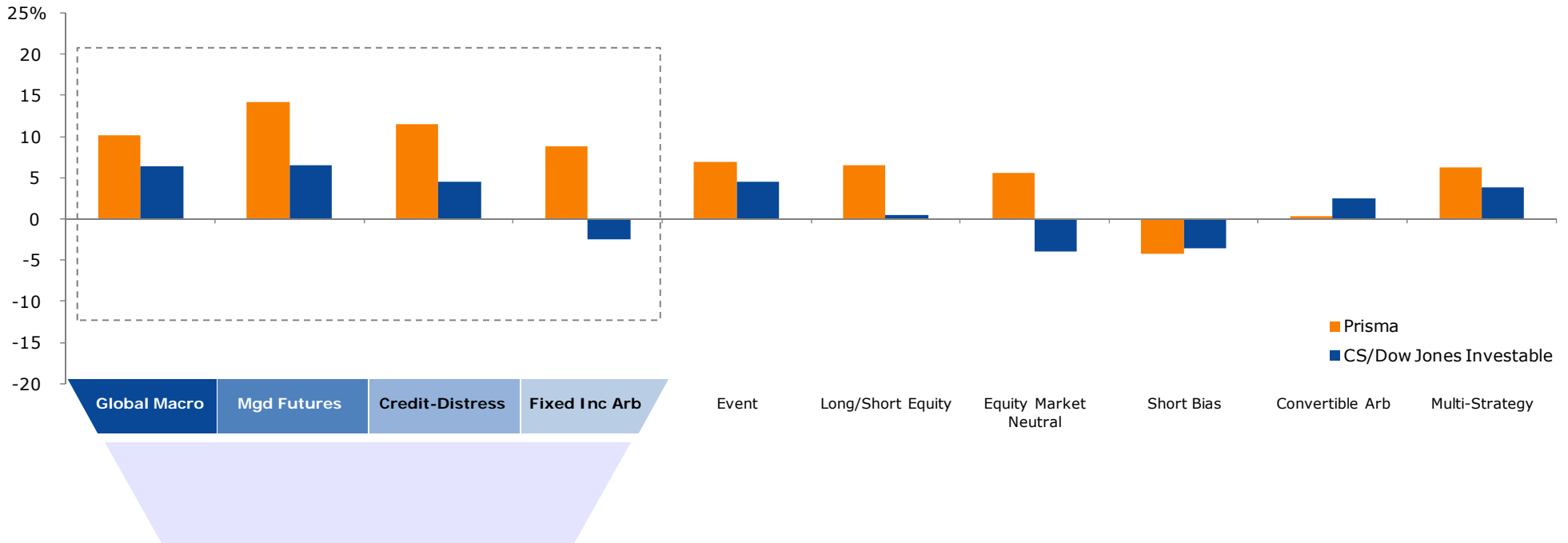


Note: Strategy allocations reflect one of Prisma's low volatility, low beta mandates. The allocations may not reflect Prisma's current Fund and/or manager views and are subject to change at Prisma's sole discretion. Past performance is not indicative of future results. Please see important notes at the end of this presentation regarding, among other things, the use of indices.

Prisma Outperformance by Strategy ◀

Historical Gross Strategy Performance of All Prisma Funds by Sector (June 2004 – December 2011)

Prisma has a history of allocating to managers that outperform within their sector...



...especially within the four sectors proposed for ARMB's portfolio allocation

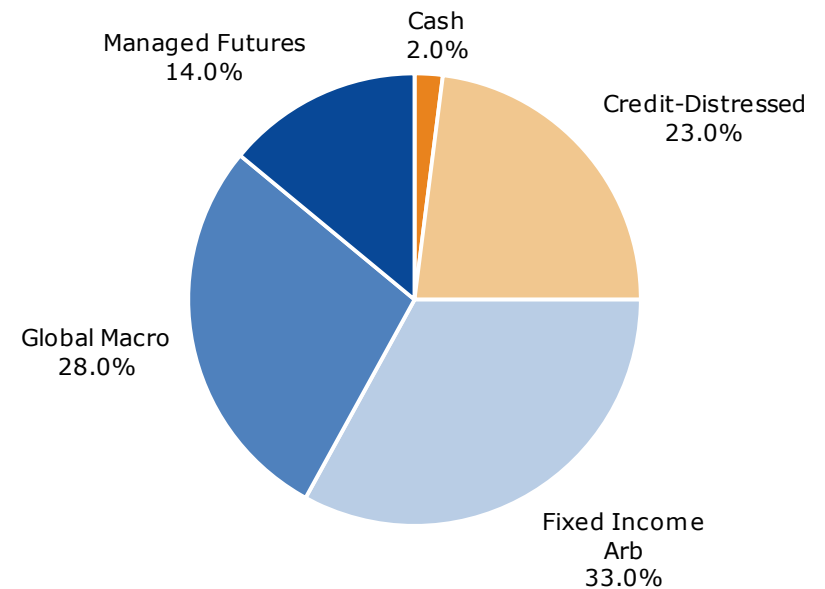
Note: The top chart represents gross annualized returns by strategy vs. CS/Dow Jones Hedge Fund Investable Index from June 2004 – December 2011. Strategy returns are inclusive of underlying managers across all Prisma products and are asset weighted returns gross of Prisma's fees. CS/Dow Jones Investable does not provide Credit/Distressed strategy index and, therefore, Event Driven strategy index is used as a proxy. Please see important notes at the end of this presentation.

Proposed Portfolio Composition

Proposed Portfolio Allocations

Proposed Portfolio Objectives:

- ◇ *Yield & Income*
- ◇ *Low beta to equities*
- ◇ *High liquidity*
- ◇ *Low volatility*

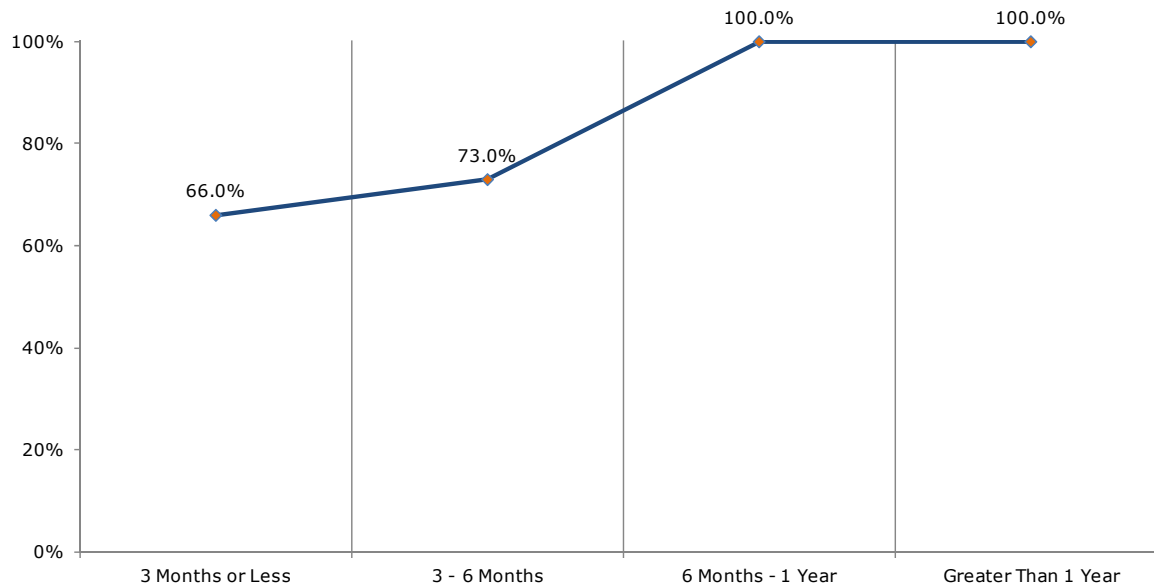


Total Number of Managers:	13
Largest Manager Allocation:	10.0%
Total Allocation of Top 5 Positions:	43.0%
Total Number of HF Strategies:	4
Largest Single Strategy Allocation:	33.0%

Notes: The proposed portfolio allocations are subject to change in Prisma's discretion.

PROPOSED PORTFOLIO LIQUIDITY SUMMARY

Cumulative Time Necessary to Liquidate the Portfolio (4/1/2012 Notification Date)



Manager Liquidity Summary

- Funds with Monthly Liquidity: **8**
- Funds with Quarterly Liquidity: **4**
- Funds with Annual Liquidity: **1**
- Funds with No Lockup: **6**
- % of Portfolio with No Lockup: **49%**

8 Funds, totaling 55% of the proposed portfolio, provide monthly liquidity

Notes: The liquidity analysis incorporates the payment of early redemption penalties if liquidity is required by Alaska RMB. The analysis assumes a 3/1/2012 portfolio inception date and a 4/1/2012 redemption notification date. This analysis is based on the liquidity of the underlying funds as stated in their governing documents. Please see important notes at the end of this document.

Proposed Portfolio: Correlation Heat Map Identifies Risk "Hot Spots"

3-YEAR HISTORICAL CORRELATIONS (MAR 2009 – FEB 2012)

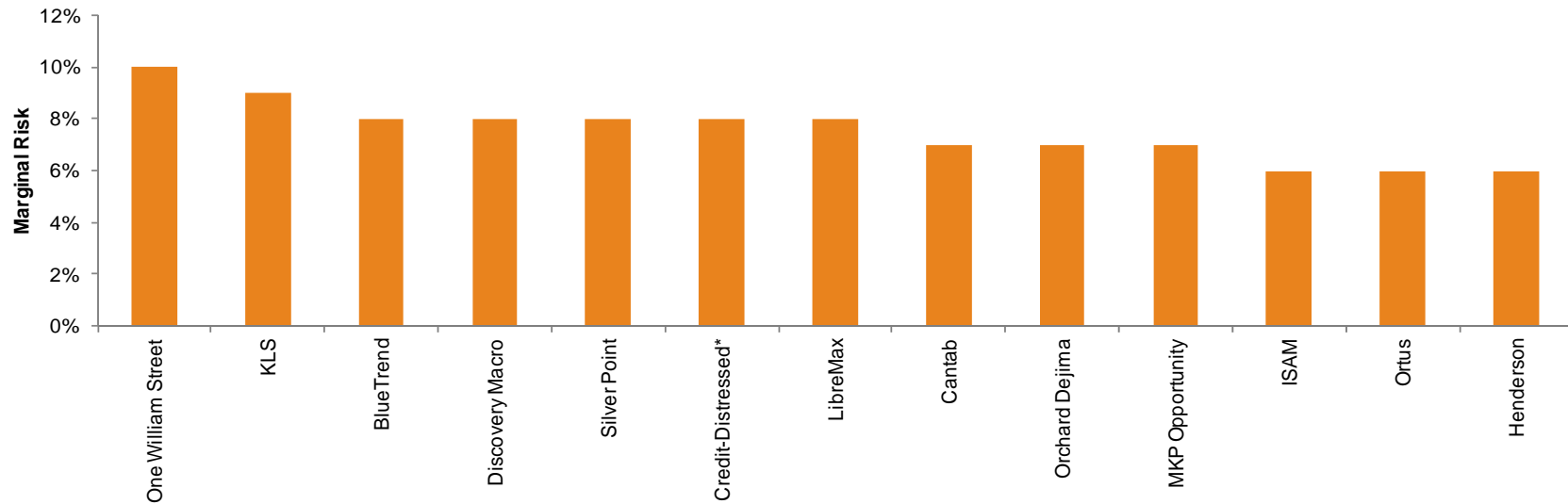
	Credit / Distressed			Fixed Income Arb			Global Macro			Mgd Futures		
	Orchard Dejima*	Credit-Distressed*^	Silver Point	KLS	LibreMax	One William Street	Cantab	Discovery Macro*	MKP Opportunity	Ortus	BlueTrend	ISAM
Orchard Dejima*	1.00											
Credit-Distressed*^	0.32	1.00										
Silver Point	0.23	0.57	1.00									
KLS	0.19	0.38	0.39	1.00								
LibreMax	0.03	0.21	0.20	0.31	1.00							
One William Street	0.16	0.43	0.62	0.60	0.71	1.00						
Cantab	0.11	0.27	0.08	0.00	0.45	0.19	1.00					
Discovery Macro*	0.18	0.43	0.35	0.42	0.16	0.28	0.29	1.00				
MKP Opportunity	-0.16	-0.08	-0.16	0.06	0.43	0.11	0.43	0.21	1.00			
Ortus	0.12	0.40	0.12	0.24	-0.19	0.09	0.30	0.37	-0.22	1.00		
BlueTrend	0.11	0.54	0.26	0.19	0.43	0.17	0.69	0.45	0.12	0.57	1.00	
ISAM	-0.09	0.16	0.19	0.20	0.51	0.32	0.61	0.27	0.45	0.24	0.71	1.00

Correlation Between Underlying Managers	
■	> 0.7 High Correlation
■	> 0.3-0.7 Low to Moderate Correlation
■	< 0.3 Negative to Low Correlation

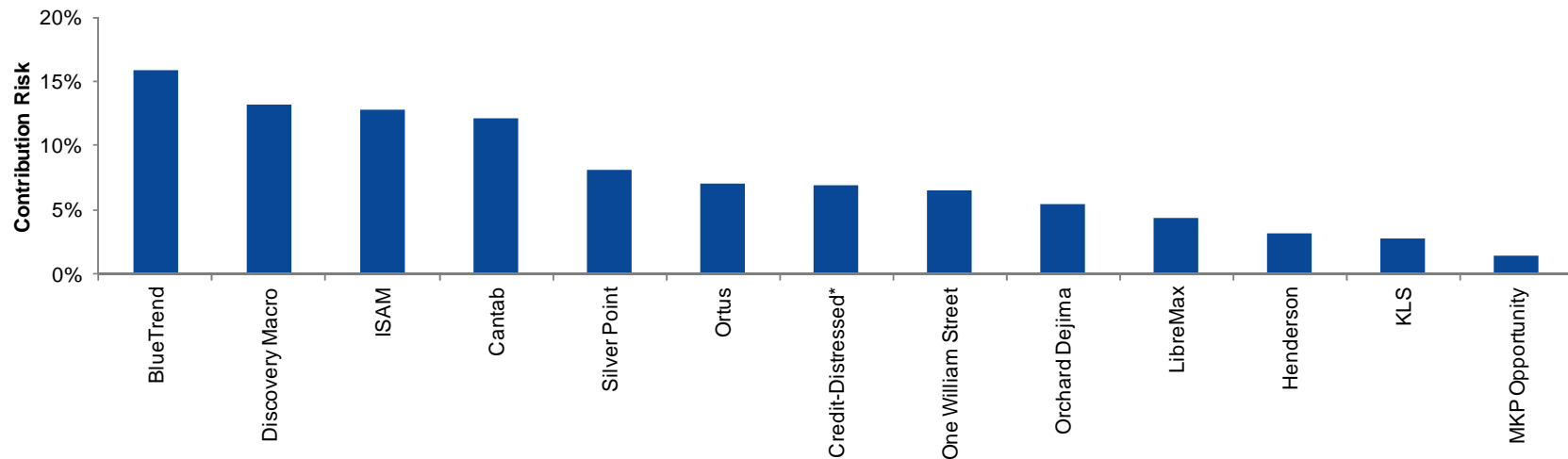
Note: The following managers with 12 or fewer data points are excluded: Henderson. The following managers have fewer than 36 months of return history: LibreMax. ^Manager pending approval at upcoming Investment Committee meeting. *Funds identified with a star have proxy data incorporated to allow for a full track record. Credit-Distressed^ uses a heritage portfolio as a proxy. Orchard Centar Fund is used as a proxy for Orchard Dejima Fund from Feb-2009 to Nov-2011. Discovery Global Opportunities Fund is used as a proxy for Discovery Global Macro Fund from Feb-2009 to Aug-2011. The outputs shown above represent the proposed portfolio for Alaska RMB designed to meet specific investment and risk constraints.

Proposed Portfolio: Manager Allocation & Risk Breakdown as of Q1 2012

PROPOSED MANAGER ALLOCATION



FORECASTED CONTRIBUTION RISK

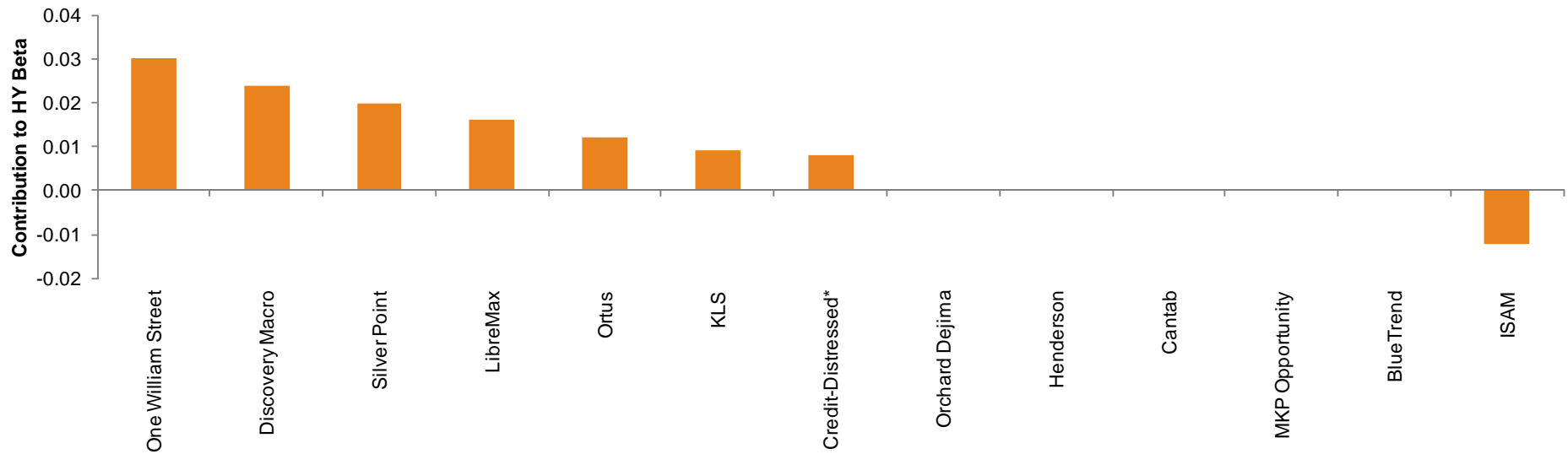


Note: *Underlying manager pending approval at upcoming Investment Committee meeting. The outputs shown above represent the proposed model portfolio designed to meet Alaska RMB specific investment and risk constraints. Please see important notes at the end of this presentation regarding, among other things, the use of hypothetical performance.

Proposed Portfolio: Beta Analysis as of Q1 2012

CONTRIBUTION TO HIGH YIELD BETA

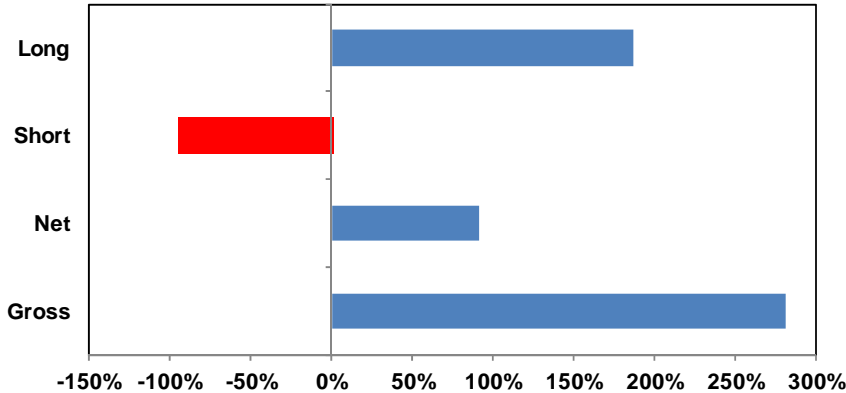
Total Projected Beta to High Yield: 0.11



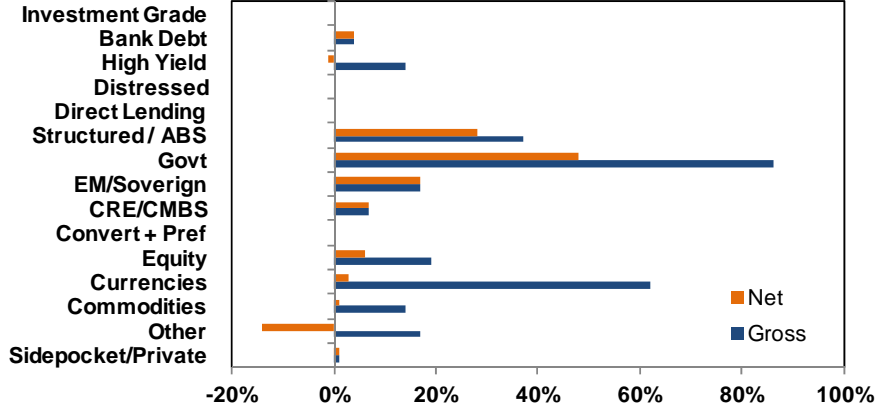
Notes: *Underlying manager pending approval at upcoming Investment Committee meeting. Beta projections based on the proposed portfolio allocations and Q1 2012 manager forecasted beta. Please see important notes at the end of this presentation regarding, among other things, the use of hypothetical performance.

Proposed Portfolio: Fund Exposures*

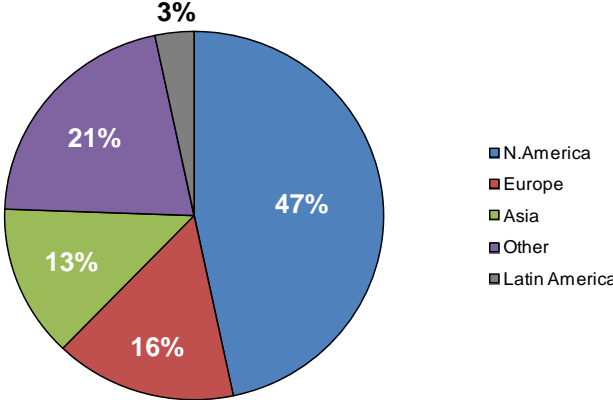
Total Exposures



Asset Class



Geographical Exposure (Net)



Note: *The information in the above analysis includes the best available data provided to Prisma, as of January 2012, from underlying managers' risk reports, government filings, and Prisma's monthly calls/visits with the managers and uses the proposed allocations of each manager to determine total fund exposures. The outputs shown above represent the proposed portfolio for Alaska RMB designed to meet specific investment and risk constraints. Please see important notes at the end of this presentation regarding, among other things, the use of hypothetical performance.

Prisma's Edge in Managing Opportunistic Mandates ◀

Experience in Opportunistic Mandates

- Long track record of investing in specialist, early stage, and niche opportunities through our broader portfolios with diversified, low volatility mandates
- Successful in dynamically shifting our strategy allocation to capture evolving opportunities
- Expertise in managing multiple large, customized accounts
- Strong network of hedge fund relationships to help source niche managers who can capture less liquid opportunities

Specialist Managers, Specialized Team

- Prisma portfolio managers are specialists in their strategies, with in-depth understanding of their respective areas, including sub-set opportunities
- Specialist managers typically offer greater transparency into new and niche ideas

Customization

- Approximately 70% of Prisma's assets are managed in customized portfolios (i.e., fund-of-one investor)
- Prisma has significant resources and infrastructure dedicated to supporting customized portfolios

Risk Management for Less Liquid Opportunities

- Prisma's robust risk management system and experienced team provide the necessary support and infrastructure to manage risk of less liquid managers
- A fundamental philosophy of asset / liability matching at the underlying manager level enables Prisma to invest prudently with niche managers

Note: AUM data as of February 29, 2012. Please see important notes at the end of this presentation.

Appendix ◀



Historical Performance of Passive Index Portfolio ◀

Performance of a Passive Portfolio During Drawdowns in Global Equities

	Four Worst Drawdowns in Global Equities Since Inception of the DJCS Indices in 1994			
	Oct 2007 - Feb 2009	Mar 2000 - Sep 2002	Jun 1998 - Aug 1998	Jul 1997 - Oct 1997
Passive Portfolio Index¹	-11.4%	29.0%	-2.0%	5.2%
Passive Macro Index ²	8.2%	41.3%	3.4%	7.1%
Passive Credit Index ³	-24.6%	20.5%	-6.0%	3.7%
Global Equities <i>MSCI World Index</i>	-55.4%	-48.5%	-13.7%	-7.2%
Fund of Hedge Funds <i>HFR1 Fund of Funds Composite Index</i>	-19.6%	-0.2%	-8.2%	5.7%

Macro Serves as an Equity Hedge

- ◇ *The portfolio's allocation to global macro strategies has generated positive performance during substantial drawdowns in global equity markets*

Prisma's Strategy Weighting Adds Value

- ◇ *The portfolio has outperformed when fund of hedge funds have produced negative returns*

Note: ¹The Passive Portfolio Index is a weighted index that is comprised of the DJCS Fixed Income Arbitrage, DJCS Event Driven – Distressed, DJCS Global Macro, and DJCS Managed Futures Indices, weighted with the portfolio allocations proposed by Prisma to serve as a proxy for historical performance. ²The Passive Macro Index is a weighted index using the DJCS Global Macro and DJCS Managed Futures Indices and weighted with the portfolio allocations proposed by Prisma to serve as a proxy for historical performance. ³The Passive Credit Index is a weighted index using the DJCS Fixed Income Arbitrage and DJCS Event Driven – Distressed Indices and weighted with the portfolio allocations proposed by Prisma to serve as a proxy for historical performance. Past performance is not indicative of future results. Please see important notes at the end of this presentation regarding, among other things, the use of indices.

Prior Experience: Portfolio Management ◀

Girish Reddy, CFA

Founder & Managing Partner – Chairman of Investment Committee

- ♦ Former partner and Co-Head of Equity Derivatives of Goldman, Sachs & Co.
- ♦ CIO of LOR Associates, a hedging and strategy advising firm based in Los Angeles, developing strategic alliances with other established asset managers like Wells Fargo and Aetna Insurance
- ♦ Senior Vice President, Portfolio Construction and Asset Allocation, at Travelers Investment Management Company offering various overlay strategies for the firm using listed futures and options
- ♦ Serves on the Executive Board of the Indian School of Business. Elected member of the Cornell University Council. Former Board Member of Barra Inc.
- ♦ Education
 - ♦ B.Tech., Electrical Engineering, Indian Institute of Technology
 - ♦ M.Eng., Cornell University
 - ♦ M.B.A., Cornell University

William S. Cook, CFA

Senior Portfolio Manager – Investment Committee Member

- ♦ Head of Capital Market Strategies Group at AEGON USA Investment Management LLC focusing on alternative investments, SBA loans, and special opportunities
- ♦ Head of Derivatives Group at AEGON USA Investment Management LLC which was spun out of the Public Fixed Income Group
- ♦ Head of Public Fixed Income Group at AEGON USA Investment Management LLC which led a team of six portfolio managers and a group of 15
- ♦ Partner at Cleveland Management specializing in fixed income for this high net worth-oriented asset management firm
- ♦ Director of Fixed Income at United Capital Management
- ♦ Education
 - ♦ B.A., Economics, University of Denver
 - ♦ M.B.A., DePaul University

Eric Wolfe, CFA

Senior Portfolio Manager – Investment Committee Member

- ♦ Vice President at Safra National Bank of New York as the leading portfolio manager for Hedge Fund of Funds Group. Also managed the accounts group as well as head of the research process to source hedge fund investments for fund of hedge funds
- ♦ Chief Financial Officer for Buyroad.com, co-managing a 20 employee team from pre-launch to revenue producing entity for the web design of ASP for the small/medium business market
- ♦ Vice President, Global Balanced Portfolio Manager at JPMorgan Asset Management serving as portfolio manager of \$16+ billion global balanced assets, member of Global Macro Strategy Team
- ♦ Assistant Vice President, Global Balanced Portfolio Manager at JPMorgan Asset Management
- ♦ Analyst, Structured Derivatives Group at JPMorgan Asset Management, developed GTAA (Global Technical Asset Allocation) models
- ♦ Education
 - ♦ B.A., Economics, Lehigh University, magna cum laude

Prior Experience: Portfolio Management ◀

Donna L. Heitzman, CFA & CPA

Portfolio Manager, Event/Credit/Distressed Strategies

- ♦ Portfolio Manager at AEGON USA Investment Management LLC facilitating the portfolio's significant growth and broad diversification across all hedge fund strategies with a specialty in researching and implementing new strategies
- ♦ Credit analyst and private placement specialist at AEGON USA Investment Management LLC
- ♦ Financial analyst, fixed income investment portfolio at AEGON USA Investment Management LLC
- ♦ Audit Supervisor at Coopers and Lybrand specializing in the manufacturing and financial institution sectors of both publicly held and privately owned clients
- ♦ Education
 - ♦ B.S., Accounting, University of Louisville, graduated with high honors

Michael J. Rudzik

Portfolio Manager, Equity Strategies

- ♦ Portfolio Manager at AEGON USA Investment Management LLC responsible for hedge fund manager due diligence, selection and monitoring with primary strategy focus on long/short equity, event-driven, multi-strategy arbitrage and private equity
- ♦ Chief Operating Officer at Aeon Capital Management LLC collaborating in the formation of a \$50 million emerging markets hedge fund start-up for a European investment group
- ♦ General Partner at Tiedemann Investment Group, functioned as Assistant Portfolio Manager & Trading Desk Head
- ♦ Financial Analyst at Morgan Stanley
- ♦ Education
 - ♦ B.A., Economics, University of Michigan, graduated with distinction
 - ♦ M.B.A., Thunderbird School of Global Management

Peter Zakowich

Portfolio Manager, International Equity Strategies

- ♦ Associate Portfolio Manager at JPMorgan Alternative Investments, the alternative investment funds subsidiary of JPMorgan Asset Management, responsible for investment selection, position sizing, and exposure monitoring
- ♦ Equity Analyst at Edge Capital, a long/short equity hedge fund focusing on the media and technology sectors
- ♦ Investment Associate in Global Equity Research at Putnam Investments, covering the media, advertising and automotive industries
- ♦ Education
 - ♦ B.A., Economics, Harvard University
 - ♦ M.B.A., Leonard N. Stern School of Business, New York University

Prior Experience: Portfolio Management ◀

Daniel S. Lawee, CFA

Portfolio Manager, Fixed Income, Volatility, and Reinsurance Strategies

- ♦ Portfolio Manager, Northwater Capital Management Inc., responsible for fixed income, structured credit, volatility, and reinsurance hedge fund strategies
- ♦ Vice President, Corporate Foreign Exchange Desk at TD Canada Trust, responsible for coverage of corporate and institutional accounts and options marketing for the corporate and commercial FX sales teams
- ♦ Account Executive, Mortgage Department at Republic National Bank of New York, responsible for wholesale mortgage origination channel in Manhattan territory
- ♦ Education
 - ♦ B.A., Political Science, Business Studies minor, Concordia University
 - ♦ M.B.A., Richard Ivey School of Business, University of Western Ontario

James O. Welch

Portfolio Manager, Equity and Global Macro Strategies

- ♦ Managing Member of Kettle Cove Investors, LLC, a fund of hedge funds vehicle established for members of Mr. Welch's immediate family
- ♦ CEO and Executive Director of Kisco Management Corporation, a financial services firm that was exclusively dedicated to serving a prominent U.S. high net worth family
- ♦ Managing Director and Co-Head of Research and Portfolio Management at J.P. Morgan Alternative Asset Management, Inc., which is J.P. Morgan's fund of hedge funds investment firm
- ♦ Held various positions of increasing responsibility within J.P. Morgan, primarily in the capital markets area, including roles in derivatives origination, structuring, and training
- ♦ Education
 - ♦ B.A., History, Harvard College, magna cum laude

Prior Experience: Advisory Partners ◀

Gavyn Davies

Founder & Advisory Partner

- ♦ Former Partner and Chief Economist of Goldman, Sachs & Co.
- ♦ Former Chairman of the British Broadcasting Corporation
- ♦ Served as a member of H.M Treasury's Independent Forecasting Panel
- ♦ Economic Adviser to the House of Commons Select Committee on the Treasury and a Visiting Professor at the London School of Economics
- ♦ Appointed a Fellow of The University of Wales, Aberystwyth and received a Fellowship of Imperial College Faculty of Medicine
- ♦ Education
 - ♦ B.S., Economics, St. John's College, Cambridge
 - ♦ Honorary Doctor of Science, Social Sciences, University of Southampton
 - ♦ Honorary Doctor of Laws, Nottingham University
 - ♦ Honorary Doctorate, Middlesex University

Thomas Healey, CFA, CRE

Founder & Advisory Partner

- ♦ Former Partner and Head of Pension Services Group of Goldman, Sachs & Co.
- ♦ Former Co-Chairman of the Goldman Sachs Retirement Committee, with oversight of more than \$3 billion in defined contribution pension assets, and Co-Chief Investment Officer of the \$10 billion Central States Teamsters Pension Fund managed by Goldman Sachs
- ♦ Chair of the investment committee of the Rockefeller Foundation and board member of other charitable institutions
- ♦ Former Assistant Secretary of the Treasury under President Reagan
- ♦ Senior Fellow and Adjunct Lecturer at Harvard University's John F. Kennedy School of Government
- ♦ Education
 - ♦ B.A., Georgetown University
 - ♦ M.B.A., Harvard University



Prior Experience: Risk Management ◀

Emanuel Derman, Ph.D.

Co-Head of Risk Management

- ♦ Professor & Director of the MS program in Financial Engineering at Columbia University
- ♦ Retired Managing Director in Firmwide Risk at Goldman, Sachs & Co.
- ♦ Columnist for Risk magazine and Editorial Board member of Applied Mathematical Finance journal
- ♦ Senior Fellow, International Association of Financial Engineers
- ♦ Associate Editor, the Journal of Derivatives and the Journal of Risk
- ♦ Courant Institute of Mathematical Sciences, Mathematical Finance Advisory Board Member and Board of Directors, Society of Quantitative Analysts
- ♦ Global Finance Magazine Derivatives Superstar 1995 and 1996 and Profiled in Global Finance, December 1995 issue "Portrait of a Rocket Scientist"
- ♦ IAFE/Sungard Financial Engineer of the Year 2000 and inducted into the Risk Magazine Hall of Fame 2002
- ♦ Education
 - ♦ B.S., Physics, and Applied Math, University of Cape Town
 - ♦ M.A., Physics, Columbia University
 - ♦ Ph.D., Particle Physics, Columbia University

Shankar Nagarajan, Ph.D.

Co-Head of Risk Management – Investment Committee Member

- ♦ Managing Partner of Risk Capital, LLC responsible for advising major companies on strategic and tactical risk management issues; Euromoney's Best Risk Advisor 2004
- ♦ Adjunct Professor of Economics and Finance at Columbia University
- ♦ Senior Manager & Head of Valuation Group at Deloitte & Touche
- ♦ Vice President at Bankers Trust Company advising clients on strategic and tactical risk management
- ♦ Tenured Professor of Finance at McGill University in Montreal, Canada
- ♦ Consultant to the Federal Reserve and various other Central Banks
- ♦ Education
 - ♦ B.Tech., Indian Institute of Technology
 - ♦ M.S., Northwestern University
 - ♦ Ph.D., Northwestern University

Arthur Richardson

Risk Manager

- ♦ Portfolio Manager at Quattro Global Capital, responsible for managing a U.S. convertible arbitrage portfolio with capital ranging between \$100 million and \$200 million
- ♦ Assistant Portfolio Manager at SG Cowen
- ♦ Analyst at Oaktree Capital Management
- ♦ Education
 - ♦ B.A., Economics, Stanford University
 - ♦ M.B.A., Stanford Business School

Kartik Patel, CFA***Vice President – Risk & Technology***

- ♦ Internship at Wooster Asset Management implementing currency trading strategies and Applied Mean Variance Optimization to enhance the portfolio
- ♦ Signal Processing Consultant at Symbol Technologies
- ♦ Senior DSP Engineer for Lucent Digital Radio
- ♦ Software Engineer for AT&T Wireless Services
- ♦ Education
 - ♦ B.Tech., Electrical Engineering, Indian Institute of Technology
 - ♦ M.S., Electrical Engineering, University of Maryland
 - ♦ M.S., Financial Engineering, Columbia University



Prior Experience: Operations and Finance

Francis J. Conroy, CPA

Chief Operating Officer – Investment Committee Member

- ♦ Chief Financial Officer at Mezzacappa Management, LLC responsible for all financial, accounting, compliance, personnel and operational activities of a registered investment adviser managing nine funds of hedge funds
- ♦ Director and Senior Vice-President at Lazard Frères & Co. LLC, responsible for tax planning and compliance for international investment bank with affiliates in 16 countries
- ♦ Director of Taxes at McKinsey & Company, Inc., responsible for global tax planning and compliance for multinational consulting company with offices in 23 countries
- ♦ Chief Operating Officer at Catalyst Energy Corporation managing operations of two resource recovery facilities
- ♦ Manager at Arthur Andersen & Co. providing tax planning advice and overseeing tax compliance for broad range of high net worth individual, partnership, and corporate clients
- ♦ Education
 - ♦ B.S., Accounting, Fordham University, summa cum laude
 - ♦ M.B.A., Harvard University

Mark DeGaetano

Head of Operational Due Diligence

- ♦ Head of Operations for the single manager and fund of funds platforms at Deutsche Bank Absolute Return Strategies with global responsibility for Operational Due Diligence
- ♦ Vice President at Cross Mar, a technology subsidiary of Citicorp, responsible for the building and successful implementation of a new B2B Trade Finance Solution
- ♦ Vice President at Citibank Capital Markets LLC, providing management within a structured finance operations environment
- ♦ Head of Business Support in Trading and Capital Markets at Skandinaviska Enskilda Banken, responsible for middle office and trade support functions that processed the entire spectrum of financial products
- ♦ Education
 - ♦ B.S., Accounting and Computer Science, Wagner College

John Brennan

Director of Operations

- ♦ Senior Vice President of Fixed Income Institutional Sales at FTN (a wholly-owned subsidiary of First Horizon Bank N.A.) where he had oversight for eight office in the United States
- ♦ Limited Partner at Spear Leeds & Kellogg (a wholly-owned subsidiary of Goldman Sachs & Co. from 2000 - 2005), specialized in Fixed Income E-Commerce and sales administration
- ♦ Vice President and Global Head of Futures Operations at Goldman, Sachs & Co., responsible for worldwide oversight of operations
- ♦ Managing Director at First Options/Continental Bank of Chicago
- ♦ Education
 - ♦ B.S., Finance, Southern Illinois University

Prior Experience: Operations and Finance ◀

Queenie Chang, CPA, CFA

Vice President - Operational Due Diligence

- ♦ Vice President at DB Advisors Fund of Funds and Assistant Vice President at Julius Baer Investment Management LLC, responsible for global Operational Due Diligence
- ♦ Accounting manager at SAGEN Asset Management, LLC, performed attribution analysis and performance reports for the family office
- ♦ Senior Portfolio Accountant at The Bank of Bermuda (New York) Limited, provided portfolio valuations and financial statements for hedge funds
- ♦ Credit Control Officer at The Bank of Bermuda Limited, Hong Kong Branch, assessed and monitored loan proposals for collective investment schemes, corporations, and individuals
- ♦ Semi-Senior Auditor at Deloitte Touche Tohmatsu, Hong Kong
- ♦ Education
 - ♦ B.Comm., Accounting, University of New South Wales, Australia
 - ♦ M.B.A., Boston University, Beta Gamma Sigma

Kenneth Eagle, CPA

Vice President & Controller

- ♦ Manager at Rothstein, Kass & Company providing audit and tax services to a variety of clients within the private investment industry, with responsibilities including valuation testing of portfolios, tax planning and preparation
- ♦ Education
 - ♦ B.S., Accounting, University of Delaware



Prior Experience: General Counsel ◀

Anne T. Wynne, J.D.

General Counsel & Chief Compliance Officer

- ♦ Senior Counsel & Vice President of Ivy Asset Management LLC, a registered investment advisor to funds of hedge funds and customized accounts
- ♦ Associate at Seward & Kissel LLP, providing advice to clients including registered and unregistered investment advisors on a variety of issues related to general corporate and securities matters
- ♦ Associate at Stroock & Stroock & Lavan LLP, providing advice to clients on general corporate and securities matters
- ♦ Education
 - ♦ B.A., History, Loyola University Maryland, magna cum laude
 - ♦ J.D., Duke University School of Law



Prior Experience: Client Management ◀

Anthony D. Pennetti, J.D.

Managing Director

- ♦ Managing Director, Meridian Capital Partners, a fund of hedge funds; responsible for the firm's financial intermediary sales business
- ♦ Director of Marketing, Deerfield Capital Management; responsible for sales and marketing of the firm's hedge fund strategies
- ♦ Director, Marketing & Client Service, Lehman Brothers Alternative Investment Management
- ♦ Managing Director, Donaldson, Lufkin & Jenrette; managed team responsible for placement of alternative investment solutions for the firm's asset management subsidiary
- ♦ Vice President, JPMorgan, advising private clients in the bank's wealth management division
- ♦ Education
 - ♦ B.A., Political Science, Boston University
 - ♦ J.D., Albany Law School of Union University

Paul Roberts

Managing Director

- ♦ Managing Director and Co-Head of European Shares, Goldman Sachs & Co.
- ♦ Equity Derivatives Group, Goldman Sachs & Co. advising institutions on portfolio restructuring and hedging strategies
- ♦ Structured Product area of SBC Warburg
- ♦ Head of Derivative Sales at SG Warburg responsible for the distribution of all listed and OTC products
- ♦ Education
 - ♦ M.A., Economics, Cambridge University

Helenmarie Rodgers

Managing Director

- ♦ Managing Director, Institutional Client Management of JPMorgan Alternative Asset Management (JPMAAM), the alternative investment funds subsidiary of JPMorgan Asset Management, a \$8 billion hedge fund of funds manager
- ♦ Managing Director and Head of Worldwide Marketing and Product Development for Chase Alternative Asset Management, a predecessor firm to JPMAAM
- ♦ Portfolio specialist for several hedge fund of funds and feeder funds at Union Bancaire Privee, a \$6 billion Swiss investor in hedge funds
- ♦ Senior Vice President in Corporate Services Group, World Gold Council, Geneva, Switzerland
- ♦ Vice President in Hedge Fund Advisory/Marketing at Tass Management Ltd., Geneva, Switzerland
- ♦ Vice President in CapMAC Group at Citicorp
- ♦ Associate, Corporate Finance and Fixed Income Capital Markets, Salomon Brothers Inc.
- ♦ Education
 - ♦ B.S., Business Administration, Tulane University
 - ♦ M.B.A., The Wharton School, University of Pennsylvania

John B. Stimpson
Managing Director

- ♦ Executive Director, Institutional Sales Group for a large fund of hedge funds; responsible for sales and marketing to public sector pension plans and other institutions.
- ♦ Vice President of Institutional Sales, Absolute Return Strategies Group of Deutsche Bank AG; responsible for consultant relations and direct sales of fund of hedge funds and single manager hedge funds to institutions.
- ♦ Vice President of Sales and Client Service, The Torrey Funds, a long/short equity fund of hedge funds based in New York.
- ♦ Associate, Public Finance Group, UBS Financial Services; provided investment banking services to state and local governments in the U.S.
- ♦ Deputy Executive Director, Massachusetts Office of International Trade and Investment
- ♦ Assistant to Massachusetts Governors William F. Weld and Paul Cellucci
- ♦ Analyst, Massachusetts State Legislature
- ♦ Education
 - ♦ B.A., Political Science, Villanova University
 - ♦ M.B.A., Columbia Business School



This information has been provided at your request. It is strictly confidential and is intended solely for the information of the person to whom it has been delivered. The information is for discussion purposes only and is being furnished to you on a confidential basis to provide summary information regarding Prisma Capital Partners LP and the investment advisory services it offers. This information may not be reproduced or transmitted, in whole or in part, nor may its contents be disclosed to any third parties, without the prior written consent of Prisma Capital Partners LP. All information should be read in conjunction with the endnote herein which is an integral part of this Presentation. The information herein is believed to be accurate as of April 2, 2012. No representation or warranty is made as to its continued accuracy after such date.

The information set forth herein and any opinions contained herein do not constitute an endorsement, implied or otherwise, of any securities, nor does it constitute an endorsement with respect to any investment area or vehicle. Nothing contained herein constitutes an offer to sell, or the solicitation of an offer to buy, any security, financial product or instrument discussed, or a representation that any security, financial product or instrument discussed is suitable for investment. an interest in any fund. The information herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice or investment recommendations. You should consult your tax, legal, accounting or other advisers about the matters discussed herein. This material is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

Investments in hedge funds and funds of hedge funds are speculative and involve special risks, and there can be no assurance that a fund's investment objectives will be realized or that suitable investments may be identified.

Past performance is not necessarily indicative of future results. Forecasts contained herein are based upon subjective estimates and assumptions about circumstances and events that may not yet have taken place and may never do so.

The performance presented herein from March 2009 to February 2012 represents the pro forma performance of the proposed portfolio calculated on the basis of the allocations contained in the proposed portfolio based on the investment. This is not actual performance. In calculating the performance, Prisma relies on the actual unaudited performance returns provided by the underlying managers, which Prisma believes to be reliable, but makes no representations or warranties as to their accuracy or completeness. The returns are gross of Prisma's management and incentive fees.

The proposed portfolio performance and risk statistics provided assumes an initial allocation to the underlying managers rolled backward on the basis of historical appreciation or depreciation of the underlying managers' performance. Not all of the underlying managers that were chosen have track records dating back to March 2009. In such cases, the remaining assets are reallocated proportionately to the other underlying managers included in the proposed portfolio with respect to such prior period. There can be no assurances that the underlying hedge fund managers will meet their investment objectives.

Performance results are considered hypothetical. Hypothetical performance results have many inherent limitations. This information is provided for informational purposes to indicate historical performance had the portfolio been available over the relevant period. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particularly trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve risk. Variables such as the ability to adhere to a particular trading program in spite of trading losses as well as maintaining adequate liquidity are material points which can adversely affect actual real trading results.



PRISMA CAPITAL PARTNERS

Prisma Capital Partners LP

One Penn Plaza

Suite 3515

New York, NY 10119

Phone: (212) 590-0800 Fax: (212) 590-0810

www.prismapartners.com

Prisma Capital Management International LLP

17c Curzon Street

London W1J 5HU

Phone: +44 (0) 20 7318 1650

Fax: +44 (0) 20 7318 1651





Alaska PERS, TRS, JRS and NGNMRS

Actuarial Audit as of June 30, 2011
April 19, 2012

Dana Woolfrey, ASA, EA, MAAA



Gabriel Roeder Smith & Company
Consultants & Actuaries
www.gabrielroeder.com



Overview

- ◆ Plans audited as of June 30, 2011
 - ▶ JRS and NGNMRS roll-forward valuations
 - ▶ TRS and PERS Defined Contribution Retirement Plans (DCR)
 - Death and Disability
 - Retiree Medical
 - ▶ TRS and PERS Defined Benefit Plans
 - Pension
 - Retiree Medical



Overview

◆ Findings

▶ JRS and NGNMRS

- No issues

▶ Issues highlighted in June 30, 2010 audit

- Were updated in the June 30, 2011 valuation
- Outstanding issues are de minimus

▶ New findings this year – one matter to discuss for each of the following:

- TRS and PERS DCR - Occupation death benefits
- TRS and PERS DB Pension – Retirement in first year of service-based eligibility
- TRS and PERS DB Retiree Medical – Participation rates and retiree-paid premiums



Judicial Retirement System and National Guard and Naval Militia Retirement System



JRS and NGNMRS

- ◆ Full valuations performed on biennial cycle
- ◆ Roll-forwards performed on off years (including this year)
 - ▶ Accrued liability projected using standard equations
 - Increase for normal cost and interest
 - Reduce for benefit payments paid out during the year
 - ▶ Assets based on most recent financial statements
- ◆ Able to closely replicate Buck's results



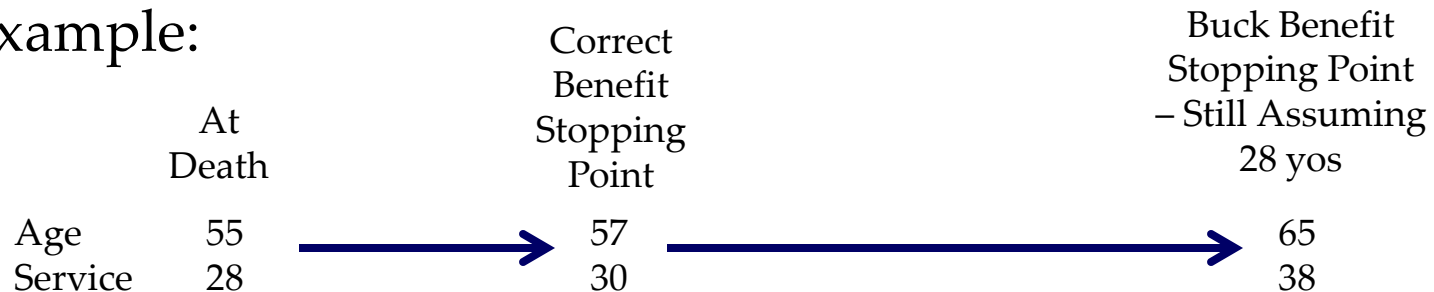
Public Employees' Retirement System and
Teachers' Retirement System
Defined Contribution Retirement Plan



PERS and TRS, DCR Plans

- ◆ Able to closely replicate disability and retiree medical benefits
- ◆ Identified misinterpretation of the occupational death benefit (confirmed that the determination of the benefits by Alaska differs from the method used in the valuation)
- ◆ Benefit is paid until member would have been eligible for normal retirement eligibility *had the member lived*
 - ▶ Buck determined eligibility using service at time of death

◆ Example:





PERS and TRS, DCR Plans

Test Case 1 - PERS Others					
Age: 25.9					
Service: 2.7					
	Buck	GRS Replicate	% Diff	GRS Revised	% Diff
Disability	295.38	295.66	0.1%	295.66	0.1%
Death	149.90	150.73	0.6%	127.61	-14.9%
Total	445.28	446.39	0.2%	423.27	-4.9%
Retiree Medical (ret. dec.)	404.04	399.88	-1.0%	399.88	-1.0%



PERS and TRS, DCR Plans

Test Case 2 - PERS PF					
Age: 31.8					
Service: 4.9					
	Buck	GRS Replicate	% Diff	GRS Revised	% Diff
Disability	20,402.72	20,402.25	0.0%	20,402.25	0.0%
Death	6,404.57	6,423.31	0.3%	4,682.07	-26.9%
Total	26,807.29	26,825.56	0.1%	25,084.32	-6.4%
Retiree Medical (ret. dec.)	3,432.72	3,437.06	0.1%	3,437.06	0.1%



PERS and TRS, DCR Plans

Test Case 3 - TRS			
Age: 35.5			
Service: 3.2			
	Buck	GRS Replicate	% Diff
Disability	268.26	268.94	0.3%
Death	186.85	186.56	-0.2%
Total	455.11	455.50	0.1%
Retiree Medical (ret. dec.)	2,670.77	2,664.08	-0.3%



PERS and TRS, DCR Plans

- ◆ Buck indicated they will re-measure liabilities with the change in occupational death benefit



Public Employees' Retirement System and Teachers' Retirement System Defined Benefit Plans



PERS and TRS, DB Plans, Pension

- ◆ This year, identified issue with **normal retirement** decrement on one TRS active test life
 - ▶ Buck uses average of benefit calculated at beginning and end of year to approximate middle of year decrement timing.
 - ▶ We would recommend calculating benefits using middle of year age and service



PERS and TRS, DB Plans, Pension

- ◆ Full-time example (actual test case part-time)
- ◆ Step 1 – determine eligibility and decrement rate

Age Middle of Year	Service Middle of Year	Eligible for Normal Retirement	Probability of Retirement	Basis for Rate
49.7	20.3	yes, service-based	10%	<Age 50 eligible for unreduced
50.7	21.3	yes, service-based	13%	Age 50 eligible for unreduced
51.7	22.3	yes, service-based	12%	Age 51 eligible for unreduced
52.7	23.3	yes, service-based	12%	Age 51 eligible for unreduced
⋮	⋮	⋮	⋮	⋮



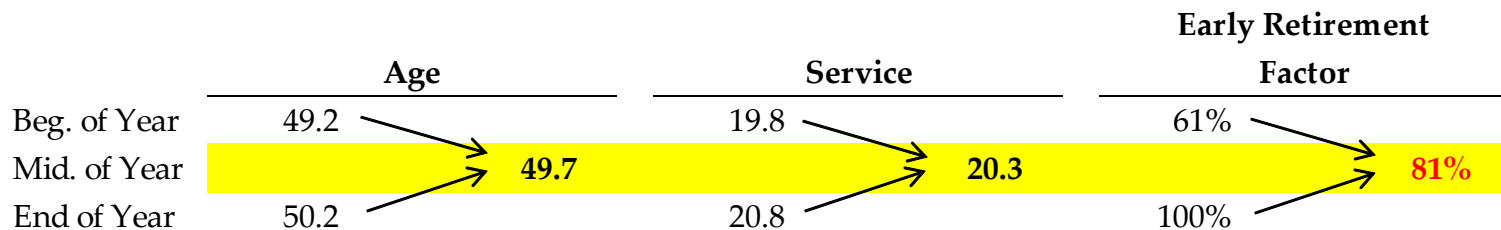
PERS and TRS, DB Plans, Pension

- ◆ Example, cont'd
- ◆ Step 2 – determine benefits
- ◆ Would recommend determining benefits based on 49.7 and 20.3 which were used to determine eligibility and rate of retirement
 - ▶ No early retirement reduction with 20.3 years of service

<u>Age</u> <u>Middle of Year</u>	<u>Service</u> <u>Middle of Year</u>	<u>Early Retirement</u> <u>Factor</u>
49.7	20.3	100%

PERS and TRS, DB Plans, Pension

- ◆ Example, cont'd
- ◆ Step 2 – determine benefits
- ◆ Instead, Buck calculates benefit at 19.8 years of service and 20.8 years of service
 - ▶ 19.8 years of service – 61% early retirement factor
 - ▶ 20.8 years of service – 100% early retirement factors
 - ▶ Averages together, resulting in ~81% early retirement factors





TRS, DB Plans, Pension

- ◆ Affected test case

Test Case 1 - TRS, Tier 1			
Age: 49.2			
Service: 19.8			
	Buck	GRS	% Diff
Retirement	422,361	431,190	2.1%
Withdrawal			
Death	1,647	1,666	1.2%
Disability			
Total	<u>424,008</u>	<u>432,855</u>	2.1%



TRS, DB Plans, Pension

◆ Summary of Results

TRS - PVB	Buck	GRS	% Diff
Active Test Case 1 - Tier 1	424,008	432,855	2.1%*
Active Test Case 2 - Tier 2	215,635	215,492	-0.1%
Active Test Case 3 - Tier 2	87,701	87,773	0.1%
TRs - Retiree 1	685,634	689,904	0.6%
TRs - Retiree 2	246,420	250,399	1.6%
TRs - Deferred	146,231	147,783	1.1%
TRs - Beneficiary	79,691	79,837	0.2%

**Early retirement factor issue*



PERS, DB Plans, Pension

◆ Summary of Results

<i>PERS - PVB</i>	Buck	GRS	% Diff
Active Test Case 1 - PF, Tier 3	407,350	405,802	-0.4%
Active Test Case 2 - Other, Tier 2	208,016	207,927	0.0%
Active Test Case 3 - Other, Tier 1	751,517	748,781	-0.4%
PERS Peace Officer/Firefighter - Retiree	390,072	393,387	0.8%
PERS Others - Retiree	78,270	77,803	-0.6%
PERS Peace Officer/Firefighter - Deferred	17,904	18,011	0.6%
PERS Others - Beneficiary	58,596	58,217	-0.6%



Public Employees' Retirement System and
Teachers' Retirement System
Retiree Healthcare Benefits for
Defined Benefit Plans



PERS and TRS, DB Plans, Healthcare

- ◆ Able to closely replicate total benefits
- ◆ Issues from June 30, 2010 actuarial audit were resolved in June 30, 2011 valuation
- ◆ Middle of year benefit calculation issue found this year
 - ▶ Similar to normal retirement pension benefit
 - ▶ Biggest impact on member and spouse premium contributions which offset liability



PERS and TRS, DB Plans, Healthcare

◆ Example of middle of year timing issue

- ▶ Determining participation based on service at beginning and end of year and averaging the two
- ▶ In first year of eligibility for plan paid coverage, Buck assumes
 - 10% participation beginning of year
 - 100% participation end of year
 - ~55% participation middle of year
- ▶ Preferable to use participation based on middle of year information, but probably okay
- ▶ Bigger issue occurs on retiree premium (which reduces plan liabilities)
 - In first year of eligibility for plan paid coverage, assuming 100% participation and assuming retiree is still paying full premium
 - Overstates retiree-paid portion, understates total liability



PERS and TRS, DB Plans, HC

◆ Example

◆ Step 1 – determine eligibility and decrement rate

Age Middle of Year	Service Middle of Year	Eligible for Normal Retirement	Probability of Retirement	Basis for Rate
35.3	12.8	no	N/A	N/A
⋮	⋮	⋮	⋮	⋮
42.3	19.8	no	N/A	N/A
43.3	20.8	yes, service-based	11%	<Age 50 eligible for unreduced
44.3	21.8	yes, service-based	11%	<Age 50 eligible for unreduced
45.3	22.8	yes, service-based	11%	<Age 50 eligible for unreduced
46.3	23.8	yes, service-based	11%	<Age 50 eligible for unreduced
47.3	24.8	yes, service-based	11%	<Age 50 eligible for unreduced
48.3	25.8	yes, service-based	11%	<Age 50 eligible for unreduced
⋮	⋮	⋮	⋮	⋮



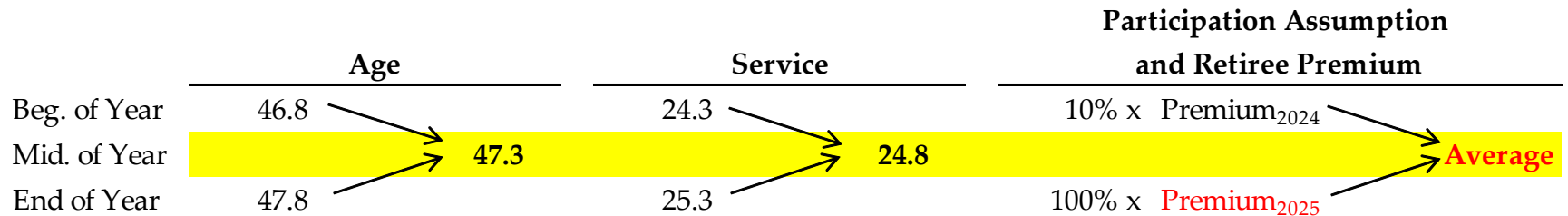
PERS and TRS, DB Plans, HC

- ◆ Example, cont'd
- ◆ Step 2 – determine participation and benefits
- ◆ Would recommend determining benefits based on 47.3 and 24.8 which were used to determine eligibility and rate of retirement
 - ▶ Member is not yet eligible for retiree paid premium
 - ▶ 10% participation

Age Middle of Year	Service Middle of Year	Participation	Retiree Paid Premium?
47.3	24.8	10%	Yes

PERS and TRS, DB Plans, HC

- ◆ Example, cont'd
- ◆ Step 2 – determine participation and benefits
- ◆ Instead, Buck calculates benefit at 24.3 years of service and 25.3 years of service
 - ▶ And still assumes retiree pays premium at 25.3 years of service



If 100% participation, retiree-paid premium should be \$0.



PERS and TRS, DB Plans, Healthcare

◆ Affected test case

Test Case 1 - PERS, PF Tier 1			
Age: 34.8			
Service: 12.3			
	Buck	GRS	% Diff
Retirement decrement:			
Member claims	68,285	68,161	-0.2%
Spouse claims	62,578	63,719	1.8%
Member contributions	(4,276)	(2,755)	-35.6%
Spouse contributions	(3,445)	(2,223)	-35.5%
Member Part D reimbursement	(3,101)	(3,071)	-1.0%
Spouse Part D reimbursement	(2,556)	(2,644)	3.4%
Total	<u>117,486</u>	<u>121,186</u>	3.1%



PERS, DB Plans, HC

◆ Summary of Results

<i>PERS HC - PVB</i>	Buck	GRS	% Diff
Active Test Case 1 - PF, Tier 3	117,486	121,186	3.1% *
Active Test Case 2 - Other, Tier 2	134,978	136,535	1.2%
Active Test Case 3 - Other, Tier 1	128,723	129,207	0.4%
PERS Peace Officer/Firefighter - Retiree	114,946	116,056	1.0%
PERS Others - Retiree	281,996	282,446	0.2%
PERS Peace Officer/Firefighter - Deferred	1,660	1,658	-0.1%
PERS Others - Beneficiary	68,753	69,046	0.4%

**Affected by middle of year member and spouse contribution issue.*



TRS, DB Plans, HC

◆ Summary of Results

TRS - PVB	Buck	GRS	% Diff
Active Test Case 1 - Tier 1	229,527	231,847	1.0%
Active Test Case 2 - Tier 2	94,046	97,005	3.1% *
Active Test Case 3 - Tier 2	61,751	63,424	2.7% *
TRS - Retiree 1	266,483	269,252	1.0%
TRS - Retiree 2	305,190	307,615	0.8%
TRS - Deferred	165,083	164,871	-0.1%
TRS - Beneficiary	75,876	76,166	0.4%

**Affected by middle of year member and spouse contribution issue.*



Summary

- ◆ Overall GRS was able to match Buck results closely
- ◆ Buck will determine valuation results for DCR once modify death benefit stop date
- ◆ Two other issues that may not be de minimus due to middle of year approach
 - ▶ Does not affect all active members
 - Depends on entry age and current service amount
 - ▶ Only affects one year in retirement pattern
 - ▶ Expected impact is modest, but non-trivial – preferable to fix

ALASKA RETIREMENT MANAGEMENT BOARD

**ACTUARIAL REVIEW OF PENSION AND POSTEMPLOYMENT
HEALTHCARE PLANS FOR PERS AND TRS**

APRIL 19, 2012

April 19, 2012

Mr. Gary Bader
Chief Investment Officer
Department of Revenue, Treasury Division
Alaska Retirement Management Board
P.O. Box 110405
Juneau, AK 99811-0405

Subject: Actuarial Review of June 30, 2011 valuations for the State of Alaska Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS).

Dear Gary:

We have performed an actuarial review of the June 30, 2011 Actuarial Valuations for PERS and TRS.

This report includes a review of:

- Pension Assumptions and Benefits
- Health Care Cost Assumptions
- Actuarial Valuation Methods and Procedures
- Contribution Rate Determination
- Actuarial Valuation Report
- Potential Areas for Future Review

A major part of the review is a thorough analysis of the test lives provided by Buck Consultants. The report includes exhibits which summarize the detailed analysis of these sample test cases for PERS and TRS, as well as a comparison of the results between Buck Consultants and GRS. We wish to thank the staff of the State of Alaska Treasury Division and Buck Consultants without whose willing cooperation this review could not have been completed.

Sincerely,

Gabriel, Roeder, Smith & Company



Leslie L. Thompson, FSA, FCA, EA, MAAA
Senior Consultant



Todd D. Kanaster, ASA, MAAA
Senior Analyst



Dana L. Woolfrey, ASA, EA, MAAA
Consultant

cc: Ms. Judy Hall

TABLE OF CONTENTS

SECTION	PAGE NUMBER	
		COVER LETTER
SECTION 1	2	EXECUTIVE SUMMARY
SECTION 2	8	GENERAL APPROACH
SECTION 3	11	REVIEW OF PENSION ASSUMPTIONS AND BENEFITS
SECTION 4	20	REVIEW OF HEALTH CARE COST ASSUMPTIONS
SECTION 5	23	REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES
SECTION 6	34	REVIEW OF CONTRIBUTION RATE DETERMINATION
SECTION 7	36	REVIEW OF ACTUARIAL VALUATION REPORT

SECTION 1

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Gabriel, Roeder, Smith & Co. was engaged by the Alaska Retirement Management Board (ARMB) to review the June 30, 2010 Actuarial Valuation of the State of Alaska Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS).

This report presents our findings in the following areas:

- General Approach
- Pension Assumptions and Benefits
- Health Care Cost Assumptions
- Actuarial Valuation Methods and Procedures
- Contribution Rate Determination
- Actuarial Valuation Report
- Potential Areas for Future Review
- Summary and Conclusions

In general, we found that the Buck's actuarial results and reports were reasonable. We found no areas of concern in the actuarial valuation results, and find the assumptions consistent with generally accepted actuarial practice. We also verified that the new assumptions have been applied in the determination of the liabilities of the plan. We have also monitored the outcome of findings from prior audits, and have found all outstanding issues from these prior audits to be closed.

FINDINGS FROM JUNE 30, 2011 AUDIT

Through the test life review completed with the June 30, 2011 audit we did find a few issues to be resolved. Our test life work, in general, matches that of Buck Consultants. The liabilities shown in the Buck test lives matches to our liabilities within an acceptable degree of tolerance.

Each year we review the historical gains and losses. This year is the first year of observing gains and losses under the assumptions adopted following the experience study. In looking at the following PERS pension liability gain/(loss) by source, including the 2011 valuation results and comparing these items with the recommendations from the experience study, we have the following observations:

1. There continue to be termination losses. Based on the experience study, termination rates were increased in the face of consistent termination losses. In general, losses are created when *less* members terminate than expected. There seems to be a disconnect between the gain/loss methodology and the experience that was shown in the experience study.
2. For PERS, there continue to be large losses in the "other" category. In our experience, the major components of gain/(loss) should be accounted for in the items shown, and "other" should represent a small portion of the gain/(loss) experience. We recommend Buck

consider examining the gain/(loss) methodology used to determine the major sources of the “other” gain/(loss).

PERS Historical Gains and Losses by Source

<u>Source</u>	<u>2011 Valuation</u>	<u>2010 Valuation</u>	<u>2009 Valuation</u>	<u>2008 Valuation</u>	<u>2007 Valuation</u>
Retirement	\$(8,116)	\$3,730	\$(6,440)	\$(2,325)	\$(2,716)
Termination	(39,980)	(33,532)	(20,118)	(7,241)	(7,627)
Mortality	(2,020)	(17,350)	(23,756)	(6,842)	(6,426)
Disability	177	(1,837)	(60)	(1,217)	(267)
New Hires and Re-entrants	(25,953)				
Other	(42,015)	(28,765)	(22,113)	(30,528)	(61,451)
Salary	(13,845)	4,617	(20,132)	(60,440)	(65,045)
COLA and PRPA	39,219	86,479	(19,481)	41,400	
Total	\$(92,533)	\$13,342	\$(112,100)	\$(67,193)	\$(143,532)

TRS Historical Gains and Losses by Source

<u>Source</u>	<u>2011 Valuation</u>	<u>2010 Valuation</u>	<u>2009 Valuation</u>	<u>2008 Valuation</u>	<u>2007 Valuation</u>
Retirement	\$3,809	\$7,922	\$8,298	\$3,618	\$6,810
Termination	(14,197)	(9,763)	(10,182)	(2,108)	(3,543)
Mortality	(5,625)	(17,413)	(17,693)	(15,681)	(10,807)
Disability	(974)	(556)	(428)	(320)	180
New Hires and Re-entrants	8,225				
Other	(14,236)	(20,959)	(16,262)	(16,536)	(29,860)
Salary	8,514	(35,479)	(12,153)	(11,870)	21,351
COLA and PRPA	26,347	58,823	(16,355)	20,193	0
Total	\$11,863	(\$17,425)	(\$64,775)	(\$22,704)	(\$15,869)

TEST LIVE OBSERVATIONS

We have noted the most significant areas of concern below, and a more detailed interpretation of the correspondence of resolution and/or explanation between Buck and GRS is noted in Section 3. In addition, we continue to monitor the findings and recommendations from the audit performed in 2011 against the test lives and reports submitted by Buck for the audit performed in 2012. At the end of this Section we have included a checklist of our review of these items and Buck's status and/or explanation for each item.

- *Retirement benefits – due to averaging benefits determined at beginning and end of year, rather than determining the benefits at middle of year, early retirement factors are being applied in some instances where the member is eligible for an unreduced benefit. This has the impact of valuing too low of a benefit for some members.*
- *Post-retirement health benefits – due to averaging benefits determined at beginning and end of year, rather than determining the benefits at middle of year, less than 100% participation is being used in the first year of service-related eligibility for system paid coverage. In that same year, retiree contributions are non-zero even though eligible for system paid coverage. This has the impact of valuing too high of retiree contributions and thereby too low of system paid benefits.*
- *Post-retirement health benefits – one aging factor is misstated in the assumption section of the report.*

SUMMARY OF TEST LIFE REVIEW

We have included as a part of this report a detailed test life results summary.

- We matched the present value of benefits closely in total on all testlives submitted. We have included exhibits in Section 5 of the report which summarize the differences in calculations by decrement for the test lives analyzed. Differences between actuarial firms will always occur due to system differences and other nuances in the calculations.
- The actuarial basis used for the funding of the plan lies within the range of reasonableness.

Issues newly identified in the June 30, 2011 actuarial audit:

Issue	GRS Recommendations	Plan	Buck Comments
Benefits			
1. Retirement			
a. Early retirement reduction	Due averaging of beginning of year and end of year statistics, applying early retirement reduction where none is needed in first year of eligibility based on 20 years of service.	TRS	The Buck valuation system does not allow for this. Does not believe their methodology introduces any bias.
2. Post-retirement health			
a. Election percentage	Averaging beginning of year and end of year participation assumption. Should use participation assumption based on middle of year eligibility. Biggest issue for retiree contributions.	PERS, TRS	The Buck valuation system does not allow for this.
b. Aging factors	Age 74 should be 0.5%	PERS, TRS	Buck will update this in the final report.

Resolution of issues identified in the June 30, 2010 actuarial audit:

Issue	GRS Recommendations	Plan	Buck Updated?	Buck Comments
Benefits				
1. Withdrawal				
a. Vested termination benefit	Deferred to earliest unreduced retirement age, but has age 55 early reduction factor applied. Remove early reduction factor.	PERS	✓	
2. Death				
a. Occupational death eligibility	Remove 5-year eligibility requirement.	PERS	✓	
b. Occupational death benefit	Use maximum of projected service at age 60 and service at time of death.	PERS	✓	
3. Disability				
a. Temporary v. deferred disability benefit	Correct the timing of when temporary benefit ends and the deferred benefit commences for members eligible for normal retirement.	PERS, TRS	✓	
b. Occupational disability rates	Assumption ceases at early retirement; the new assumption is that a members will elect to retire.	PERS	✗	Buck indicates this assumption is included in the report.
c. Occupational disability for police officers	Can elect greater of disability benefit or retirement benefit - Buck only values the normal retirement benefit.	PERS	✓	
d. Normal retirement conversion	Timing of normal retirement conversion should match for the annuity value and the benefit.	TRS	✓	
4. OPEB				
a. Election rates	Should be same for member and spouse.	PERS, TRS	✓	

Ongoing outstanding issues:

Issue	GRS Recommendations	Plan	Buck Updated?	Buck Comments
Benefits				
1. Death a. Postretirement benefit adjustments for survivors	Eligibility for post-retirement benefit adjustments is based on the retiree age rather than the surviving spouse age.	PERS, TRS	✘	Agree with GRS, but system limitations prevent this change.

SECTION 2

GENERAL APPROACH

GENERAL APPROACH

Gabriel, Roeder, Smith & Co. was charged with reviewing the actuarial assumptions of the pension and health care provisions of the actuarial valuations of TRS and PERS.

We requested a number of items from Buck Consultants in order to perform the actuarial review and health cost assumption review:

1. We received the draft reports on February 29, 2012. On December 8, 2010, we received valuation data for pension and healthcare for both plans. On December 15, 2010, we received the pension and healthcare test lives for PERS and TRS.

In performing our review, we:

1. Reviewed actuarial assumptions – we checked to see if they were consistent, comprehensive, and appeared reasonable.
2. Reviewed the actuarial valuation reports as of June 30, 2011 for completeness, GASB compliance and a review of financial determinations.
3. Reviewed, in detail, the sample members provided us – This provided us with a perspective on the actuarial process utilized by Buck with respect to the plan and allowed us to review the valuation methods and procedures.
4. Reviewed the health cost assumptions and trend.
5. Identified areas for future more detailed review.

KEY ACTUARIAL CONCEPTS

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board. It is designed to simulate all of the dynamics of such a system for each current system member including:

1. Earning future service and making contributions,
2. Receiving changes in compensation,
3. Leaving the system through job change, disablement, death, or retirement, and
4. Determination of and payment of benefits from the System.

This simulated dynamic is applied to each active member of the System. It results in a set of expected future benefit payments to that member. Bringing those expected payments to present value, at the assumed rate of investment return, produces the Actuarial Present Value (“APV”) of future benefits for that member. In like manner, an APV of future salaries is determined.

The APV of future benefits and the APV of future salaries for the entire System are the total of these values across all members. The remainder of the actuarial valuation process depends upon these building blocks.

Once the basic results are derived, an actuarial method is applied in order to develop information on contribution levels and funding status. An actuarial method splits the APV of future benefits into two components:

1. APV of Future Normal Costs, and
2. Actuarial Accrued Liability (“AAL”).

The actuarial method in use by the State of Alaska is known as the Entry Age Normal (EAN) method. Under EAN, the Normal Cost for a member is that portion of the Actuarial Present Value of the increase in the value of that member’s benefit for service during the upcoming year. The AAL is the difference between the total APV and the present value of all future normal costs.

For TRS and PERS, the APV of future benefits applies to the following benefits:

- Retirement benefits
- Withdrawal benefits
- Disability benefits
- Death benefits
- Return of contributions
- Medical benefits
- Indebtedness (from contributions which might be redeposited)

The medical benefits are based on potential future health care benefits, while the others are a type of post-employment income replacement benefit, based on salary. For the medical benefits, estimates must be made of the future health care costs. This is done by determining current per capita health care claim costs by age of retiree, and projecting them into the future based on anticipated future health care inflation.

SECTION 3

REVIEW OF PENSION ASSUMPTIONS AND BENEFITS

REVIEW OF ASSUMPTIONS AND BENEFITS

GENERAL

In the review of the testlives as well as the report we confirmed that the assumptions shown in the report were the assumptions used in the PERS and TRS valuations.

BACKGROUND

The findings below are based on the detailed review of the following test lives summarized in exhibits at the end of Section 5:

- PERS (Pension and Post-retirement Health): Three actives, two retirees, one vested termination and one beneficiary
- TRS (Pension and Post-retirement Health): Three actives, two retirees, one vested termination and one beneficiary

Note that the active test lives analyzed are not necessarily exposed to all of the possible benefits under the plans (i.e. already beyond the eligibility period for certain benefits, or not eligible for particular benefits). Therefore, findings may occur for these other benefits in future audits depending on the set of test lives chosen for review at that time. However, the vast majority of the liability for each plan is due to the retirement benefits (included for all active test lives), and retirement-related withdrawal benefits (one active testlife included per plan), so any future findings are also expected to be de minimus. Also, the impact for any one test life may not be representative of the impact on the total plan.

FINDINGS FROM JUNE 30, 2011 TEST LIFE AUDIT – NEW ISSUES IDENTIFIED AND RESOLUTION OF ITEMS OUTSTANDING FROM JUNE 30, 2010 TEST LIFE AUDIT

Issues identified in the June 30, 2011 test lives

Retirement:

GRS Finding: The valuation uses middle of year decrement timing (assumes members leave July 1st). Buck uses rounded middle of year age and service for eligibility and application of decrements. Buck uses an average of benefits calculated at beginning of year and end of year (rather than calculating the benefit based on the age and service at middle of year). In the majority of cases, this results in a very similar benefit to the mid-year benefit calculation. However, in the Tier 1 test case this year, it did cause a difference in liabilities. The member is age 49.2 with 19.8 years of service at the valuation date. In the first year benefit calculation, Buck assumed that the member would

have a 61% early reduction factor applied to the beginning of year benefit (since the member just barely misses the 20 year normal retirement requirement) and 100% early retirement reduction factor applied to the end of year benefit. The results is an approximate 80% early retirement reduction factor on the middle of year benefit (average of 61% and 100%). A mid-year valuation would determine the benefits using middle of year age and service, resulting in no early retirement reduction, and this method would be more conservative. This discrepancy only applies in one loop year. Had the reduction not been applied, the present value of retirement benefits would be 2.1% higher.

Buck Response: Buck indicates that the member is not eligible for normal retirement at beginning of year and should have the early retirement reduction factor applied. They indicate that there will be members that will retire on either side of the eligibility cutoff and that their methodology approximates the benefits on average.

GRS Comment: The retirement rates applied are for members “eligible for unreduced benefits” and should be applied as such. Assuming that members will take the reduced benefit when they are close to full eligibility undervalues the benefit.

Post-retirement Health:

GRS Finding: Similar to the retirement benefit above, this finding relates to interpolating between beginning of year and end of year benefits. Contributions for healthcare are required for Tier 2 members who retire before age 60 if they don't have 25 years of service. The valuation methodology assumes that 100% of members eligible for system paid coverage elect post-retirement healthcare benefits and 10% of members who must self-pay elect post-retirement healthcare benefits.

In the first year of service-based eligibility, there is interpolation between beginning of year benefits with the 10% participation rate applied and end of year benefits with the 100% participation applied. A mid-year value the benefit at middle of year using 100% participation.

The biggest issue presents in the retiree and spouse contribution benefit stream (still in the first year of service-based eligibility). Once the member is eligible for system paid coverage and the 100% participation rate is applied, the retiree contribution benefit should be \$0. Thus, if the Buck middle of year averaging is applied, it should be an average of:

- 10% - applied to the retiree contribution rate beginning of year and
- 100% - applied to \$0 because the retiree no longer contributes.

Instead, the averaged benefit appears to be the average of

- 10% - applied to the retiree contribution rate beginning of year and
- 100% - applied to the retiree contribution rate end of year.

Thus, in this first year of service-based eligibility, the retiree contributions are overstated. The retiree contributions act to reduce the liability, so the liability is understated. This problem occurs in test lives where the retiree reaches service-based retirement first.

Buck Response: Buck agrees that the election percentages should be applied as we suggest; however, their valuation system does not allow them to be applied in the way suggested.

Post-retirement Health:

GRS Finding: The prescription benefit aging factor used at age 74 was 0.5%. The report states on page 100 of the PERS draft report and page 81 of the TRS draft report that it is 1.5%.

Buck Response: Buck will update this assumption in the final reports.

Resolution of Issues identified in the June 30, 2010 test lives

Withdrawal:

A. Deferral age used in the calculation of benefits

GRS Finding: Buck was calculating the PERS deferred vested benefits assuming retirement at first eligibility for reduced retirement; however Buck was valuing the benefit as not payable until eligibility for unreduced retirement. The benefit calculation and payment timing should match.

Buck Response: Buck concurred and indicated they would remove the early retirement reduction from the deferred vested benefits in the 2011 valuation.

Resolution: This change has been made in the June 30, 2011 valuation.

Disability:***B. Occupational disability rates***

GRS Finding: As part of the experience study, Buck chose to stop disability rates at the member's earliest retirement date. We do not concur with this change in methodology. The member may be eligible for a more valuable disability benefit during the early retirement period. The member would benefit doubly from taking the disability benefit due to tax advantages available to them. We recommended continuing to include probability for disability retirement until the member is eligible for normal retirement.

Buck Response: Buck referred us to the experience study and indicated that they assume the member will choose to retire, if eligible.

Closing comment: No change was made and we continue to recommend reconsidering this change in methodology and extending the rates out until normal retirement.

C. Occupational disability benefit for police officers

GRS Finding: Occupationally disabled members are eligible to elect the greater of the occupational disability benefit and the normal retirement benefit. Buck was only valuing the retirement benefit. We recommend valuing the greater of the two benefits.

Buck Response: Buck concurred and indicated they would value the greater of the two benefits in the 2011 valuation.

D. Normal retirement conversion

GRS Finding: In the prior valuation, Buck assumed the normal retirement conversion benefit will begin at age 60; however, the normal retirement conversion benefit was calculated as of the earliest normal retirement age, which for the observed test cases was substantially earlier. The payment timing and benefit calculation should be based on the same conversion age.

Buck Response: Buck concurred and indicated their valuation system does not allow them to convert to normal retirement at different ages so they would convert everyone at 60 and calculate their benefit accordingly in the 2011 valuation.

Closing comment: Buck has found a way to convert to normal retirement at different ages and is converting at earliest normal retirement age and calculating benefits accordingly. This is the ideal approach.

Death from active status:***E. Occupational death eligibility***

GRS Finding: The Buck valuation assumed members were not eligible for occupational death benefits until completing five years of service. We recommend removing this restriction consistent with the provisions.

Resolution: This change has been made in the June 30, 2011 valuation.

F. Occupational death benefit

GRS Finding: Benefits after conversion to the normal retirement were using service at age 60 even if the member death occurs after age 60 and the member had more service at the time of death. Normal retirement benefits payable to the surviving spouse should use the maximum of service projected to age 60 and service at the time of death.

Buck Response: Buck concurred and indicated they would value the greater of the two service amounts in the 2011 valuation.

Resolution: This change has been made in the June 30, 2011 valuation.

G. Election or participation rates for the retiree medical plan

GRS Finding: Buck uses a two-tiered participation assumption based on whether retirees are eligible for employer-paid coverage (based on member age). The assumption was applied incorrectly to spouse benefits based on spouse age rather than member age. As an example, a 58-year old female not meeting the eligibility requirement for employer-paid coverage would have a 10% participation assumption. Her assumed spouse would be three years older, or 61. It is our understanding that the spouse would still have a 10% participation rate based on the member's age. However, the Buck valuation used the spouse age of 61 and applies a participation assumption of 100%. It is our understanding that the member and spouse participation rates should match and should both be based on member age.

Buck Response: Buck concurred and indicated they would use matching participation rates based on member age in the 2011 valuation.

Resolution: This change has been made in the June 30, 2011 valuation.

Ongoing issues from prior audits

There is one ongoing deminimis issue which cannot be corrected due to system limitations. For Post-retirement Pension Adjustments for surviving spouses, Buck's valuation system uses the age of the original member, not the age of the benefit recipient.

ECONOMIC ASSUMPTIONS

General

These assumptions simulate the impact of economic forces on the amounts and values of future benefits. Key economic assumptions are the assumed rate of investment return and assumed rates of future salary increase.

Economic assumptions are normally defined by an underlying inflation assumption. Buck has cited 3.12% as its inflation assumption. Over the last year or so, long-term inflation forecasts have been declining. With the decline, the 3.12% inflation assumption is now at the higher end of the generally accepted range.

Investment Return Assumption

The nominal investment return assumption is 8.00%. The assumption is net of all investment and administrative expenses. A net investment return rate of 8.00% per annum is a commonly used assumption by many large public employee retirement systems. Combined with the 3.12% inflation assumption, this yields a 4.88% real net rate of return. This 4.88% real return should be continuously tested with the PERS and the TRS asset allocation.

Because PERS and TRS are closed to new members, eventually the asset allocation may need to be adjusted to reflect cash flow needs. This should also be considered in the next asset allocation and experience study.

Member Pay Increase Assumption

In sophisticated actuarial models, assumed rates of pay increase are often constructed as the total of several components:

Base salary increases -- base pay increases that include price inflation and general “standard of living” or productivity increases.

An allowance for Merit, Promotion, and Longevity – This portion of the assumption is not related to inflation.

In the context of a typical pay grid, pay levels are set out for various employment grades with step increases for longevity:

The base salary increase assumption reflects overall growth in the entire grid, and The Merit, Promotion, and Longevity pay increase assumption reflects movement of members through the grid, both step increases and promotional increases.

Base Salary Increase Assumption

The Base Salary Increase Assumption (also known as the wage inflation assumption) is 3.62%. The 3.62% is comprised of 3.12% for general inflation and 0.5% for productivity increases.

Merit, Promotion, and Longevity Pay Increase Assumption

As described above, the Merit, Promotion, and Longevity pay increase assumption represents pay increases due to movement through the pay grid. This is based on longevity and job performance. In most models, it is recognized that step increases and promotions are very rare late in careers. Thus, this allowance should trail away from relatively high levels for young or short service members to virtually nothing late in careers. We would expect that, as members approach retirement, this component would fade away.

The assumptions used by Buck are reasonable.

We would also offer that the manner in which pays change over time for teachers in comparison to public employees tends to differ. Since most teachers have a specific skill set, the approach to their compensation tends to follow a more consistent trend. Public Employees however (except for Peace officers and Firefighters) tend to represent a multitude of different skills – from a more generalized, labor intensive capacity (e.g., custodial) to more specialized training (ex. Accounting).

SUMMARY

In summary, the set of actuarial assumptions appear to be reasonable.

SECTION 4

REVIEW OF HEALTH CARE COST METHODS AND ASSUMPTIONS

REVIEW OF HEALTH CARE COST ASSUMPTIONS

GENERAL

Buck was able to complete their analysis of medical costs based on claims information provided by WFIS and Premera. For the 2011 valuation, the claim costs and Medicare offset analyses were updated using claims and enrollment data. Individual claim level detail was obtained from WFIS and Premera for fiscal years 2008 through 2011.

Claims Cost and Medicare Offset

We analyzed the trend in the per capita claim costs over the last four years:

	Age 65 Per Capitas					Trend				
	2008	2009	2010	2011	2012	08-09	09-10	10-11	11-12	Avg.
Med: Pre-Medicare	7,196	7,670	7,503	8,606	9,497	6.6%	-2.2%	14.7%	10.4%	7.2%
Med: Medicare A&B only	1,151	1,296	1,336	1,563	1,551	12.6%	3.1%	17.0%	-0.8%	7.7%
Med: Medicare B only	2,805	3,384	4,754	6,654	6,936	20.6%	40.5%	40.0%	4.2%	25.4%
Rx	2,173	2,379	2,419	2,600	2,799	9.5%	1.7%	7.5%	7.7%	6.5%

The changes in rates between June 30, 2011 and June 30, 2012 for pre-Medicare medical claims outpaced the current trend assumption being used. The changes in rates between June 30, 2011 and June 30, 2012 for post-Medicare medical claims and prescription claims outpaced the current trend assumption being used. This resulted in an overall gain on Postemployment Healthcare Liabilities.

Method and Contributions

- Nothing to recommend

Report

- Nothing to recommend.

Assumptions

- The trend assumptions used for Medical and Prescription Drugs still appear to be reasonable.
- The participation assumption of 100% for employer-paid coverage and 10% for member-paid coverage still appears reasonable.

Incurred Adjustment

- Assumptions were developed regarding the number of Medicare Part B only coverage and associated claims costs. In addition, the assumed lag used to adjust claims data from a paid to incurred basis was 2.0 months for medical claims and 0.04 for prescription claims. We concur with this approach.

Aging of Claim Costs

- Buck used individual claim data to develop age-graded cost rates, and will continue to measure the individual claim data against the aging curve to test its ongoing reasonableness of fit. We concur with this methodology.

Medicare Part B Only

- Eligibility for current active members is now determined based on quarters worked since date of hire or re-hire. This refinement created a liability gain for the plans.

Cadillac Tax

- Buck indicates that the Cadillac Tax will affect the plan sufficiently far in the future to produce a minimal impact to valuation results. We commend Buck for addressing this future provision.

SECTION 5

REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES

REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES

I. Background

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board.

The actuarial values generated from this process are based not only on these assumptions, but also on the additional assumptions built into each actuarial firm's pension valuation software.

Our scope for performing the review did not include a complete replication of the valuation results as determined by Buck Consultants at June 30, 2011. Rather, we reviewed a number of sample test lives from Buck in great detail, and made our determinations as to whether the methods and assumptions being employed were being done so properly. We also reviewed the report in order to examine the aggregate results and conclusions of this actuarial valuation.

Though this approach is not intended to meet the rigors of a full scale replication of results – it still serves as a strong indicator of the appropriateness of the assumptions and methods being used to value the liabilities and determine the costs for these plans.

II. Process:

Our review process can be summarized as follows:

Computation: Valuation Liabilities

We analyzed test cases to compare the Actuarial Liability under the EAN funding method for the test cases of the PERS and TRS Systems. As a starting point, we wanted to first replicate Buck's test case liabilities by using their assumptions and methods to ensure that the computations were in sync with the descriptions listed in the valuation report.

When conducting an actuarial audit, and reviewing the testlives, we look at the projected benefits at each age for each decrement type. We also look at the component of the benefit (final average earnings and years of service). This is critical to understanding what the valuation system is actually valuing and making sure that they valuation is not "right for the wrong reasons", (meaning, errors could occur in two different directions making total liabilities approximate a correct value.)

We also review the construction of the commutation functions- the varying probabilities for each decrement and the discounting to the valuation date.

III. Actuarial Method:

Findings:

The actuarial method used for producing Alaska PERS and TRS June 30, 2011 Actuarial Valuations is known as the Entry Age Normal (EAN) Method. Under this method, benefits are projected to the assumed occurrence of future events based on future salary levels and service to date. The Normal Cost is the present value of benefits to be earned for the current year while the Actuarial Accrued Liability (AAL) is the present value of benefit earned for all prior years

Conclusion:

The level percent of pay method for both amortization of the unfunded accrued liability and the normal cost are both appropriate as a funding policy, considering that that payroll is not closed (as promulgated under SB 123.) For GASB reporting purposes (as opposed to funding purposes), a different set of numbers may need to be disclosed to account for the closed nature of the group.

Additionally, to account for the Part D subsidy in the retiree medical plan, a different set of numbers may need to be disclosed for GASB reporting purposes (again, as opposed to funding purposes). The report also recognizes that a different discount rate will need to be utilized for the GASB numbers for the retiree medical liabilities, in order to recognize the partially funded nature of that plan.

The EAN method is the most commonly used method in the public sector. The EAN method tends to produce the most stable costs- a tool widely appreciated for its budgeting purposes.

IV. Actuarial Calculations:

We reviewed sample test cases used for the June 30, 2011 valuation draft reports. In order to accomplish this, we requested a number of sample cases from Buck with intermediate statistics to assist us in analyzing the results. We combined this with our understanding of the plan provisions in an attempt to analyze the liability values produced by Buck for these sample cases only.

Findings:

We analyzed the test cases and found the results to be well within acceptable tolerance limits for differences in the present value of benefits.

Conclusion and Results:

We matched the liabilities in total quite closely for the test cases submitted under the Pension plans for PERS and TRS, and present value of retirement benefits under the PERS Retiree Health plan. In addition we have analyzed the calculations of the ancillary benefits and have provided a summary of this detailed analysis at the end of this section. These exhibits provide a comparison of the calculations by decrement provided to us from Buck against our replication of those benefits as we interpret them from the plan provisions and assumptions. We completed this detail for three active test lives under PERS and TRS (Pension plan), as well as selected inactives and pay status members under PERS and TRS. We continue to refine our review for three active test lives under both the PERS and TRS Retiree Health plans with regards to the retirement benefits, as well as the inactives and pay status. Some of the decrements match very well, and others show more discrepancy. The significant differences are shown in the exhibits where the percentage difference of the comparison between Buck and GRS is not close to 100%. Hence we recommend further study of these particular areas.

In matching the present value of benefits, it is being determined that all benefits are being valued, and that the valuation of the liability for those benefits is consistent with the stated assumptions and methods.

PENSION PLANS

For PERS pension, the test life PVB match was within 0.4% on the three cases shown. The inactive test lives match to within 0.8%. This would be considered as an overall match for purposes of the valuation.

For TRS pension, the PVB of two active test lives matches within 0.1%. The PVB difference on the third active test life is 2.1%. The inactive test lives match to within 1.6%. This would be considered as an overall match for purposes of the valuation.

We have no additional issues to recommend for review.

RETIREE HEALTH PLANS

For PERS retiree health, the test life PVB on the retirement benefit decrement for active members was 3.1%, 1.2%, and 0.4% different of the three test lives. This is considered a reasonable match, as the retirement benefit decrement consists of approximately 90% of the total PVB. The inactive test lives match to within 1.0%. This would be considered as an overall match for purposes of the valuation.

For PERS retiree health, the test life PVB on the retirement benefit decrement for active members was 1.0%, 3.1%, and 2.7% different of the three test lives. This is considered a reasonable match, as the retirement benefit decrement consists of approximately 90% of the total PVB. The inactives test lives match to within 1.0%. This would be considered as an overall match for purposes of the valuation.

NOTE

Ancillary or non-retirement benefits such as death and disability tend to be low probability events (and hence low liability) and they also tend to have many “bells and whistles” which can be valued in different ways by different actuaries. When looking at the test life results, it may be most informative to review the decrement (retirement, termination, disability, death) totals rather than each particular segment of the decrement (married non-occupational death, etc.).

Actuarial Review of Pension and Health Plans - June 30, 2011
 Comparison of Present Value of Benefits - **PERS Active Pension**

Actives	Test Case 1 - PF Tier 3			Test Case 2 - Other Tier 2			Test Case 3 - Other Tier 1		
<u>Basic Data:</u>	Current Age	Credited Service	Sex	Current Age	Credited Service	Sex	Current Age	Credited Service	Sex
	34.8	12.3	Male	57.2	13.9	Female	64.1	28.1	Male
Present Value of Benefits (PVB)	GRS*	Buck	% Diff	GRS*	Buck	% Diff	GRS*	Buck	% Diff
<u>Retirement:</u>									
Main Retirement Benefit	363,117	364,488	-0.4%	197,113	197,327	-0.1%	688,094	691,373	-0.5%
AK COLA	5,653	5,654	0.0%	8,801	8,792	0.1%	40,817	40,816	0.0%
Total Retirement PVB	368,771	370,142	-0.4%	205,914	206,119	-0.1%	728,911	732,189	-0.4%
<u>Withdrawal:</u>									
Vested Term	20,198	20,476	-1.4%	-	-	0.0%	-	-	0.0%
Vested Term AK COLA	552	561	-1.6%	-	-	0.0%	-	-	0.0%
Vested Term (take LS)	5,191	5,258	-1.3%	-	-	0.0%	-	-	0.0%
Vested Term (death during deferral)	250	264	-5.5%	-	-	0.0%	-	-	0.0%
Vested Term (death during deferral AK COLA)	12	19	-37.0%	-	-	0.0%	-	-	0.0%
Total Withdrawal PVB	26,202	26,578	-1.4%	-	-	0.0%	-	-	0.0%
<u>Death:</u>									
NonOcc Dth Marr	632	559	13.0%	461	386	19.5%	4,719	3,840	22.9%
NonOcc Dth Marr AK COLA	6	8	-17.3%	23	17	33.5%	237	223	6.5%
NonOcc Married LS Dth	53	54	-1.1%	33	33	0.6%	334	335	-0.3%
NonOcc Single LS Dth	89	90	-1.2%	94	94	0.7%	556	558	-0.3%
Occ Dth Marr (Pre-NR Conversion Benefit)	444	445	-0.1%	56	56	0.0%	-	-	0.0%
Occ Dth Marr (Post-NR Conversion Benefit)	4,235	4,105	3.2%	1,166	1,145	1.8%	12,703	12,942	-1.8%
Occ Dth Marr AK COLA (Post-NR)	44	59	-26.0%	64	52	21.4%	643	750	-14.2%
Occ Single LS Dth	266	270	-1.2%	115	115	0.7%	680	682	-0.3%
Total Death PVB	5,769	5,588	3.2%	2,012	1,897	6.1%	19,871	19,328	2.8%
<u>Disability:</u>									
NonOcc Dis	993	993	0.0%	-	-	0.0%	-	-	0.0%
NonOcc Dis AK COLA	56	56	0.0%	-	-	0.0%	-	-	0.0%
Occ Dis (Pre-NR Conversion Benefit)	807	807	0.0%	-	-	0.0%	-	-	0.0%
Occ Dis (Post-NR Conversion Benefit)	2,777	2,732	1.7%	-	-	0.0%	-	-	0.0%
Occ Dis AK COLA (Pre-NR)	54	54	0.0%	-	-	0.0%	-	-	0.0%
Occ Dis AK COLA (Post-NR)	159	157	1.7%	-	-	0.0%	-	-	0.0%
Dis Death Ben	200	231	-13.1%	-	-	0.0%	-	-	0.0%
Dis Death Ben AK COLA	13	12	2.6%	-	-	0.0%	-	-	0.0%
Total Disability PVB	5,060	5,042	0.4%	-	-	0.0%	-	-	0.0%
GRAND TOTAL PVB	405,802	407,350	-0.4%	207,927	208,016	0.0%	748,781	751,517	-0.4%

Actuarial Review of Pension and Health Plans - June 30, 2011
 Comparison of Present Value of Benefits - TRS Pension

Actives	Test Case 1 - Tier 1			Test Case 2 - Tier 2			Test Case 3 - Tier 2		
	Current Age	Credited Service	Sex	Current Age	Credited Service	Sex	Current Age	Credited Service	Sex
<i>Basic Data:</i>	49.2158	19.80	Female	34.4918	10.00	Female	29.4699	4.30	Male
Present Value of Benefits (PVB)	GRS*	Buck	% Diff	GRS*	Buck	% Diff	GRS*	Buck	% Diff
<i>Retirement:</i>									
Main Retirement Benefit	409,699.66	401,319.75	2.1%	191,568.85	191,594.23	0.0%	69,695.32	69,721.77	0.0%
AK COLA	21,489.93	21,041.26	2.1%	3,343.19	3,342.39	0.0%	1,274.64	1,274.34	0.0%
Total Retirement PVB	431,189.59	422,361.01	2.1%	194,912.04	194,936.62	0.0%	70,969.96	70,996.11	0.0%
<i>Withdrawal:</i>									
Vested Term	-	-	0.0%	15,397.98	15,409.31	-0.1%	6,792.00	6,799.16	-0.1%
Vested Term AK COLA	-	-	0.0%	476.29	476.26	0.0%	208.76	208.75	0.0%
Vested Term (take LS)	-	-	0.0%	2,556.90	2,556.90	0.0%	1,260.79	1,260.78	0.0%
Vested Term (death during deferral)	-	-	0.0%	118.41	103.50	14.4%	137.96	89.39	54.3%
Vested Term (death during deferral AK COLA)	-	-	0.0%	1.50	5.94	-74.7%	1.66	4.76	-65.1%
Vested Term (death, single)	-	-	0.0%	10.46	47.74	-78.1%	33.91	22.61	50.0%
Total Withdrawal PVB	-	-	0.0%	18,561.54	18,599.65	-0.2%	15,269.11	15,219.46	0.3%
<i>Death:</i>									
Non Vested NonOcc 1<svc<5 LS Dth	-	-	0.0%	-	-	0.0%	27.54	27.58	-0.2%
NonOcc Dth Marr	841.33	816.65	3.0%	505.56	481.27	5.0%	361.75	332.07	8.9%
NonOcc Dth Marr AK COLA	44.13	43.08	2.4%	7.86	7.67	2.5%	6.03	5.65	6.7%
NonOcc Married LS Dth	72.99	71.31	2.4%	36.94	36.93	0.0%	25.38	25.59	-0.8%
NonOcc Single LS Dth	243.31	237.71	2.4%	122.96	122.87	0.1%	44.71	45.06	-0.8%
Occ Dth (Pre-NR Conversion Benefit)	1.35	1.35	0.0%	37.34	37.36	-0.1%	63.81	64.37	-0.9%
Occ Dth (Post-NR Conversion Benefit)	438.69	452.64	-3.1%	214.42	254.86	-15.9%	-	-	0.0%
Occ Dth AK COLA (Pre-NR)	-	-	0.0%	-	-	0.0%	151.02	175.59	-14.0%
Occ Dth AK COLA (Post-NR)	24.06	23.86	0.8%	2.71	4.35	-37.7%	2.02	3.16	-36.1%
Total Death PVB	1,665.86	1,646.60	1.2%	927.79	945.31	-1.9%	682.25	679.07	0.5%
<i>Disability:</i>									
Non-vested LS Ben	-	-	0.0%	-	-	0.0%	4.72	5.23	-9.8%
Dis (Pre-NR Conversion Benefit)	-	-	0.0%	372.34	372.34	0.0%	357.71	357.70	0.0%
Dis (Post-NR Conversion Benefit)	-	-	0.0%	497.27	565.13	-12.0%	285.58	243.55	17.3%
Dis AK COLA (Pre-NR)	-	-	0.0%	21.06	21.05	0.0%	19.69	19.70	-0.1%
Dis AK COLA (Post-NR)	-	-	0.0%	27.79	26.92	3.2%	16.31	12.06	35.2%
Dis Death Ben	-	-	0.0%	12.06	12.07	-0.1%	26.48	26.50	-0.1%
Dis Death Ben AK COLA	-	-	0.0%	0.57	0.56	1.8%	1.21	1.22	-0.8%
Dis Child Ben	-	-	0.0%	151.51	147.31	2.9%	133.14	133.16	0.0%
Dis Child Ben AK COLA	-	-	0.0%	8.46	8.22	2.9%	7.29	7.29	0.0%
Total Disability PVB	-	-	0.0%	1,091.06	1,153.60	-5.4%	852.13	806.41	5.7%
GRAND TOTAL PVB	432,855.45	424,007.61	2.1%	215,492.43	215,635.18	-0.1%	87,773.45	87,701.05	0.1%

Actuarial Review - June 30, 2011
Comparison of Present Value of Benefits - Inactive Pension

PERS Inactives Pension - PVB	GRS	Buck	% Diff
PERS Peace Officer/Firefighter - Retiree	393,387	390,072	0.8%
PERS Others - Retiree	77,803	78,270	-0.6%
PERS Peace Officer/Firefighter - Deferred	18,011	17,904	0.6%
PERS Others - Beneficiary	58,217	58,596	-0.6%

TRS Inactives Pension - PVB	GRS	Buck	% Diff
TRS - Retiree 1	689,904	685,634	0.6%
TRS - Retiree 2	250,399	246,420	1.6%
TRS - Deferred	147,783	146,231	1.1%
TRS - Beneficiary	79,837	79,691	0.2%

Actuarial Review of Pension and Health Plans - June 30, 2011	
Active Pension Test Case Legend	
Benefit	Extended Description
Retirement: Main Retirement Benefit AK COLA	Early/Normal Retirement (base) Benefit Alaska Cost of Living Allowance (10% of Ret base benefit)
Withdrawal: Vested Term Vested Term AK COLA Vested Term (take LS) Vested Term (death during deferral) Vested Term (death during deferral AK COLA) Vested Term (death, single)	Deferred retirement (base) Benefit (deferred to early retirement eligibility) Alaska Cost of Living Allowance (10% of Term base benefit) Refund of employee contributions upon termination of (vested) member Death (base) Benefit payable upon death after withdrawal but before benefit commencement Alaska Cost of Living Allowance (10% of DV Dth base benefit) Return of employee contributions upon death during deferral period for single members
Death: Non Vested NonOcc 1<svc<5 LS Dth NonOcc Dth Marr NonOcc Dth Marr AK COLA NonOcc Married LS Dth NonOcc Single LS Dth Occ Dth (Pre-NR Conversion Benefit) Occ Dth (Post-NR Conversion Benefit) Occ Dth AK COLA (Pre-NR) Occ Dth AK COLA (Post-NR) Occ Single LS Dth	Refund of employee contributions upon death of non-vested member Non-Occupational Death (base) benefit Alaska Cost of Living Allowance (10% of Non-Occupational Dth base benefit) Refund of employee contributions upon non-occupational death of married (vested) member Refund of employee contributions upon non-occupational death of single (vested) member Occupational Death (base) benefit until normal retirement conversion Occupational Death (base) benefit after normal retirement conversion Alaska Cost of Living Allowance (10% of Occupational Dth base benefit pre-conversion) Alaska Cost of Living Allowance (10% of Occupational Dth base benefit post-conversion) Refund of employee contributions upon occupational death of single (vested) member
Disability: Non-vested LS Ben Dis (Pre-NR Conversion Benefit) Dis (Post-NR Conversion Benefit) Dis AK COLA (Pre-NR) Dis AK COLA (Post-NR) Dis Death Ben Dis Death Ben AK COLA Dis Child Ben Dis Child Ben AK COLA	Refund of employee contributions payable upon disability before vested Disability benefit prior to normal retirement conversion Disability benefit after normal retirement conversion Alaska Cost of Living Allowance (10% of pre-conversion disability benefit) Alaska Cost of Living Allowance (10% of post-conversion disability benefit) Death (base) Benefit payable upon death after disability Alaska Cost of Living Allowance (10% of Dis Dth base benefit) Disability (base) Child Benefit payable until eligible for normal retirement Alaska Cost of Living Allowance (10% of Temp Dis Child base benefit)

Actuarial Review of Pension and Health Plans - 2011
 Comparison of Present Value of Benefits - PERS Retiree Health

Actives	Test Case 1 - PF Tier 3			Test Case 2 - Other Tier 2			Test Case 3 - Other Tier 1		
Basic Data:									
Sex	Male			Female			Male		
Current Age	34.82			57.19			64.11		
Current Credited Service	12.32			13.91			28.08		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff	GRS*	Buck	% Diff	GRS*	Buck	% Diff
Retirement:									
Tier x <Member>	68,160.51	68,285.01	-0.2%	98,722.73	96,433.45	2.4%	68,910.21	70,006.16	-1.6%
Tier x <Spouse>	63,718.82	62,577.97	1.8%	51,267.29	51,835.70	-1.1%	74,503.79	72,887.69	2.2%
Contrib Tier 3 <Member>	(2,755.22)	(4,275.69)	-35.6%	(322.37)	(322.62)	-0.1%	-	-	0.0%
Contrib Tier 3 <Spouse>	(2,223.12)	(3,445.00)	-35.5%	(224.19)	(225.02)	-0.4%	-	-	0.0%
Post 65 Part D Tier 3 <Member>	(3,071.19)	(3,100.77)	-1.0%	(7,905.39)	(7,676.73)	3.0%	(7,454.26)	(7,581.86)	-1.7%
Post 65 Part D Tier 3 <Spouse>	(2,643.64)	(2,555.92)	3.4%	(5,003.55)	(5,066.61)	-1.2%	(6,752.28)	(6,588.99)	2.5%
Total Retirement PVB	121,186.17	117,485.60	3.1%	136,534.52	134,978.17	1.2%	129,207.45	128,723.00	0.4%

Inactives - PVB	GRS*	Buck	% Diff
Retiree - PF Tier 1 - Female	116,056	114,946	1.0%
Retiree - Other Tier 2 - Male	282,446	281,996	0.2%
Vested Termination - PF Tier 3 - Male	1,658	1,660	-0.1%
Beneficiary - Other Tier 1 - Female	69,046	68,753	0.4%

* GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.

Benefits - Buck Valuation Terminology	Description*
Retirement:	
Tier x <Member>	Base Benefit Paid to Employee
Tier x <Spouse>	Base Benefit Paid to Spouse
Contrib <Member>	Employee Pre-Retirement Contributions
Contrib <Spouse>	Spouse Pre-Retirement Contributions
Post 65 Part D <Member>	Employee Post-age 65 Medicare Part D Reimbursement
Post 65 Part D <Spouse>	Spouse Post-age 65 Medicare Part D Reimbursement

Actuarial Review of Pension and Health Plans - 2011
 Comparison of Present Value of Benefits - TRS Retiree Health

Actives	Test Case 1 - Tier 1, high svc			Test Case 2 - Tier 2			Test Case 3 - Tier 2, low svc		
<u>Basic Data:</u>									
Sex	Female			Female			Male		
Current Age	49.22			34.49			29.47		
Current Credited Service	33			10			4		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff	GRS*	Buck	% Diff	GRS*	Buck	% Diff
<u>Retirement:</u>									
Tier x <Member>	148,697.40	146,984.32	1.2%	65,330.51	64,659.79	1.0%	34,902.56	34,610.71	0.8%
Tier x <Spouse>	96,404.69	95,656.43	0.8%	41,479.81	41,142.02	0.8%	33,994.17	33,651.65	1.0%
Post 65 Part D Tier 2 <Member>	(7,652.85)	(7,555.91)	1.3%	(3,554.76)	(3,518.04)	1.0%	(1,881.21)	(1,868.35)	0.7%
Post 65 Part D Tier 2 <Spouse>	(5,602.28)	(5,557.95)	0.8%	(2,616.25)	(2,594.78)	0.8%	(1,624.60)	(1,611.06)	0.8%
Contrib <Member>				(2,083.03)	(3,233.53)	-35.6%	(1,060.78)	(1,635.52)	-35.1%
Contrib <Spouse>				(1,551.15)	(2,409.76)	-35.6%	(906.48)	(1,396.70)	-35.1%
Total Retirement PVB	231,846.95	229,526.89	1.0%	97,005.12	94,045.70	3.1%	63,423.66	61,750.73	2.7%

Inactives - PVB	GRS*	Buck	% Diff
Vested Termination - Male	269,252	266,483	1.0%
Retiree - Male	307,615	305,190	0.8%
Retiree - Female	164,871	165,083	-0.1%
Beneficiary - Female	76,166	75,876	0.4%

* GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.

Benefits - Buck Valuation Terminology	Description*
<u>Retirement:</u>	
Tier x <Member>	Base Benefit Paid to Employee
Tier x <Spouse>	Base Benefit Paid to Spouse
Contrib <Member>	Employee Pre-Retirement Contributions
Contrib <Spouse>	Spouse Pre-Retirement Contributions
Post 65 Part D <Member>	Employee Post-Age 65 Medicare Part D Reimbursement
Post 65 Part D <Spouse>	Spouse Post-Age 65 Medicare Part D Reimbursement

SECTION 6

REVIEW OF CONTRIBUTION RATE DETERMINATION

REVIEW OF CONTRIBUTION RATE DETERMINATION

GRS was to analyze the funding method being used and verify its computation (as shown in pages 18, 21, and 24 of the PERS valuation report and page 14 of the TRS valuation report). The goal here is to start with the Actuarial Accrued Liabilities and the Normal Costs that are developed from the data and valuation software and compare this to the Assets in the system. The difference between the two, the Unfunded Actuarial Accrued Liability (UAAL) in conjunction with the Normal Cost forms the basis of the contributions that the Actuary recommends the system make in order to ensure that benefits can be provided for current and future retirees. As noted in the Buck report, the compensation used to develop the rates is a combination of both this plan's compensation, as well as the DCR compensation.

FINDINGS:

The calculations were reasonable and consistent with actuarial practice. It is outside of the norm to use compensation other than the compensation that relates directly to the plan; however, the Buck report provides an adequate disclosure of this method in the determination of the rates.

We noted that there was more volatility in the normal cost rates than we would have expected for a large stable plan with no major assumption changes. We would encourage Buck to provide additional documentation on the underlying causes of the changes in rate.

Total Normal Cost Rate			
	Pension	HC	Total
TRS Current	12.18%	4.96%	17.14%
TRS Prior	12.51%	5.25%	17.76%
Change	-0.33%	-0.29%	-0.62%
PERS Current	10.75%	7.19%	17.94%
PERS Prior	10.22%	7.79%	18.01%
Change	0.53%	-0.60%	-0.07%

SECTION 7

REVIEW OF ACTUARIAL VALUATION REPORT

REVIEW OF ACTUARIAL VALUATION REPORT

GASB No. 25 DISCLOSURE:

GASB (Governmental Accounting Standards Board) sets out guidelines for financial accounting and reporting for state and local government entities. Under GASB No. 25, the actuarial valuation reports for PERS and TRS must disclose a set of financial statistics. These include:

- Schedule of Funding Progress
- Schedule of Employer Contributions
- Notes to Required Supplementary Information

Findings:

No issues to report.

Conclusion:

Buck has indicated that they do calculate the actuarial present value of assumed Part D Retiree Drug Subsidy (RDS) payments separately. For funding purposes, the total healthcare liability is offset by the RDS amounts to conform to the ARMB's current policy of funding discounted net cash flow. Figures used for GASB 43 purposes have been illustrated without the RDS offset.

VALUATION REPORT:

GRS reviewed the June 30, 2011 valuation report for scope as well as content to determine if actuarial statistics were being reflected fairly and if the details of the plan were being correctly communicated.

Findings:

The June 30, 2011 draft valuation report submitted by Buck to the board had the following layout:

1. Actuarial Certification – This introduces the report, lists the valuation date in question, and provides a disclaimer that the results are predicated on the census data received from the Systems and the financial information received from KPMG. It also discusses the basic actuarial concepts and provides the funded ratios.

2. Report Highlights – Shows funding status, including a graph of the funding ratio history, and the employer recommended contribution rate.
3. Analysis of the Valuation – Explains the change in the funded status and calculated contribution rate. Includes retiree medical costs, investment return, and other factors. Within this section there are three sections that show the development of valuation results, basis of the valuation, and other historical information. These include projections which are beyond those commonly produced in actuarial valuation reports.

Conclusion:

We consider the scope and content of Buck’s report to be effective in communicating the financial position and contribution requirements of PERS and TRS.

The Actuarial Standard of Practice with regard to the mortality assumption has recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states:

“The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement.”

This new standard applies to actuarial valuations dated on or after June 30, 2011. This disclosure should be added to the valuation report.

ALASKA RETIREMENT MANAGEMENT BOARD
ACTUARIAL REVIEW OF DEFINED CONTRIBUTION
RETIREMENT PLANS
APRIL 19, 2012

April 19, 2012

Mr. Gary Bader
Chief Investment Officer
Department of Revenue, Treasury Division
Alaska Retirement Management Board
P.O. Box 110405
Juneau, AK 99811-0405

Subject: Actuarial Review of June 30, 2011 Defined Contribution Retirement (DCR) Plan valuations for the State of Alaska Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS).

Dear Gary:

We have performed an actuarial review of the June 30, 2011 DCR Actuarial Valuations for PERS and TRS.

This report includes a review of:

- Occupational Death and Disability Assumptions and Benefits
- Retiree Health Care Cost Assumptions
- Actuarial Valuation Methods and Procedures
- Contribution Rate Determination
- Actuarial Valuation Report

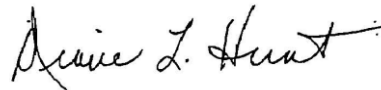
A major part of our review is the analysis of the test lives provided by Buck Consultants. We have included exhibits in our report which summarize the detailed analysis of these sample test cases for the PERS and TRS DCR Plans, as well as a comparison of the results between Buck Consultants and GRS. We wish to thank the staff of the State of Alaska Treasury Division and Buck Consultants without whose willing cooperation this review could not have been completed.

Sincerely,

Gabriel, Roeder, Smith & Company



Leslie L. Thompson, FSA, FCA, EA, MAAA
Senior Consultant



Diane Hunt, FSA, FCA, EA, MAAA
Consultant



Dana L. Woolfrey, ASA, EA, MAAA
Consultant

cc: Ms. Judy Hall

TABLE OF CONTENTS

SECTION	PAGE NUMBER	
		COVER LETTER
SECTION 1	2	EXECUTIVE SUMMARY
SECTION 2	6	GENERAL APPROACH
SECTION 3	9	REVIEW OF ASSUMPTIONS AND BENEFITS
SECTION 4	12	REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES
SECTION 5	19	REVIEW OF CONTRIBUTION RATE DETERMINATION
SECTION 6	21	REVIEW OF ACTUARIAL VALUATION REPORT
SECTION 7	24	SUMMARY AND CONCLUSIONS

SECTION 1

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Gabriel, Roeder, Smith & Co. was engaged by the Alaska Retirement Management Board (ARMB) to review the Actuarial Valuations as of June 30, 2011 for the Public Employee's Retirement System Defined Contribution Retirement (DCR) Plan and the Teachers' Retirement System (TRS) Defined Contribution Plan.

This report presents our findings in the following areas:

- General Approach
- Pension Assumptions and Benefits
- Health Care Cost Assumptions
- Actuarial Valuation Methods and Procedures
- Contribution Rate Determination
- Actuarial Valuation Report
- Potential Areas for Future Review
- Summary and Conclusions

FINDINGS FROM THE AUDIT ON THE JUNE 30, 2011 VALUATIONS

Through the test life review completed with this audit, we generally matched the results of Buck Consultants. The liabilities shown in the Buck test lives match our liabilities within an acceptable range of tolerance.

However, while we could reproduce Buck Consultant's test lives, we do have an exception to the interpretation used in valuing the Occupational Death benefit for the PERS and TRS plans.

Exception regarding Occupational Death calculation. The Occupational Death benefits payable from the DCR plans are payable to the spouse until the date that the member would have first qualified for normal retirement, either by service or age and service. For example if a PERS-Other or TRS member dies at age 55 with 28 years of service at the date of death, the benefits would be paid to the spouse for two years, until the date the member would have had 30 years of service, and at that time the benefits to the spouse cease. (Police and Fire have a 25 year normal retirement eligibility instead of 30 years and would be administered in a similar manner.) We have been informed by Alaska staff that this is the way the Plan is administered for the Occupational Death benefits.

Buck Consultants has confirmed that their interpretation has been that if the member did not have the service eligibility at the time of death, then the benefits were assumed to continue to the spouse until the member would have reached normal retirement age at 65.

In the example above, the benefits would be continued to the spouse for an additional 10 years, until the date that the member would have reached age 65. The result is that the valuation assumes the benefits are payable to the spouse for a longer period of time, resulting in a higher liability.

Resolution: *Buck Consultants has agreed to this change and will determine the impact on the valuation results of this revision.*

The valuations did not have any benefit provision or method changes since the prior valuation. The assumptions did not change since the prior valuation, except for the assumption regarding Medicare Part B only participation for pre-65 retirees and active members.

The gain/loss analysis has been revised since last year to provide additional detail, especially for the retiree health benefits. The PERS DCR plan showed fairly large mortality and disability gains for the prior two years. The TRS valuation showed a gain due to mortality and disability. For the retiree health care portion of both the PERS and TRS plans, there were gains due to claim costs and losses due to “other”.

The PERS DCR plan is well-funded, with a funded ratio of 143.8%, a decrease from 168.8% last year. For TRS, the funded ratio is 196.1%, a decrease from 223.5% last year.

SUMMARY OF TEST LIFE REVIEW

We have included as a part of this report a detailed test life results summary.

- We matched the present value of benefits closely in total on test lives submitted for PERS Other, PERS P/F and TRS DCR plans. We have included exhibits in Section 4 of the report which summarize the differences in calculations by decrement for the test lives analyzed. Differences between actuarial firms will always occur due to system differences and other nuances in the calculations.
- As mentioned previously, we are recommending a revision to the calculation of the Occupational Death benefit. The first exhibit shows our calculation matching Buck’s results using their interpretation. The second exhibit shows the results using the revised methodology. Two of the test lives were affected by this change but the third was not impacted since the member reached age 65 before the 25 or 30 years service eligibility.
- The actuarial basis used for the funding of the plan lies within the range of reasonableness.
- The gain/(loss) analysis has been expanded this year, especially for the healthcare plans. As the DCR plan grows, the gain/loss by source will be an important tool in assessing the

reliability of the actuarial assumptions. Monitoring these changes year by year can aid in ensuring the assumptions are kept “up to date” with the experience of the plan.

The table below shows the changes recommended by GRS both in the past years newly identified issues and the resolution of the issue. Newly identified issues are bolded.

Issue	GRS Recommendations	Plan		Buck Comments
1. PERS Peace Officer/Firefighter				
a. Final Average Earnings for disability monthly benefits	Should use three year average instead of five year average.	DCR PERS-PF	✓	Buck agreed to change and was correctly revised in 2010
2. DCR Reports				
a. Participation reconciliation grid	Was not included in 2009	DCR Reports	✓	Included in 2010 report
b. Gain/loss by source	Was not included in 2009	DCR Reports	✓	Included in 2010 report
c. Amortization method description	Enhance clarification	DCR Reports	✓	Included in 2010 report
d. Definition of normal retirement eligibility	Include in report	DCR Reports	<input checked="" type="checkbox"/>	
e. Description of payment of occupational death benefit	Clarify that normal retirement is determined assuming the member had lived	DCR Reports	<input checked="" type="checkbox"/>	
f. Mortality disclosure	Add comment on margin for future mortality improvements	DCR Reports	<input checked="" type="checkbox"/>	
3. Retiree Medical Plans				
a. Participation assumed to be 100%	Study and adopt participation rates	DCR Retiree Health	✓	Adopted assumptions and included in valuation in 2010
b. Claims cost	Provide additional information on adjustments to costs	DCR Retiree Health	✓	Added in 2010
4. Occupational Death Benefit	Stop payment at normal retirement eligibility had the retiree lived.	DCR PERS, TRS	<input checked="" type="checkbox"/>	Buck will measure the impact on the June 30, 2011 valuation

SECTION 2

GENERAL APPROACH

GENERAL APPROACH

Gabriel, Roeder, Smith & Co. was charged with reviewing the actuarial valuations of TRS and PERS DCR plans.

We requested a number of items from Buck Consultants in order to perform the actuarial review:

1. In December, 2011, we received the pension and healthcare test lives for the PERS and TRS DCR plans, and the valuation data for both plans.
2. We received the DCR draft reports on March 13, 2012.

In performing our review, we:

1. Reviewed actuarial assumptions – we checked to see if they were consistent, comprehensive, and appeared reasonable.
2. Reviewed the actuarial valuation reports as of June 30, 2011 for completeness, GASB compliance and a review of financial determinations.
3. Reviewed, in detail, the sample members provided us – This provided us with a perspective on the actuarial process utilized by Buck with respect to the plan and allowed us to review the valuation methods and procedures.
4. Reviewed the health cost assumptions and trend.
5. Identified areas for future more detailed review.

KEY ACTUARIAL CONCEPTS

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board. It is designed to simulate all of the dynamics of such a system for each current system member including:

1. Earning future service and making contributions,
2. Receiving changes in compensation,
3. Leaving the system through job change, disablement, death, or retirement, and
4. Determination of and payment of benefits from the System.

This simulated dynamic is applied to each active member of the System. It results in a set of expected future benefit payments to that member. Bringing those expected payments to present value, at the assumed rate of investment return, produces the Actuarial Present Value (“APV”) of future benefits for that member. In like manner, an APV of future salaries is determined.

The actuarial present value of future benefits and the actuarial present value of future salaries for the entire System are the total of these values across all members. The remainder of the actuarial valuation process depends upon these building blocks.

Once the basic results are derived, an actuarial method is applied in order to develop information on contribution levels and funding status. An actuarial method splits the actuarial present value of future benefits into two components:

1. Present value of Future Normal Costs, and
2. Actuarial Accrued Liability (“AAL”).

The actuarial method in use by the State of Alaska is known as the Entry Age Normal (EAN) method. Under entry age normal funding method, the Normal Cost for a member is that portion of the Actuarial Present Value of the increase in the value of that member’s benefit for service during the upcoming year. The actuarial accrued liability is the difference between the total actuarial present value and the present value of all future normal costs.

For TRS and PERS DCR plans, a present value of future benefits applies to the following benefits:

- Occupational Disability benefits
- Occupational Death benefits
- Retiree Medical benefits

The retiree medical benefits are based on potential future retiree health care benefits, while the others are a type of post-employment income replacement benefit, based on salary. For the medical benefits, estimates must be made of the future health care costs. This is done by determining current per capita health care claim costs by age of retiree, and projecting them into the future based on anticipated future health care inflation. Since the DCR plan is relatively new, and based on members hired after 2006, and on different health plan rules, Buck has used the claim costs from the defined benefit plan with adjustments for this particular population. We concur with this approach.

SECTION 3

REVIEW OF ASSUMPTIONS AND BENEFITS

REVIEW OF ASSUMPTIONS AND BENEFITS

GENERAL

In our review of the testlives as well as the report we confirmed that the assumptions shown in the report were the assumptions used in the PERS and TRS DCR valuations.

BACKGROUND

The findings below are based on the detailed review of the following test lives summarized in exhibits at the end of Section 4:

Pension Plans

- ◇ PERS Peace Officer/Firefighter (POLICE/FIRE) : One active
- ◇ PERS – Other: One active
- ◇ TRS: One active 60% part-time

Medical Plans

- ◇ PERS Peace Officer/Firefighter (POLICE/FIRE) : One active
- ◇ PERS – Other: One active
- ◇ TRS: One active 60% part-time

Note that the active test lives analyzed are not necessarily exposed to all of the possible benefits under the plans (i.e. already beyond the eligibility period for certain benefits, or not eligible for particular benefits). Therefore, findings may occur for these other benefits in future audits depending on the set of test lives chosen for review at that time. Also, the impact for any one test life may not be representative of the impact on the total plan.

ECONOMIC ASSUMPTIONS

General

These assumptions simulate the impact of economic forces on the amounts and values of future benefits. Key economic assumptions are the assumed rate of investment return and assumed rates of future salary increase.

Economic assumptions are normally defined by an underlying inflation assumption. Buck has cited 3.12% as its inflation assumption. Over the last year or so, long-term inflation forecasts have been declining. With the decline, the 3.12% inflation assumption is now at the higher end of the generally accepted range.

Investment Return Assumption

The nominal investment return assumption, net of all investment and administrative expenses, was changed to 8.00% from 8.25% in 2010. GRS agrees with this change. Combined with the 3.12% inflation assumption, this yields a 4.88% real net rate of return. This 4.88% real return should be continuously tested with the PERS and the TRS DCR asset allocation.

Other Assumptions

We recognize that the payroll for the DCR population has grown steeply in the past with payroll growth of 98% in the first year, then 56% in the second year and 34% in the third year. This year the rate of growth slowed significantly, with a payroll growth rate of 9.1%. Lower growth of payroll is a trend commonly observed in this economy. The assumption used in the valuation is that payroll will grow at a rate of 3.63% per year.

For PERS, salary increases were slightly higher than assumed, resulting in losses on the accrued liability for the year.

In both 2010 and 2011 valuations, we notice that the retiree medical in both the PERS and TRS plan had losses for the year. We expect some volatility in the gains and losses of a new plan, and we recommend further analysis on the losses so they do not compound over time and create unexpected rate increases.

Claim costs were estimated based on the claim costs in the defined benefit plan. Buck made adjustments to these claim costs to reflect the different population and differing plan provisions and provide detail on the adjustments. We concur with this approach. Until the DCR population has enough credible data, we would recommend using the data that is available from the defined benefit plan, while making adjustments that recognize these differences which affect the underlying claim costs of the plan.

SECTION 4

REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES

REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES

I. Background

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board.

The actuarial values generated from this process are based not only on these assumptions, but also on the additional assumptions built into each actuarial firm's pension valuation software.

Our scope for performing the review did not include a complete replication of the valuation results as determined by Buck Consultants at June 30, 2011. Rather, we reviewed a number of sample test lives from Buck in great detail, and made our determinations as to whether the methods and assumptions being employed were being done so properly.

Though this approach does not meet the rigors of a full scale replication of results – it still serves as a strong indicator of the appropriateness of the assumptions and methods being used to value the liabilities and determine the costs for these plans.

II. Process:

Our review process can be summarized as follows:

Computation: Valuation Liabilities

We analyzed test cases to compare the Actuarial Liability under the EAN funding method for the test cases of the PERS and TRS DCR Plans. As a starting point, we wanted to first replicate Buck's test case liabilities by using their assumptions and methods to ensure that the computations were in sync with the descriptions listed in the valuation report.

When conducting an actuarial audit, and reviewing the testlives, we look at the projected benefits at each age for each decrement type. We also look at the component of the benefit (final average earnings and years of service). This is critical to understanding what the valuation system is actually valuing and making sure that the valuation is not "right for the wrong reasons", (meaning, errors could occur in two different directions making total liabilities approximate a correct value.)

We also review the construction of the commutation functions- the varying probabilities for each decrement and the discounting to the valuation date.

III. Actuarial Method:

Findings:

The actuarial method used for producing Alaska PERS and TRS DCR June 30, 2011 Actuarial Valuations is known as the Entry Age Normal (EAN) Method. Under this method, benefits are projected to the assumed occurrence of future events based on future salary levels and service to date. The Normal Cost is the present value of benefits to be earned for the current year while the Actuarial Accrued Liability (AAL) is the present value of benefit earned for all prior years

Conclusion:

To account for the Part D subsidy in the retiree medical plan, a different set of numbers has been disclosed for GASB reporting purposes (again, as opposed to funding purposes). We concur with this approach.

IV. Actuarial Calculations:

We reviewed sample test cases used for the DCR June 30, 2011 valuation draft reports. In order to accomplish this, we requested a number of sample cases from Buck with intermediate statistics to assist us in analyzing the results. We combined this with our understanding of the plan provisions in an attempt to analyze the liability values produced by Buck for these sample cases only.

Conclusion and Results:

Overall, we matched the liabilities in total quite closely for the test cases submitted under the DCR Pension plans for PERS Other and TRS, with the exception of the Occupational Death benefit. These exhibits provide a comparison of the calculations by decrement provided to us from Buck against our replication of those benefits as we interpret them from the plan provisions and assumptions. We completed this detail for all active test lives under the PERS and TRS DCR.

We have also included exhibits that show the revised calculations for the Occupational Death benefit using the methodology that we believe more accurately reflects the Plan provisions, as discussed previously in this report.

DEATH AND DISABILITY PLANS

For PERS Other pension, the test life actuarial present value match was within 0.2% on the test case shown, replicating Buck's approach. This would be considered as an overall match for purposes of the valuation. However, after we revised the Occupational Death benefit calculation, GRS' actuarial present value of benefits is -4.9% lower on the test life than that calculated by Buck.

For PERS Peace Officer/Firefighter pension, the test life actuarial present value match was 0.1% in total on the test case shown, replicating Buck's approach. This would be considered as an overall match for purposes of the valuation. However, after we revised the Occupational Death benefit calculation, GRS' actuarial present value of benefits is -6.4% lower than that calculated by Buck.

For TRS pension, the test life actuarial present value match was within 0.1% on the test case shown. This would be considered as an overall match for purposes of the valuation. This participant is working 60% of full-time, and does not meet service normal retirement eligibility before age 65, so is not impacted by the revision to the Occupational Death calculation.

Buck Consultants will be providing additional information on the impact of the Occupational Death calculation to the valuation results.

RETIREE HEALTH PLANS

For PERS Other retiree health, the test life actuarial present value match on the retirement benefit decrement for active members was within -1.0%. This is considered a reasonable match, as the retirement benefit decrement consists of approximately 90% of the total actuarial present value.

For PERS Peace Officer/Firefighter retiree health, the test life actuarial present value match on the retirement benefit decrement for active members was within 0.1%. This is considered a reasonable match, as the retirement benefit decrement consists of approximately 90% of the total actuarial present value.

For TRS retiree health, the test life actuarial present value match on the retirement benefit decrement for active members was within -0.3%. This is considered a reasonable match, as the retirement benefit decrement consists of approximately 90% of the total actuarial present value.

We have no issues to resolve from the test live review of the retiree health benefits.

ALASKA RETIREMENT MANAGEMENT BOARD
Actuarial Review of DCR Pension and Health Plans - June 30, 2011

BUCK'S CALCULATION FOR DEATH BENEFIT--Comparison of Present Value of Benefits - **DCR PERS and TRS Pension**

Actives	Test Case 1 - PERS Other		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	4
Current Age	25.93	Full time %	100%
Current Credited Service	2.67		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR	295.66	295.38	0.1%
Total Disability PVB	295.66	295.38	0.1%
<u>Death:</u>			
DCR - married only	150.73	149.90	0.6%
Total Death PVB	150.73	149.90	0.6%
GRAND TOTAL PVB	446.39	445.28	0.2%

Actives	Test Case 2 - PERS PF		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Male	Tier	4
Current Age	31.80	Full time %	100%
Current Credited Service	4.90		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR Deferred Ben	-	-	
DCR Immed Ben	13,278.09	13,278.39	0.0%
DCR	7,124.16	7,124.33	0.0%
Total Disability PVB	20,402.25	20,402.72	0.0%
<u>Death:</u>			
DCR - married only	6,423.31	6,404.57	0.3%
Total Death PVB	6,423.31	6,404.57	0.3%
GRAND TOTAL PVB	26,825.56	26,807.29	0.1%

Actives	Test Case 3 - TRS		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	3
Current Age	35.54	Full time %	60%
Part-Time Credited Service	3.20		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR	268.94	268.26	0.3%
Total Disability PVB	268.94	268.26	0.3%
<u>Death:</u>			
DCR - married only	186.56	186.85	-0.2%
Total Death PVB	186.56	186.85	-0.2%
GRAND TOTAL PVB	455.50	455.11	0.1%

Benefits - Buck Valuation Terminology	
<u>Disability:</u>	
DCR Deferred Ben	Disability benefit payable upon eligibility for retirement
DCR Immed Ben	Disability benefit payable until eligible for normal retirement
DCR	Occupational base disability benefit
<u>Death:</u>	
DCR - married only	Occupational death benefit payable as annuity to spouse

* GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.

ALASKA RETIREMENT MANAGEMENT BOARD
Actuarial Review of DCR Pension and Health Plans - June 30, 2011

REVISED CALCULATION FOR DEATH BENEFIT--Comparison of Present Value of Benefits - **DCR PERS and TRS Pension**

Actives	Test Case 1 - PERS Other		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	4
Current Age	25.93	Full time %	100%
Current Credited Service	2.67		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR	295.66	295.38	0.1%
Total Disability PVB	295.66	295.38	0.1%
<u>Death:</u>			
DCR - married only	127.61	149.90	-14.9%
Total Death PVB	127.61	149.90	-14.9%
GRAND TOTAL PVB	423.27	445.28	-4.9%

Actives	Test Case 2 - PERS PF		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Male	Tier	4
Current Age	31.80	Full time %	100%
Current Credited Service	4.90		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR Deferred Ben	-	-	
DCR Immed Ben	13,278.09	13,278.39	0.0%
DCR	7,124.16	7,124.33	0.0%
Total Disability PVB	20,402.25	20,402.72	0.0%
<u>Death:</u>			
DCR - married only	4,682.07	6,404.57	-26.9%
Total Death PVB	4,682.07	6,404.57	-26.9%
GRAND TOTAL PVB	25,084.32	26,807.29	-6.4%

Actives	Test Case 3 - TRS		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	3
Current Age	35.54	Full time %	60%
Part-Time Credited Service	3.20		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Disability:</u>			
DCR	268.94	268.26	0.3%
Total Disability PVB	268.94	268.26	0.3%
<u>Death:</u>			
DCR - married only	186.56	186.85	-0.2%
Total Death PVB	186.56	186.85	-0.2%
GRAND TOTAL PVB	455.50	455.11	0.1%

Benefits - Buck Valuation Terminology	
<u>Disability:</u>	
DCR Deferred Ben	Disability benefit payable upon eligibility for retirement
DCR Immed Ben	Disability benefit payable until eligible for normal retirement
DCR	Occupational base disability benefit
<u>Death:</u>	
DCR - married only	Occupational death benefit payable as annuity to spouse

* GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.

ALASKA RETIREMENT MANAGEMENT BOARD
Actuarial Review of DCR Pension and Health Plans - June 30, 2011

Comparison of Present Value of Benefits - DCR PERS and TRS Retiree Health

Actives	Test Case 1 - PERS Other		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	4
Current Age	25.93	Full time %	100%
Current Credited Service	2.67		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Retirement:</u>			
Post 65 DCR <Member>	20.69	20.97	-1.3%
Post 65 DCR <Spouse>	12.79	13.03	-1.9%
Contrib DCR <Member>	206.89	208.59	-0.8%
Contrib DCR <Spouse>	127.88	129.61	-1.3%
Post 65 Part D DCR <Member>	19.52	19.61	-0.4%
Post 65 Part D DCR <Spouse>	12.11	12.23	-1.0%
Total Retirement PVB	399.88	404.04	-1.0%

Actives	Test Case 2 - PERS PF		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Male	Tier	4
Current Age	31.80	Full time %	100%
Current Credited Service	4.90		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Retirement:</u>			
Post 65 DCR <Member>	174.11	175.81	-1.0%
Post 65 DCR <Spouse>	133.70	131.34	1.8%
Contrib DCR <Member>	1,610.17	1,625.94	-1.0%
Contrib DCR <Spouse>	1,240.88	1,220.06	1.7%
Post 65 Part D DCR <Member>	160.06	161.04	-0.6%
Post 65 Part D DCR <Spouse>	118.15	118.53	-0.3%
Total Retirement PVB	3,437.06	3,432.72	0.1%

Actives	Test Case 3 - TRS		
<u>Basic Data:</u>		<u>Basic Data:</u>	
Sex	Female	Tier	3
Current Age	35.54	Full time %	60%
Current Credited Service	3.20		
Present Value of Benefits (PVB)	GRS*	Buck	% Diff
<u>Retirement:</u>			
Post 65 DCR <Member>	243.55	243.85	-0.1%
Post 65 DCR <Spouse>	166.47	167.28	-0.5%
Contrib DCR <Member>	1,217.75	1,219.25	-0.1%
Contrib DCR <Spouse>	832.34	836.40	-0.5%
Post 65 Part D DCR <Member>	121.21	121.01	0.2%
Post 65 Part D DCR <Spouse>	82.76	82.98	-0.3%
Total Retirement PVB	2,664.08	2,670.77	-0.3%

Benefits - Buck Valuation Terminology	
<u>Retirement:</u>	
Post 65 DCR <Member>	Base benefit paid to employee while employee is at least 65
Post 65 DCR <Spouse>	Base benefit paid to spouse while employee is at least 66
Contrib DCR <Member>	Employee pre-retirement contributions
Contrib DCR <Spouse>	Spouse pre-retirement contributions
Post 65 Part D DCR <Member>	Employee post-age 65 Medicare Part D reimbursement
Post 65 Part D DCR <Spouse>	Spouse post-age 65 Medicare Part D reimbursement

* GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.

SECTION 5

REVIEW OF CONTRIBUTION RATE DETERMINATION

REVIEW OF CONTRIBUTION RATE DETERMINATION

GRS was to analyze the funding method being used and verify its computation. The goal here is to start with the Actuarial Accrued Liabilities and the Normal Costs that are developed from the data and valuation software and compare this to the Assets in the system. The difference between the two, the Unfunded Actuarial Accrued Liability (UAAL) in conjunction with the Normal Cost forms the basis of the contributions that the Actuary recommends the system make in order to ensure that benefits can be provided for current and future retirees.

FINDINGS:

The calculations were reasonable and consistent with actuarial practice.

SECTION 6

REVIEW OF ACTUARIAL VALUATION REPORT

REVIEW OF ACTUARIAL VALUATION REPORT

GASB No. 25 DISCLOSURE:

GASB (Governmental Accounting Standards Board) sets out guidelines for financial accounting and reporting for state and local government entities. Under GASB No. 25, the actuarial valuation reports for DCR PERS and TRS must disclose a set of financial statistics. These include:

- Schedule of Funding Progress
- Schedule of Employer Contributions
- Notes to Required Supplementary Information

Findings:

No issues to report.

Conclusion:

Buck has indicated that they do calculate the actuarial present value of assumed Part D Retiree Drug Subsidy (RDS) payments separately. For funding purposes, the total healthcare liability is offset by the RDS amounts to conform to the ARMB's current policy of funding discounted net cash flow. Figures used for GASB 43 purposes have been appropriately illustrated without the RDS offset.

VALUATION REPORT:

GRS reviewed the June 30, 2011 DCR valuation reports for scope as well as content to determine if actuarial statistics were being reflected fairly and if the details of the plan were being correctly communicated.

Findings:

The June 30, 2011 DCR draft valuation reports submitted by Buck had the following layout:

1. Actuarial Certification – This introduces the report, lists the valuation date in question, and provides a disclaimer that the results are predicated on the census data received from the Systems and the financial information received from KPMG. It also discusses the basic actuarial concepts and provides the funded ratios.

2. Report Highlights – Shows funding status and the employer recommended contribution rate.
3. Analysis of the Valuation – Explains the change in the funded status and calculated contribution rate. Includes retiree medical costs, investment return, and other factors. Within this section there are three sections that show the development of valuation results, basis of the valuation, and other historical information.
4. Disclosure – Actuarial Standards of Practice No. 35, “Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations” requires additional disclosures in valuation reports effective July 1, 2011. The standard requires that the “disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement.” The valuation report indicates the mortality table used but does not include information on the whether or not future mortality improvement has been reflected in the assumption. We recommend that additional disclosure be provided on this assumption.
5. Summary of Benefit Provisions – we recommend including the definition of normal retirement eligibility in the summary of benefit provisions. We also recommend clarifying the language regarding the occupational death benefit so that it is clear that normal retirement eligibility is determined assuming the member had lived and continued to work.

Conclusion:

- We consider the scope and content of Buck’s report to be effective in communicating the financial position and contribution requirements of the PERS and TRS DCR plans. We believe it is in accordance with standard actuarial reporting methodologies for public sector systems, with the addition of more disclosure on whether future mortality improvement has been taken into account.

SECTION 7

SUMMARY AND CONCLUSIONS

SUMMARY AND CONCLUSIONS

We have reviewed the testlives in this limited scope audit, the reports, assumptions and the methods. Based upon our review of the report and the test lives, we recommend that the valuation results be revised to reflect the change to the Occupational Death calculation and to include disclosure on future mortality improvement. After these revisions, we believe the results will meet disclosure requirements and reasonably reflect the costs of this plan.

ALASKA RETIREMENT MANAGEMENT BOARD
ACTUARIAL REVIEW OF THE:
NATIONAL GUARD AND NAVAL MILITIA RETIREMENT
SYSTEM PENSION PLAN; AND
JUDICIAL RETIREMENT SYSTEM PENSION AND HEALTH
PLANS
ROLL-FORWARD ACTUARIAL VALUATIONS
MARCH 28, 2012

March 28, 2012

Mr. Gary Bader
Chief Investment Officer
Department of Revenue, Treasury Division
Alaska Retirement Management Board
P.O. Box 110405
Juneau, AK 99811-0405

Subject: Actuarial Review of the Roll-Forward June 30, 2011 valuations for the State of Alaska National Guard and Naval Militia Retirement System (NGNMRS) and Judicial Retirement System (JRS)

Dear Gary:

We have performed an actuarial review of the June 30, 2011 Roll-Forward Actuarial Valuation for NGNMRS and JRS.

This audit includes a review of the results of the roll forward calculations using actuarial methods, assumptions and procedures from the most recent actuarial valuation reports and Buck Consultants (Buck) letter dated January 27, 2012 (re: Judicial Retirement System and National Guard and Naval Militia Retirement System Roll-Forward Actuarial Valuations as of June 30, 2011). The steps of the process of our audit, including potential areas for future review, are as follows:

1. The first step in reviewing the calculations shown in the Roll-Forward letter was to confirm that the results shown as of June 30, 2010 in the Roll-Forward letter match Buck's June 30, 2010 actuarial valuation reports.
 - a. GRS has confirmed that all results match.
2. The second step involved verification of Buck's June 30, 2011 Roll-Forward calculations using information from the most recent June 30, 2010 Buck actuarial valuations and Roll Forward letter and financial statements for the fiscal year ending June 30, 2011. GRS completed this review by estimating these results using the appropriate methods, assumptions and procedures. Overall, the audit results were very close.

3. We calculated the actuarial value of assets as of June 30, 2011 using the financial statements provided and the historical gains and losses shown in the June 30, 2010 report. The results were very close.
4. Finally we audited the contribution rate calculations using the past service base and payment information, and estimated FY11 Gain/Loss noted in Buck's Roll Forward letter.

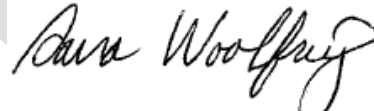
We wish to thank the staff of the State of Alaska Treasury Division and Buck Consultants without whose willing cooperation this review could not have been completed.

Sincerely,

Gabriel, Roeder, Smith & Company



Leslie L. Thompson, FSA, FCA, EA, MAAA
Senior Consultant



Dana Woolfrey, ASA, EA, MAAA
Consultant

cc: Ms. Judy Hall

P:\2742Alaska\2012\JRS_NGNMRS\AlaskaJRSNGNMRSAudit2012Draft.doc



State of Alaska Retirement Systems

*Actuarial Presentation to the Alaska
Retirement Management Board*

April 19, 2012

Agenda

- About the Valuations
- 2011 Actuarial Valuation Results
 - PERS DB
 - TRS DB
 - DCR PERS
 - DCR TRS
- State Assistance under SB125
- 2011 Roll-Forward Valuation Results
 - JRS
 - NGNMRS
- 30-Year Projections for PERS and TRS
- Questions
- Appendix

State of Alaska Retirement Systems

About the Valuations

- Alaska Retirement Systems consists of four traditional defined benefit (DB) pension plans and two defined contribution with DB type occupational death and disability and retiree healthcare benefits (DC plans)
 - Public Employees' Retirement System (PERS)
 - Teachers' Retirement System (TRS)
 - Judicial Retirement System (JRS)
 - National Guard and Naval Militia Retirement System (NGNMRS)
 - PERS Defined Contribution Retirement (DCR) Plan
 - TRS Defined Contribution Retirement (DCR) Plan
- Actuarial valuations are performed annually as of June 30. The most recent is as of June 30, 2011
- ARM Board has responsibility for PERS, TRS and NGNMRS. Commissioner of Administration and the ARM Board are responsible for JRS
- Roll forward valuations are being performed as of June 30, 2011 for JRS and NGNMRS



2011 Actuarial Valuation Results for PERS and TRS DB Plans

Changes Since Last Year

- No change in Benefit Provisions
- No change in Actuarial Assumptions except for the healthcare changes listed below
- Change in the assumptions regarding Medicare Part B only participation for pre-65 retirees and active members
 - Determination of Part B only status based on cumulative number of quarters worked since date of hire or re-hire where applicable
- No change in Healthcare Base Claim Cost Rate methodology for PERS and TRS except for the following:
 - Use of 2.0 months lag for medical claims and 0.04 months lag for prescription claims vs. 2.4 and 0.15 respectively

Public Employees' Retirement System

Peace Officer/Firefighter and Others Combined

Pension and Postemployment Healthcare

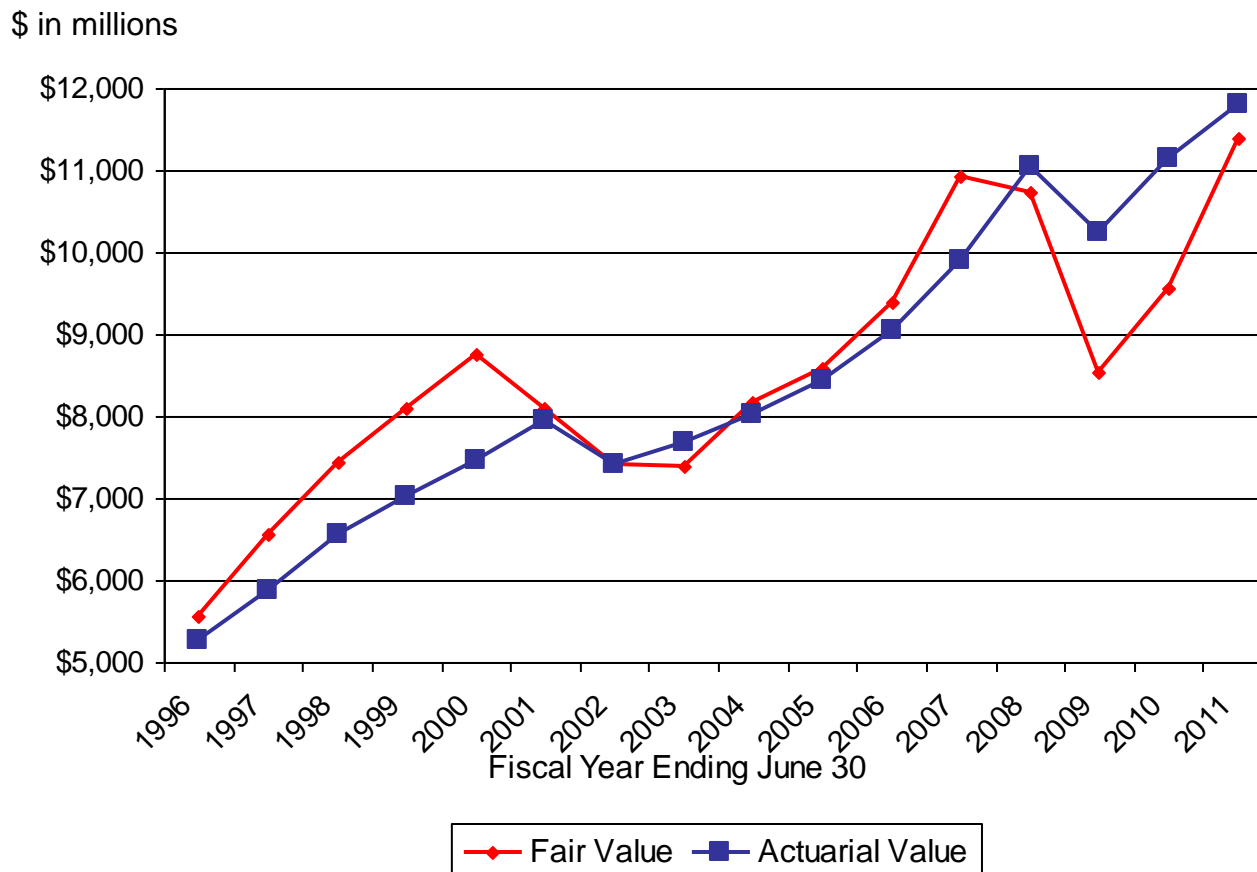
(\$ in millions)

	June 30, 2010	June 30, 2011
1. Number		
- Active	26,442	24,393
- Inactive Non Vested	14,543	14,028
- Vested Terminations	6,253	6,414
- Retired, Disabled and Beneficiaries	<u>26,237</u>	<u>27,359</u>
- Total	73,475	72,194
2. Annual Compensation*		
- Total	\$ 1,587	\$ 1,542
- Average (Actual)	\$ 60,007	\$ 63,201
3. Assets		
- Fair Value	\$ 9,573	\$ 11,389
- Actuarial Value	11,157	11,814
- % AV to FV	116.6%	103.7%
4. Annual Benefit Payments		
- Total	\$ 821	\$ 836
- % of Fair Value	8.6%	7.3%
5. Accumulated Member Contributions		
- Total for Actives and Inactives	\$ 1,736	\$ 1,785
- Average (actual)	\$ 36,747	\$ 39,816

*Annual Compensation for Prior Year.

Asset Smoothing for Public Employees' Retirement System

Pension and Postemployment Healthcare 1996 – 2011



Public Employees' Retirement System

Peace Officer/Firefighter and Others Combined

Pension and Postemployment Healthcare

Actuarial Contribution Under Entry Age Actuarial Cost Method

(\$ in millions)

Funding	June 30, 2011			June 30, 2010
	Pension	Postemployment Healthcare	Total	Total
1. Actuarial Accrued Liability	\$ 10,919	\$ 7,822	\$ 18,741	\$ 18,133
2. Actuarial Value of Assets	<u>6,762</u>	<u>5,052</u>	<u>11,814</u>	<u>11,158</u>
3. Unfunded Actuarial Accrued Liability	\$ 4,157	\$ 2,770	\$ 6,927	\$ 6,975
4. Funded Ratio	61.9%	64.6%	63.0%	61.5%
5. Normal Cost Contribution				
– Total Normal Cost	\$ 173	\$ 116	\$ 289	\$ 300
– Member Contribution	<u>(113)</u>	<u>(0)</u>	<u>(113)</u>	<u>(116)</u>
– Employer Normal Cost	\$ 60	\$ 116	\$ 176	\$ 184
– % of Total Pay	2.79%	5.33%	8.12%	8.67%
6. Past Service Cost				
– Amortization of Unfunded (25) Years	\$ 298	\$ 229	\$ 527	\$ 511
– % of Total Pay	13.68%	10.51%	24.19%	24.16%
7. Employer/State Contribution for FY14				
– Amount	\$ 358	\$ 345	\$ 703	\$ 695
– % of Total Pay	16.47%	15.84%	32.31%*	32.83%

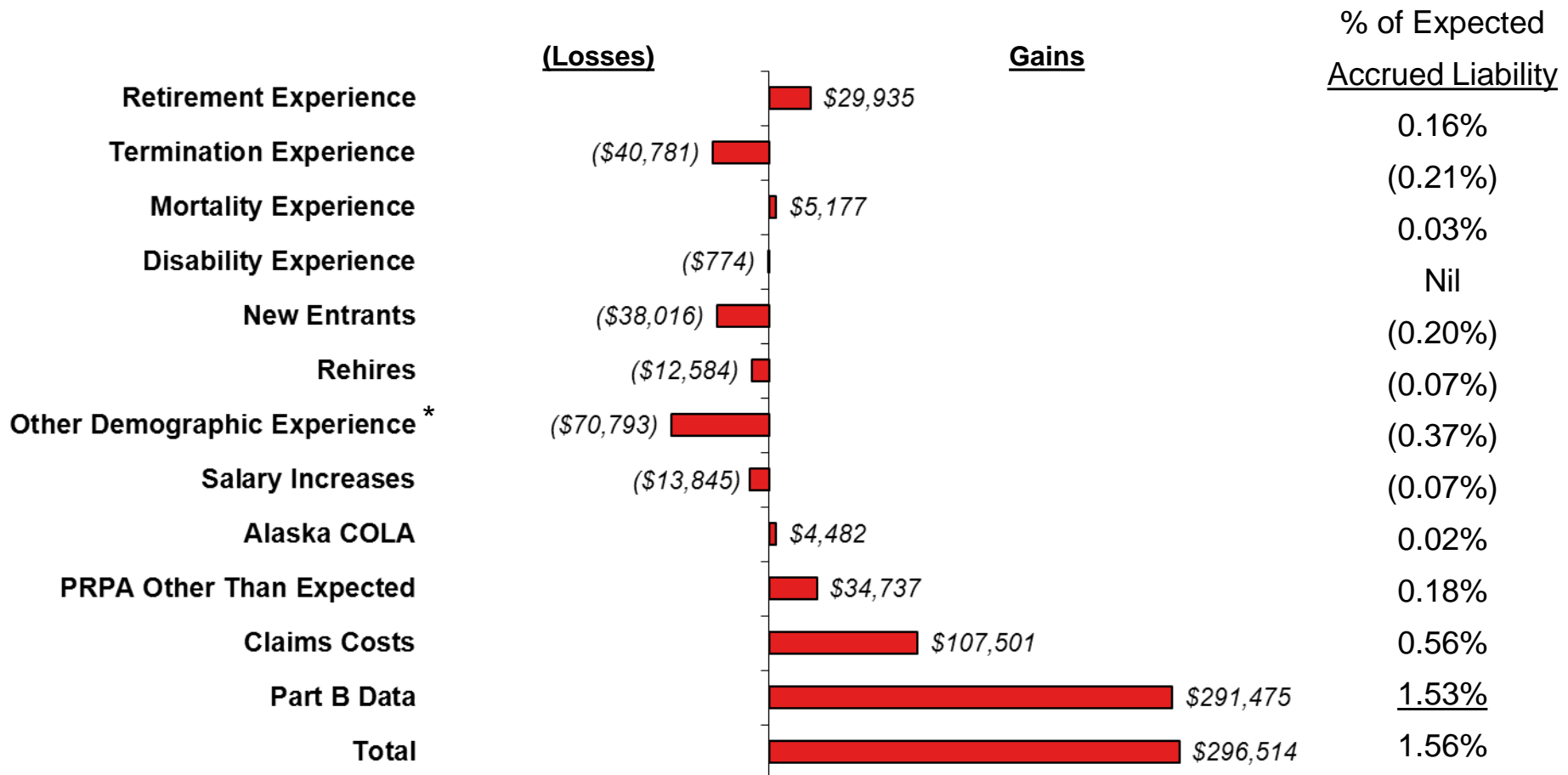
Total Pay is expected to be \$2,176 million for FY12, was \$2,116 for FY11.

*Based on level percent of payroll amortization. The Employer/State contribution rate for FY14 under level dollar amortization method is 39.27%

Public Employees' Retirement System

Gain/(Loss) on Total Accrued Liability

(\$ in thousands)



From Expected Accrued Liability of \$19,037M

*Programming and data changes.

Public Employees' Retirement System

Peace Officer/Firefighter and Others Combined

Change in Total Employer/State Contribution Rate

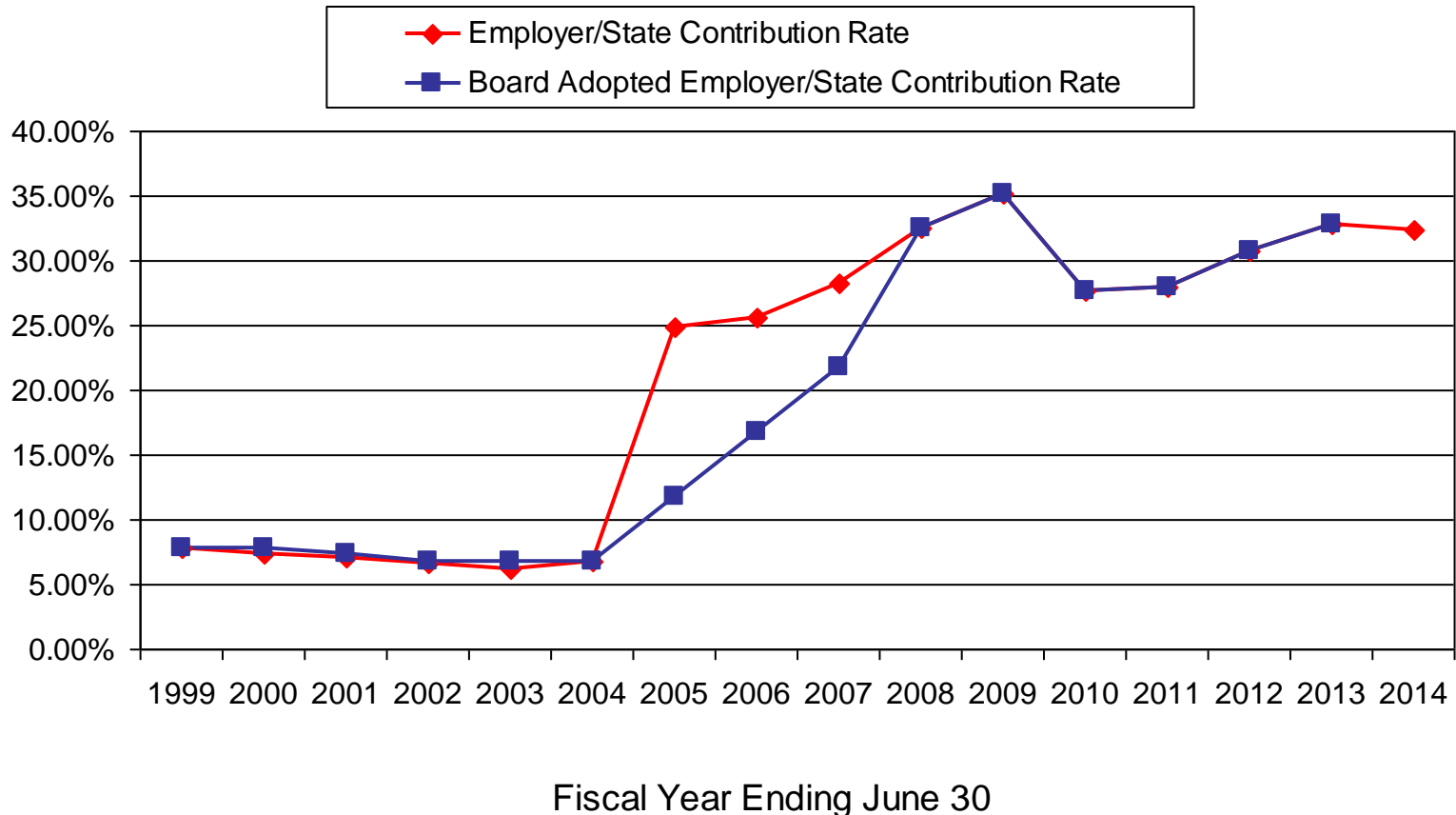
	Pension	Healthcare	Total
1. Last year's total Employer/State contribution rate	15.45%	17.38%	32.83%
2. Change due to:			
– Effect of two-year delay in the contribution rate	0.42%	0.02%	0.44%
– Investment experience	0.00%	0.26%	0.26%
– Salary increases	0.31%	N/A	0.31%
– Demographic and medical experience*	<u>0.29%</u>	<u>(1.82%)</u>	<u>(1.53%)</u>
– Total Change	1.02%	(1.54%)	(0.52%)
3. Total Employer/State contribution rate this year	16.47%	15.84%	32.31%

*Includes changes in expected future healthcare claims costs.

Public Employees' Retirement System

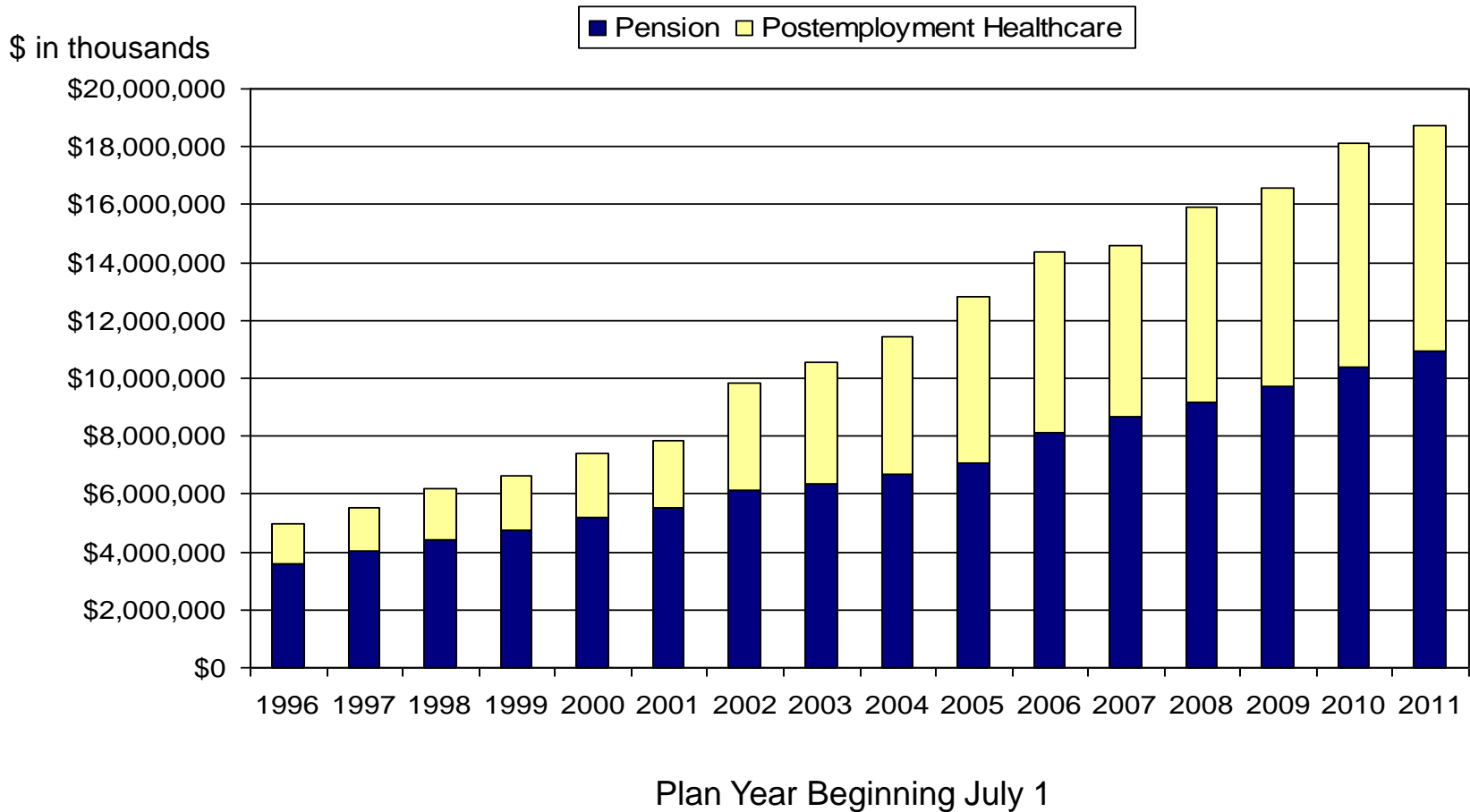
Total Employer/State Contribution Rate History

1999 - 2014



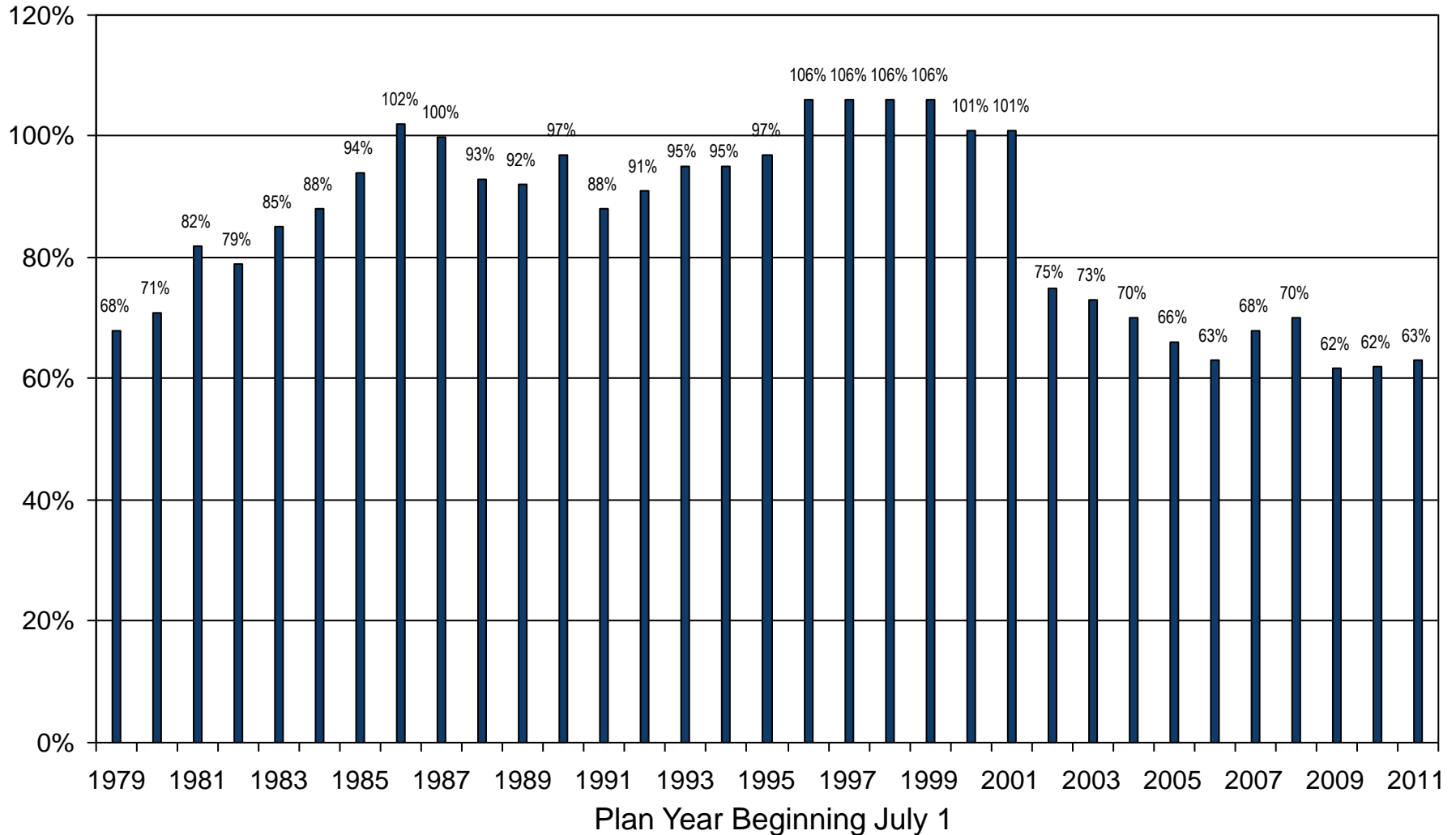
PERS Actuarial Accrued Liability History

Pension and Postemployment Healthcare



PERS Funding Ratio History

Pension and Postemployment Healthcare
Based on Valuation Assets



Teachers' Retirement System

Pension and Postemployment Healthcare

(\$ in millions)

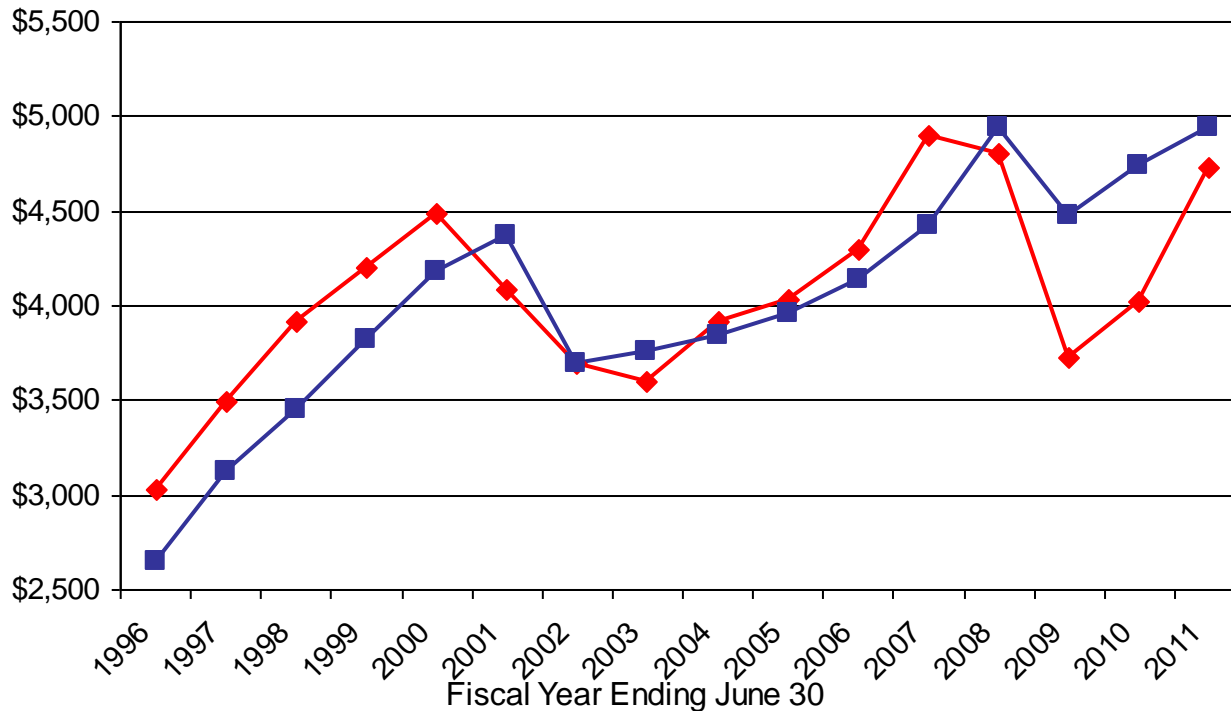
	June 30, 2010	June 30, 2011
1. Number		
- Active	7,832	7,303
- Inactive Non Vested	2,789	2,675
- Vested Terminations	840	852
- Retired, Disabled and Beneficiaries	<u>10,598</u>	<u>11,016</u>
- Total	22,059	21,846
2. Annual Compensation*		
- Total	\$ 565	\$ 545
- Average (Actual)	\$72,125	\$74,648
3. Assets		
- Fair Value	\$ 4,024	\$ 4,733
- Actuarial Value	4,739	4,938
- % AV to FV	117.8%	104.3%
4. Annual Benefit Payments		
- Total	\$ 446	\$ 449
- % of Fair Value	11.1%	9.5%
5. Accumulated Member Contributions		
- Total for Actives and Inactives	\$ 821	\$ 826
- Average (actual)	\$ 71,615	\$ 76,301

*Annual Compensation for Prior Year.

Asset Smoothing for Teachers' Retirement System

Pension and Postemployment Healthcare
1996 – 2011

\$ in millions



—◆— Fair Value —■— Actuarial Value

Teachers' Retirement System

Pension and Postemployment Healthcare

Actuarial Contribution Under Entry Age Actuarial Cost Method (\$ in millions)

Funding	June 30, 2011			June 30, 2010
	Pension	Postemployment Healthcare	Total	Total
1. Actuarial Accrued Liability	\$ 6,196	\$ 2,933	\$ 9,129	\$ 8,848
2. Actuarial Value of Assets	<u>3,346</u>	<u>1,592</u>	<u>4,938</u>	<u>4,739</u>
3. Unfunded Actuarial Accrued Liability	\$ 2,850	\$ 1,341	\$ 4,191	\$ 4,109
4. Funded Ratio	54.0%	54.3%	54.1%	53.6%
5. Normal Cost Contribution				
– Total Normal Cost	\$ 70	\$ 28	\$ 98	\$ 105
– Member Contribution	<u>(50)</u>	<u>(0)</u>	<u>(50)</u>	<u>(51)</u>
– Employer Normal Cost	\$ 20	\$ 28	\$ 48	\$ 54
– % of Total Pay	2.72%	3.87%	6.59%	7.47%
6. Past Service Cost				
– Amortization of Unfunded (25) Years	\$ 210	\$ 109	\$ 319	\$ 303
– % of Total Pay	28.68%	14.83%	43.51%	42.09%
7. Employer/State Contribution for FY14				
– Amount	\$ 230	\$ 137	\$ 367	\$ 357
– % of Total Pay	31.40%	18.70%	50.10%*	49.56%

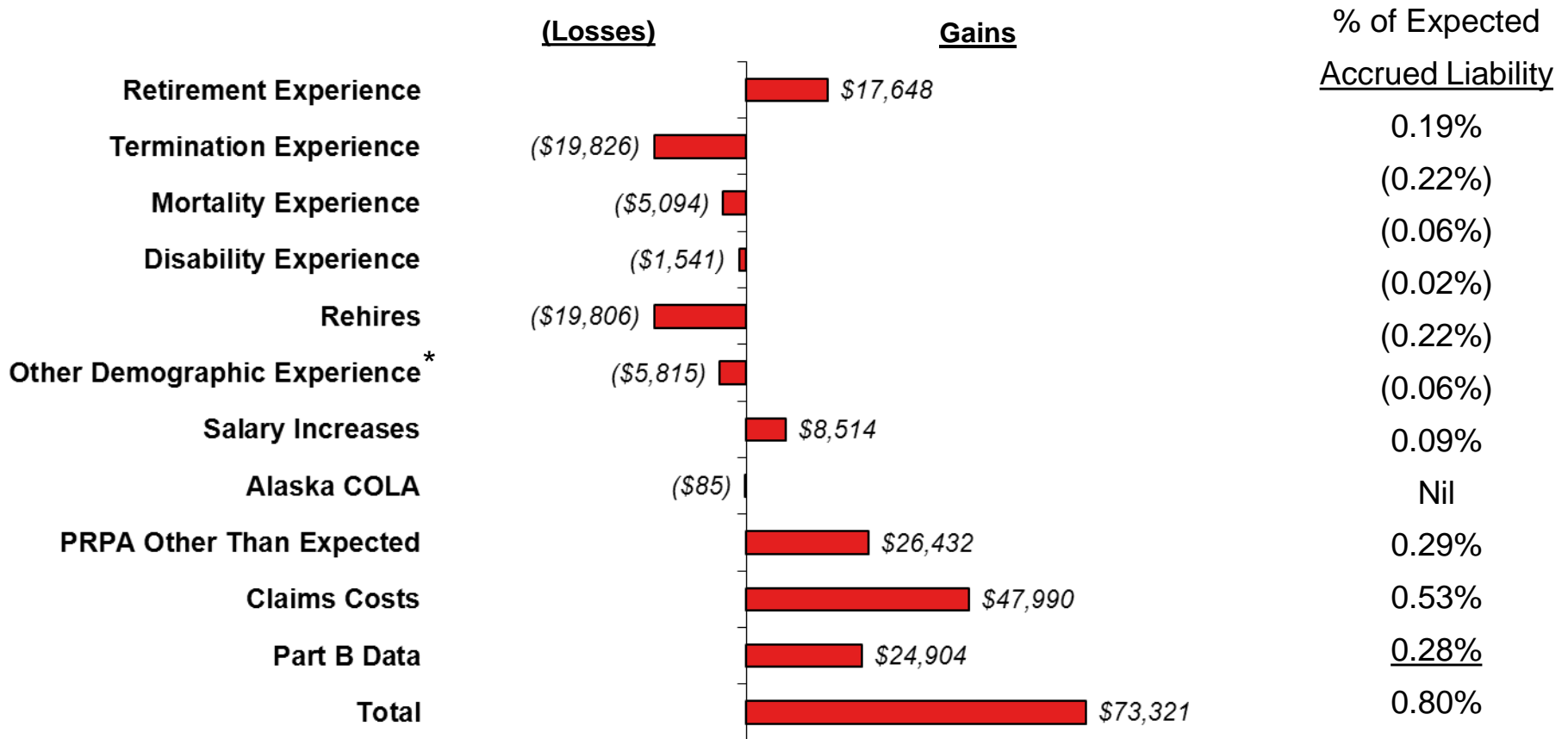
Total Pay is expected to be \$732 million for FY12, was \$718 for FY11.

*Based on level percent of payroll amortization. The Employer/State contribution rate for FY14 under level dollar amortization method is 62.65%

Teachers' Retirement System

Gain/(Loss) on Total Accrued Liability

(\$ in thousands)



From an Expected Accrued Liability of \$9,202M.

*Programming and data changes.

Teachers' Retirement System

Change in Total Employer/State Contribution Rate

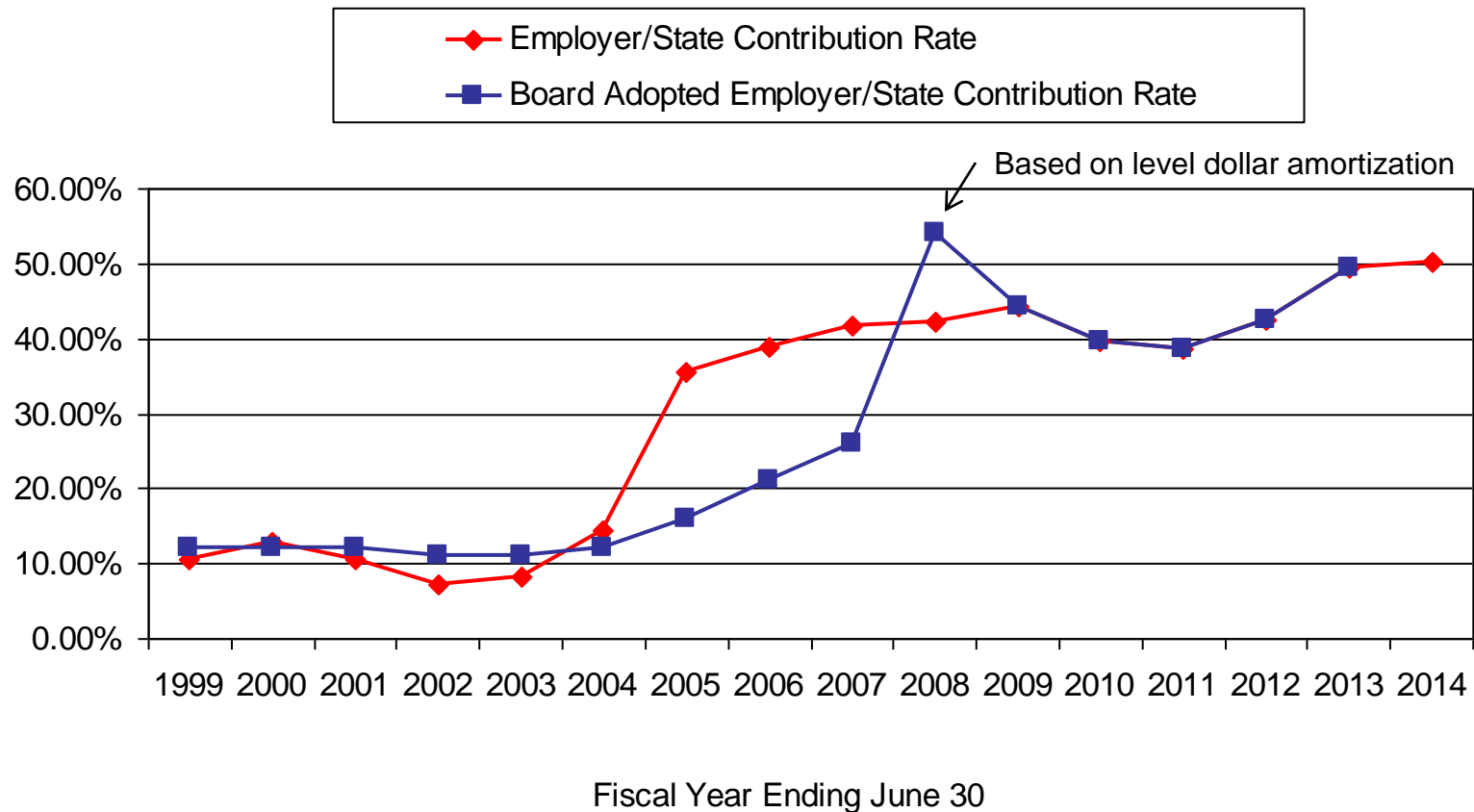
	Pension	Healthcare	Total
1. Last year's total Employer/State contribution rate	30.53%	19.03%	49.56%
2. Change due to:			
– Effect of two-year delay in the contribution rate	0.75%	0.11%	0.86%
– Investment experience	0.18%	0.28%	0.46%
– Salary increases	(0.03%)	N/A	(0.03%)
– Demographic and medical experience*	<u>(0.03%)</u>	<u>(0.72%)</u>	<u>(0.75%)</u>
– Total Change	0.87%	(0.33%)	0.54%
3. Total Employer/State contribution rate this year	31.40%	18.70%	50.10%

*Includes changes in expected future healthcare claims costs.

Teachers' Retirement System

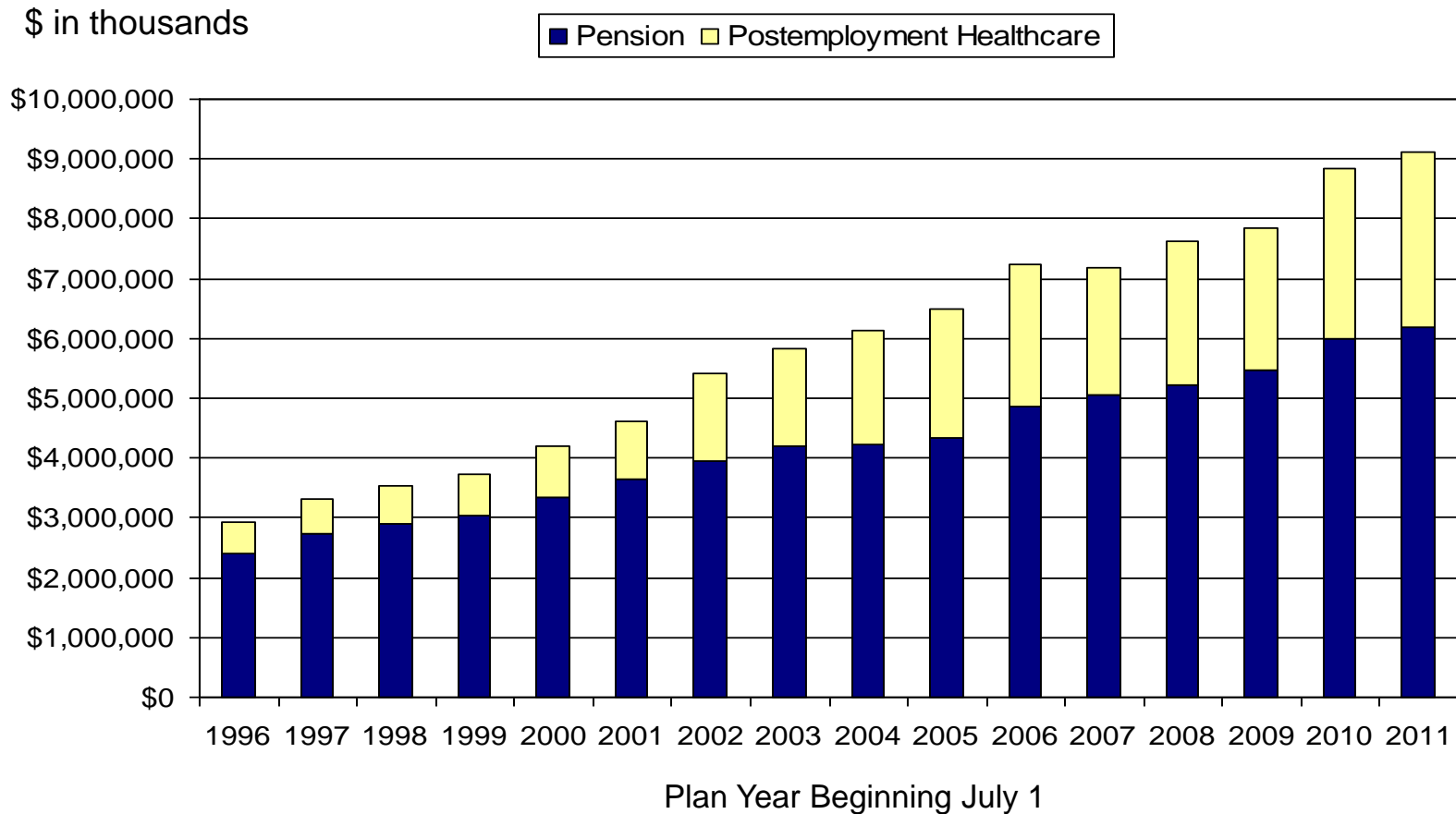
Total Employer/State Contribution Rate History

1999 – 2014



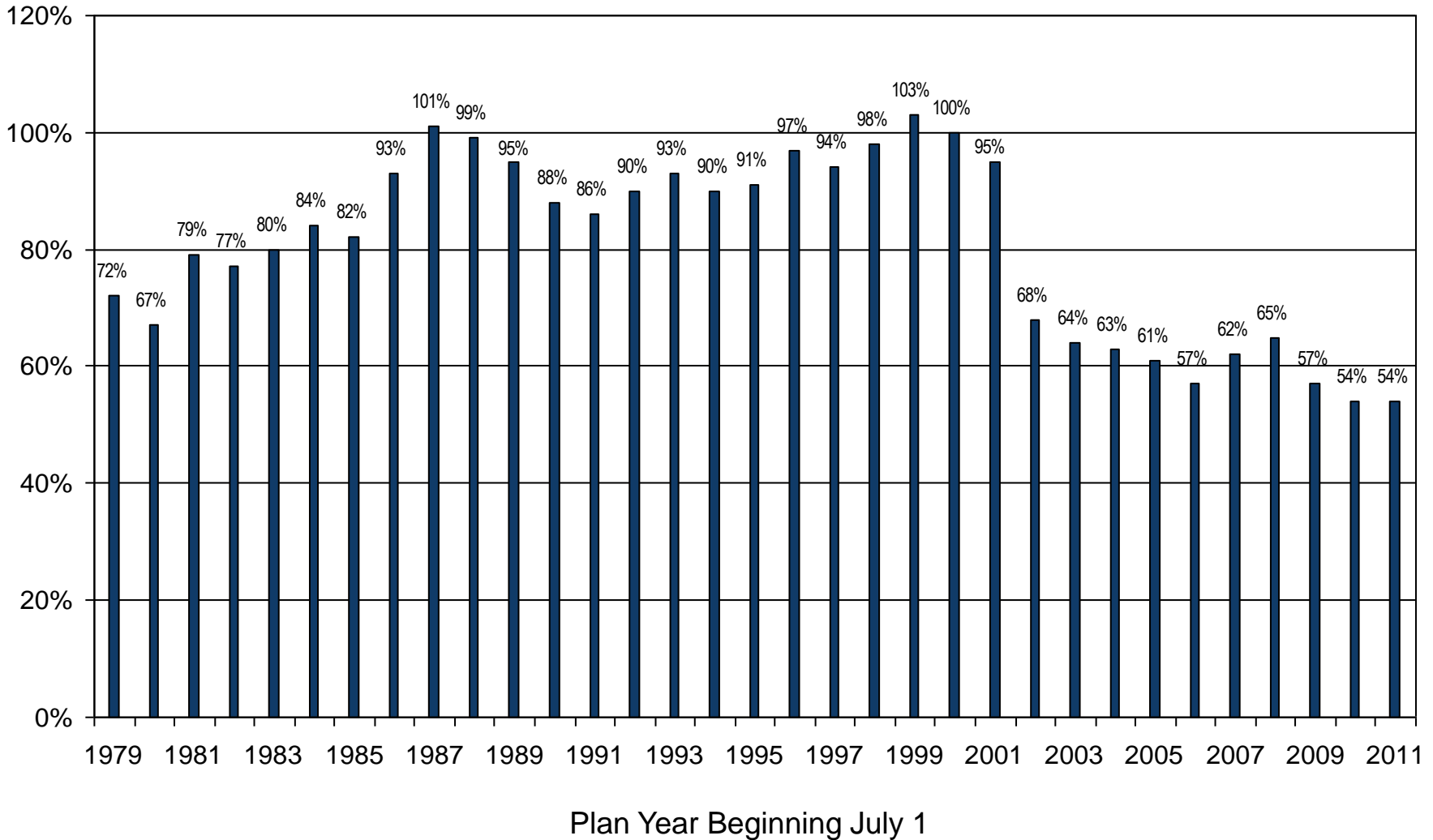
TRS Actuarial Accrued Liability History

Pension and Postemployment Healthcare



TRS Funding Ratio History

Pension and Postemployment Healthcare Based on Valuation Assets



Conclusions and Comments

- Asset gains on fair value experienced during year ending June 30, 2011. Rate of return on fair value was 20.4% for PERS and 20.5% for TRS, or about 12.5% more than the 8.00% assumed rate of return
- Delayed losses from prior years along with the investment gains during last two years resulted in actuarial value return of 7.2% for PERS and 6.9% for TRS, or about 1% less than the 8.00% assumed
- Gain on liabilities due to medical experience
 - Claims costs less than expected and Part B only data refined
- Loss on liabilities due to demographic experience
 - Fewer deaths than expected in total for TRS, more than expected in total for PERS
 - Fewer terminations than expected
 - Salary increases more than expected for PERS
 - Losses due to new entrants and re-hires

Conclusions and Comments (cont'd)

- Changes in Unfunded Liability

(\$ in millions)

	<u>PERS</u>	<u>TRS</u>
2010 Unfunded Liability	\$ 6,975	\$ 4,109
– Expected Increase	7	2
– Asset Loss on Actuarial Value of Assets	90	53
– Decremental and Other (Gains)	(297)	(73)
– Contribution Delay	<u>152</u>	<u>100</u>
2011 Unfunded Liability	\$ 6,927	\$ 4,191

Conclusions and Comments (cont'd)

- Decreased Employer/State contribution rate required for PERS and Increased Employer/State contribution rate required for TRS

	% of Total Pay	
Level % of Pay	<u>PERS</u>	<u>TRS</u>
– 2010	32.83%	49.56%
– 2011	32.31%	50.10%
– Change	-0.52%	+0.54%
Level Dollar		
– 2011	39.27%	62.65%
– Change	+6.96%	+12.55%

- Funded ratios increased over last year

	<u>PERS</u>	<u>TRS</u>
– 2010	61.5%	53.6%
– 2011	63.0%	54.1%
– Change	+1.5%	+0.5%

Conclusions & Comments – Healthcare Reform

- Patient Protection and Affordable Care Act (H.R. 3590) – signed March 23, 2010
- Health Care and Education Affordability Reconciliation Act – signed March 30, 2010
- Early retiree reinsurance program – opportunity to recoup a 80% of costs between \$15k - \$90k of early retirees and dependents; restrictions apply to qualify and as to how funds are used, limited funds available for a limited time
 - The State of Alaska received \$27.6 million in reimbursements in October 2011 for the 2010 plan year
 - An additional reimbursement request for \$27 million for plan year 2011 is currently pending
 - Program was allocated \$5 billion for reimbursements; as of February 17, 2012, \$4.7 billion has been spent - funds are expected to be exhausted in 2012
- Removal of lifetime/annual limits – optional for AlaskaCare so long as plan continues to be managed as completely separate from active plans
- Impact of provider fees/taxes on future healthcare cost trend
- Cadillac tax –not effective until 2018, 40% of excess benefit value over specified dollar amounts, indexed each year with adjustments for retiree groups and industry
- Taxation of RDS – not applicable here



2011 Actuarial Valuation Results for PERS and TRS DCR Plans

Public Employees' Retirement System Defined Contribution Retirement Plan

Peace Officer/Firefighter and Others Combined Occupational Death and Disability and Retiree Medical

(\$ in thousands)

	June 30, 2010	June 30, 2011
1. Number		
- Active	9,232	10,965
- Retired, Disabled and Beneficiaries	<u>0</u>	<u>1</u>
- Total	9,232	10,966
2. Annual Compensation*		
- Total	\$ 421,187	\$ 524,088
- Average (Actual)	\$ 45,622	\$ 47,796
3. Assets		
- Fair Value	\$ 12,534	\$ 19,724
- Actuarial Value	13,568	19,058
- % AV to FV	108.2%	96.6%
4. Annual Benefit Payments		
- Total	\$ 0	\$ 40
- % Fair Value	0.0%	0.2%

*Annual Compensation for Prior Year.

Public Employees' Retirement System Defined Contribution Retirement Plan

Peace Officer/Firefighter and Others Combined Occupational Death and Disability and Retiree Medical

Actuarial Contribution Under Entry Age Actuarial Cost Method (\$ in thousands)

Funding	June 30, 2011			June 30, 2010
	Occupational Death and Disability	Retiree Medical	Total	Total
1. Actuarial Accrued Liability	\$ 1,949	\$ 11,302	\$ 13,251	\$ 8,038
2. Actuarial Value of Assets	<u>7,049</u>	<u>12,009</u>	<u>19,058</u>	<u>13,568</u>
3. Unfunded Actuarial Accrued Liability	\$ (5,100)	\$ (707)	\$ (5,807)	\$ (5,530)
4. Funded Ratio	361.7%	106.3%	143.8%	168.8%
5. Annual Actuarial Contribution				
– Normal Cost	\$ 1,981	\$ 2,784	\$ 4,765	\$ 3,532
– Amortization of Unfunded Over 25 Years	<u>(333)</u>	<u>(52)</u>	<u>(385)</u>	<u>(359)</u>
– Total Contribution	\$ 1,648	\$ 2,732	\$ 4,380	\$ 3,173
– % of DCR Pay	0.29%	0.48%	0.77%	0.70%

Total DCR pay is expected to be \$564,434 for FY12, was \$455,113 for FY11.

Teachers' Retirement System

Defined Contribution Retirement Plan

Occupational Death and Disability and Retiree Medical

(\$ in thousands)

	June 30, 2010	June 30, 2011
1. Number of Actives	2,246	2,708
2. Annual Compensation*		
- Total	\$ 118,813	\$ 151,269
- Average (Actual)	\$ 52,900	\$ 55,860
3. Assets		
- Fair Value	\$ 5,077	\$ 7,825
- Actuarial Value	5,472	7,566
- % AV to FV	107.8%	96.7%
4. Annual Benefit Payments		
- Total	\$ 0	\$ 0
- % Fair Value	0.0%	0.0%

*Annual Compensation for Prior Year.

Teachers' Retirement System

Defined Contribution Retirement Plan

Occupational Death and Disability and Retiree Medical

Actuarial Contribution Under Entry Age Actuarial Cost Method (\$ in thousands)

Funding	June 30, 2011			June 30, 2010
	Occupational Death and Disability	Retiree Medical	Total	Total
1. Actuarial Accrued Liability	\$ 57	\$ 3,801	\$ 3,858	\$ 2,448
2. Actuarial Value of Assets	<u>2,193</u>	<u>5,373</u>	<u>7,566</u>	<u>5,472</u>
3. Unfunded Actuarial Accrued Liability	\$ (2,136)	\$ (1,572)	\$ (3,708)	\$ (3,024)
4. Funded Ratio	3,847.4%	141.4%	196.1%	223.5%
5. Annual Actuarial Contribution				
– Normal Cost	\$ 80	\$ 867	\$ 947	\$ 773
– Amortization of Unfunded Over 25 Years	<u>(80)</u>	<u>(105)</u>	<u>(185)</u>	<u>(141)</u>
– Total Employer Contribution	\$ 0	\$ 762	\$ 762	\$ 632
– % of DCR Pay	0.00%	0.47%	0.47%	0.49%

Total DCR pay is expected to be \$160,509 for FY12, was \$126,520 for FY11.



State Assistance Under SB 125

Contribution Background

- SB 125 capped the employer contribution rate based on Total Salary (DB plus DCR)
 - PERS rate = 22%
 - TRS rate = 12.56%
- SB 125 also provided for State assistance if the actuarial rate is above the capped rate for both the DB and DCR plan combined

Summary of Results

PERS	Rate based on DCR Pay	Rate based on Total DB & DCR FY14 Pay
Retiree Medical	0.48%	0.19%
Occ D&D	0.29%	0.11%
HRA	3.00%	1.15%
DC Account	<u>5.00%</u>	<u>1.92%</u>
Total	8.77%	3.37%

TRS	Rate based on DCR Pay	Rate based on Total DB & DCR FY14 Pay
Retiree Medical	0.47%	0.16%
Occ D&D	0.00%	0.00%
HRA	3.00%	1.01%
DC Account	<u>7.00%</u>	<u>2.35%</u>
Total	10.47%	3.52%

Development of Additional State Contribution for FY14 – Level % of Payroll Amortization Method

	PERS		TRS	
	Rate	Amount (in millions)	Rate	Amount (in millions)
Expected Payroll for FY14				
- DB		\$ 1,406.0		\$ 512.7
- DCR		<u>878.2</u>		<u>259.0</u>
- Total		\$ 2,284.2		\$ 771.7
Employer State Actuarial Contributions				
- Actuarial Contribution for DB Plan	32.31%	\$ 738.0	50.10%	\$ 386.6
- DCR Contribution	<u>3.37%</u>	<u>77.0</u>	<u>3.52%</u>	<u>27.2</u>
- Total Required Contribution	35.68%	\$ 815.0	53.62%	\$ 413.8
- Total Limited Employer Contribution	<u>(22.00%)</u>	<u>(502.5)</u>	<u>(12.56%)</u>	<u>(96.9)</u>
- Additional State Contribution for FY14	13.68%	\$ 312.5	41.06%	\$ 316.9

Total State Assistance = \$629.4 million

Development of Additional State Contribution for FY14 – Level Dollar Amortization Method

	PERS		TRS	
	Rate	Amount (in millions)	Rate	Amount (in millions)
Expected Payroll for FY14				
- DB		\$ 1,406.0		\$ 512.7
- DCR		<u>878.2</u>		<u>259.0</u>
- Total		\$ 2,284.2		\$ 771.7
Employer State Actuarial Contributions				
- Actuarial Contribution for DB Plan	39.27%	\$ 897.0	62.65%	\$ 483.5
- DCR Contribution	<u>3.37%</u>	<u>77.0</u>	<u>3.52%</u>	<u>27.2</u>
- Total Required Contribution	42.64%	\$ 974.0	66.17%	\$ 510.7
- Total Limited Employer Contribution	<u>(22.00%)</u>	<u>(502.5)</u>	<u>(12.56%)</u>	<u>(96.9)</u>
- Additional State Contribution for FY14	20.64%	\$ 471.5	53.61%	\$ 413.8

Total State Assistance = \$885.3 million



2011 Roll-Forward Actuarial Valuation Results for JRS and NGNMRS

Judicial Retirement System – Roll-Forward Valuation

Pension and Healthcare

(\$ in thousands)

	June 30, 2010	June 30, 2011 (Roll Forward)
1. Number		
- Active	72	72
- Inactive Non Vested	0	0
- Vested Terminations	4	4
- Retired and beneficiaries	<u>99</u>	<u>99</u>
- Total	175	175
2. Total Annual Compensation*		
- Total	\$ 11,846	\$ 12,274
- Average (Actual)	\$ 164,522	N/A
3. Assets		
- Fair Value	\$ 112,817	\$ 130,983
- Actuarial Value	134,694	136,546
- % AV to FV	119.4%	104.2%
4. Annual Benefit Payments		
- Total	\$ 9,346	\$ 9,928
- % of Fair Value	8.3%	7.6%

*Total Annual Compensation for Prior Year.

Judicial Retirement System – Roll-Forward Valuation

Pension and Healthcare

Actuarial Contribution Under Entry Age Actuarial Cost Method (\$ in thousands)

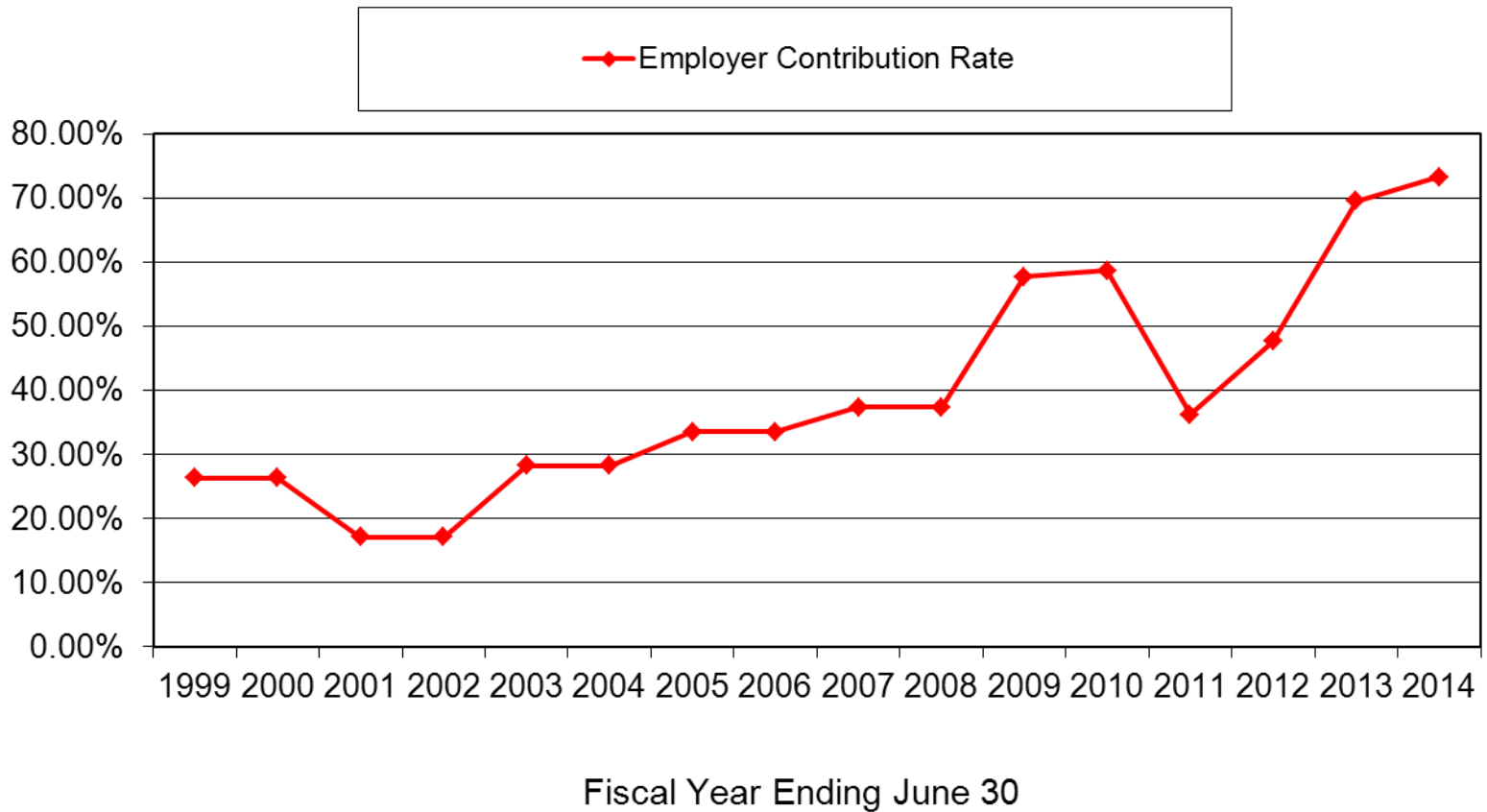
Funding	June 30, 2011			June 30, 2010
	Pension	Postemployment Healthcare	Total	Total
1. Actuarial Accrued Liability	\$ 173,424	\$ 21,407	\$ 194,831	\$ 184,828
2. Actuarial Value of Assets	<u>116,213</u>	<u>20,333</u>	<u>136,546</u>	<u>134,694</u>
3. Unfunded Actuarial Accrued Liability	\$ 57,211	\$ 1,074	\$ 58,285	\$ 50,134
4. Funded Ratio	67.0%	95.0%	70.1%	72.9%
5. Normal Cost Contribution				
– Total Normal Cost	\$ 5,062	\$ 662	\$ 5,724	\$ 5,547
– Member Contribution	<u>(702)</u>	<u>(0)</u>	<u>(702)</u>	<u>(678)</u>
– Employer Normal Cost	\$ 4,360	\$ 662	\$ 5,022	\$ 4,869
– % of Total Pay	34.82%	5.28%	40.10%	40.30%
6. Past Service Cost				
– Amortization of Unfunded (25) Years	\$ 3,988	\$ 165	\$ 4,153	\$ 3,526
– % of Total Pay	31.86%	1.32%	33.18%	29.18%
7. Employer/State Contribution for FY14				
– Amount	\$ 8,348	\$ 827	\$ 9,175	\$ 8,395
– % of Total Pay	66.68%	6.60%	73.28%*	69.48%

Total Pay is expected to be \$12,520 for FY12.

Judicial Retirement System

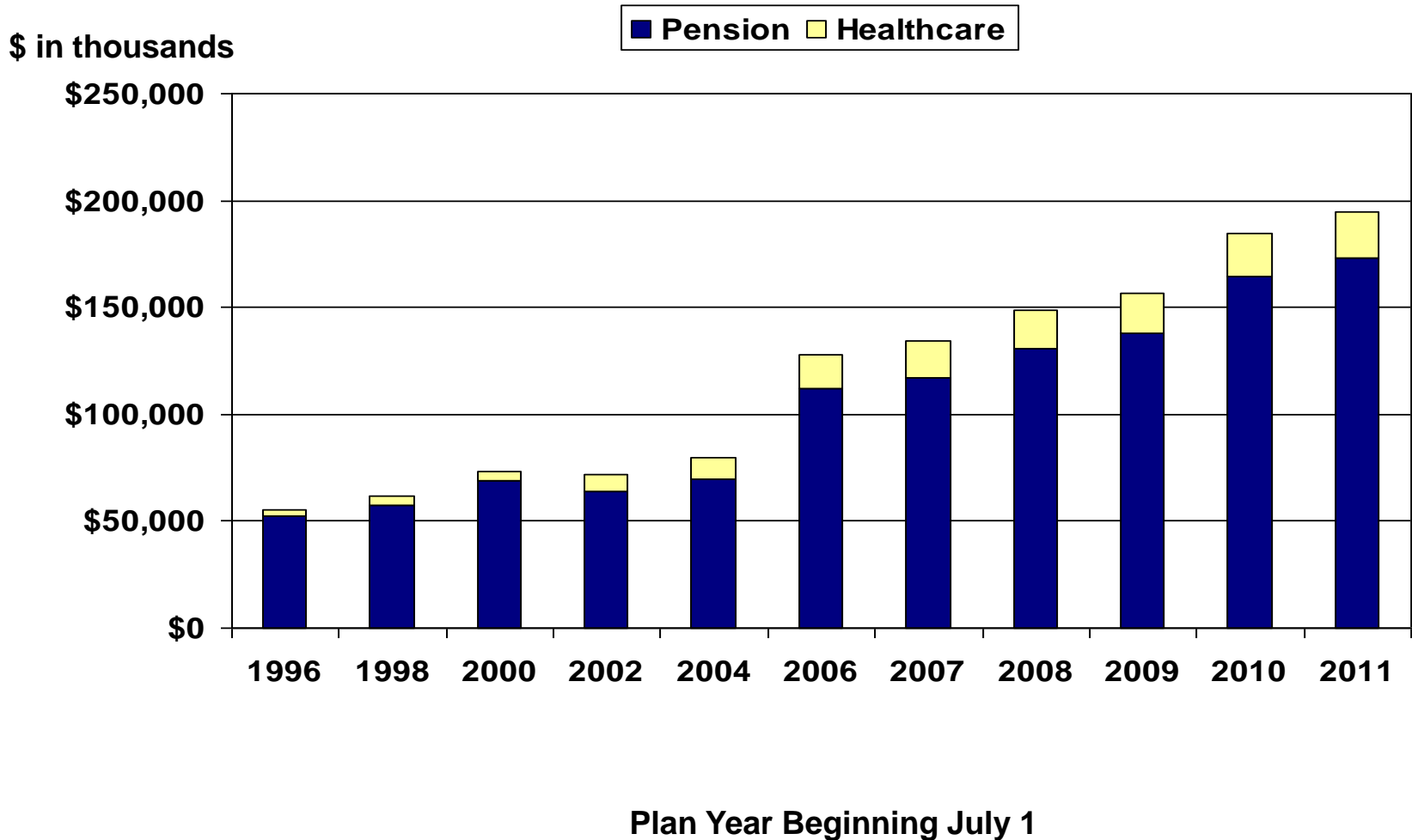
Total Employer Contribution Rate History

1999 - 2014



JRS Actuarial Accrued Liability History

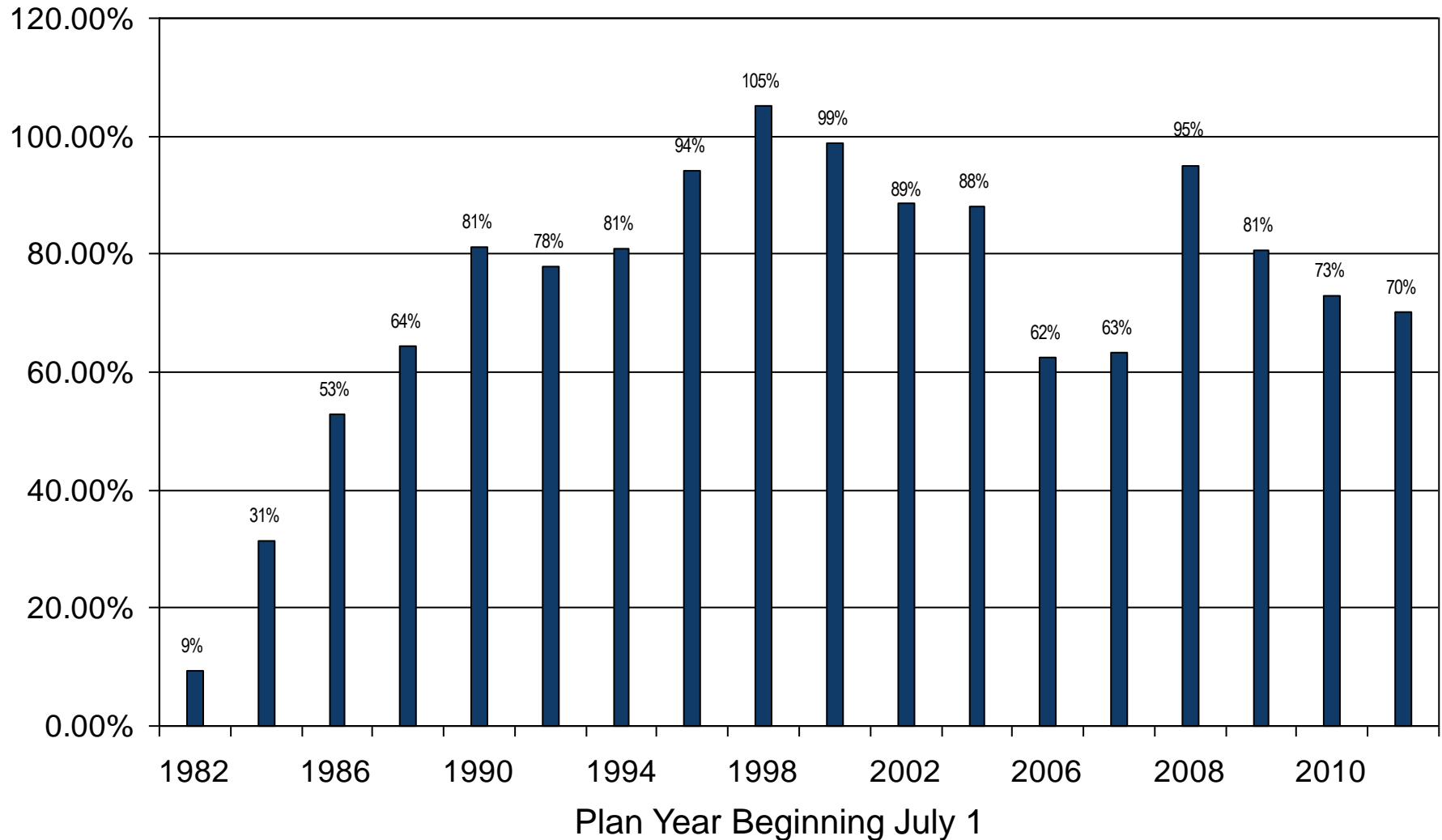
Pension and Healthcare



JRS Funding Ratio History

Pension and Healthcare

Based on Valuation Assets



National Guard and Naval Militia Retirement System – Roll-Forward Valuation

(\$ in thousands)

	June 30, 2010	June 30, 2011 (Roll Forward)
1. Number		
- Active	4,085	4,085
- Vested Terminations	1,251	1,251
- Retired and Beneficiaries	<u>547</u>	<u>547</u>
- Total	5,883	5,883
2. Assets		
- Fair Value	\$29,432	\$32,913
- Actuarial Value	32,001	33,020
- % AV to FV	108.7%	100.3%

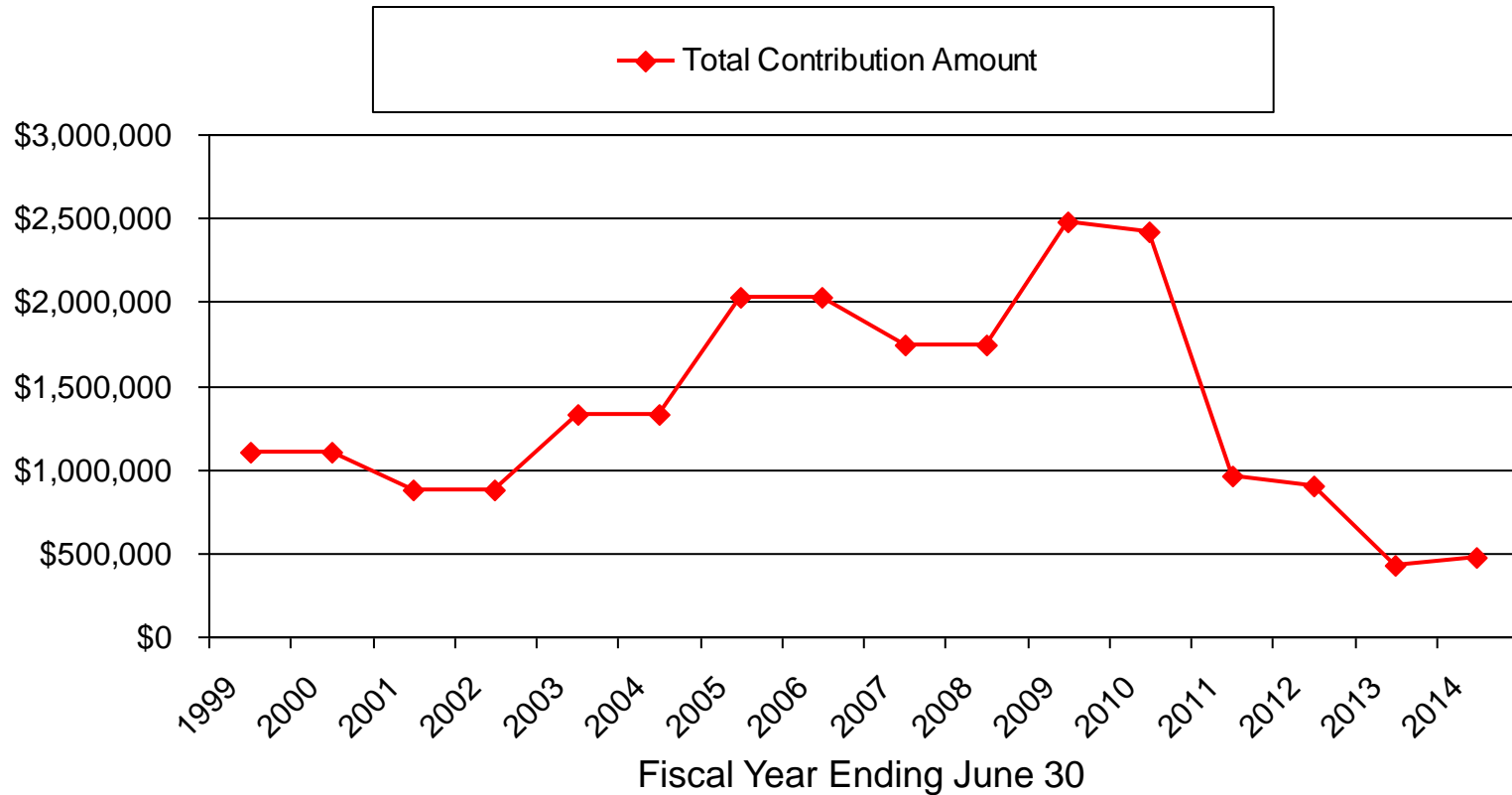
National Guard and Naval Militia Retirement System – Roll-Forward Valuation

Actuarial Contribution Under Entry Age Actuarial Cost Method (\$ in thousands)

Funding	June 30, 2010*	June 30, 2011* (Roll-Forward)
1. Actuarial Accrued Liability	\$ 30,034	\$ 31,324
2. Actuarial Value of Assets	<u>32,001</u>	<u>33,020</u>
3. Unfunded Actuarial Accrued Liability	\$ (1,967)	\$ (1,696)
4. Funded Ratio	106.5%	105.4%
5. Annual Actuarial Contribution		
– Normal Cost	\$ 605	\$ 605
– Amortization of Unfunded	(308)	(265)
– Expense Load	<u>134</u>	<u>135</u>
– Total Contribution	\$ 431	\$ 475

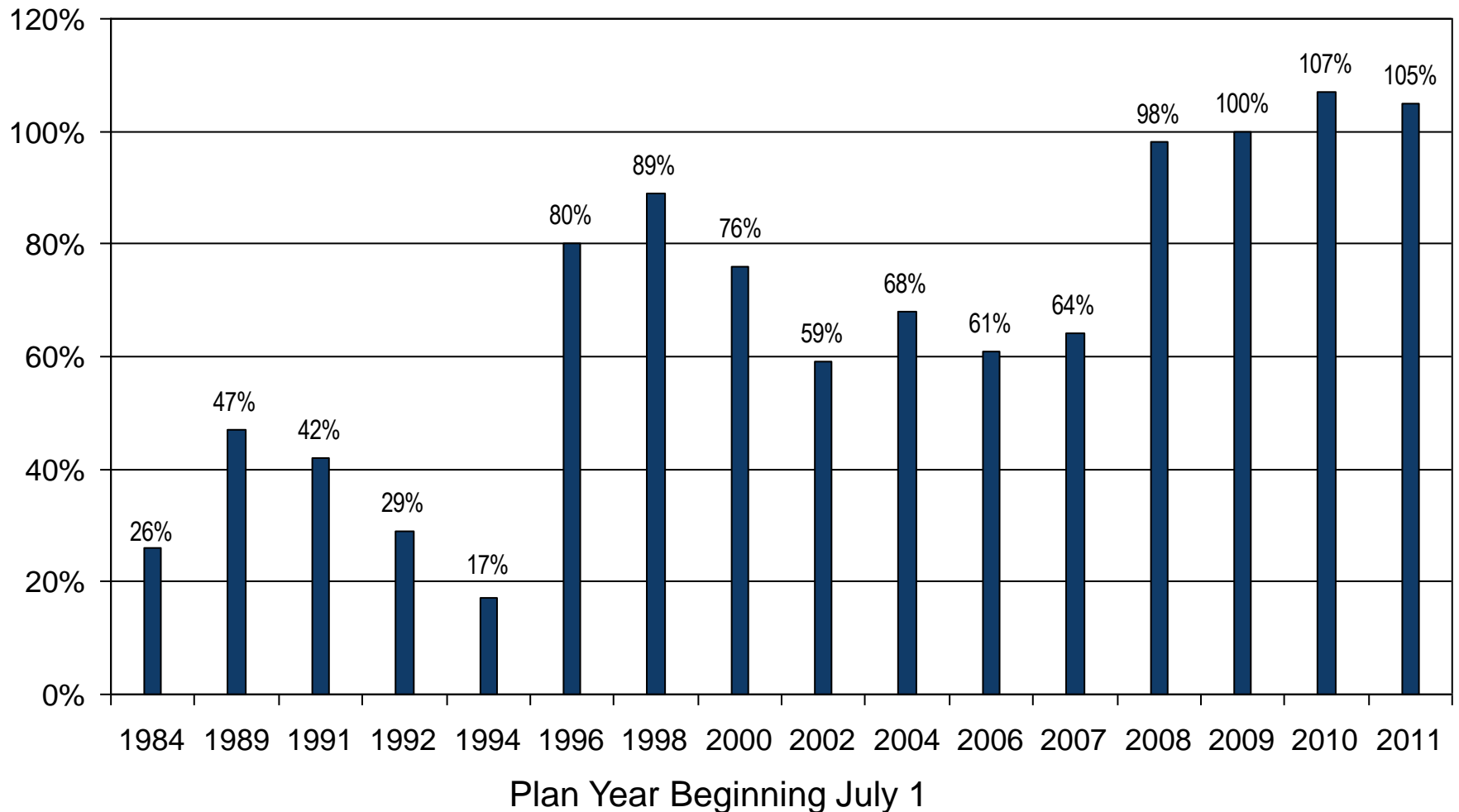
* Contribution calculated by amortizing the unfunded accrued liability over 8 years.

National Guard and Naval Militia Retirement System Total Contribution Amount History 1999 - 2014



National Guard and Naval Militia Retirement System Funding Ratio History

Based on Valuation Assets



Conclusions and Comments

- JRS
 - Plan experienced investment gains over the past year. Rate of return on fair value was 20.8%, or 12.8% more than the 8.0% assumed rate of return
 - Asset loss experienced on actuarial value due to recognition of prior losses in smoothing method. Rate of return on actuarial value was 5.0%, or 3.0% less than the 8.0% assumed rate of return
- NGNMRS
 - Plan experienced investment gains over the past year. Rate of return on fair value was 13.4%, or 6.4% more than the 7.0% assumed rate of return
 - Asset loss experienced on actuarial value due to recognition of prior losses in smoothing method. Rate of return on actuarial value was 4.6%, or 2.4% less than 7.0% assumed rate of return

Conclusions and Comments (cont'd)

- Changes in Unfunded Liability

(\$ in thousands)

	<u>JRS</u>	<u>NGNMRS</u>
2010 Unfunded Liability	\$ 50,134	\$ (1,967)
- Expected Increase	203	48
- Asset Loss	3,884	760
- Healthcare Claims	(456)	0
- Contribution Delay	<u>4,520</u>	<u>(537)</u>
2011 Rolled-Forward Unfunded Liability	\$ 58,285	\$ (1,696)

Conclusions and Comments (cont'd)

- Increased employer contribution rate for JRS and increased employer contribution amount for NGNMRS

	% of Pay	(\$ in thousands)
	<u>JRS</u>	<u>NGNMRS</u>
– 2010	69.48%	\$ 431
– 2011 (Roll Forward)	73.28%	475
– Change	+3.80%	+44

- Funded ratio decreased for JRS and NGNMRS over last year

	<u>JRS</u>	<u>NGNMRS</u>
– 2010	72.9%	106.5%
– 2011 (Roll Forward)	70.1%	105.4%
– Change	(2.8%)	(1.1%)



Summary of All Valuation Results

Summary of FY14 Employer Contribution Rates

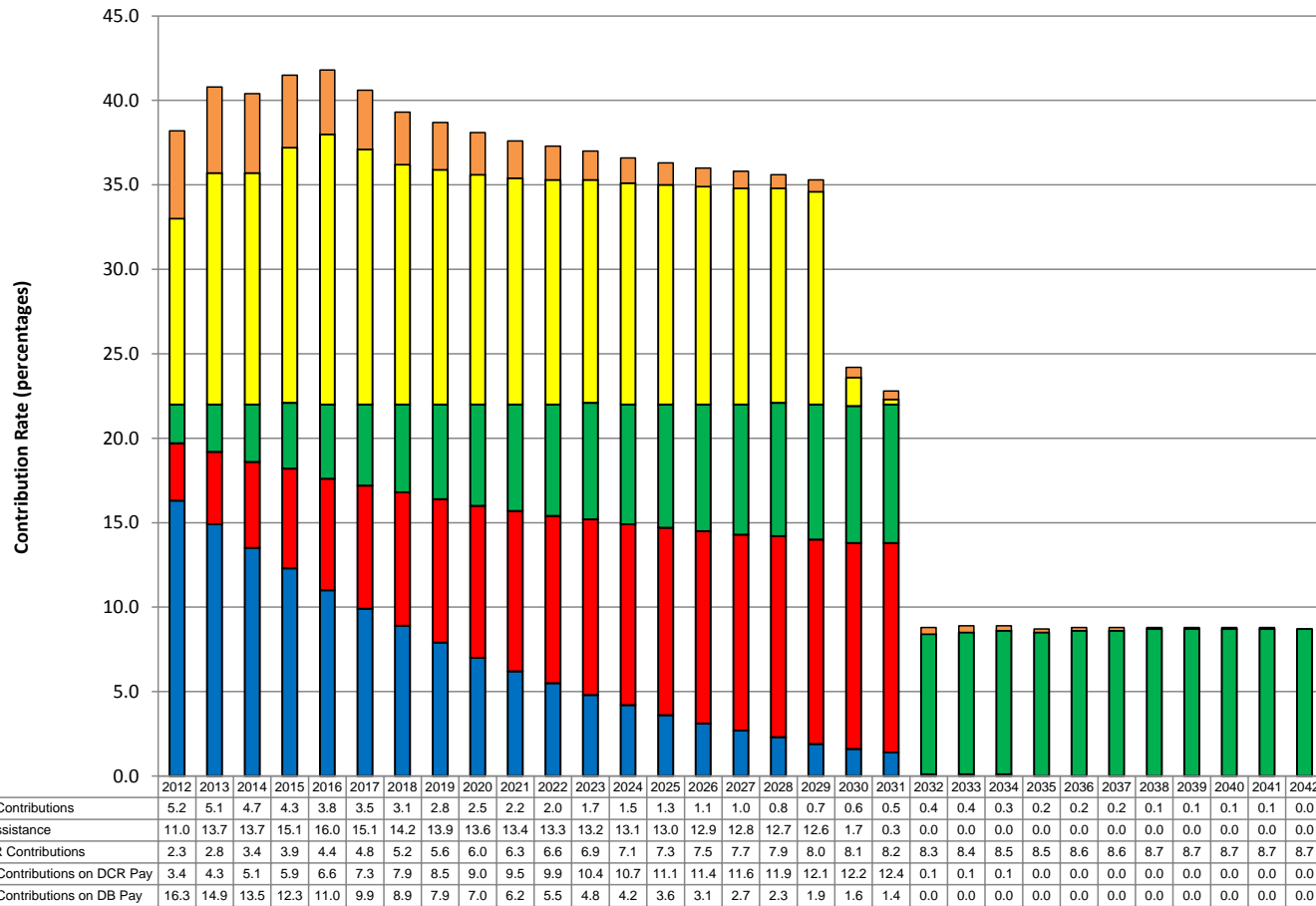
	% of Total DB & DCR Pay		% of DCR Pay		% of Pay	\$ Amount
	<u>PERS - DB</u>	<u>TRS - DB</u>	<u>PERS - DCR</u>	<u>TRS - DCR</u>	<u>JRS</u>	<u>NGNMRS</u>
Pension	16.47%	31.40%	N/A	N/A	66.68%	\$474,791
Retiree Medical	15.84%	18.70%	0.48%	0.47%	6.60%	N/A
Occupational Death & Disability	N/A	N/A	0.29%	0.00%	N/A	N/A
Total-Level % of pay	32.31%	50.10%	0.77%	0.47%	73.28%	\$474,791
Total-Level \$	39.27%	62.65%				
State Assistance			<u>Total</u>			
- Level % of pay	\$312.5M	\$316.9M	\$629.4M			
- Level \$	\$471.5M	\$413.8M	\$885.3M			
- Difference	\$159.0M	\$96.9M	\$255.9M			



30-Year Projections for PERS and TRS

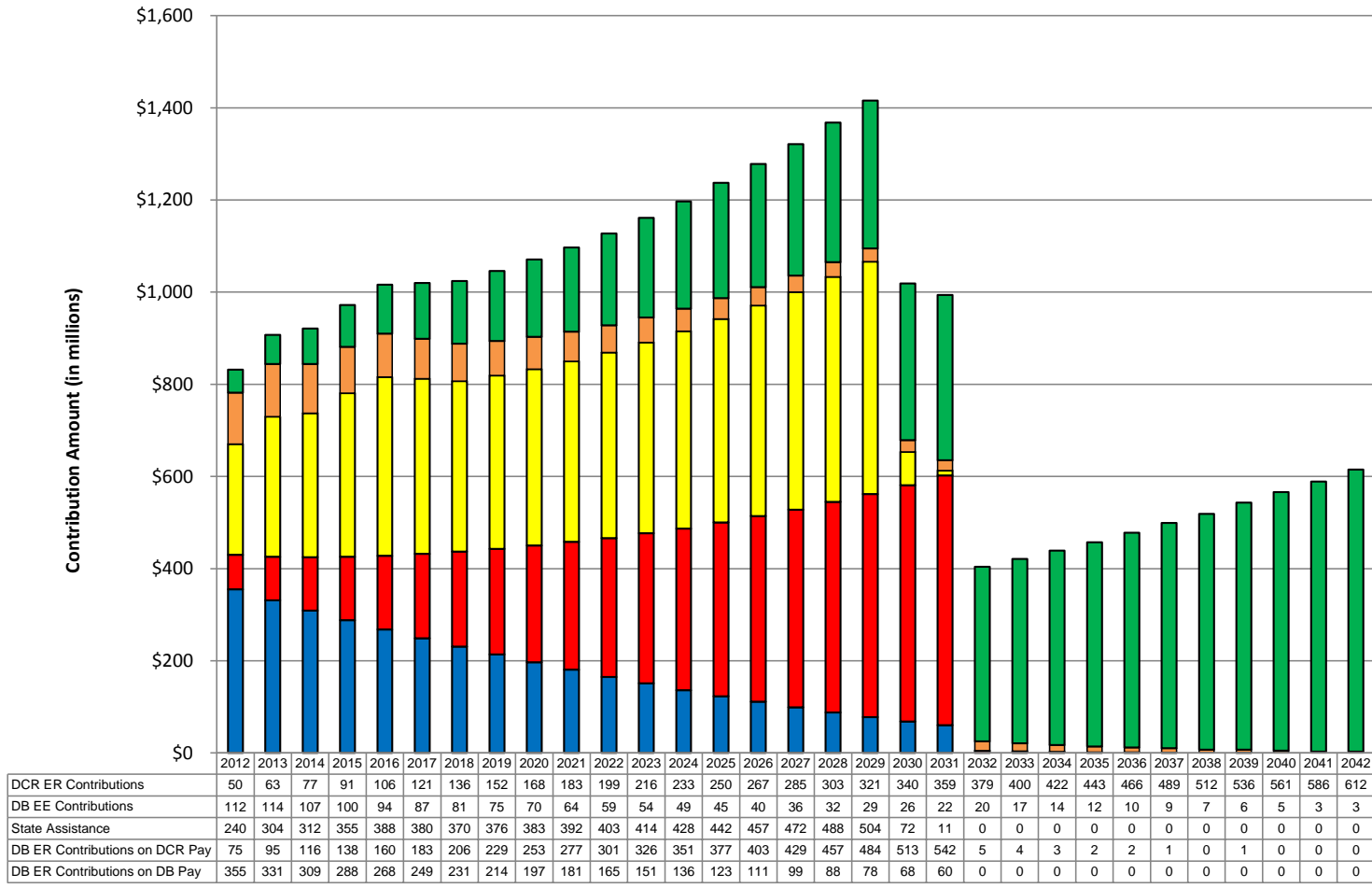
PERS Projected Contribution Rates – Level % of Pay

Based on Total DB and DCR Payroll



Legend: DB ER Contributions on DB Pay (blue), DB ER Contributions on DCR Pay (red), DCR ER Contributions (green), State Assistance (yellow), DB EE Contributions (orange)

PERS Projected Contribution Amounts – Level % of Pay

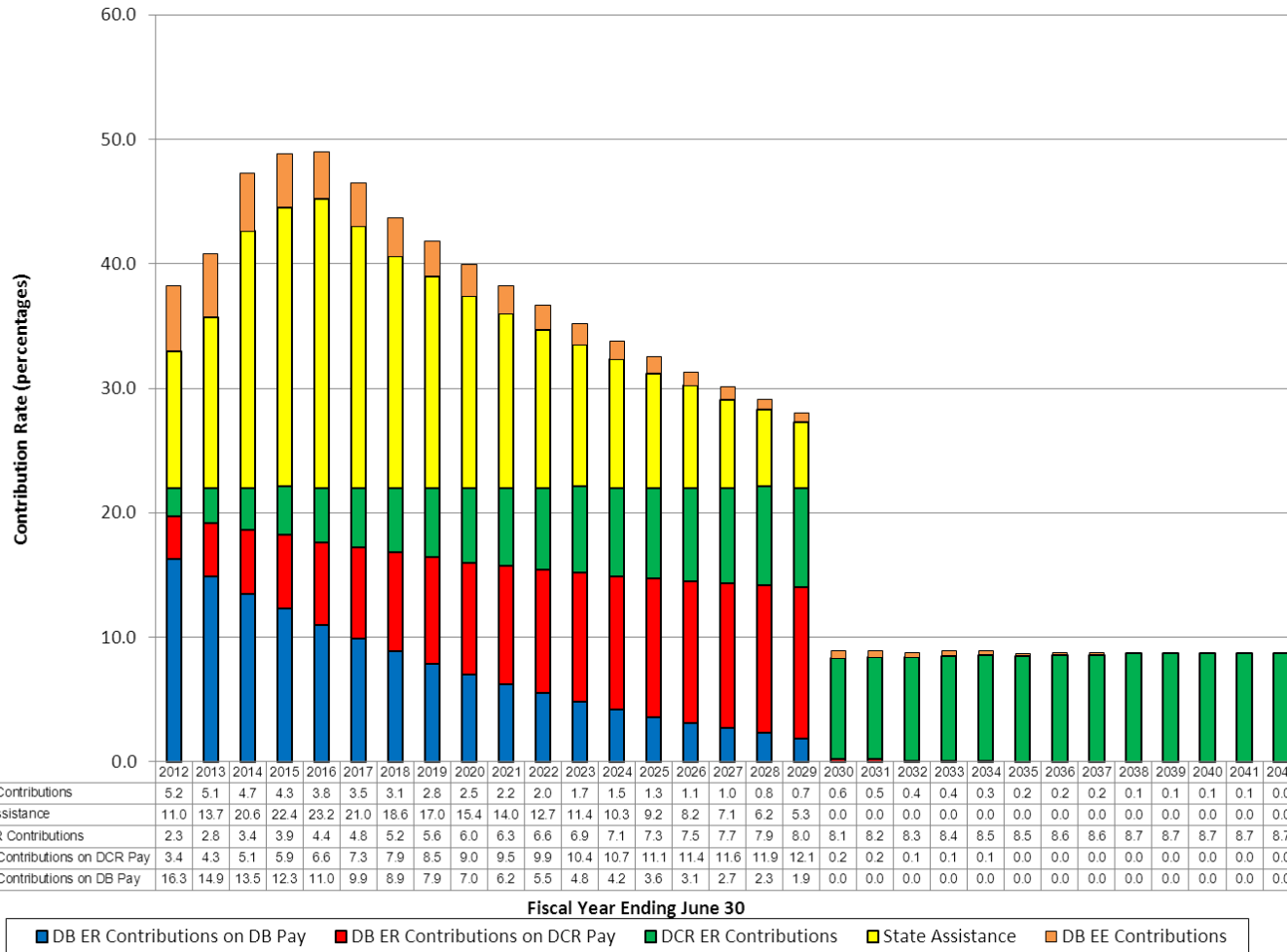


Fiscal Year Ending June 30

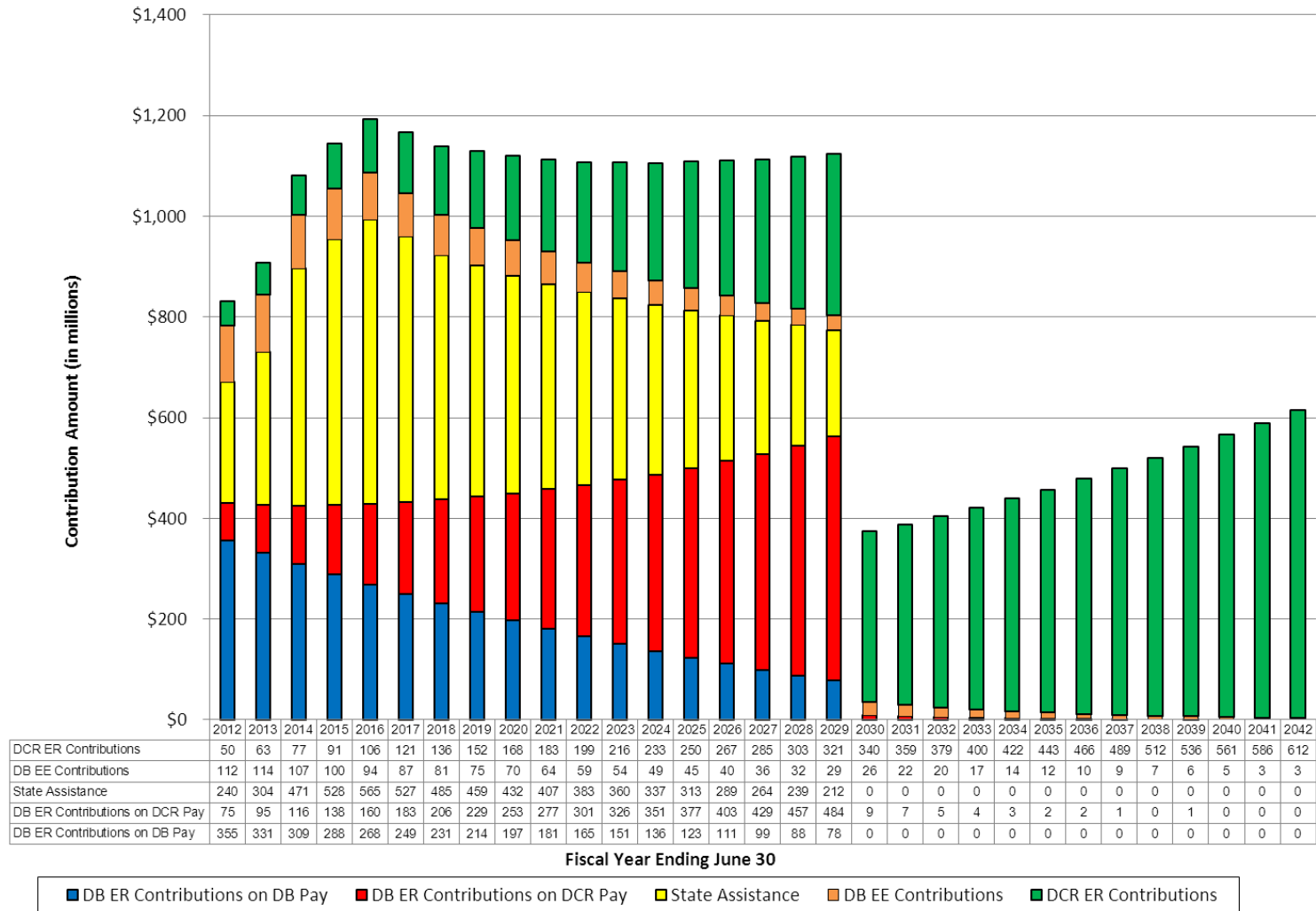
■ DB ER Contributions on DB Pay
 ■ DB ER Contributions on DCR Pay
 ■ State Assistance
 ■ DB EE Contributions
 ■ DCR ER Contributions

PERS Projected Contribution Rates – Level \$

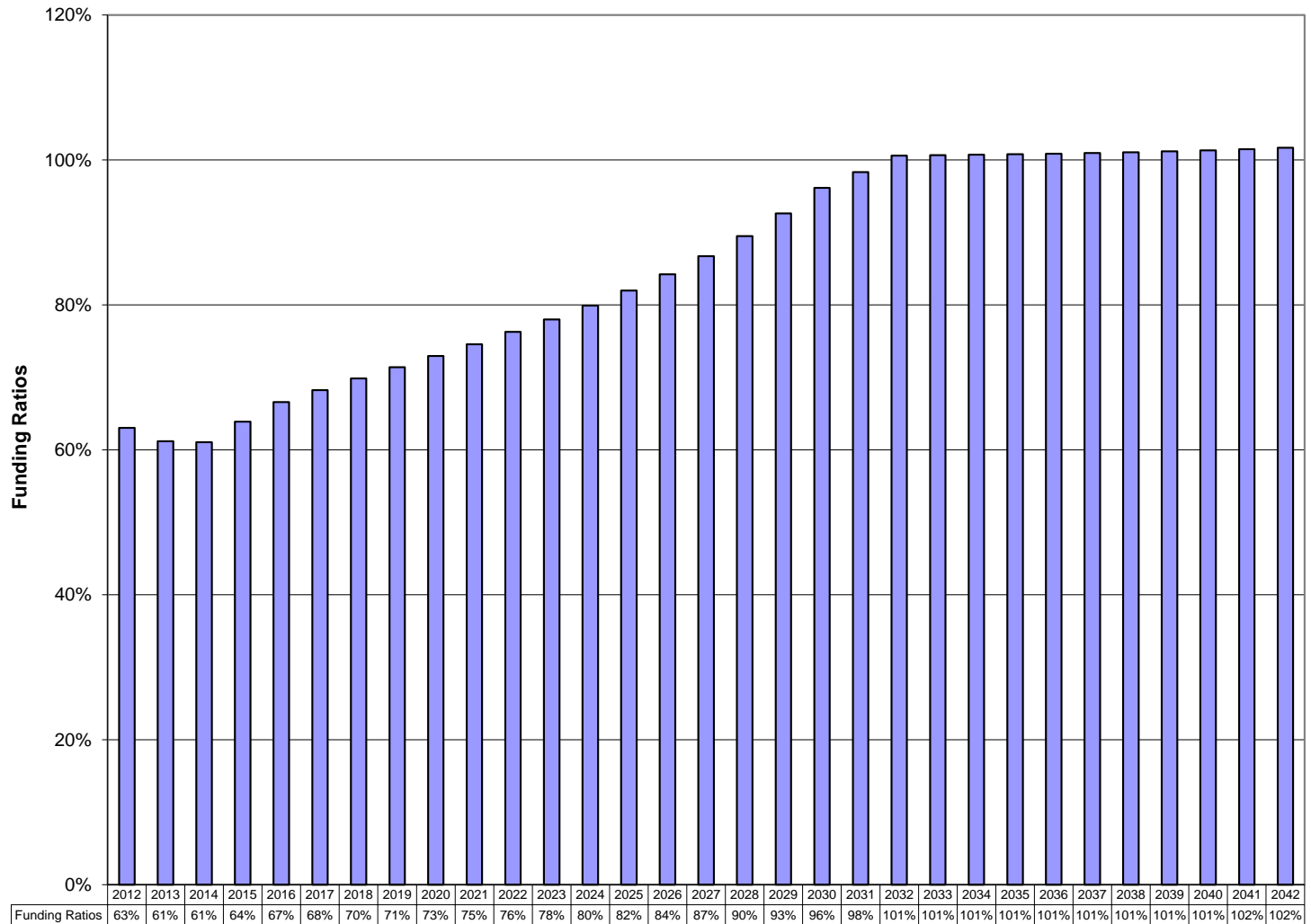
Based on Total DB and DCR Payroll



PERS Projected Contribution Amounts – Level \$



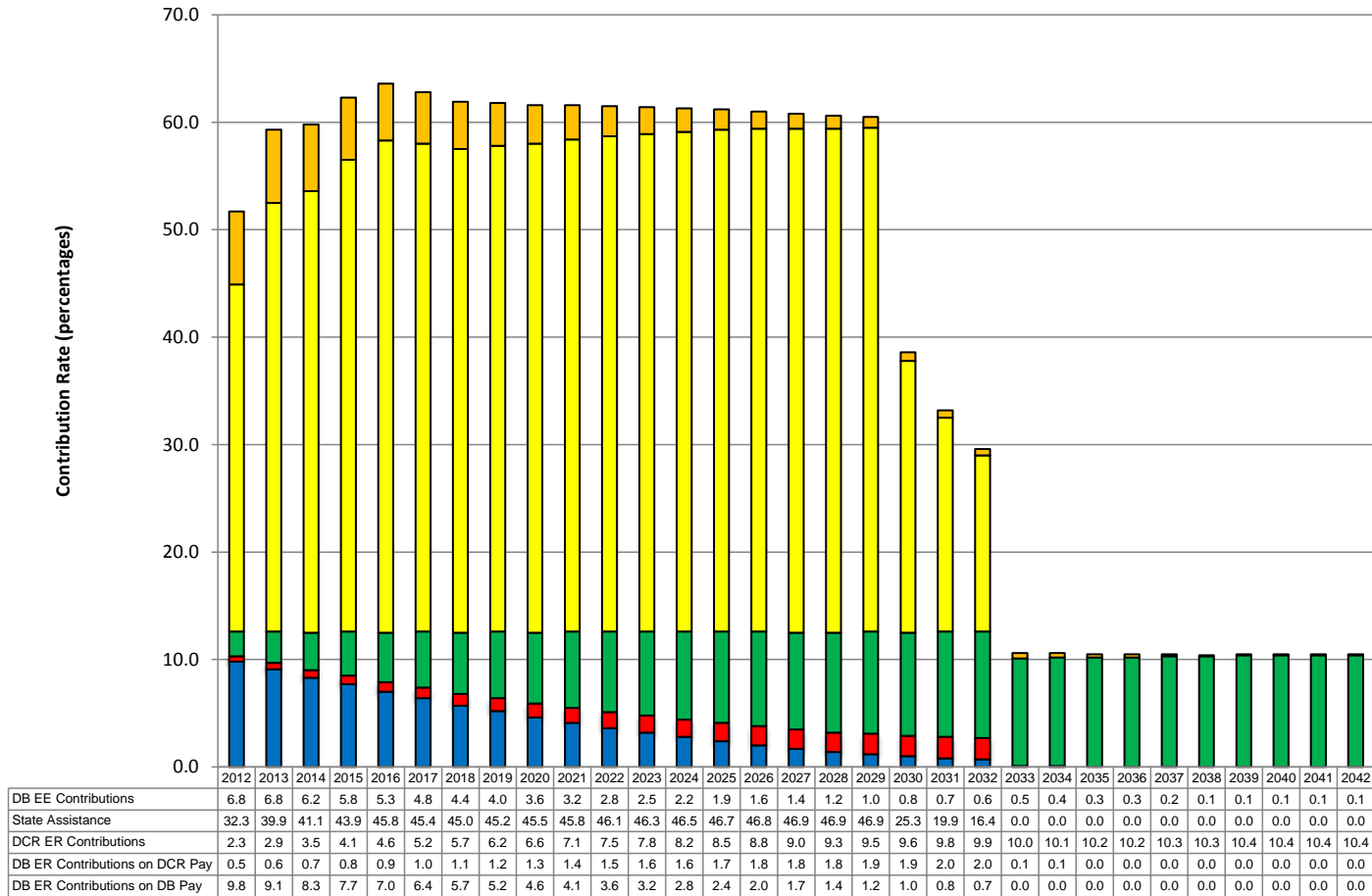
PERS Funding Ratio – Level % of Pay



Fiscal Year Ending June 30

TRS Projected Contribution Rates – Level % of Pay

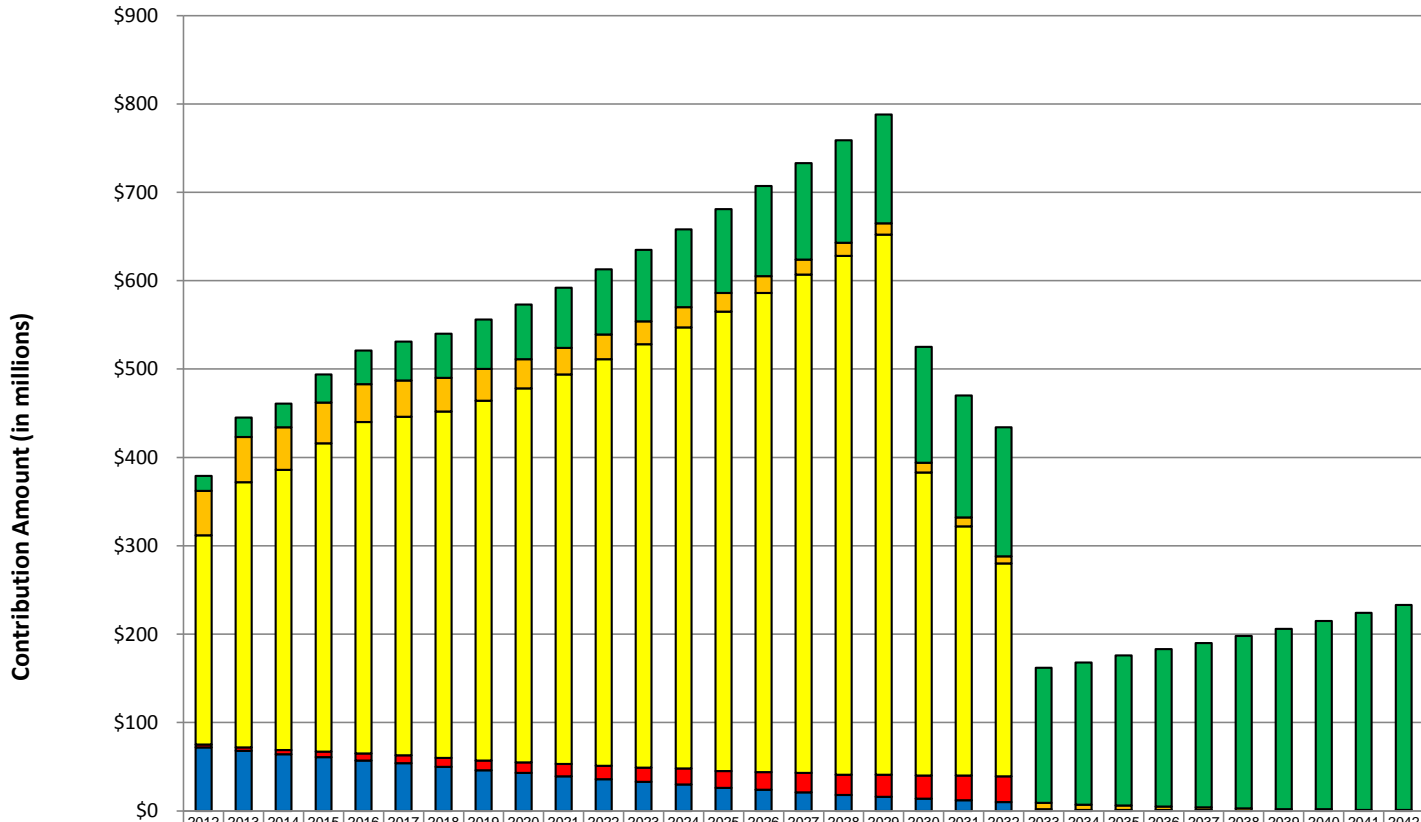
Based on Total DB and DCR Payroll



Fiscal Year Ending June 30



TRS Projected Contribution Amounts – Level % of Pay



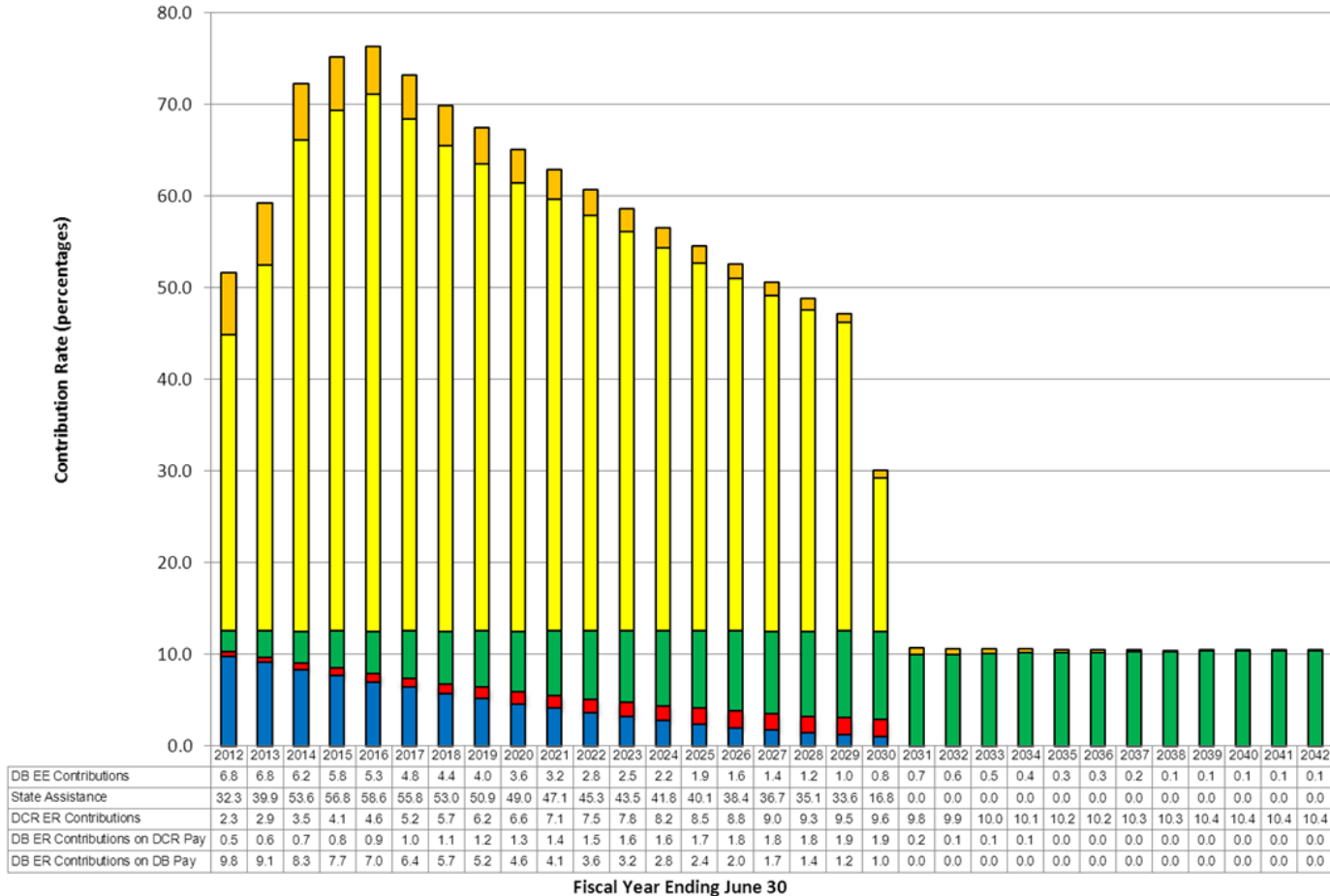
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
DCR ER Contributions	17	22	27	32	38	44	50	56	62	68	74	81	88	95	102	109	116	123	131	138	146	153	161	170	178	186	195	204	213	223	232
DB EE Contributions	50	51	48	46	43	41	38	36	33	30	28	26	23	21	19	17	15	13	11	10	8	7	6	5	4	3	3	2	2	1	1
State Assistance	237	300	317	349	375	383	392	407	423	441	460	479	499	520	542	564	587	611	343	282	241	0	0	0	0	0	0	0	0	0	0
DB ER Contributions on DCR Pay	3	4	5	6	8	9	10	11	12	14	15	16	18	19	20	22	23	25	26	28	29	2	1	1	1	1	0	0	0	0	0
DB ER Contributions on DB Pay	72	68	64	61	57	54	50	46	43	39	36	33	30	26	24	21	18	16	14	12	10	0	0	0	0	0	0	0	0	0	0

Fiscal Year Ending June 30

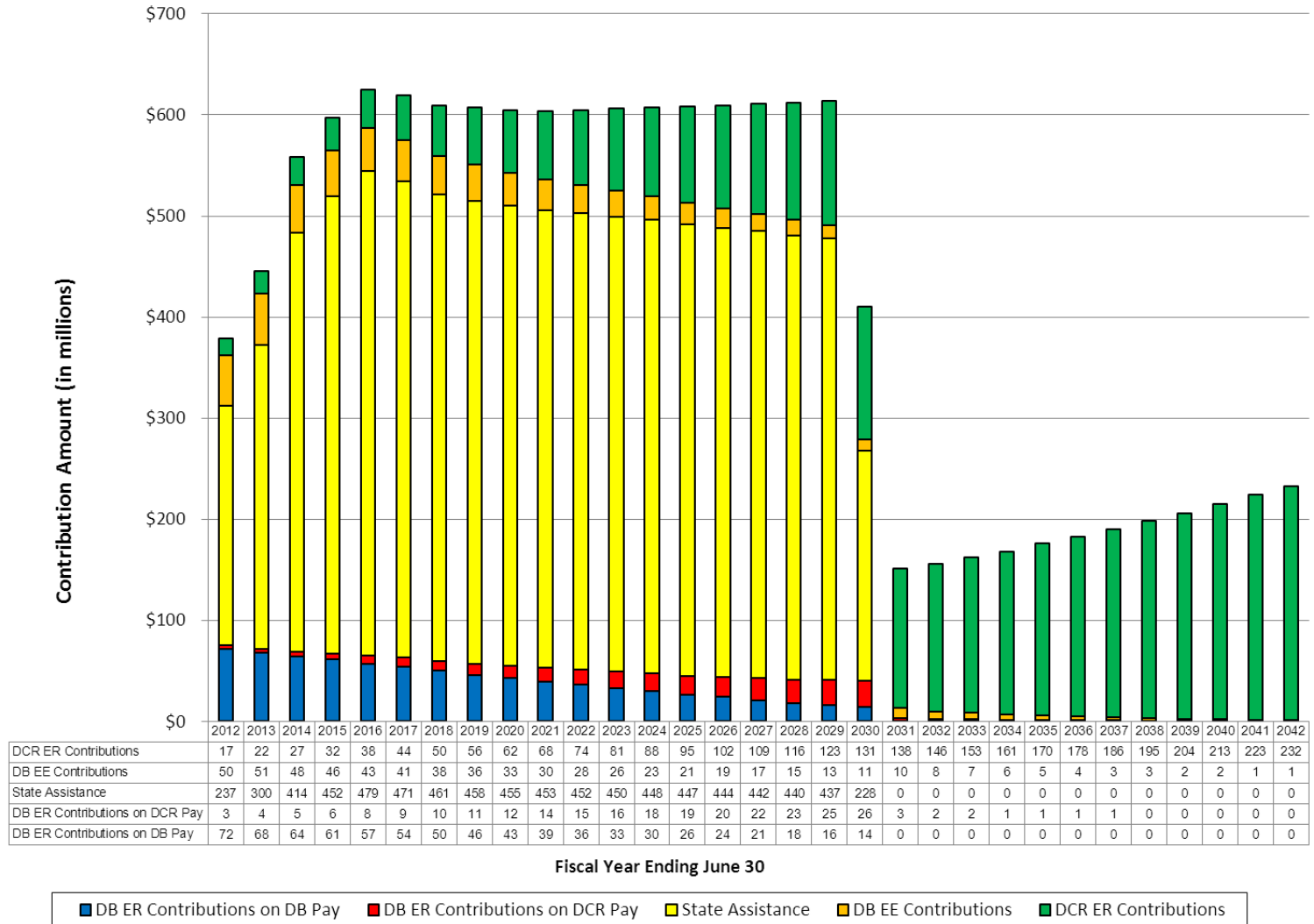
■ DB ER Contributions on DB Pay
 ■ DB ER Contributions on DCR Pay
 ■ State Assistance
 ■ DB EE Contributions
 ■ DCR ER Contributions

TRS Projected Contribution Rates – Level \$

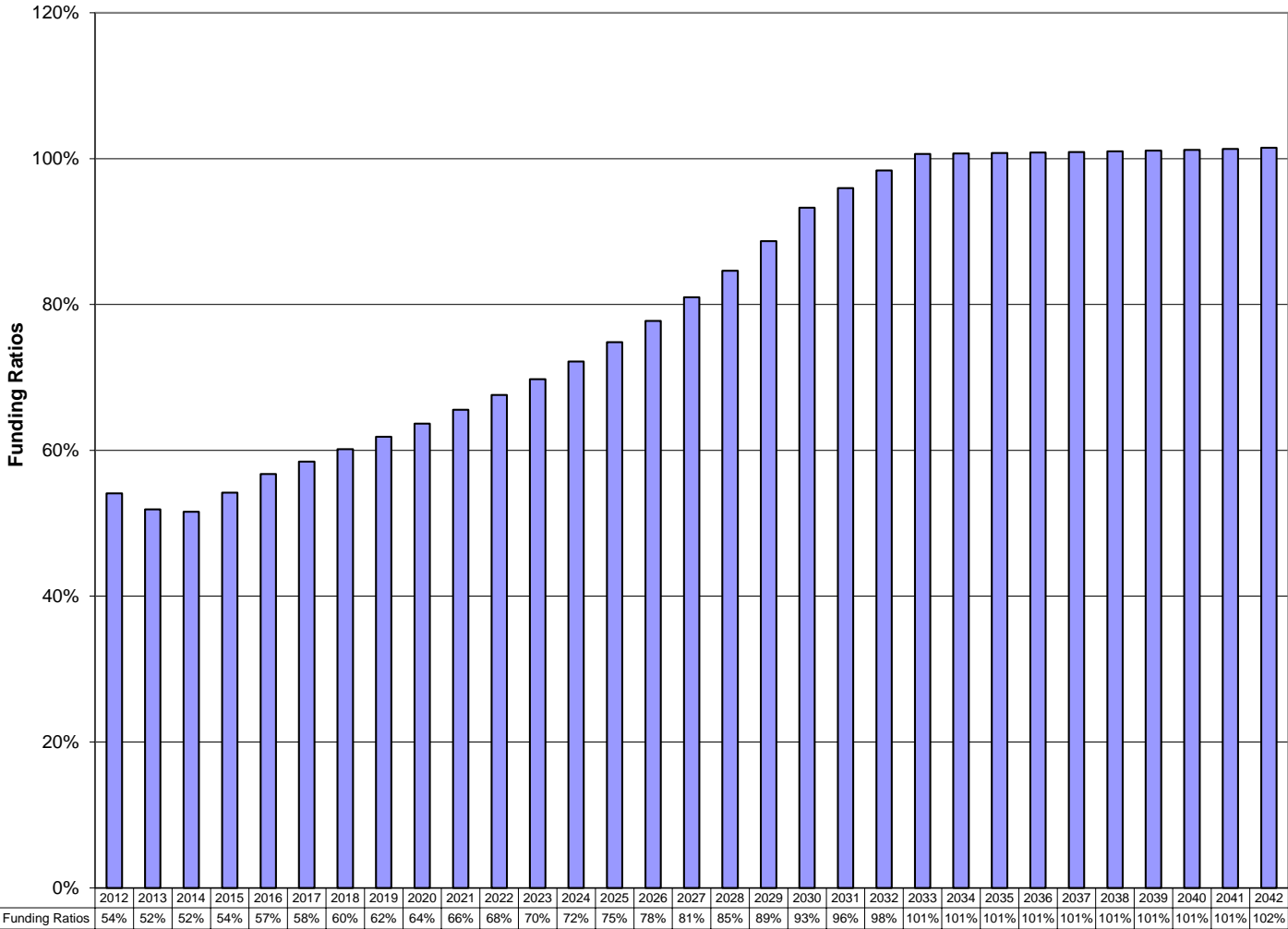
Based on Total DB and DCR Payroll



TRS Projected Contribution Amounts – Level \$



TRS Funding Ratio – Level % of Pay



Fiscal Year Ending June 30



buck

Questions?



Appendix

Public Employees' Retirement System

Peace Officer/Firefighter and Others Combined

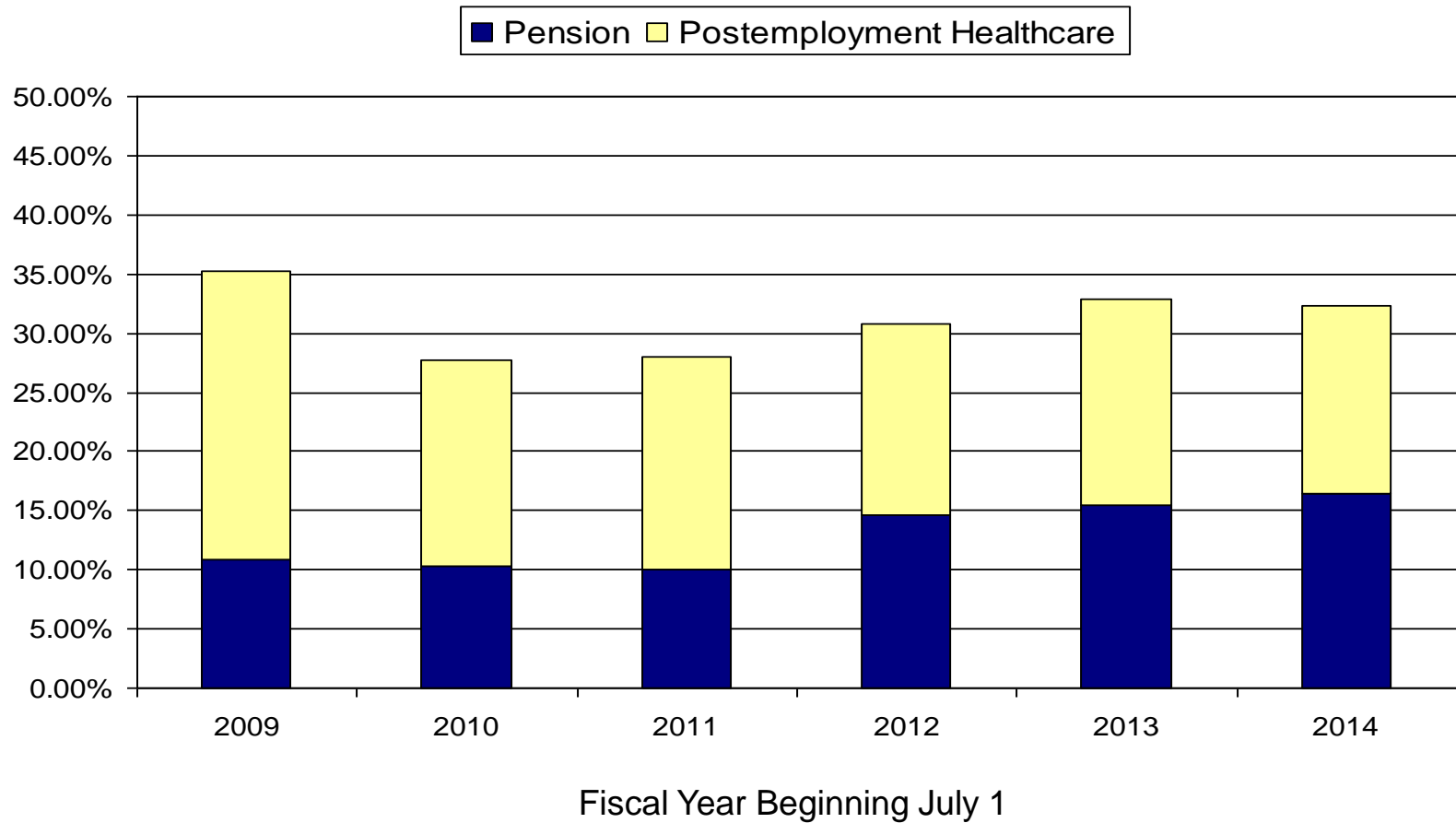
Pension and Postemployment Healthcare

Total System Assets (\$ in millions)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$ 11,314	\$ 11,596
Contributions	624	683
Disbursements, Net of Medicare Part D Subsidy	(810)	(824)
Legal Settlement, Net of Fees	359	0
Expected Return on Fair Value	697	761
2. Expected Actuarial Value (EOY)	\$ 12,184	\$ 12,216
3. 5-year Smoothing	(588)	(402)
4. Preliminary Actuarial Value (EOY)	\$ 11,596	\$ 11,814
5. Future Smoothing Amount	(2,023)	(425)
6. Fair Value (EOY)	\$ 9,573	\$ 11,389
7. 120% of Fair Value	\$ 11,487	\$ 13,666
8. 80% of Fair Value	\$ 7,658	\$ 9,111
9. Final Actuarial Value (EOY)	\$ 11,157	\$ 11,814
10. Ratio Fair Value to Actuarial Value	86%	96%

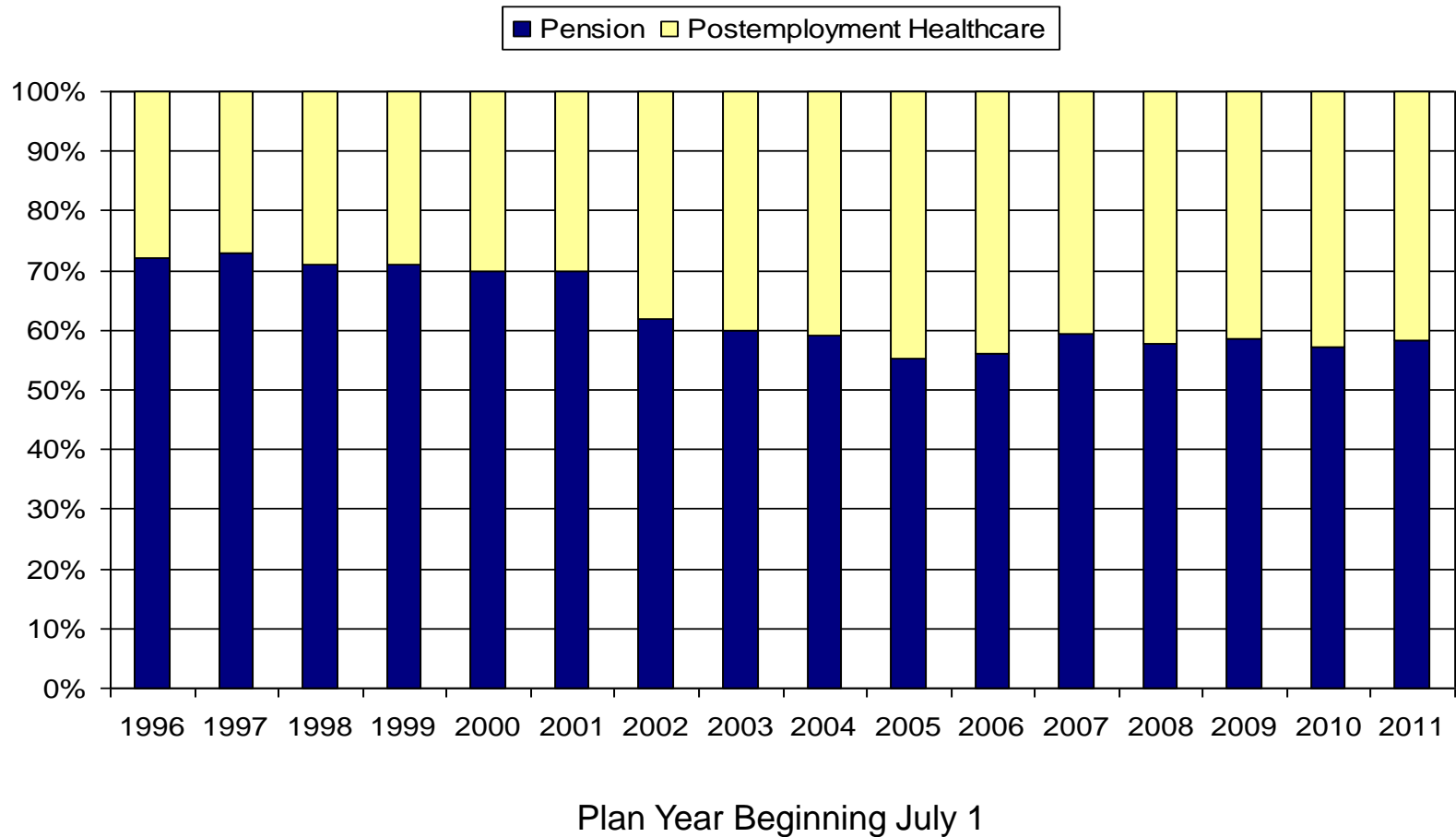
PERS Total Employer/State Contribution Rate History

Pension and Postemployment Healthcare



PERS Actuarial Accrued Liability History

Distribution % Between Pension and Postemployment Healthcare

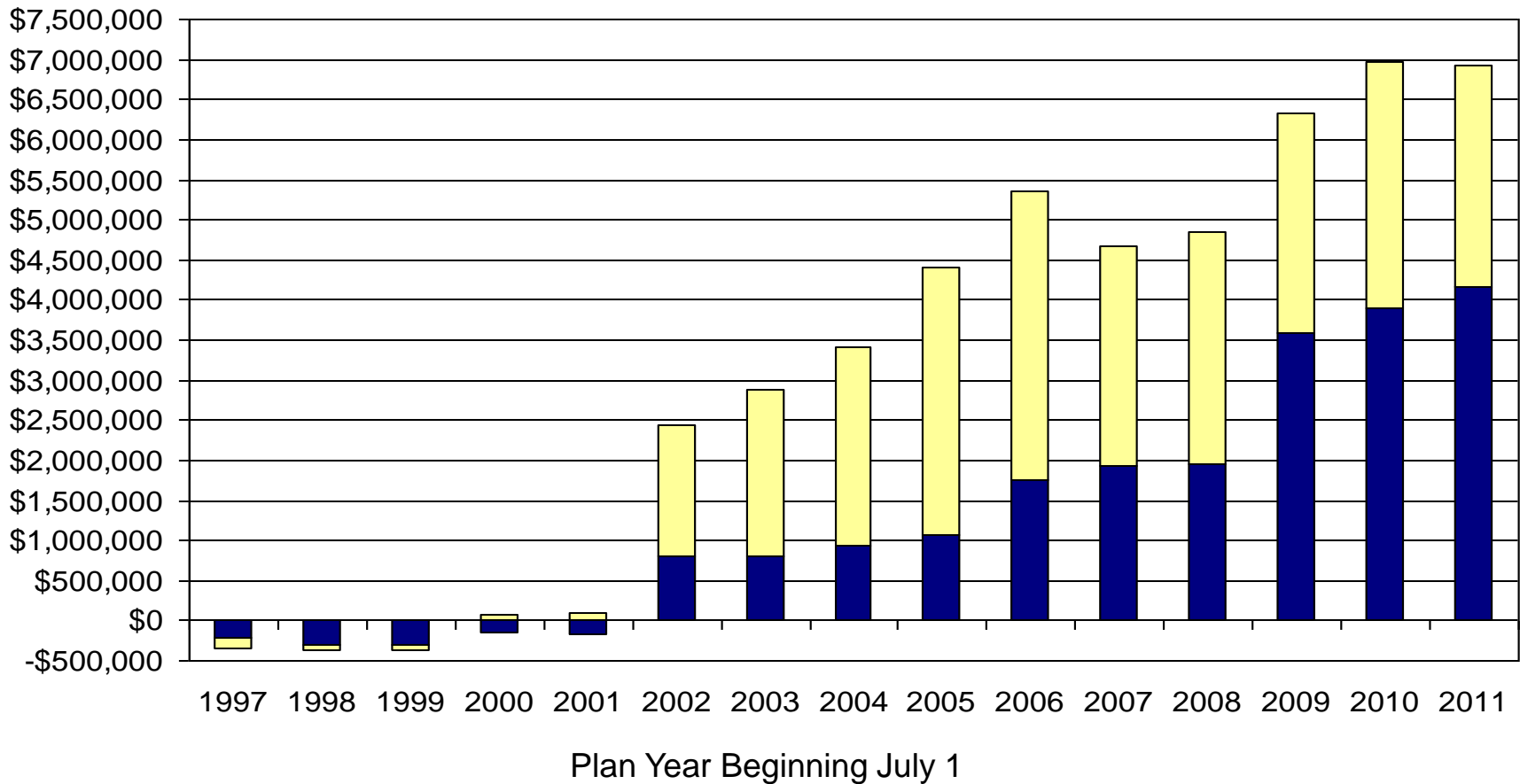


PERS Unfunded Actuarial Accrued Liability History

Pension and Postemployment Healthcare

\$ in thousands

■ Pension ■ Postemployment Healthcare



Teachers' Retirement System

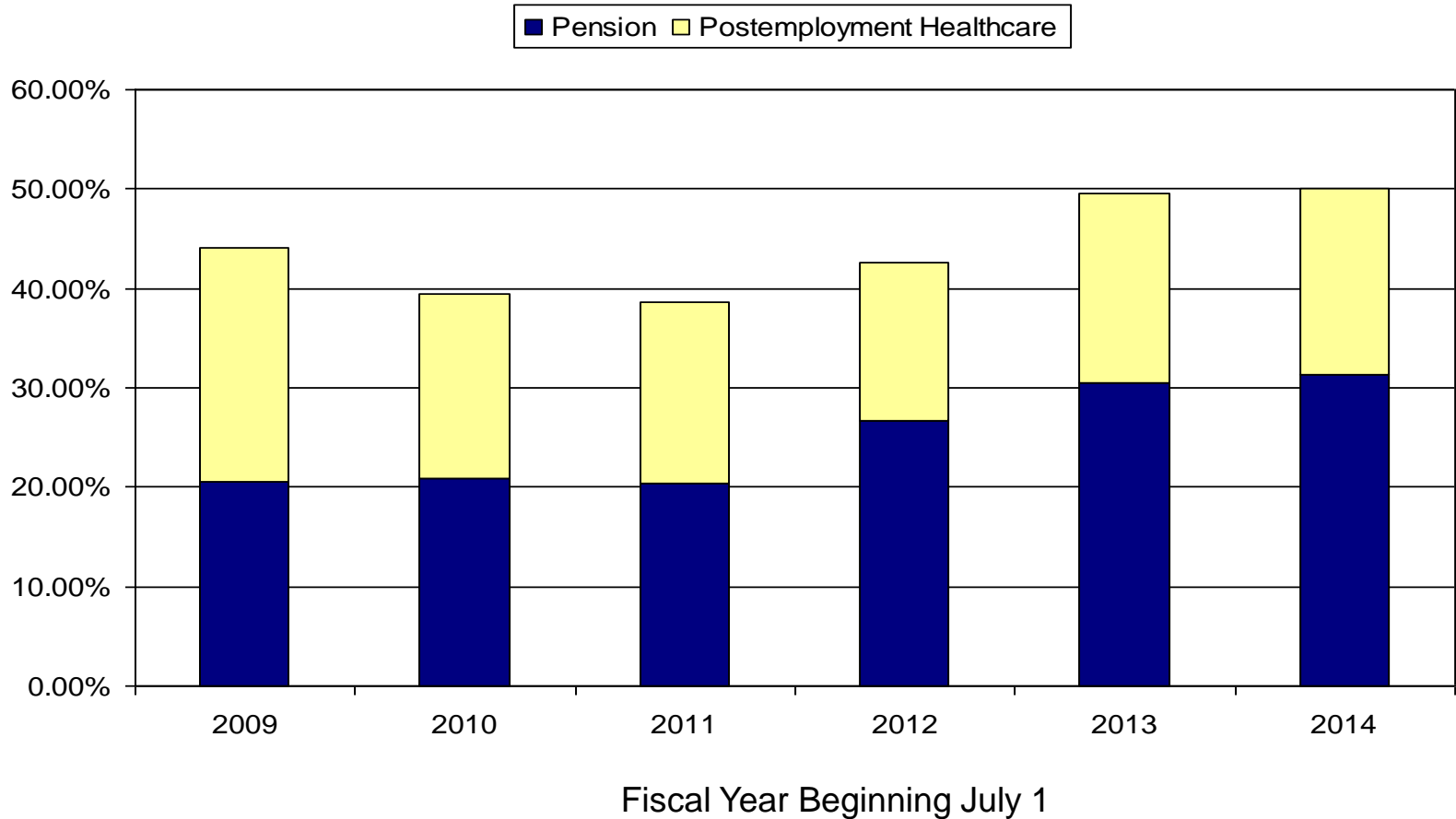
Pension and Postemployment Healthcare

Total System Assets (\$ in millions)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$ 4,976	\$ 4,926
Contributions	307	322
Disbursements, Net of Medicare Part D Subsidy	(442)	(444)
Legal Settlement, Net of Fees	44	0
Expected Return on Fair Value	302	317
2. Expected Actuarial Value (EOY)	\$ 5,187	\$ 5,121
3. 5-year Smoothing	(261)	(183)
4. Preliminary Actuarial Value (EOY)	\$ 4,926	\$ 4,938
5. Future Smoothing Amount	(902)	(205)
6. Fair Value (EOY)	\$ 4,024	\$ 4,733
7. 120% of Fair Value	\$ 4,829	\$ 5,679
8. 80% of Fair Value	\$ 3,219	\$ 3,786
9. Final Actuarial Value (EOY)	\$ 4,739	\$ 4,938
10. Ratio Fair Value to Actuarial Value	85%	96%

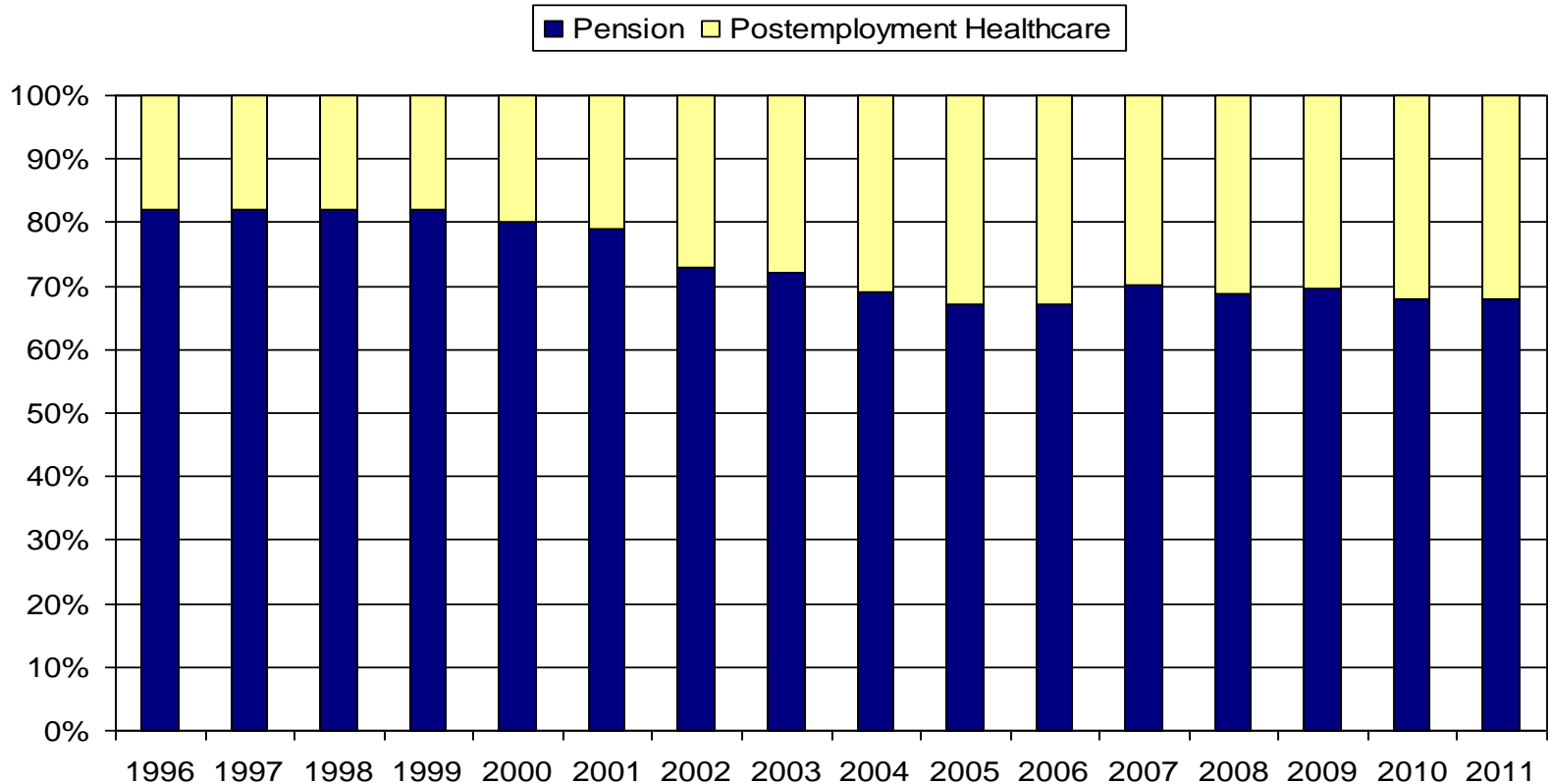
TRS Total Employer/State Contribution Rate History

Pension and Postemployment Healthcare



TRS Actuarial Accrued Liability History

Distribution % Between Pension and Postemployment Healthcare



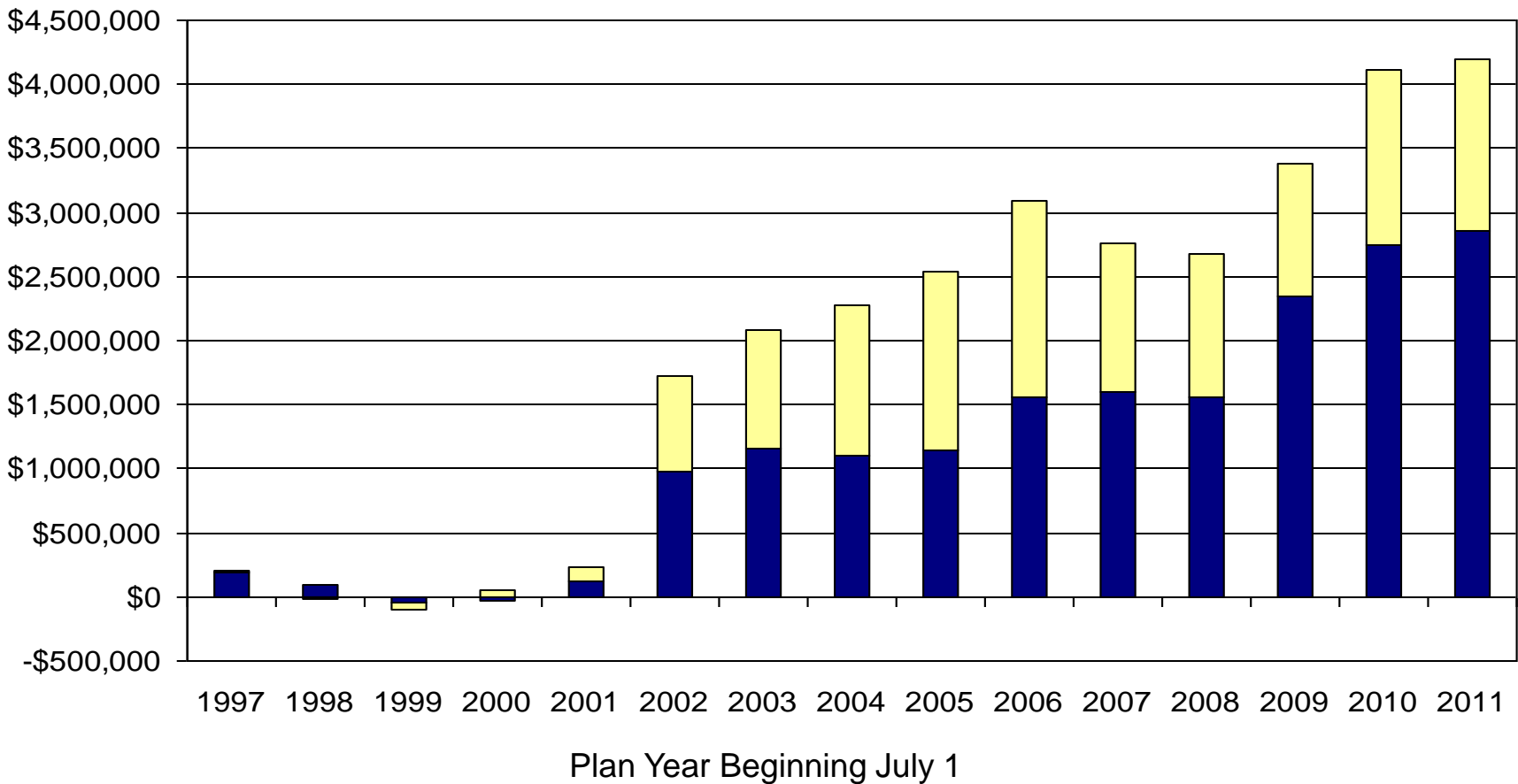
Plan Year Beginning July 1

TRS Unfunded Actuarial Accrued Liability History

Pension and Postemployment Healthcare

\$ in thousands

■ Pension ■ Postemployment Healthcare



Public Employees' Retirement System Defined Contribution Retirement Plan

Peace Officer/Firefighter and Others Combined

Occupational Death and Disability and Retiree Medical

Total System Assets (\$ in thousands)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$ 8,613	\$13,568
Contributions	4,526	4,385
Disbursements	0	(40)
Expected Return on Fair Value	791	1,173
2. Expected Actuarial Value (EOY)	\$13,930	\$19,086
3. 5-year Smoothing	(362)	(28)
4. Preliminary Actuarial Value (EOY)	\$13,568	\$19,058
5. Future Smoothing Amount	(1,034)	666
6. Fair Value (EOY)	\$12,534	\$19,724
7. 120% of Fair Value	\$15,040	\$23,668
8. 80% of Fair Value	\$10,028	\$15,780
9. Final Actuarial Value (EOY)	\$13,568	\$19,058
10. Ratio Fair Value to Actuarial Value	92%	103%

Teachers' Retirement System

Defined Contribution Retirement Plan

Occupational Death and Disability and Retiree Medical

Total System Assets (\$ in thousands)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$ 3,424	\$ 5,472
Contributions	1,863	1,628
Disbursements	0	0
Expected Return on Fair Value	320	470
2. Expected Actuarial Value (EOY)	\$ 5,607	\$ 7,570
3. 5-year Smoothing	(135)	(4)
4. Preliminary Actuarial Value (EOY)	\$ 5,472	\$ 7,566
5. Future Smoothing Amount	(395)	259
6. Fair Value (EOY)	\$ 5,077	\$ 7,825
7. 120% of Fair Value	\$ 6,091	\$ 9,388
8. 80% of Fair Value	\$ 4,063	\$ 6,262
9. Final Actuarial Value (EOY)	\$ 5,472	\$ 7,566
10. Ratio Fair Value to Actuarial Value	93%	103%

Judicial Retirement System

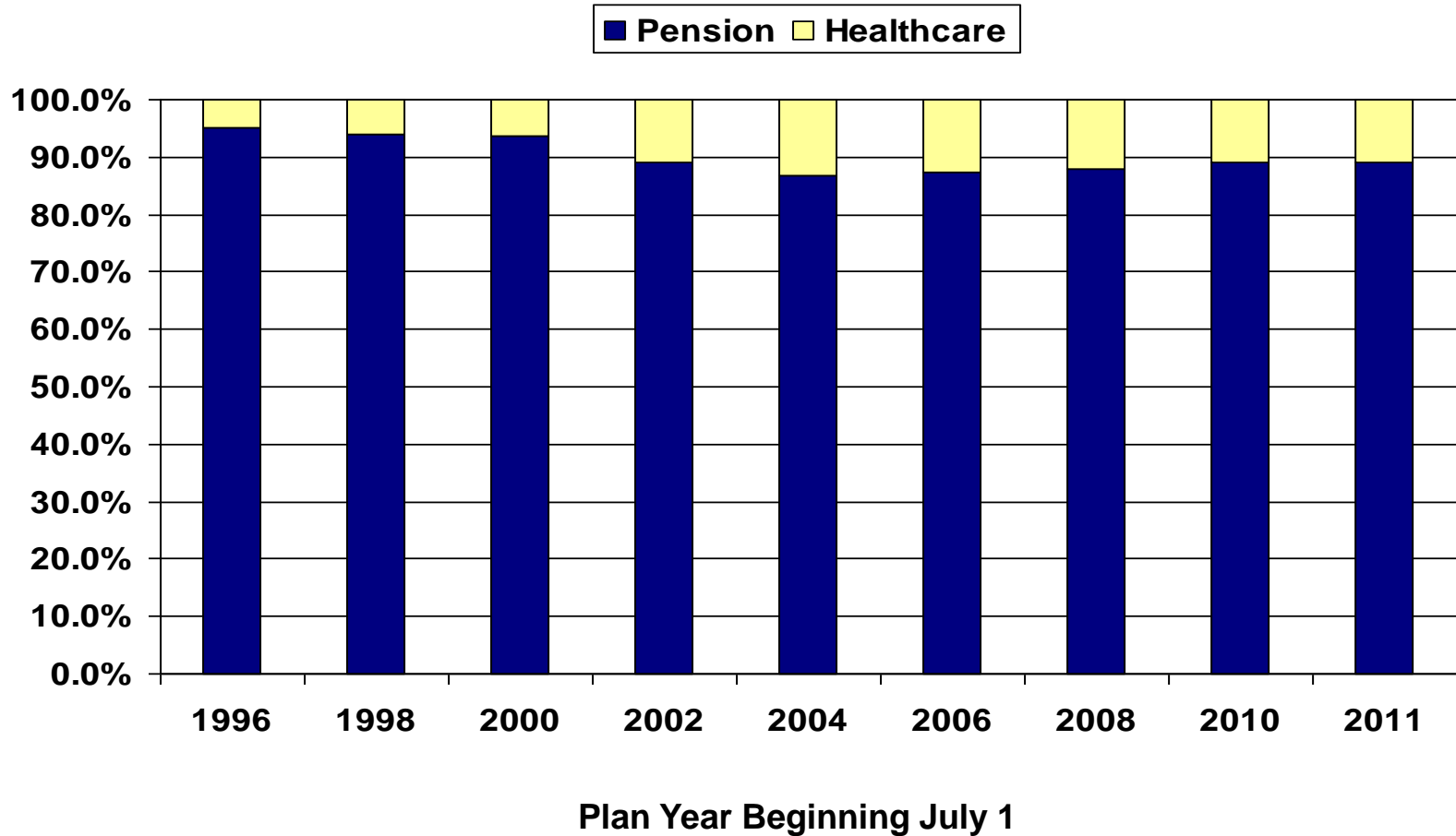
Pension and Postemployment Healthcare

Total System Assets (\$ in thousands)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$142,678	\$138,391
Contributions	5,179	5,079
Disbursements, Net of Medicare Part D Subsidy	(9,310)	(9,928)
Expected Return on Fair Value	8,511	8,835
2. Expected Actuarial Value (EOY)	\$147,058	\$142,377
3. 5-year Smoothing	(8,667)	(5,831)
4. Preliminary Actuarial Value (EOY)	\$138,391	\$136,546
5. Future Smoothing Amount	(25,574)	(5,563)
6. Fair Value (EOY)	\$ 112,817	\$ 130,983
7. 120% of Fair Value	\$ 134,694	\$ 157,179
8. 80% of Fair Value	\$ 90,254	\$ 104,786
9. Final Actuarial Value (EOY)	\$ 134,694	\$ 136,546
10. Ratio Fair Value to Actuarial Value	95%	96%

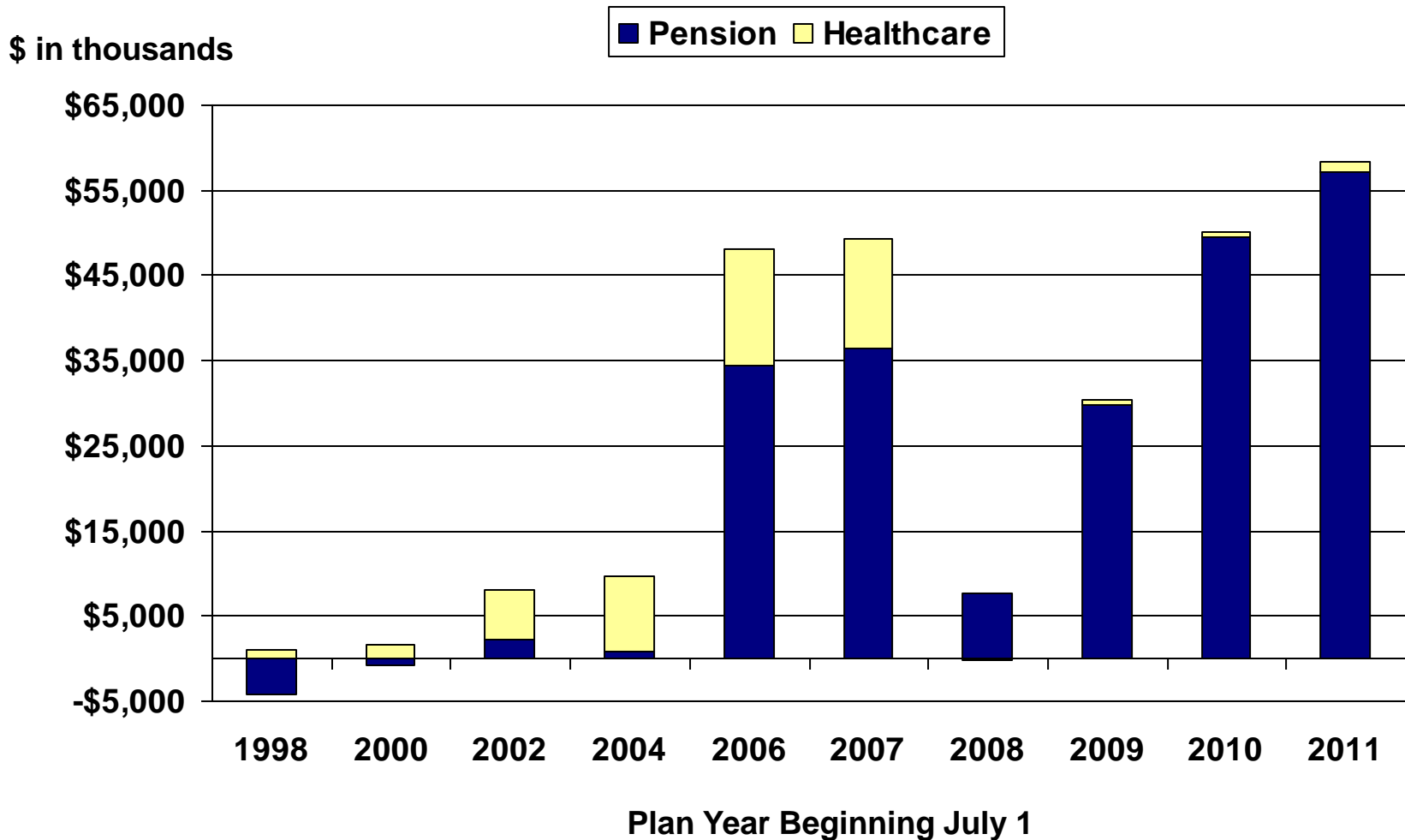
JRS Actuarial Accrued Liability History

Distribution % Between Pension and Healthcare



JRS Unfunded Actuarial Accrued Liability History

Pension and Healthcare

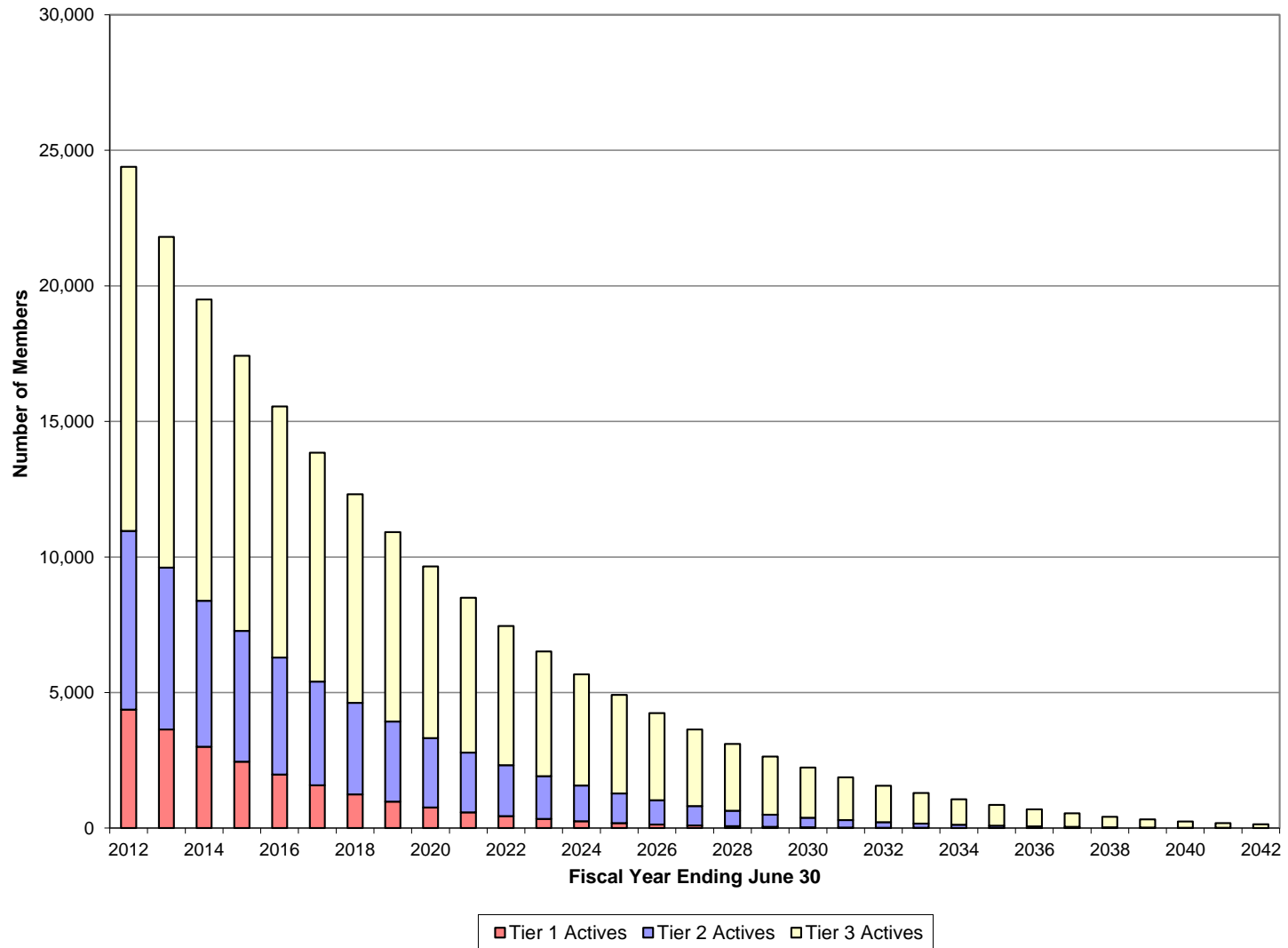


National Guard and Naval Militia Retirement System

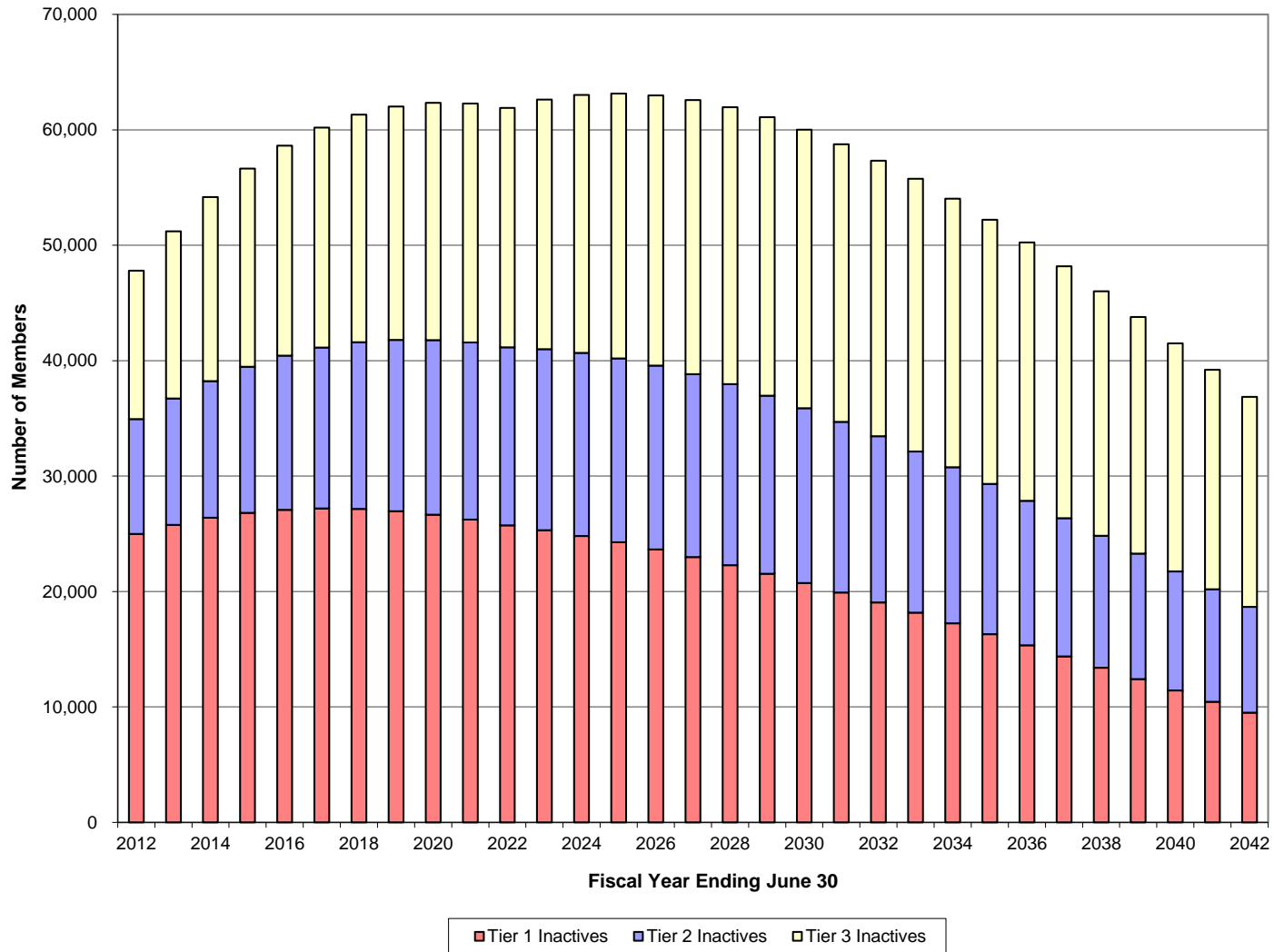
Total System Assets (\$ in thousands)

	Year Ending	
	June 30, 2010	June 30, 2011
1. Preliminary Actuarial Value (BOY)	\$ 30,123	\$ 32,001
Contributions	2,603	965
Disbursements, Net of Medicare Part D Subsidy	(1,647)	(1,411)
Expected Return on Fair Value	1,878	2,045
2. Expected Actuarial Value (EOY)	\$ 32,957	\$ 33,600
3. 5-year Smoothing	(956)	(580)
4. Preliminary Actuarial Value (EOY)	\$ 32,001	\$ 33,020
5. Future Smoothing Amount	(2,569)	(107)
6. Fair Value (EOY)	\$ 29,432	\$ 32,913
7. 120% of Fair Value	\$ 35,318	\$ 39,495
8. 80% of Fair Value	\$ 23,545	\$ 26,330
9. Final Actuarial Value (EOY)	\$ 32,001	\$ 33,020
10. Ratio Fair Value to Actuarial Value	92%	100%

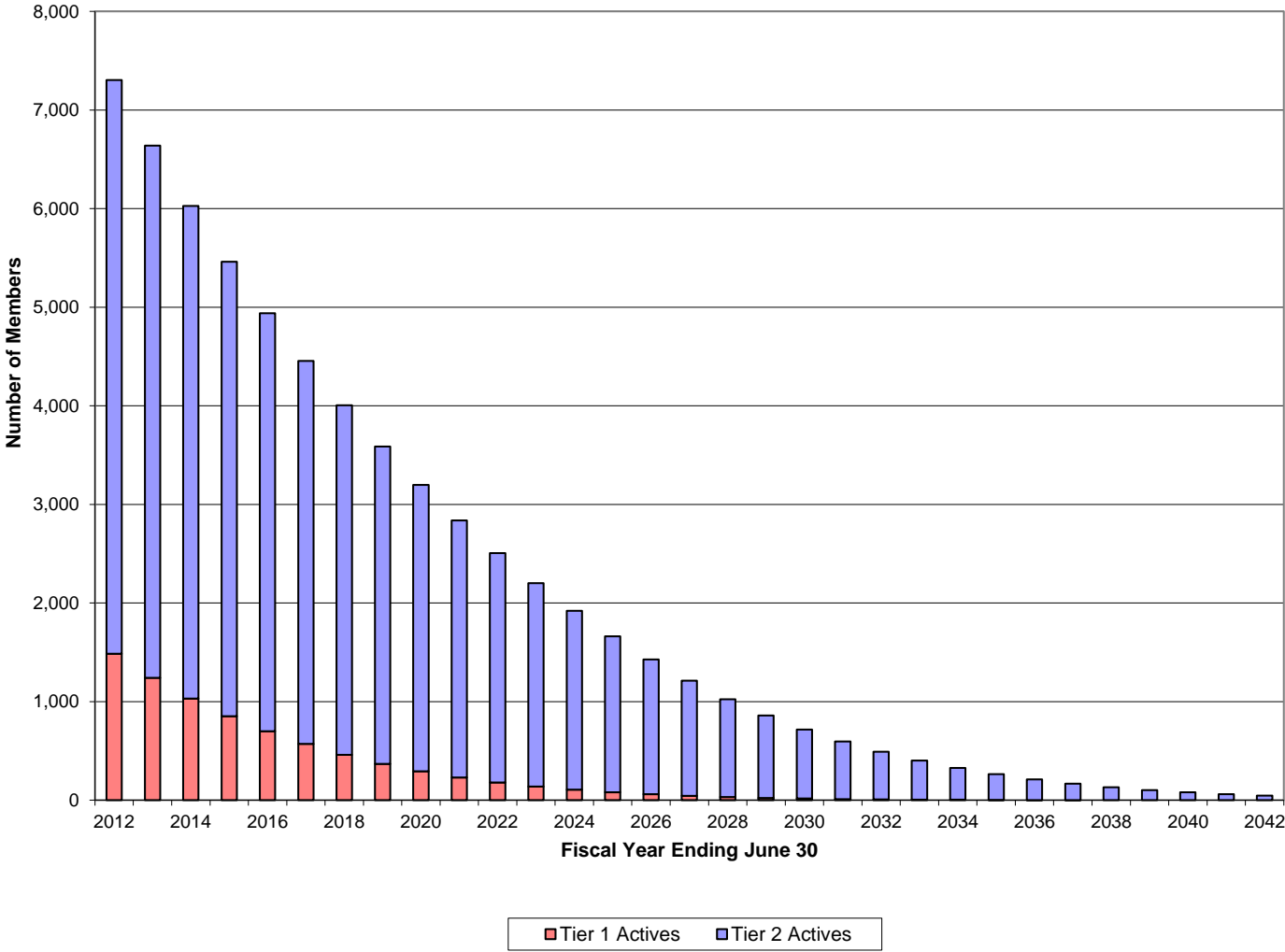
PERS Projected Active Member Count



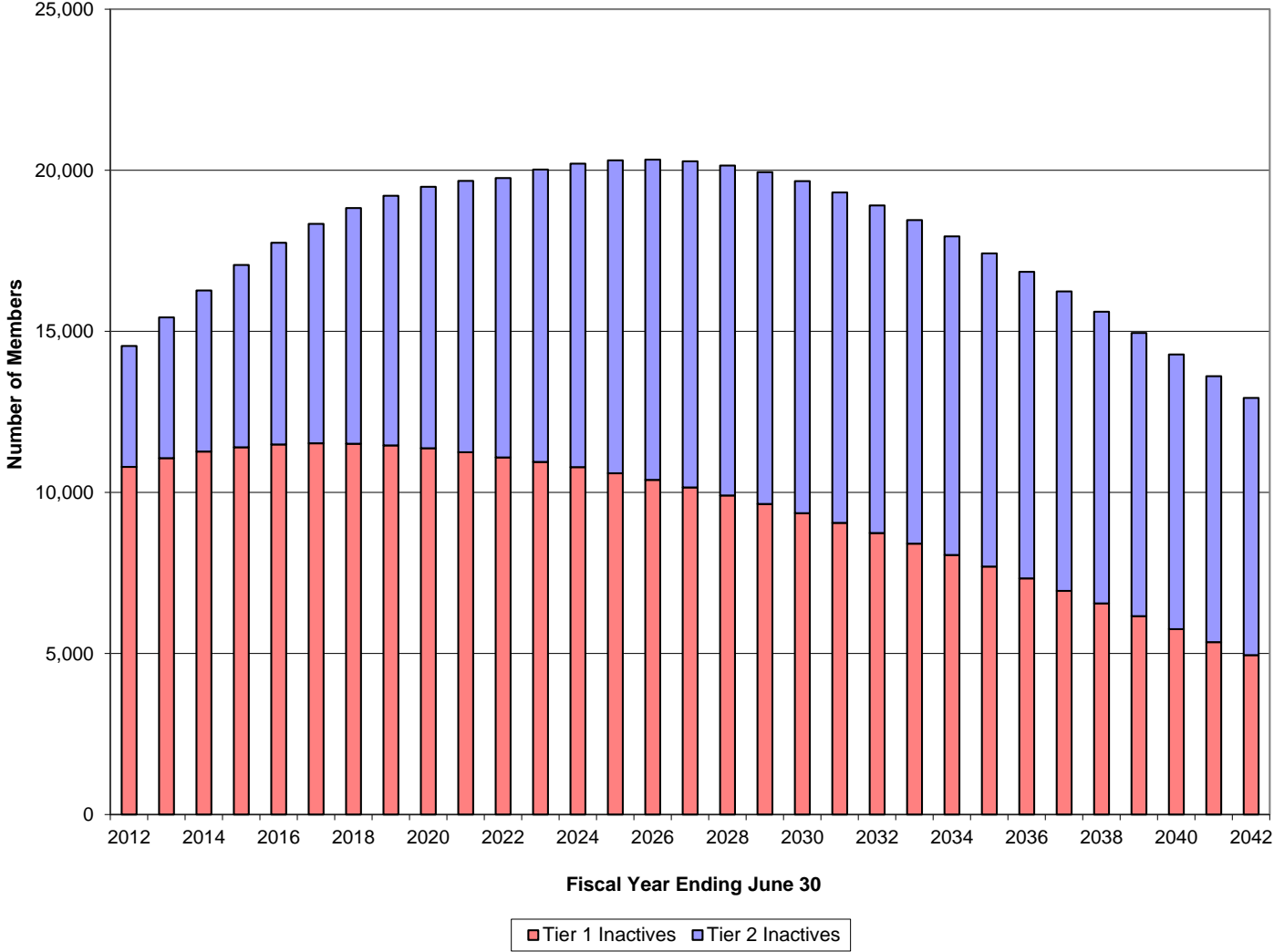
PERS Projected Inactive Member Count



TRS Projected Active Member Count



TRS Projected Inactive Member Count



ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Fiscal Year 2013 Health Reimbursement	ACTION:	
	Arrangement amounts for employers		
DATE:	April 19, 2012	INFORMATION:	X

BACKGROUND:

AS 39.30.350 "Employer Contribution Fund" states that Teachers' and Public Employees' Retiree health reimbursement arrangement plan trust fund is an employer contribution fund. Employee contributions are not permitted.

AS 39.30.360 "Management and Investment of the Fund" states that "The Alaska Retirement Management Board is the fiduciary of the fund and has the same powers and duties under this section in regard to the fund as are provided under AS 37.10.220."

AS 39.30.370 "Contributions by Employers" states that "For each member of the plan, an employer shall contribute to the teachers' and public employees' retiree health reimbursement arrangement plan trust fund an amount equal to three percent of the average annual compensation of all employees of all employers in the TRS and PERS." The Division of Retirement & Benefits calculates the HRA amount annually and reports this to all affected employers for proper payroll reporting each fiscal year.

STATUS:

Attached is the memorandum from the Division of Retirement & Benefits for Fiscal Year 2013's Health Reimbursement Arrangement employer contribution per pay period. The amounts have been reported to employers.

Also attached is a summary spreadsheet for fiscal years 2008 - 2013.

MEMORANDUM

STATE OF ALASKA DEPARTMENT OF ADMINISTRATION Division of Retirement and Benefits

To: Jim Puckett
Director

Date: March 9, 2012

Thru: Teresa Kesey *TK*
Chief Financial Officer

From: Christina Maiquis *CM*
Accounting Supervisor

Subject: FY 2013 HRA Employer
Contribution Amounts

Alaska Statute 39.30.370 "Contributions by Employers" relates to the employer contributions required to fund the Health Reimbursement Arrangement (HRA) Plan for Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) Defined Contribution Retirement (DCR) Plan members. The statute states in part:

For each member of the plan, an employer shall contribute to the teachers' (TRS) and public employees' (PERS) retiree health reimbursement arrangement plan trust fund an amount equal to three percent of the average annual compensation of all employees of all employers in the teachers' retirement system and public employees' retirement system. The administrator shall maintain a record for each member to account for employer contributions on behalf of that member.

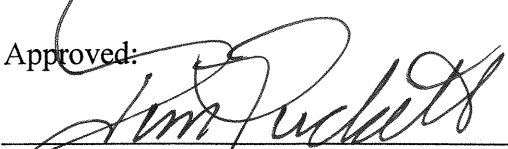
In order to compute the dollar amount required to fund the PERS and TRS HRA Plan, a rate of 3.00% is applied to the average annual compensation of all employees of all employers in PERS and TRS. Contributions to a DCR members HRA account are required each pay period in which the employee is enrolled in the Defined Contribution Retirement (DCR) Plan, regardless of the compensation paid during the calendar year. By definition, the HRA employer contribution is a dollar amount.

The Fiscal Year 2013 HRA employer contribution amounts are shown below:

FY 2013 HRA Amounts					
Annual	Quarterly	Semi-monthly	Bi-weekly	Monthly	Hourly
\$1,848.43	\$462.11	\$77.02	\$71.09	\$154.04	\$1.18

The attached document shows a comparative of HRA rates since Fiscal Year 2008.

Approved:


Jim Puckett, Director

3/14/12
Date

Attachment

**Division of Retirement & Benefits
 Health Reimbursement Arrangement (HRA)
 Employer contribution amounts by fiscal year**

<u>Fiscal Year</u>	<u>Annual</u>	<u>Quarterly</u>	<u>Semi-monthly</u>	<u>Bi-weekly</u>	<u>Monthly</u>	<u>Hourly</u>
2008	1,531.27	382.82	63.80	58.89	127.61	0.98
2009	1,616.81	404.20	67.37	62.18	134.73	1.04
2010	1,699.71	424.93	70.82	65.37	141.64	1.09
2011	1,720.70	430.17	71.70	66.18	143.39	1.10
2012	1,778.09	444.52	74.09	68.39	148.17	1.14
2013	1,848.43	462.11	77.02	71.09	154.04	1.18

NOTE: For fiscal year 2007, HRA amounts were computed by employer rather than the HRA as a plan. Beginning fiscal year 2008, HRA amounts were computed and applied uniformly to all members and are reflected above.

Lazard Asset Management

Mandate: Global Equity

Hired: 1993

Firm Information	Investment Approach	Total ARMB Mandate & Fees																						
<p>Lazard Asset Management is a subsidiary of Lazard Freres & Co., a limited liability company.</p> <p>As of 12/31/11, the firm's total assets under management were approximately \$122 billion.</p> <p>Lazard's business strategy is to focus on delivering strong investment performance and superior client service. The overall objective is to continue globalizing business by product and client type to expand the client base in a controlled manner. Lazard is prepared to close products to new business if there is a conflict between new clients and the acquisition of new business.</p> <p>Key Executives Global Equity Team: John Reinsberg, Deputy Chairman Michael Bennett, Portfolio Manager/Analyst Michael Fry, Managing Director/PM/Analyst Andrew Lacey, PM/Analyst Ron Temple, Managing Director, PM/Analyst James Donald, Managing Director PM/Analyst Anthony Dote, Marketing Representative</p>	<p>Investment decisions are made by the portfolio management team; the members of the team are responsible for the purchase and sale of all securities in the portfolio as well as the risk monitoring process to ensure that the portfolio is adequately diversified.</p> <p>Research analysts meet with members of the portfolio management team to present and discuss investment recommendations. The strategy seeks to identify companies that are attractively priced (e.g. low price/earnings, price/book and price/cash flow) relative to their financial returns. The portfolio typically holds 140-150 securities.</p> <p>The strategy seeks to generate strong relative returns over a long-term time horizon and also to outperform the MSCI AC World Index by 200-300 basis points over a full market cycle by investing in companies with strong financial productivity at attractive valuations.</p> <p>In the past year, there were no changes to the portfolio management team.</p> <p>Benchmark: MSCI AC World Index</p>	<p>Assets Managed:</p> <table> <tr> <td>12/31/10</td> <td style="text-align: right;">\$777,221,752</td> </tr> <tr> <td>12/31/11</td> <td style="text-align: right;">\$618,869,181</td> </tr> </table> <p>Fee Schedule:</p> <table> <tr> <td>First \$200 million:</td> <td style="text-align: right;">0.50%</td> </tr> <tr> <td>Next \$100 million:</td> <td style="text-align: right;">0.45%</td> </tr> <tr> <td>Next \$100 million:</td> <td style="text-align: right;">0.40%</td> </tr> <tr> <td>Next \$100 million:</td> <td style="text-align: right;">0.35%</td> </tr> <tr> <td>Next \$100 million:</td> <td style="text-align: right;">0.30%</td> </tr> <tr> <td>Next \$100 million:</td> <td style="text-align: right;">0.25%</td> </tr> <tr> <td>Next \$300 million:</td> <td style="text-align: right;">0.20%</td> </tr> <tr> <td>Next \$250 million:</td> <td style="text-align: right;">0.15%</td> </tr> <tr> <td>Balance of Acct.:</td> <td style="text-align: right;">0.125%</td> </tr> </table>	12/31/10	\$777,221,752	12/31/11	\$618,869,181	First \$200 million:	0.50%	Next \$100 million:	0.45%	Next \$100 million:	0.40%	Next \$100 million:	0.35%	Next \$100 million:	0.30%	Next \$100 million:	0.25%	Next \$300 million:	0.20%	Next \$250 million:	0.15%	Balance of Acct.:	0.125%
12/31/10	\$777,221,752																							
12/31/11	\$618,869,181																							
First \$200 million:	0.50%																							
Next \$100 million:	0.45%																							
Next \$100 million:	0.40%																							
Next \$100 million:	0.35%																							
Next \$100 million:	0.30%																							
Next \$100 million:	0.25%																							
Next \$300 million:	0.20%																							
Next \$250 million:	0.15%																							
Balance of Acct.:	0.125%																							

Concerns: None.

12/31/2011 Performance (gross of fees)

	<u>Last Quarter</u>	<u>1 Year</u>	<u>3 Years Annualized</u>	<u>5 Years Annualized</u>	<u>7 Years Annualized</u>	<u>Last 18-1/2 Years Annualized</u>
Lazard	8.28%	-5.18%	10.83%	-1.01%	3.49%	7.05%
Benchmark	7.59%	-5.54%	11.13%	-2.37%	2.22%	5.80%

Lazard Asset Management

Mandate: Emerging Markets

Hired: 2008

Firm Information	Investment Approach	Total ARMB Mandate & Fees				
<p>Lazard Asset Management is a subsidiary of Lazard Freres & Co., a limited liability company.</p> <p>As of 12/31/11, the firm's total assets under management were approximately \$122 billion.</p> <p>Lazard's business strategy is to focus on delivering strong investment performance and superior client service. The overall objective is to continue globalizing business by product and client type to expand the client base in a controlled manner. Lazard is prepared to close products to new business if there is a conflict between new clients and the acquisition of new business.</p> <p>Key Executives Emerging Markets Team: John Reinsberg, Deputy Chairman James Donald, Managing Director PM/Analyst Rohit Chopra, Director, PM/Analyst Eric McKee, Director, PM/Analyst Anthony Dote, Marketing Representative</p>	<p>Investment decisions are made by the portfolio management team; the members of the team are responsible for the purchase and sale of all securities in the portfolio.</p> <p>Research analysts meet with members of the portfolio management team to present and discuss investment recommendations.</p> <p>The strategy seeks to outperform the MSCI Emerging Markets Index by 3.0% per annum over a market cycle with lower than index levels of volatility. Lazard's investment philosophy focuses on adding value through bottom-up security selection. The relative value investing style aims to outperform the index over a cycle while managing volatility. Tracking error does not play a major role in the investment process, however, Lazard's Global Asset Risk Management team along with the portfolio management team monitors relative sector and country weights and trends in tracking error. The strategy typically holds 70-90 securities.</p> <p>In the past year, there were no changes to the portfolio management team.</p> <p>Benchmark: MSCI Emerging Market Index</p>	<p>Assets Managed:</p> <table> <tr> <td>12/31/10</td> <td>\$305,671,153</td> </tr> <tr> <td>12/31/11</td> <td>\$290,392,425</td> </tr> </table> <p>Fee Schedule:</p> <p>0.65% of assets</p>	12/31/10	\$305,671,153	12/31/11	\$290,392,425
12/31/10	\$305,671,153					
12/31/11	\$290,392,425					

Concerns: None.

12/31/2011 Performance (gross of fees)

	<u>Last Quarter</u>	<u>1 Year</u>	<u>3 Years Annualized</u>	<u>Last 4 Years Annualized</u>
Lazard	3.89%	-17.74%	19.92%	-3.41%
Benchmark	4.45%	-18.17%	20.42%	-4.91%

Lazard Asset Management

Mandate: Emerging Income

Hired: 2008

Firm Information	Investment Approach	Total ARMB Mandate & Fees				
<p>Lazard Asset Management is a subsidiary of Lazard Freres & Co., a limited liability company.</p> <p>As of 12/31/11, the firm's total assets under management were approximately \$122 billion.</p> <p>The Lazard Emerging Income team manages three commingled vehicles, various separate accounts, and other funds.</p> <p>Key Executives Emerging Income Team: John Reinsberg, Deputy Chairman Ardra Belitz, Managing Director PM/Analyst Ganesh Ramachandran, Director, PM/Analyst Aristotel Kondili, Vice President /Portfolio Analyst Andrew Raab, Portfolio Analyst Anthony Dote, Marketing Representative</p>	<p>The Lazard Emerging Income portfolio (LEI) management team has full discretion to make decisions for the portfolio. Members of the LEI team are responsible for the purchase and sale of all securities as well as the risk monitoring process to ensure that the portfolio is adequately diversified.</p> <p>Co-Portfolio Managers/Analysts Ardra Belitz and Ganesh Ramachandran are responsible for investment strategy, asset allocation, country selection and portfolio construction, with input from the team.</p> <p>The investment process begins with an active research effort resulting in the creation and monitoring of an evolving 50+ country universe. A country's inclusion into the universe is based on whether or not a foreign investor is able to continually access that market with two-way liquidity (entry and exit at will).</p> <p>In the past year, there were no changes to the portfolio management team.</p> <p>Benchmark: 3-month LIBOR</p>	<p>Assets Managed:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">12/31/10</td> <td style="text-align: right;">\$125,716,245</td> </tr> <tr> <td>12/31/11</td> <td style="text-align: right;">\$122,176,607</td> </tr> </table> <p>Fee Schedule:</p> <p>Management Fee: 1% per annum, with 0.12% reinvestment rebate</p> <p>Incentive Fee: 15% net appreciation exceeding average month-end non-reserve adjusted 3-month LIBOR</p>	12/31/10	\$125,716,245	12/31/11	\$122,176,607
12/31/10	\$125,716,245					
12/31/11	\$122,176,607					

Concerns: None.

12/31/2011 Performance (gross of fees)

	<u>Last Quarter</u>	<u>1 Year</u>	<u>3 Years</u> <u>Annualized</u>	<u>Last 3-1/4 Years</u> <u>Annualized</u>
Lazard	-4.30%	-2.82%	3.65%	1.10%
Benchmark	0.11%	0.33%	0.49%	0.69%

Alaska Retirement Management Board

Lazard Global Equity Review

April 20, 2012

John Reinsberg
Deputy Chairman

Tony Dote
Managing Director

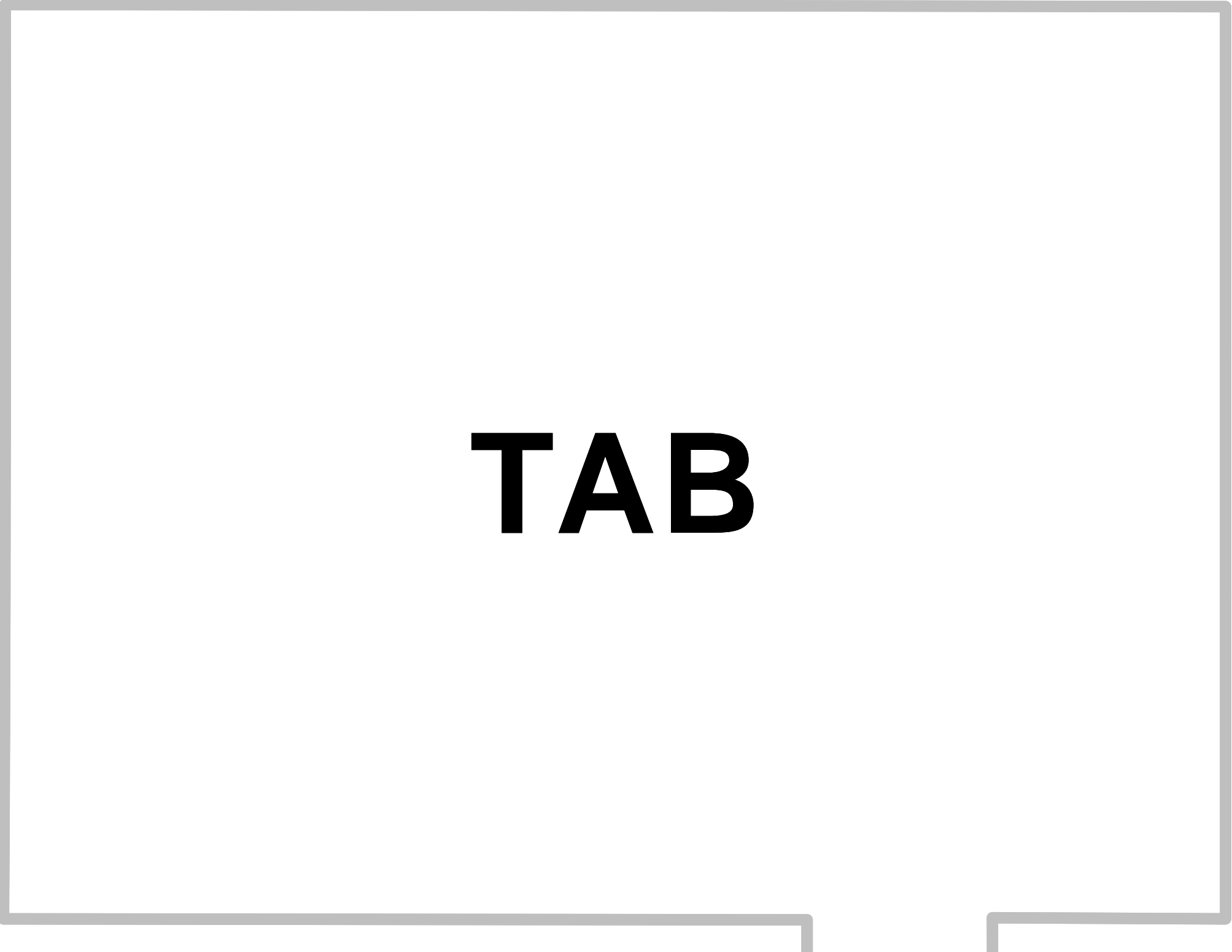
This presentation and all research and materials enclosed are property of Lazard Asset Management LLC. © 2012 Lazard Asset Management LLC

Information and opinions presented have been obtained or derived from sources believed by Lazard to be reliable. Lazard makes no representation as to their accuracy or completeness. All opinions expressed herein are as of the date of this presentation and are subject to change.

Equity securities will fluctuate in price; the value of your investment will thus fluctuate, and this may result in a loss. Securities in certain non-domestic countries may be less liquid, more volatile, and less subject to governmental supervision than in one's home market. The values of these securities may be affected by changes in currency rates, application of a country's specific tax laws, changes in government administration, and economic and monetary policy. Emerging market securities carry special risks, such as less developed or less efficient trading markets, a lack of company information, and differing auditing and legal standards. The securities markets of emerging market countries can be extremely volatile; performance can also be influenced by political, social, and economic factors affecting companies in emerging market countries.

Table of Contents

- A. Organizational Overview
- B. Market and Performance Review
- C. Holdings and Characteristics
- D. Market Environment and Outlook
- E. Lazard Emerging Markets Equity Portfolio
- F. Lazard U.S. Small-Mid Cap Equity Portfolio
- G. Appendix

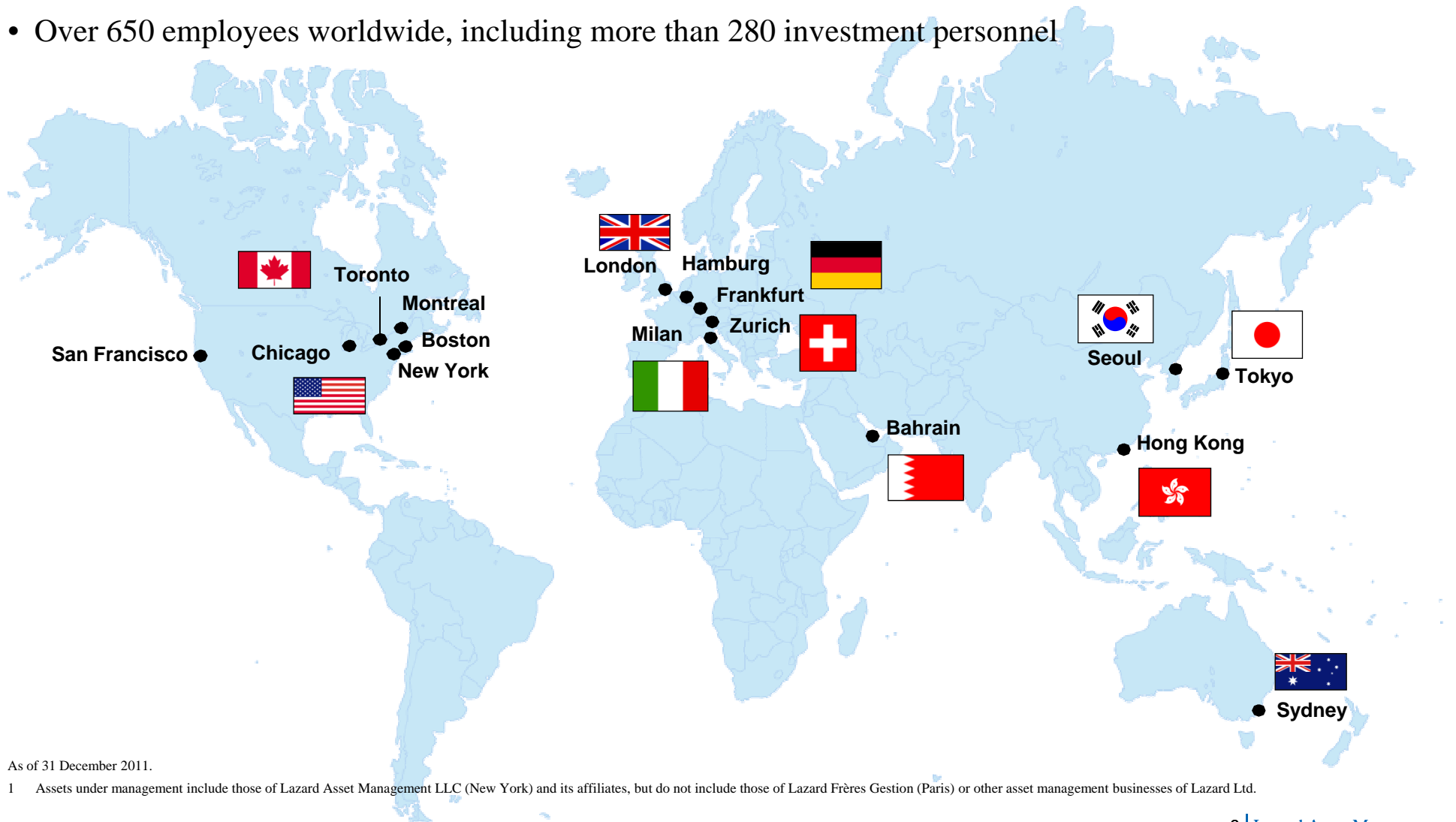


TAB

Lazard Asset Management

Lazard's global perspective: offices spanning the world and a history of investing prudently wherever the firm finds value.

- Company history dating back to 1848
- \$127.0 billion in assets under management¹
- Over 650 employees worldwide, including more than 280 investment personnel



As of 31 December 2011.

¹ Assets under management include those of Lazard Asset Management LLC (New York) and its affiliates, but do not include those of Lazard Frères Gestion (Paris) or other asset management businesses of Lazard Ltd.

Lazard's Investment Organization

Ashish Bhutani
Chief Executive Officer, LAM LLC

Charles Carroll
Deputy Chairman
Global Marketing

Andrew Lacey
Deputy Chairman
U.S./Global Strategies

John Reinsberg
Deputy Chairman
International/Global Strategies

Oversight Committee

Management body for the investment platform that provides:

- Oversight for investment processes and products
- Reporting line for investment professionals




Investment Council

Discussion forum for matters related to:

- Research analyst and portfolio management team interaction
- Resource allocation and staffing




Lazard International Equity Platform Management

		Joined Lazard	Years Investment Experience
	Michael Bennett Managing Director, Portfolio Manager/Analyst	1992	24
	James Donald, CFA Managing Director, Portfolio Manager/Analyst	1996	26
	Michael G. Fry Managing Director, Portfolio Manager/Analyst	2005	30
	Robin O. Jones Director, Portfolio Manager/Analyst	2002	10
	Mark Little Managing Director, Portfolio Manager/Analyst	1997	19

		Joined Lazard	Years Investment Experience
	Kevin J. Matthews, CFA Director, Portfolio Manager/Analyst	2001	10
	Brian Pessin, CFA Managing Director, Portfolio Manager/Analyst	1999	17
	Michael Powers Managing Director, Portfolio Manager/Analyst	1990	21
	John Reinsberg Deputy Chairman, International and Global Strategies	1992	30

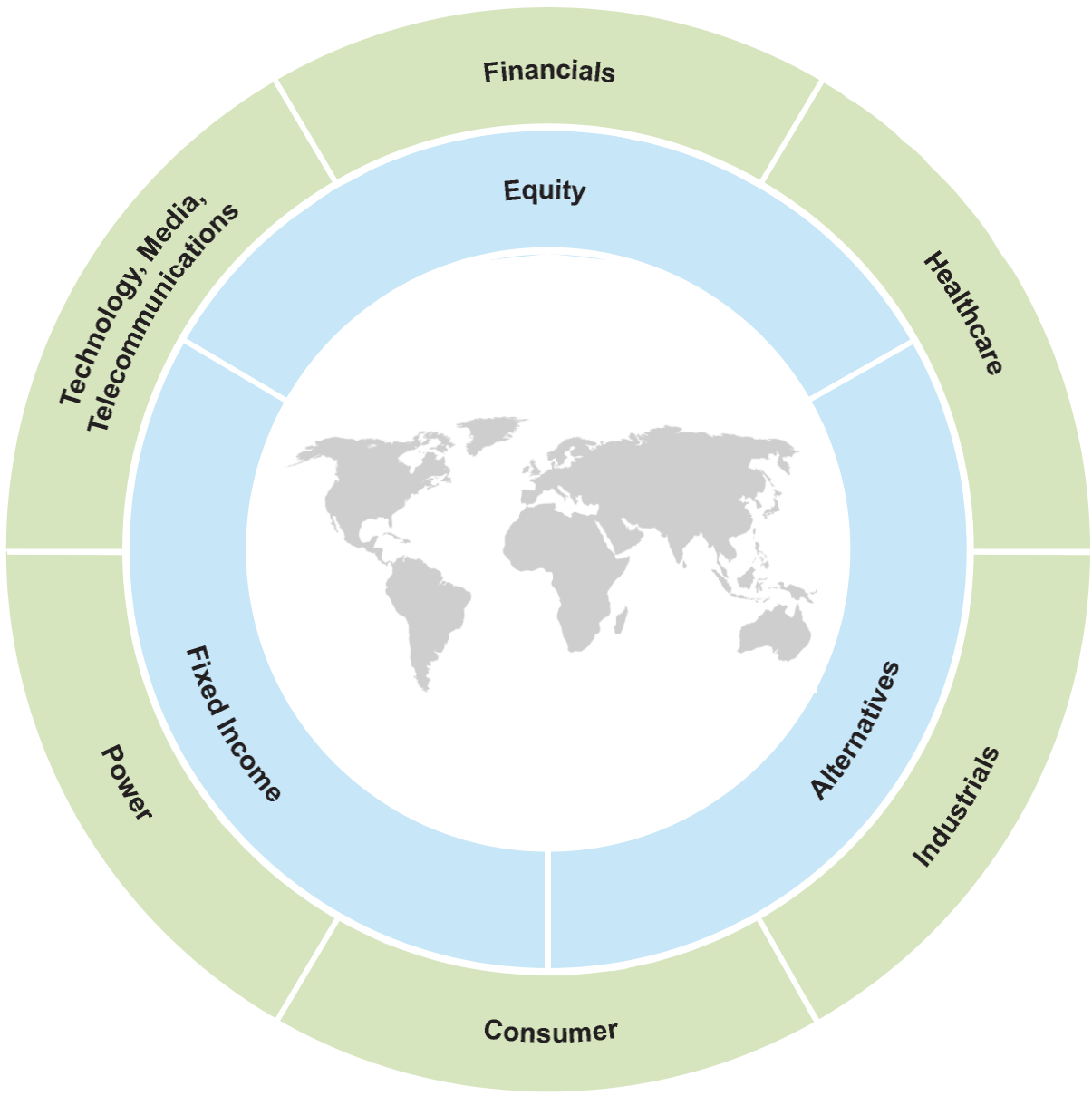
Lazard U.S. Equity Platform Management

		Joined Lazard	Years Investment Experience
	Andrew Lacey Deputy Chairman, U.S. and Global Strategies	1995	16
	Christopher Blake Managing Director, Portfolio Manager/Analyst	1995	16
	Daniel Breslin Director, Portfolio Manager/Analyst	2002	19

		Joined Lazard	Years Investment Experience
	Robert A. Failla, CFA Managing Director, Portfolio Manager/Analyst	2003	18
	Martin Flood Director, Portfolio Manager/Analyst	1996	18
	Ronald Temple, CFA Managing Director, Portfolio Manager/Analyst	2001	20

Integrated Knowledge on a Global Scale

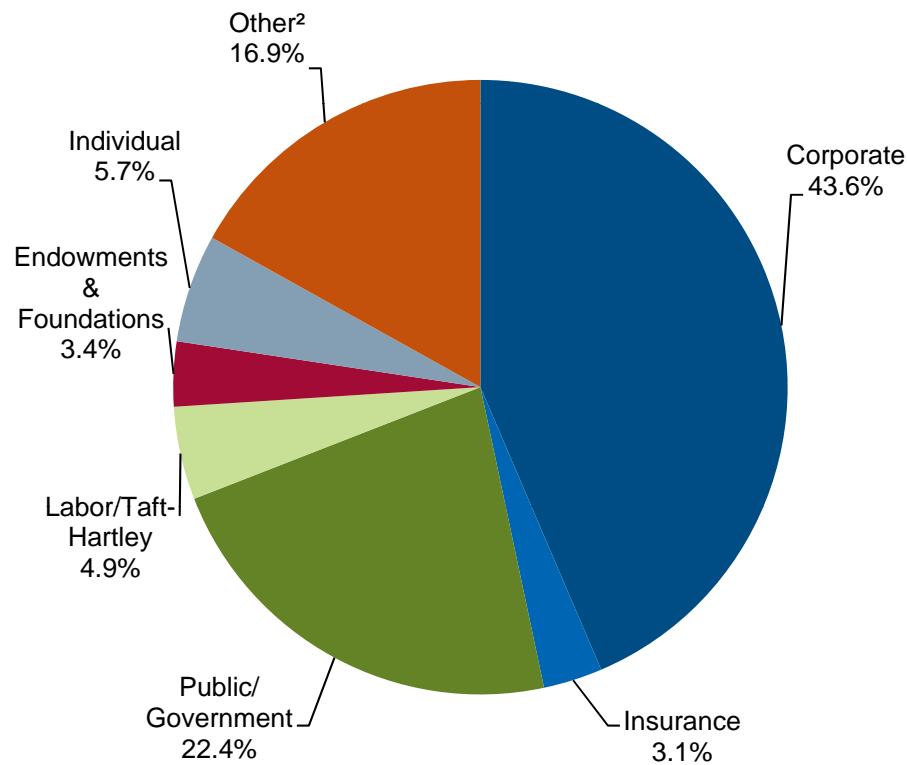
Local Focus, Global Leverage



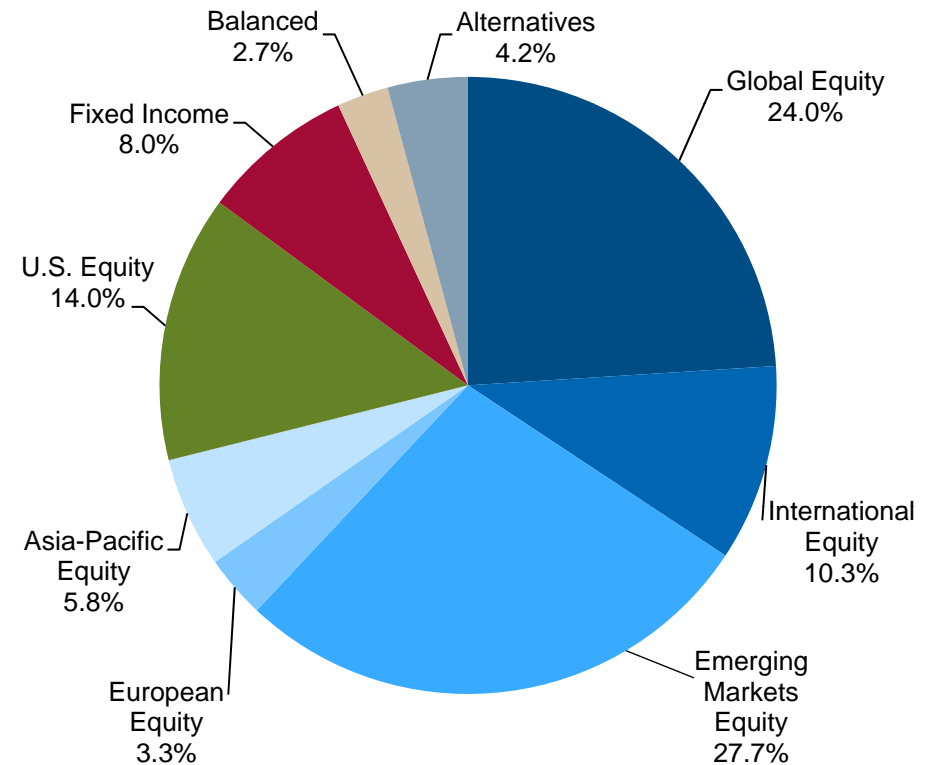
Assets Under Management

Total Firm Assets Under Management¹:
US\$127.0 billion

By Client Type



By Investment Mandate



¹ As of 31 December 2011. Assets under management include those of Lazard Asset Management LLC (New York) and its affiliates, but do not include those of Lazard Frères Gestion (Paris) or other asset management businesses of Lazard Ltd.

² Other represents clients invested in hedge funds, mutual funds, and other investment vehicles for which client type is not reported.

Investment Philosophy, Objectives and Process

Our Investment Philosophy

- Focus on those companies that are financially productive and inexpensively valued
- Add value through stock selection and portfolio management

Our Investment Objectives

- Outperform relevant benchmark over a full market cycle
- Participate in rising markets; preserve capital in falling markets
- Outperform our investment competitors
- Seek consistent results

Our Investment Process



Lazard's investment process for research and portfolio construction is presented here as sequential steps; in practice the process is neither static, nor sequential, but ongoing.

Distinguishing Features

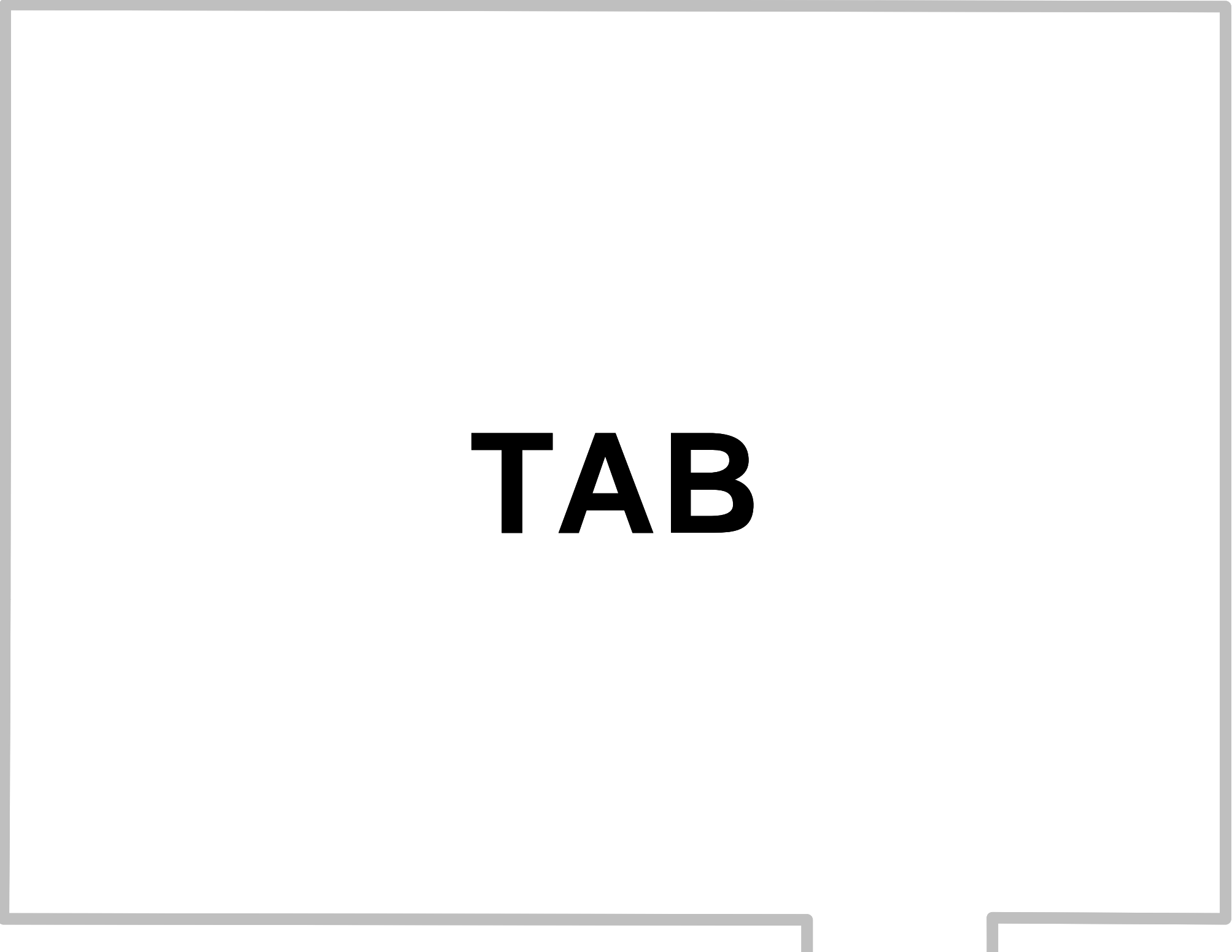
Lazard International Equity Strategies

- Disciplined Investment Approach
 - Stock Driven
 - Relative Value Philosophy
 - Extensive Emerging Markets Capabilities
- Global On-The Ground Research
 - *Local knowledge, global leverage*
 - *Differentiated Insight*
- Accounting Validation
- Historical Consistency of Returns (Upside & Downside)
- Pro-active Client Service

Executive Summary

Alaska Retirement Management Board

	Former	Current (as of 10/1/10)
Benchmark:	MSCI World Index	MSCI ACWI
Emerging Markets Equity		
Allocation Range:	0%-10% of total portfolio	0% to benchmark Plus 10% (current maximum at 23%)
Allocation:	8-9% of total portfolio	15.0%
U.S. SMID Cap Equity		
Allocation Range:	0-15% (Int'l Small Cap)	0-10% of total portfolio (Int'l Small Cap and U.S. SMID Cap)
Allocation:	5%	6.2%
Expected Return:	1-2% over Index	3% over Index
Pattern of Returns:	Defensive in down markets Outpace in flat markets Participate in rising markets	Defensive in down markets Outpace in flat markets Participate in rising markets



TAB

2011 Market Summary

Environment

- Negative world events and economic uncertainty dominated headlines throughout the year
- 3Q took the brunt leading to the worst quarter since 4Q08
- 1Q, 2Q and 4Q were each positive driven by solid company results

Portfolio

- Good stock selection drove solid performance vs. index and peers¹
- Avoided some macro uncertainty by not having large directional bets
- Disciplined in holding both defensive and cyclical relative value stocks

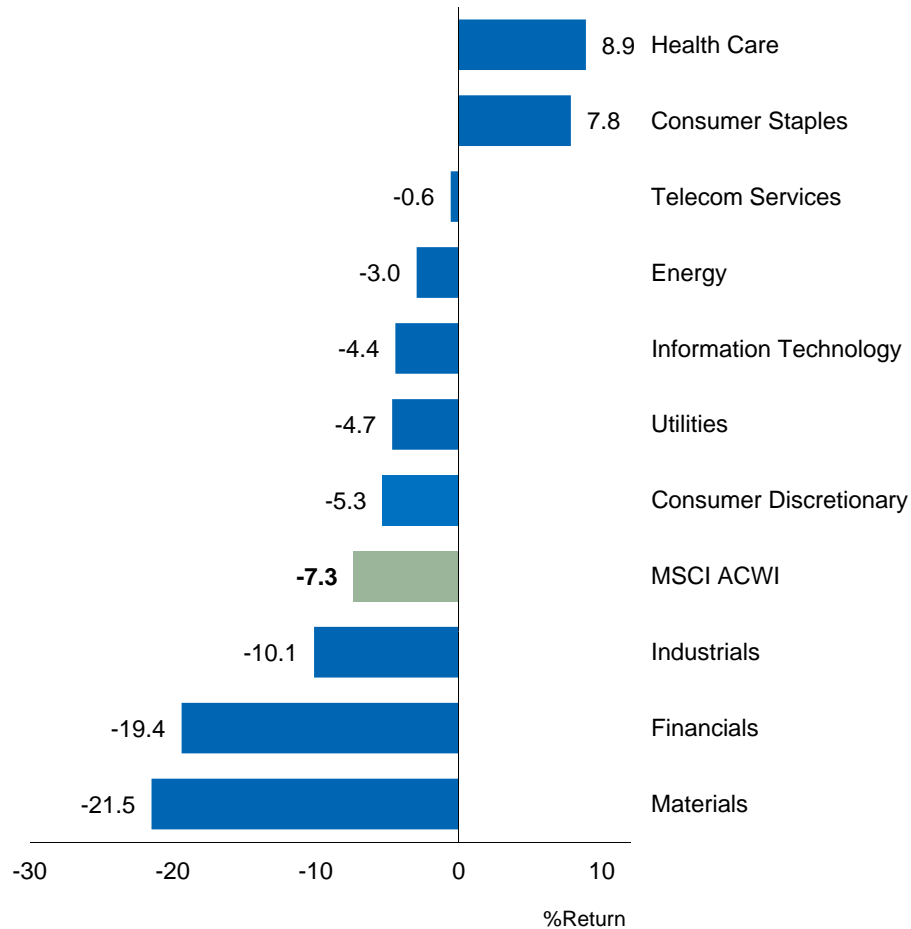
As of 31 December 2011

¹ Peers defined by eVestment Alliance peer universe as of 31 December 2011 data, and reported on 13 March 2012. The All Global Equity Value universe had 738 observations for the 1 year period.

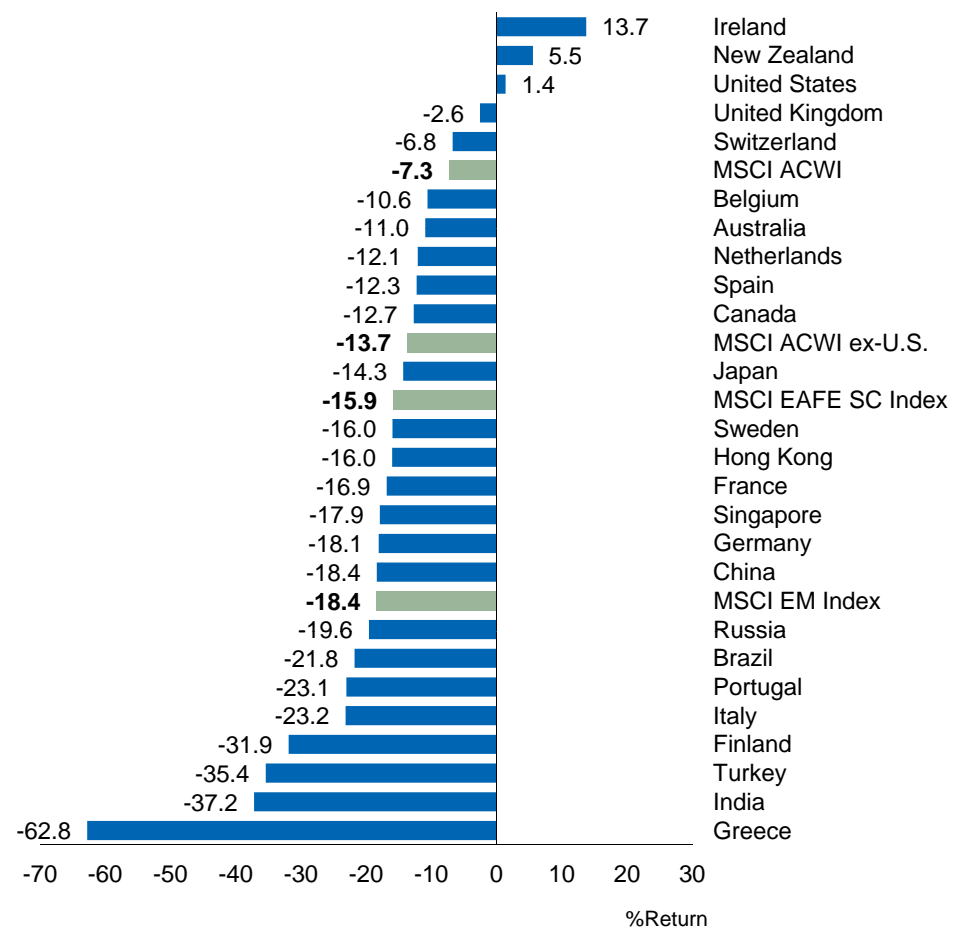
Source: Lazard

Market Performance – 2011

MSCI ACWI Sector Performance



MSCI Country Performance¹



As of 31 December 2011

¹ The performance shown is that of various MSCI country indices, but is not representative of all the countries that make up the MSCI ACWI.

Past performance is not a reliable indicator of future results.

Source: MSCI

Performance Summary

Alaska Retirement Management Board

Performance as of 31 December 2011 (%)

	YTD ² (March/2012)	Annualized					
		2011	Since (10/1/10)	5 Years	7 Years	12 Years	Since Inception (4/20/93)
Total Portfolio	12.7	-4.8	2.1	-0.9	3.6	2.0	7.1
Linked Index ¹	11.9	-7.4	0.6	-2.8	1.9	0.3	5.7
Excess Return (bps)	+80	+260	+150	+190	+170	+170	+140

Portfolio Composition as of 31 March 2012 (\$)

	Market Value	% of Portfolio	% of ACWI
Total International Equities:	\$374,322,543	53.7%	53.8%
International Equity Portfolio	\$265,437,161	38.1%	40.9%
Emerging Markets Equity Portfolio	\$108,885,382	15.6%	12.9%
Total U.S. Equities:	\$305,093,330	43.8%	46.2%
U.S. Equity Portfolio	\$253,231,894	36.3%	
Small-Mid Cap Equity Portfolio	\$51,861,436	7.5%	
Cash & Equivalents:	\$17,770,323	2.5%	
Total Portfolio	\$697,186,196	100.0%	100.0%

As of 31 December 2011. All data shown in USD.

¹ The Benchmark is comprised of the MSCI World Index from 4/20/93-9/30/10 and of the MSCI ACWI thereafter.

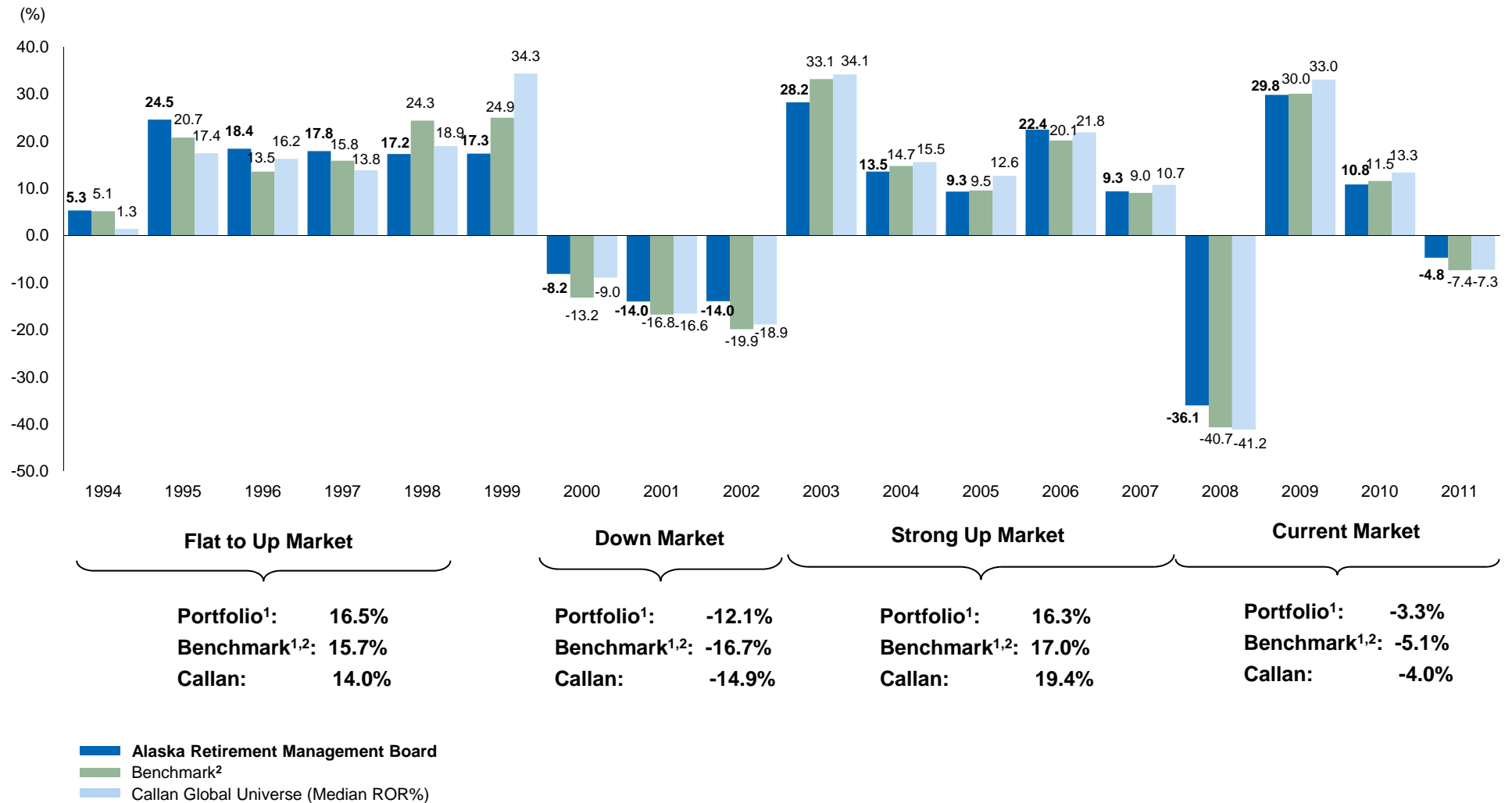
² Performance through 31 March 2012 is preliminary and presented gross of fees.

The performance presented is gross of fees and represents past performance. Past performance is not a reliable indicator of future results.

Pattern of Performance

Alaska Management Retirement Board

Lazard's investment process and style of management has been consistently applied



As of 31 December 2011. All data shown in USD.

¹ Performance shown is annualized.

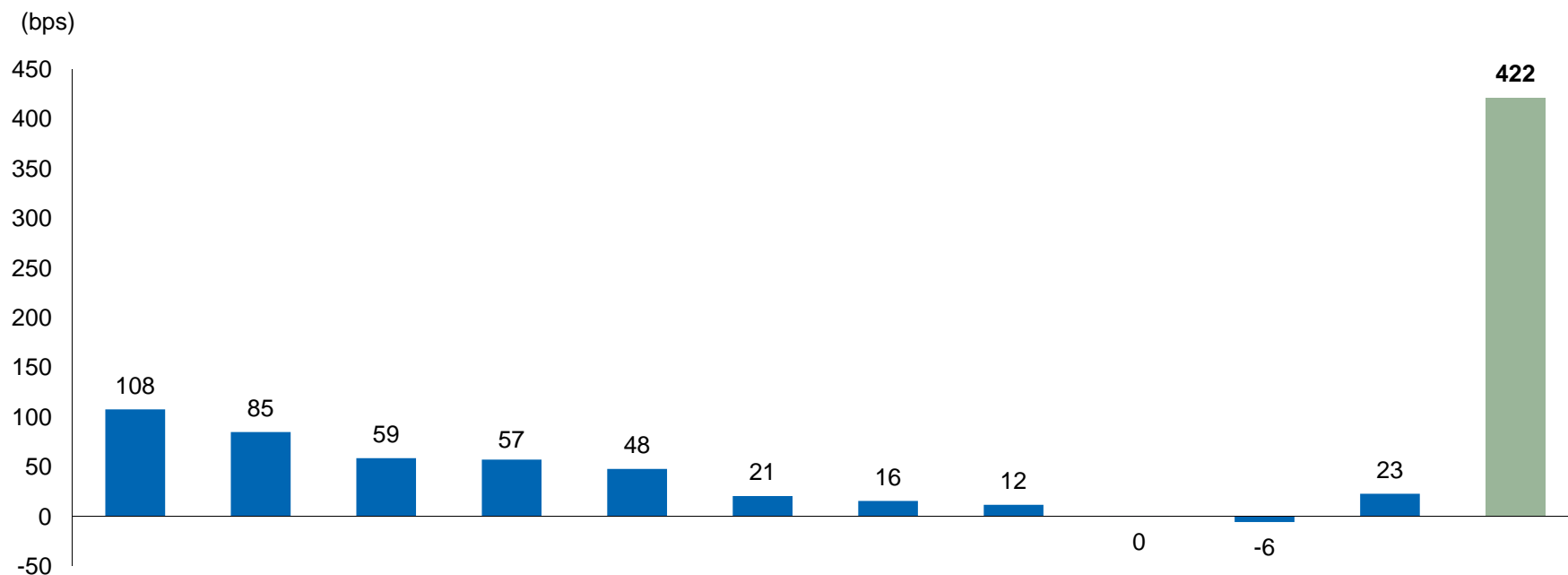
² The Benchmark is comprised of the MSCI World Index from 1/1/94-9/30/10 and of the MSCI ACWI thereafter.

Performance is presented gross of fees. The performance quoted represents past performance. Past performance is not a reliable indicator future results.

Source: Lazard, MSCI

Attribution by Sector – 2011

Alaska Retirement Management Board vs. MSCI World Index



	Financials	Materials	Telecom Services	Health Care	Consumer Staples	Industrials	Energy	Consumer Discretionary	Information Technology	Utilities	Cash	Total
Sector (bps)	18	39	-4	15	13	7	0	-1	11	-8	23	114
Stock (bps)	90	46	63	43	35	14	16	12	-12	2	0	308
Total (bps)	108	85	59	57	48	21	16	12	0	-6	23	422

As of 31 December 2011. Currency: USD

1 Attribution excludes the weights in LAM Mutual Funds which represents a 15.0% allocation in the Lazard Emerging Markets Equity Portfolio and a 6.2% allocation in the Lazard U.S. Small-Mid Cap Equity Portfolio.

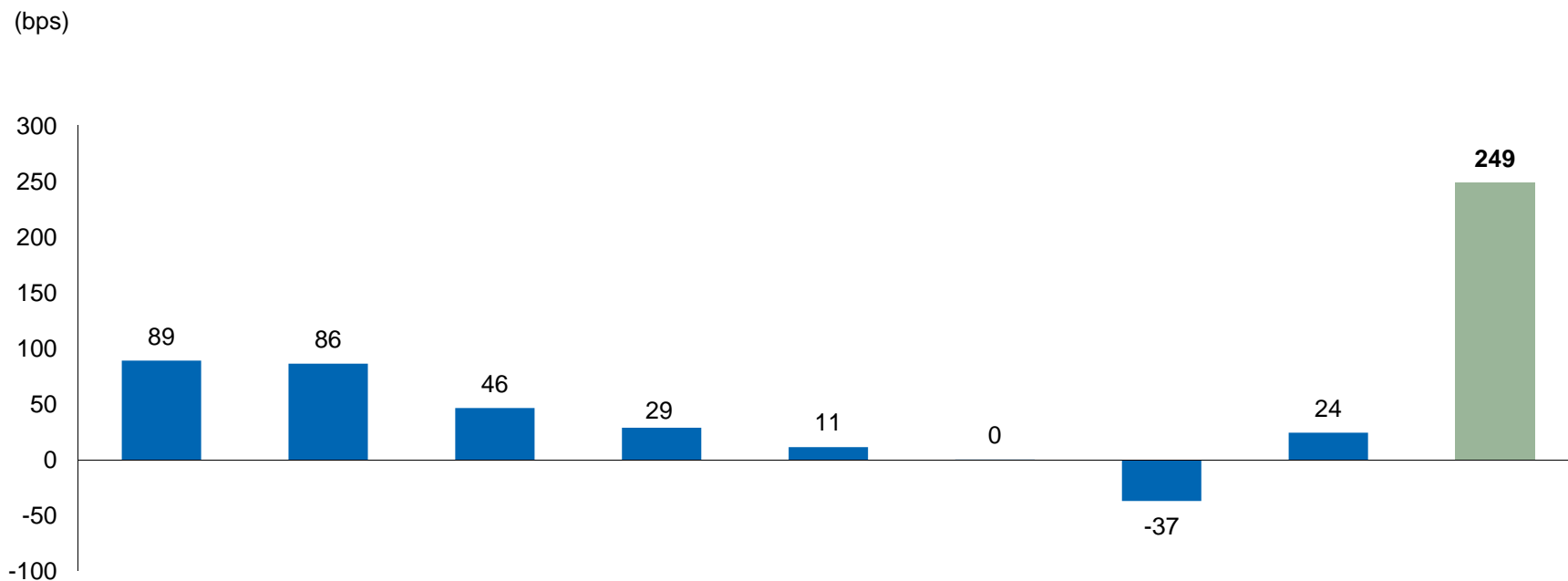
Total attribution reflects rounding. Allocations are subject to change. Attribution analysis is provided for illustrative purposes only, as values are calculated based on returns gross of fees. Performance would be lower if fees and expenses were included.

Past performance is not a reliable indicator of future results.

Source: Lazard, MSCI

Attribution by Region – 2011

Alaska Retirement Management Board vs. MSCI ACWI



	Asia ex-Japan	Continental Europe	United Kingdom	Japan	North America	Middle East	Emerging Markets	Cash	Total
Region (bps)	20	-21	16	-1	-48	2	-39	24	-46
Stock (bps)	69	107	30	30	59	-2	1	0	295
Total (bps)	89	86	46	29	11	0	-37	24	249

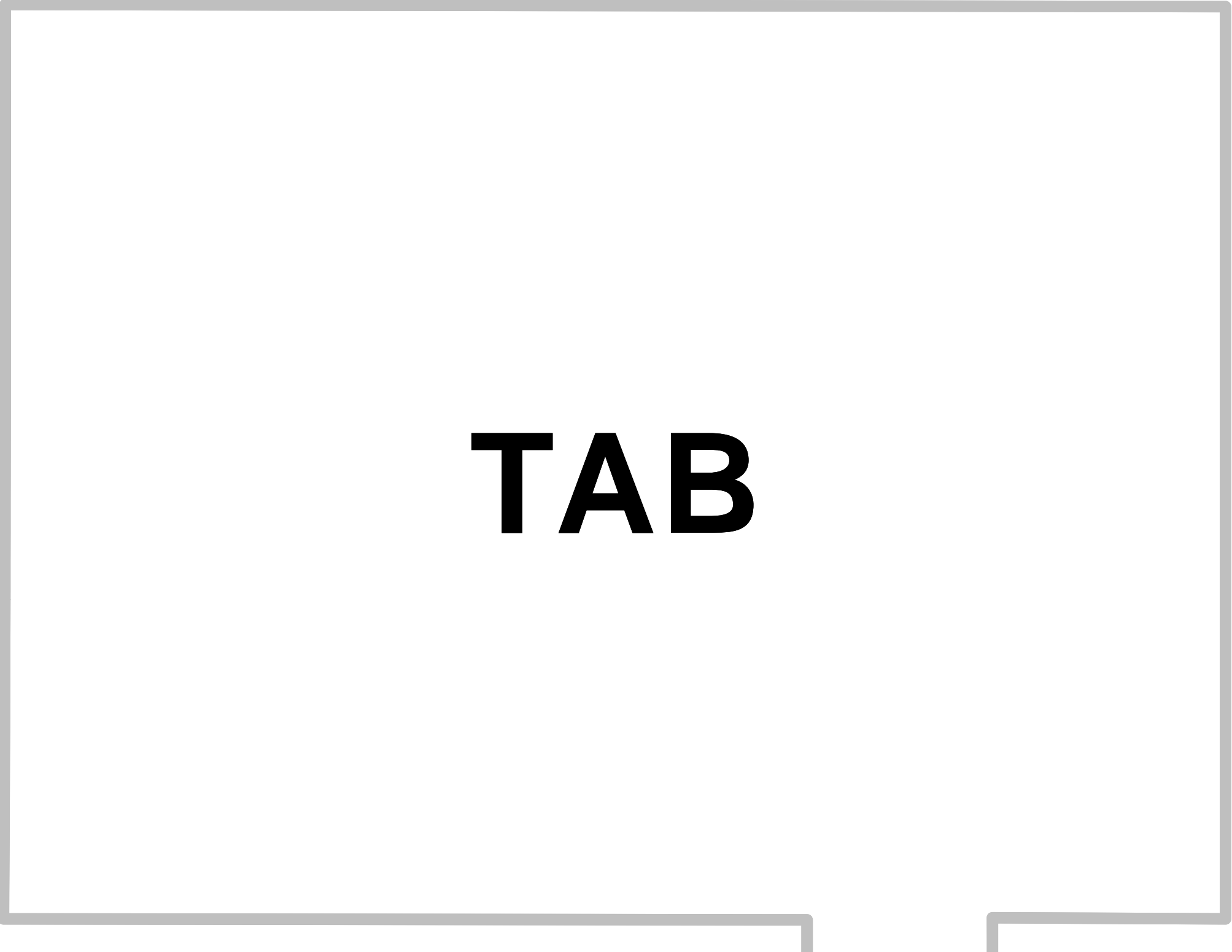
As of 31 December 2011.

Currency: USD

\Total attribution reflects rounding. Allocations are subject to change.

Attribution analysis is provided for illustrative purposes only, as values are calculated based on returns gross of fees. Performance would be lower if fees and expenses were included. Past performance is not a reliable indicator of future results.

Source: Lazard, MSCI



TAB

Holdings by Sector

Alaska Retirement Management Board

	% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI
Consumer			Energy	10.3	11.4	Health Care	11.4	8.9	Information Technology (continued)		
Discretionary	12.5	10.5	BG Group			Amgen			Intel		
Asics			Chevron			Baxter International			International Business Machines		
Autozone			ConocoPhillips			Gilead Sciences			MasterCard		
Bayerische Motoren Werke			Devon Energy			GlaxoSmithKline			Oracle		
British Sky Broadcasting Group			Generale se Geophysique			Merck			Qualcomm		
Comcast Special Cl A			Occidental Petroleum			Merck			SAP		
Don Quijote			Petrofac			Novartis			Texas Instruments		
Honda Motor			Royal Dutch Shell Cl A			Pfizer			Yahoo Japan		
Informa			Schlumberger			Sanofi-Aventis			Materials	6.4	7.9
Lear			Technip			UnitedHealth Group			BHP Billiton		
Lowes Companies			Total			Industrials	12.3	10.5	DuPont		
Macy's			Tullow Oil			A.P. Moller-Maersk Group			Freeport McMoran Copper & Gold Cl B		
Mediaset Espana Comunicacion			Financials	16.6	19.5	Assa Abloy			James Hardie Industries		
Ross Stores			American Express			Atlantia			Monsanto		
Valeo			Ameriprise Financial			Boeing			Mosaic		
Viacom Cl B			AXA			Caterpillar			Potash Corporation of Saskatchewan		
WPP Group			BNP Paribas			Fanuc			Rexam		
Yamada Denki			Capital One Financial			GEA Group			Xstrata		
Consumer Staples	10.4	10.2	Citigroup			General Electric			Telecom Services	2.3	4.4
Anheuser-Busch InBev			Credit Suisse Group			Honeywell International			Rogers Communications Cl B		
British American Tobacco			Daito Trust Construction			JS Group			Telecom New Zealand		
CVS Caremark			ING Groep			Komatsu			Telstra		
Energizer Holdings			JPMorgan Chase			Mitsubishi			Utilities	0.7	3.6
Group Danone			PNC Financial Services Group			Parker Hannifin			International Power		
Ralcorp Holdings			Prudential			Ryanair Holdings (ADR)			Total Portfolio	100.0	100.0
Sysco			QBE Insurance Group			Siemens					
Unilever			Sampo			Union Pacific					
Wal-Mart Stores			Standard Chartered			United Technologies			Lazard Mutual Funds	23.1	0.0
William Morrison Supermarket			Sumitomo Mitsui Financial Group			Information Technology	17.1	13.1	Lazard Emerging Markets		
			Swedbank			Amadeus IT Holding			Equity Portfolio (Instl)	15.6	
			Wells Fargo			Apple			Lazard U.S. Small-Mid Cap		
						Canon			Equity Portfolio (Instl)	7.5	
						Cisco Systems			Cash & Equivalents	2.5	0.0
						EMC					
						Google Cl A					

As of 31 March 2012.

Represents the portfolio allocation excluding the breakdown of the mutual fund positions. Therefore the portfolio weights will vary and may not equal 100%.

Cash is not viewed as a strategic asset class.

Allocations and security selection are subject to change. The information provided in this material should not be considered a recommendation or solicitation to purchase or sell any particular security. There is no assurance that any securities referenced herein will remain in the account's portfolio or that securities sold have not been repurchased. The securities discussed may not represent the account's entire portfolio. It should not be assumed that any of the referenced securities were or will prove to be profitable, or that the investment decisions we make in the future will be profitable.

Source: Lazard, MSCI

Holdings by Country

Alaska Retirement Management Board

	% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI		% of Portfolio	% of MSCI ACWI
Australia	1.9	3.1	Israel	0.0	0.2	United Kingdom	12.2	8.2	United States (continued)		
James Hardie Industries			Italy	0.3	0.8	BG Group			EMC		
QBE Insurance Group			Atlantia			BHP Billiton			Energizer Holdings		
Telstra			Japan	7.1	7.9	British American Tobacco			Freeport McMoran Copper & Gold CI B		
Austria	0.0	0.1	Asics			British Sky Broadcasting Group			General Electric		
Belgium	1.3	0.4	Canon			GlaxoSmithKline			Gilead Sciences		
Anheuser-Busch InBev			Daito Trust Construction			Informa			Google CI A		
Canada	0.8	4.3	Don Quijote			International Power			Honeywell International		
Potash Corporation of Saskatchewan			Fanuc			Petrofac			Intel		
Rogers Communications CI B			Honda Motor			Prudential			International Business Machines		
Denmark	0.4	0.4	JS Group			Rexam			JPMorgan Chase		
A.P. Moller-Maersk Group			Komatsu			Royal Dutch Shell CI A			Lazard U.S. Small-Mid Cap Equity Portfolio (Instl)		
Finland	0.6	0.3	Mitsubishi			Standard Chartered			Lear		
Sampo			Sumitomo Mitsui Financial Group			Tullow Oil			Lowe's Companies		
France	4.7	3.4	Yahoo Japan			Unilever			Macy's		
AXA			Yamada Denki			William Morrison Supermarket			MasterCard		
BNP Paribas			Netherlands	0.6	0.9	WPP Group			Merck		
Generale se Geophysique			ING Groep			Xstrata			Monsanto		
Group Danone			New Zealand	0.3	0.0	United States	43.8	46.2	Mosaic		
Sanofi-Aventis			Telecom New Zealand			American Express			Occidental Petroleum		
Technip			Norway	0.0	0.4	Ameriprise Financial			Oracle		
Total			Portugal	0.0	0.1	Amgen			Parker Hannifin		
Valeo			Singapore	0.0	0.7	Apple			Pfizer		
Germany	3.1	3.1	Spain	0.8	1.1	Autzone			PNC Financial Services Group		
Bayerische Motoren Werke			Amadeus IT Holding			Baxter International			Qualcomm		
GEA Group			Mediaset Espana Comunicacion			Boeing			Ralcorp Holdings		
Merck			Sweden	1.3	1.2	Capital One Financial			Ross Stores		
SAP			Assa Abloy			Caterpillar			Schlumberger		
Siemens			Swedbank			Chevron			Sysco		
Greece	0.0	0.0	Switzerland	1.8	3.1	Cisco Systems			Texas Instruments		
Hong Kong	0.0	1.0	Credit Suisse Group			Citigroup			Union Pacific		
Ireland	0.6	0.1	Novartis			Comcast Special CI A			United Technologies		
Ryanair Holdings (ADR)						ConocoPhillips			UnitedHealth Group		
						CVS Caremark			Viacom CI B		
						Devon Energy			Wal-Mart Stores		
						DuPont			Wells Fargo		
									Total Developed Markets	81.9	87.1
									Total Emerging Markets	15.6	12.9
									Lazard Emerging Markets Equity Portfolio (Instl)		
									Cash & Equivalents	2.5	0.0
									Total Portfolio	100.0	100.0

As of 31 March 2012.

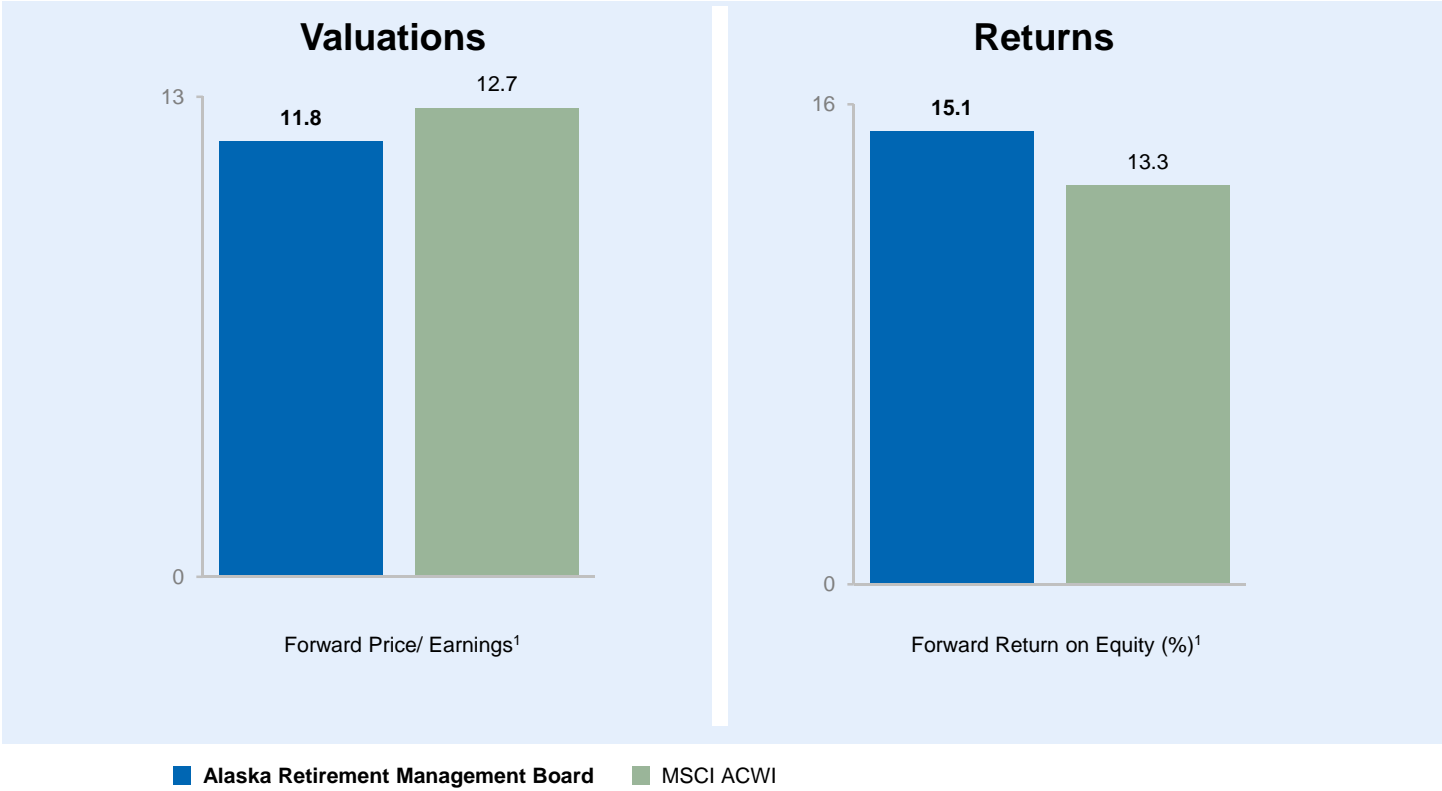
Cash is not viewed as a strategic asset class.

Allocations and security selection are subject to change. The information provided in this material should not be considered a recommendation or solicitation to purchase or sell any particular security. There is no assurance that any securities referenced herein will remain in the account's portfolio or that securities sold have not been repurchased. The securities discussed may not represent the account's entire portfolio. It should not be assumed that any of the referenced securities were or will prove to be profitable, or that the investment decisions we make in the future will be profitable.

Source: Lazard, MSCI

Investment Characteristics (Forward Looking)

Alaska Retirement Management Board

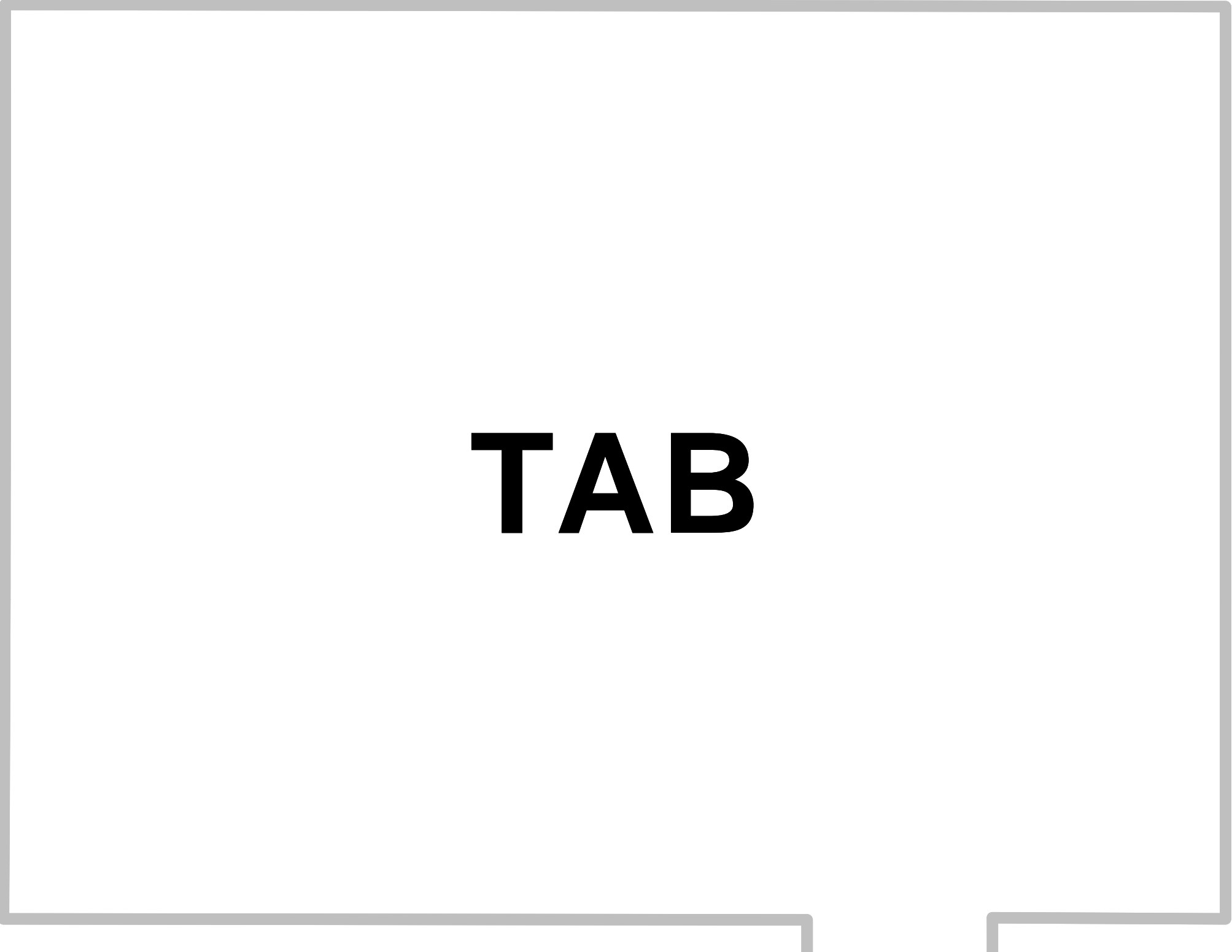


As of 31 March 2012

¹ Forward P/E is defined as P/E FY1, and Forward ROE is NTM.

The figures above represent expected returns. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Source: Lazard, MSCI



TAB

Outlook

- Market environment has changed since the fall of 2007
 - Macro, political and regulatory risks are difficult to quantify and analyze
 - One of the keys goal is identifying stock opportunities that are not driven by macro economics
-
- Portfolio is currently positioned with close to 20% ROE premium with what we believe are attractive valuations relative to the benchmark
 - We continue to minimize factor bets to ensure that stock selection drives returns
 - We seek to generate consistent alpha over long-term periods and through different market environments

Europe: Possible Range of Outcomes

Eurozone Disintegrates

Political: Core countries, particularly Germany, refuse to continue to bailout the GIIPS

Market: Investors flee the European financial markets, draining GIIPS ability to refund the debt

Global: A troubled global economy is unable to assist with Europe's debt crisis

Currency: Winners and losers but weighted average skews slightly positive

Baseline: Europe Muddles Through

Confederated States of EU

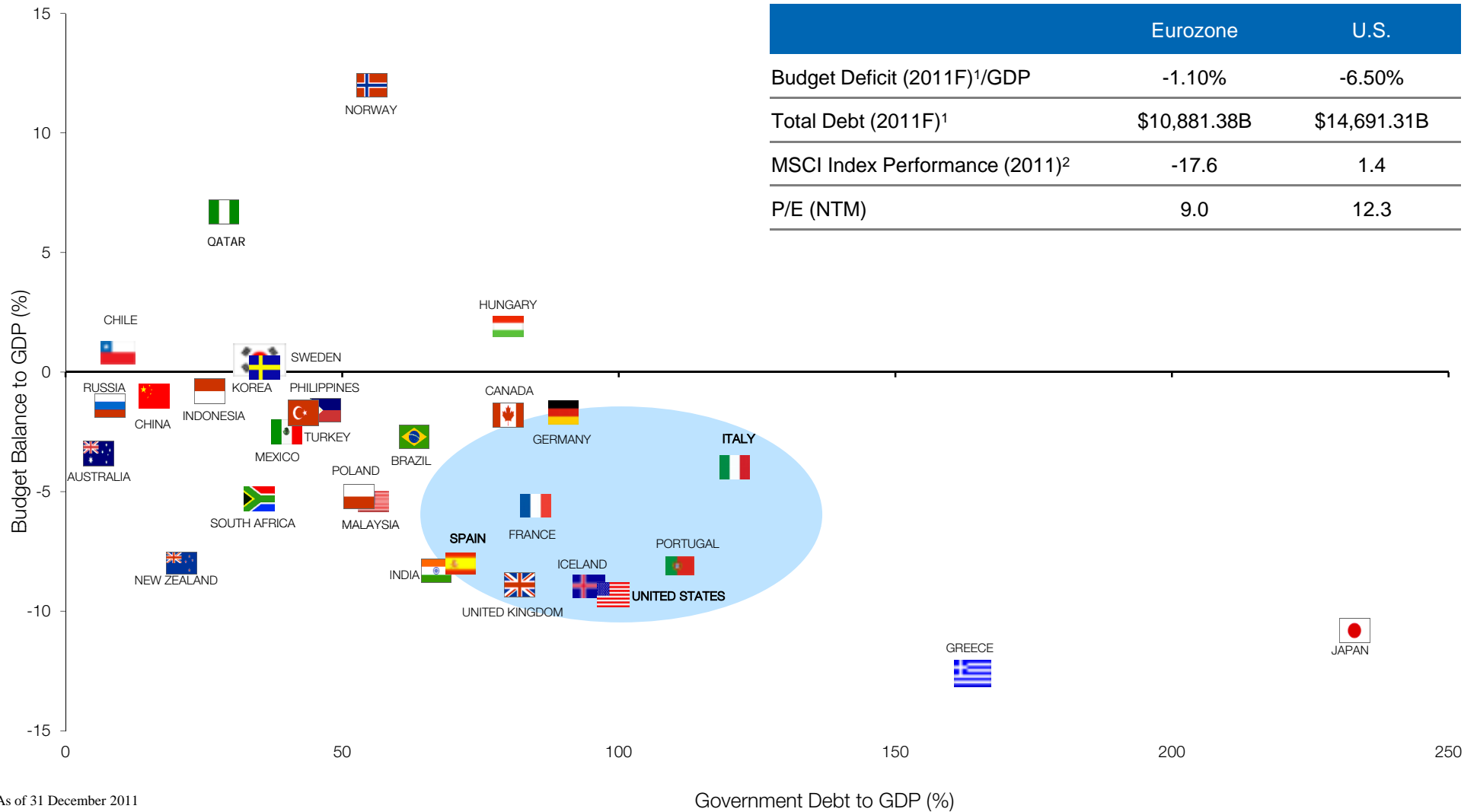
Political: Core countries recognize high costs of disunion; pro-EU powers overwhelm in Eurozone

Market: Core's continuous growth and GIIPS fiscal balance improvement boosts market confidence

Global: Strong growth in emerging markets, recovery in the U.S. and greater trade openness

Currency: Euro strengthens once again

Europe: Global Fiscal Comparison



As of 31 December 2011

¹ As of 30 November 2011.

² MSCI EMU, MSCI U.S.

The figures above represent expected returns. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Source: Bloomberg, Moody's, Citigroup, I/B/E/S Consensus

Government Debt Outstanding vs. Budget Surplus/Deficit

Europe: Summary

- 2011 story: risks are arguably in the price; oversold
- EU endorsed new disciplined agreement
- December ECB loan commitment was a catalyst
- Fears have already started to ease
- European equity markets ended year up more than 10% since autumn lows
- Euro has appreciated vs. U.S. dollar since inception

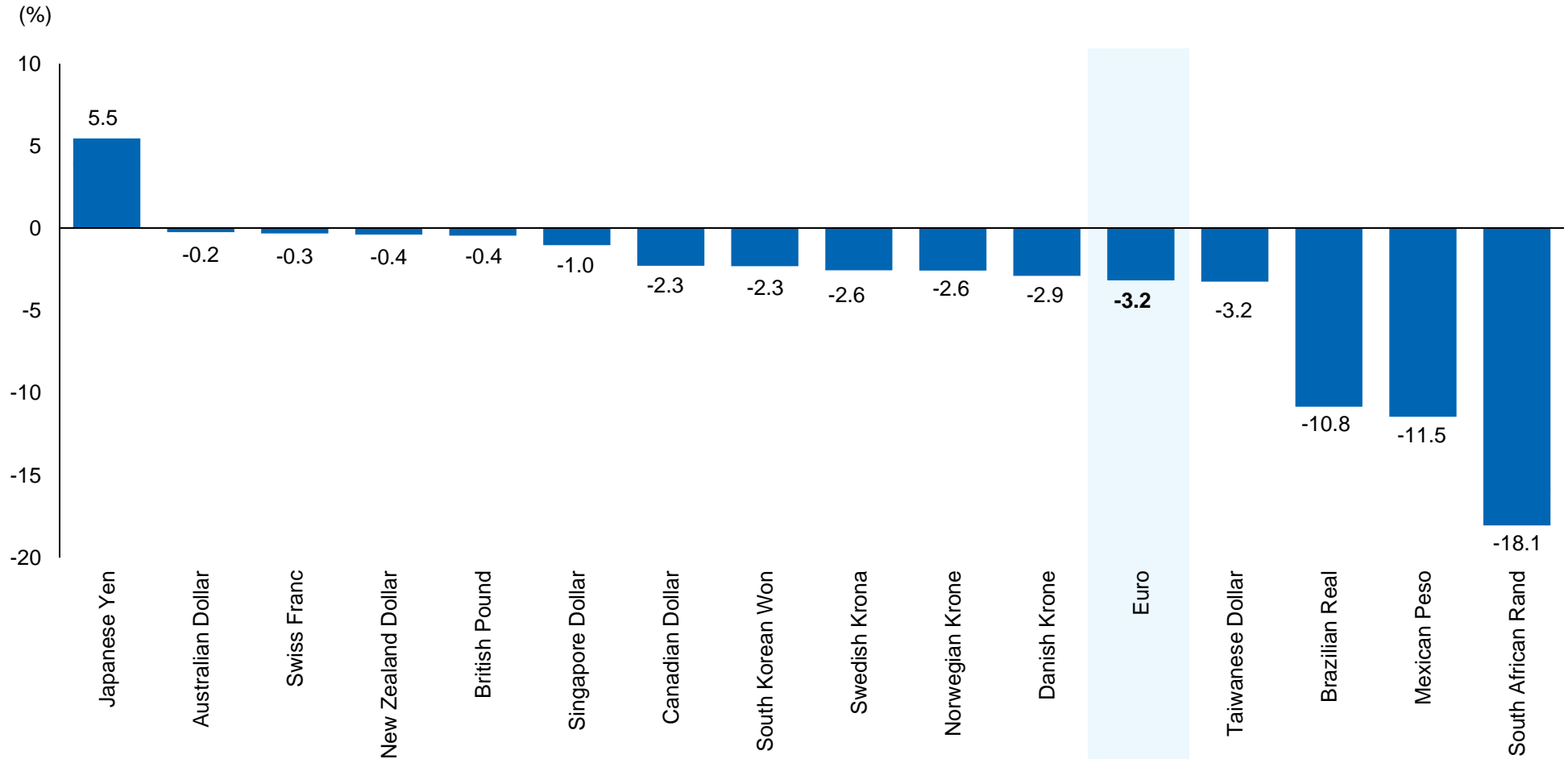
- Many companies only European by passport
- We believe that many high quality companies are trading at attractive valuations

As of 31 December 2011 and is subject to change.

Source: Lazard

Foreign Currencies

2011 vs. U.S. Dollar



As of 31 December 2011

Currencies presented constitute Bloomberg's "Major Currencies."

The performance quoted represents past performance. Past performance is not a reliable indicator of future results.

Source: Bloomberg

Relative Value

MSCI Regions

	Forward P/E ¹	Forward ROE (%) ¹	Dividend Yield (%)
EAFE	11.0	11.6	3.9
U.S.	12.9	14.8	2.2
Europe	10.4	13.4	4.2
Asia	12.5	8.9	3.4
Japan	13.4	7.5	2.7
Emerging Markets	10.2	15.2	2.9
EAFE Small Cap	12.8	9.6	3.2

We believe the portfolio is positioned where we see attractive relative value

As of 31 December 2011

¹ Forward Price/Earnings is defined as Price/Earnings FY1 and Forward Return on Equity as Return on Equity NTM.

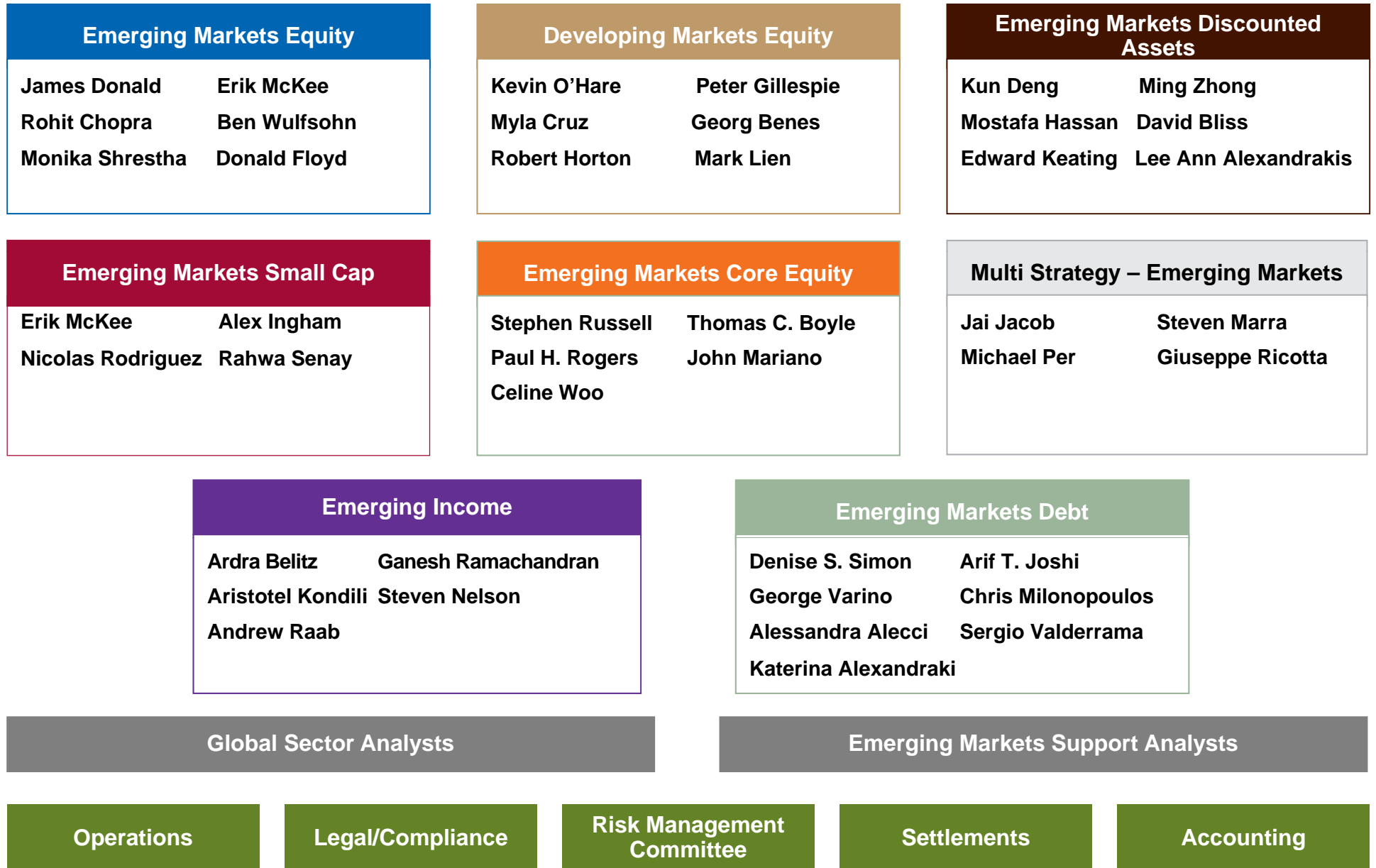
The figures above represent expected returns. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Source: Lazard, MSCI, I/B/E/S Consensus



TAB

Global Emerging Market Strategies



Lazard Emerging Markets Equity Portfolio Performance

Institutional Shares

	YTD March 2012	Annualized			
		3 Years	5 Years	10 Years	Since Inception (18 Jul 1994)
Lazard Emerging Markets Equity Portfolio (Net)	17.32	19.71	3.53	16.00	7.80
MSCI Emerging Markets Index	14.08	20.07	2.40	13.86	5.91
Excess Return (bps)	+324	-36	+113	+214	+189

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Lazard Emerging Markets Equity Portfolio (Net)	-17.75	22.81	69.82	-47.88	33.05	30.32	41.40	30.79	54.45	-0.37	-3.16
MSCI Emerging Markets Index	-18.42	18.88	78.50	-53.33	39.38	32.17	34.00	25.55	55.82	-6.17	-2.62
Excess Return (bps)	+67	+393	-868	+545	-633	-185	+740	+524	-137	+580	-54

As of 31 December 2011

All data in USD

The performance quoted represents past performance. Past performance does not guarantee future results. Performance is presented net of fees. The investment return and principal value of the Portfolio will fluctuate so that an investor's shares in the Portfolio, when redeemed, may be more or less than their original cost. Returns reflect reimbursement of expenses as described in the prospectus. For more complete information about the Lazard Funds and current performance, you may obtain a prospectus by calling 800.823.6300 or go to www.LazardNet.com. Read the prospectus carefully before you invest. The Lazard Funds are distributed by Lazard Asset Management Securities LLC. The MSCI Emerging Markets Index is comprised of emerging market securities in countries open to non-local investors. The index is unmanaged and has no fees. One cannot invest directly in an index.

Helped/Hurt

Lazard Emerging Markets Equity Portfolio

2011

What Helped

- Cielo and Redecard, both Brazilian credit card processors, performed well following expectation of strong results driven by volume growth and stable margins.
- Ambev, a Brazilian beverage company, experienced strong price strength on rising volumes and pricing for its products.
- Stock picking within the information technology sector and within Brazil added value.
- A higher-than-benchmark exposure to the consumer staples sector helped performance.

What Hurt

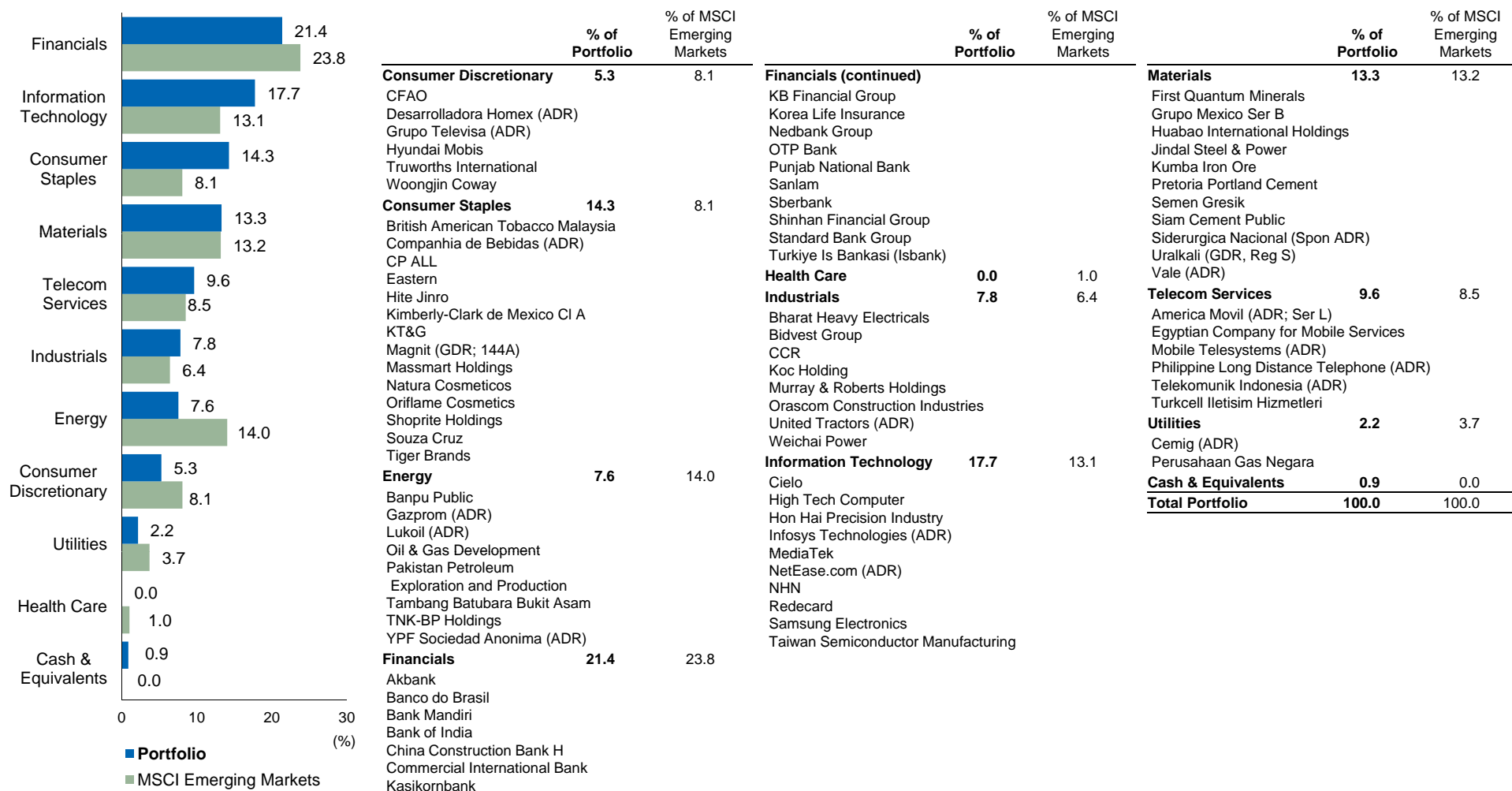
- Stock picking within the financial and telecommunication services sectors hurt returns.
- Turkiye Is Bankasi (Isbank), a Turkish bank, was negatively affected by central bank policies and an investigation by the market regulator into claims of influence by the opposition party on Isbank's policies.
- Shares of Vale, a Brazilian iron ore mining company, fell on the back of concerns regarding potential changes in royalties and government pressure for the CEO to resign.
- Punjab National Bank, an Indian bank, fell as a result of potential slower growth due to the slowing economy, and the risk of increased credit costs as interest rates rise in India.

As of 31 December 2011

The allocations and specific securities mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change. The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased. The securities mentioned may not represent the entire portfolio.

Holdings by Sector

Lazard Emerging Markets Equity Portfolio



As of 31 December 2011

Allocations and security selection are subject to change.

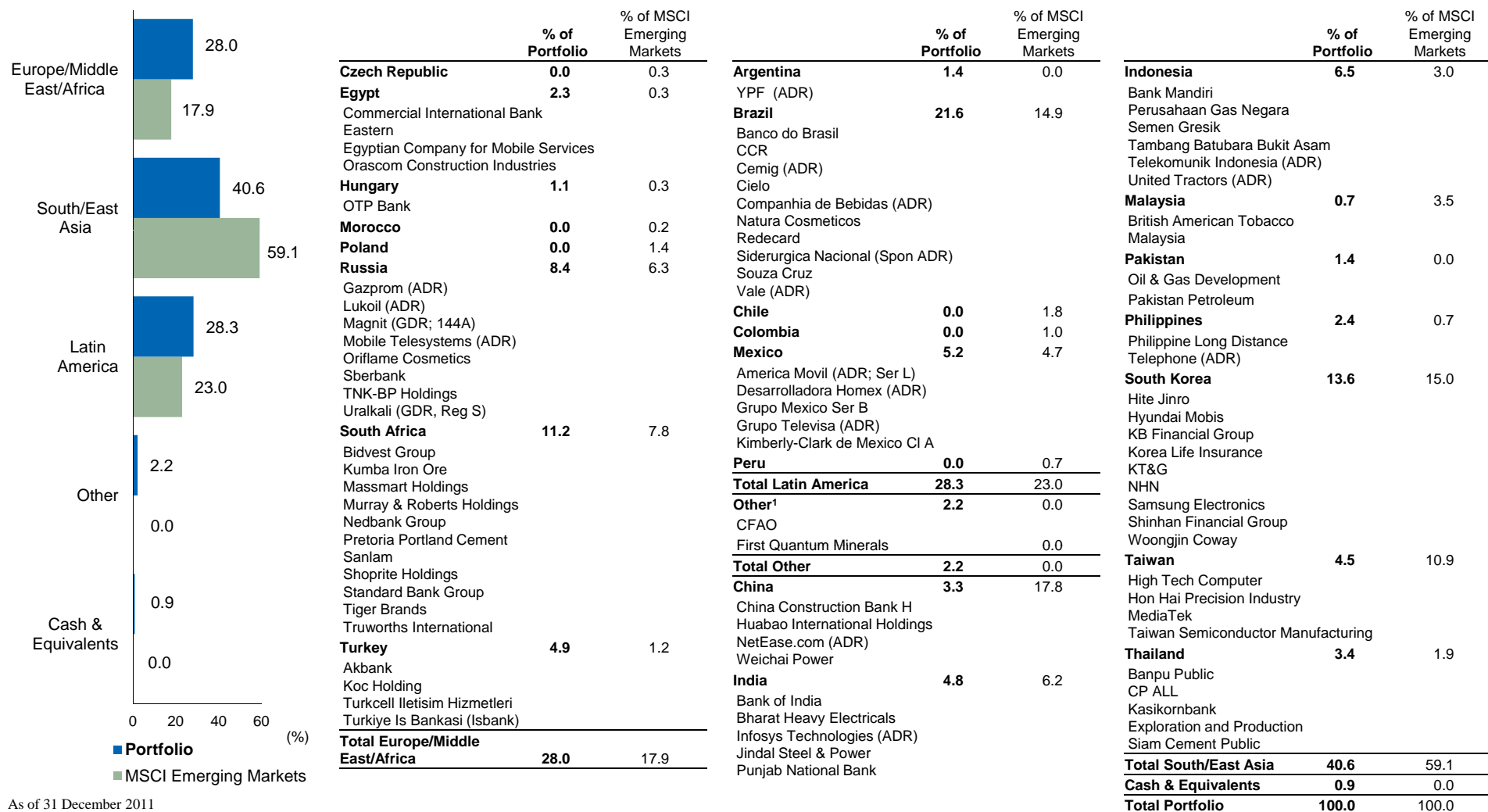
The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased.

Please note that cash is not viewed as a strategic asset class.

Source: Lazard, MSCI

Holdings by Country

Lazard Emerging Markets Equity Portfolio



As of 31 December 2011

*Other – Consists of companies that have 50% or more of their net assets and/or sales from emerging markets, but are domiciled in non-emerging market countries. Allocations and security selection are subject to change.

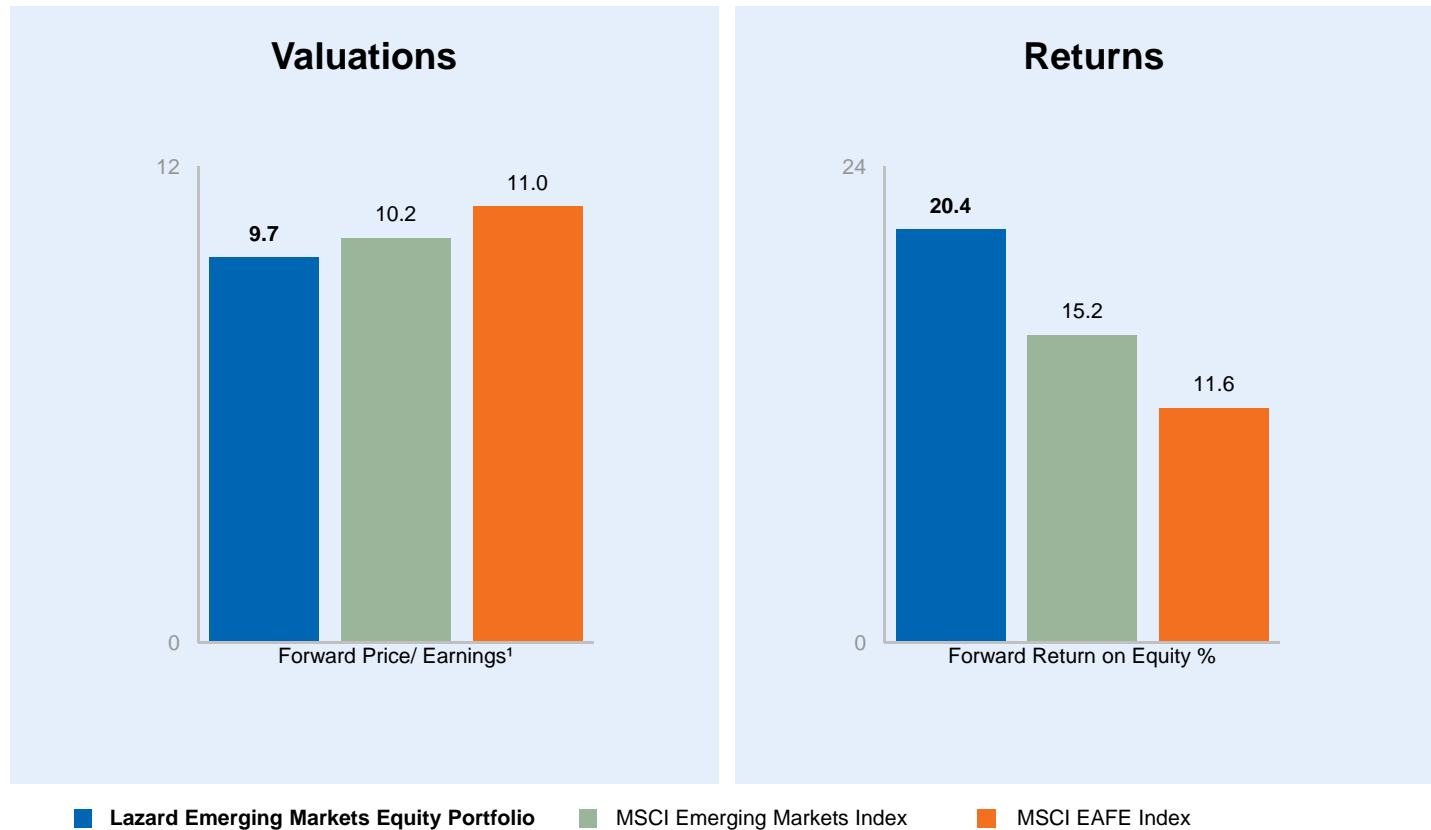
The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased.

Please note that cash is not viewed as a strategic asset class.

Source: Lazard, MSCI

Investment Characteristics Forward Looking

Lazard Emerging Markets Equity Portfolio



As of 31 December 2011

¹ Forward P/E is defined as P/E FY1

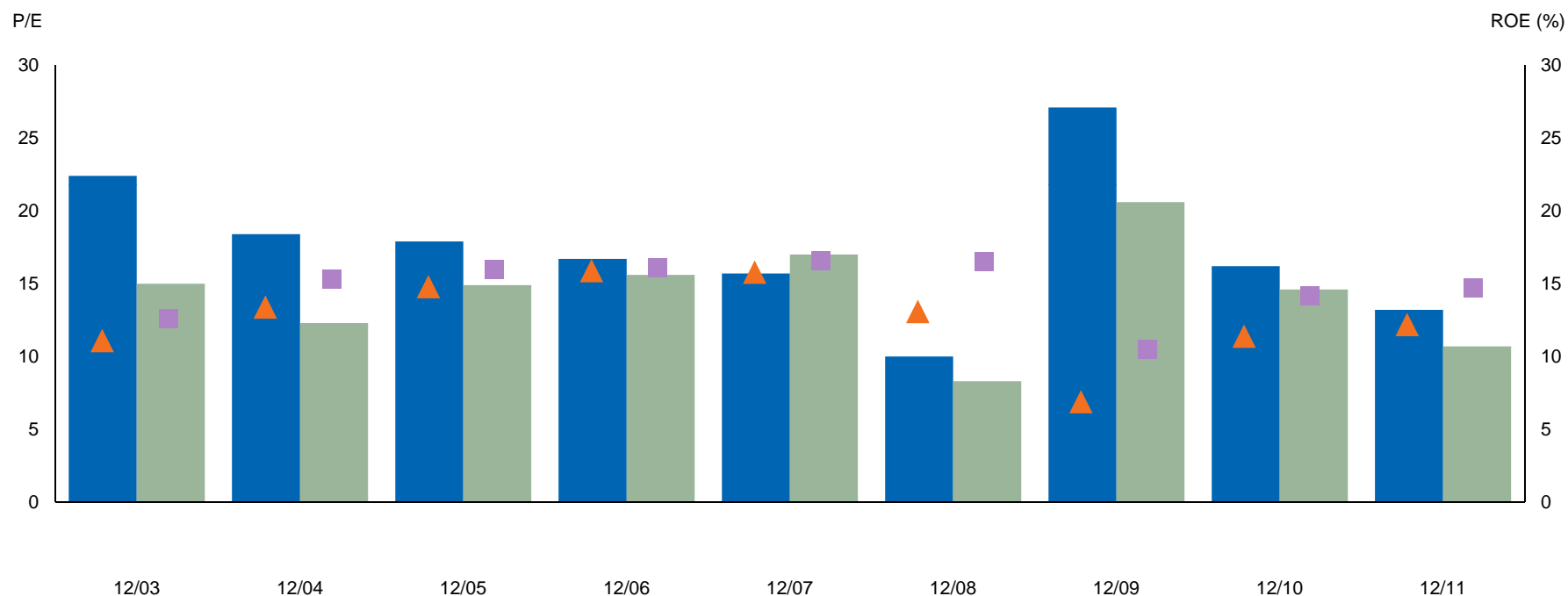
The figures above represent expected returns. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Source: Lazard, MSCI, I/B/E/S Consensus

Valuations and Financial Productivity

Emerging markets equities are currently at a discount to developed markets

MSCI World Index vs. MSCI Emerging Markets Index



	EPS Growth (%)								
MSCI World	50.9	35.4	8.7	25.1	14.9	-9.1	-52.0	83.7	13.1
MSCI EM	57.0	45.1	5.3	22.6	24.4	-5.2	-35.7	64.2	8.6

- MSCI World P/E
- MSCI EM P/E
- ▲ MSCI World ROE
- MSCI EM ROE

As of 31 December 2011

Characteristics shown are calculated on a trailing 1-year basis.

Source: Lazard, MSCI

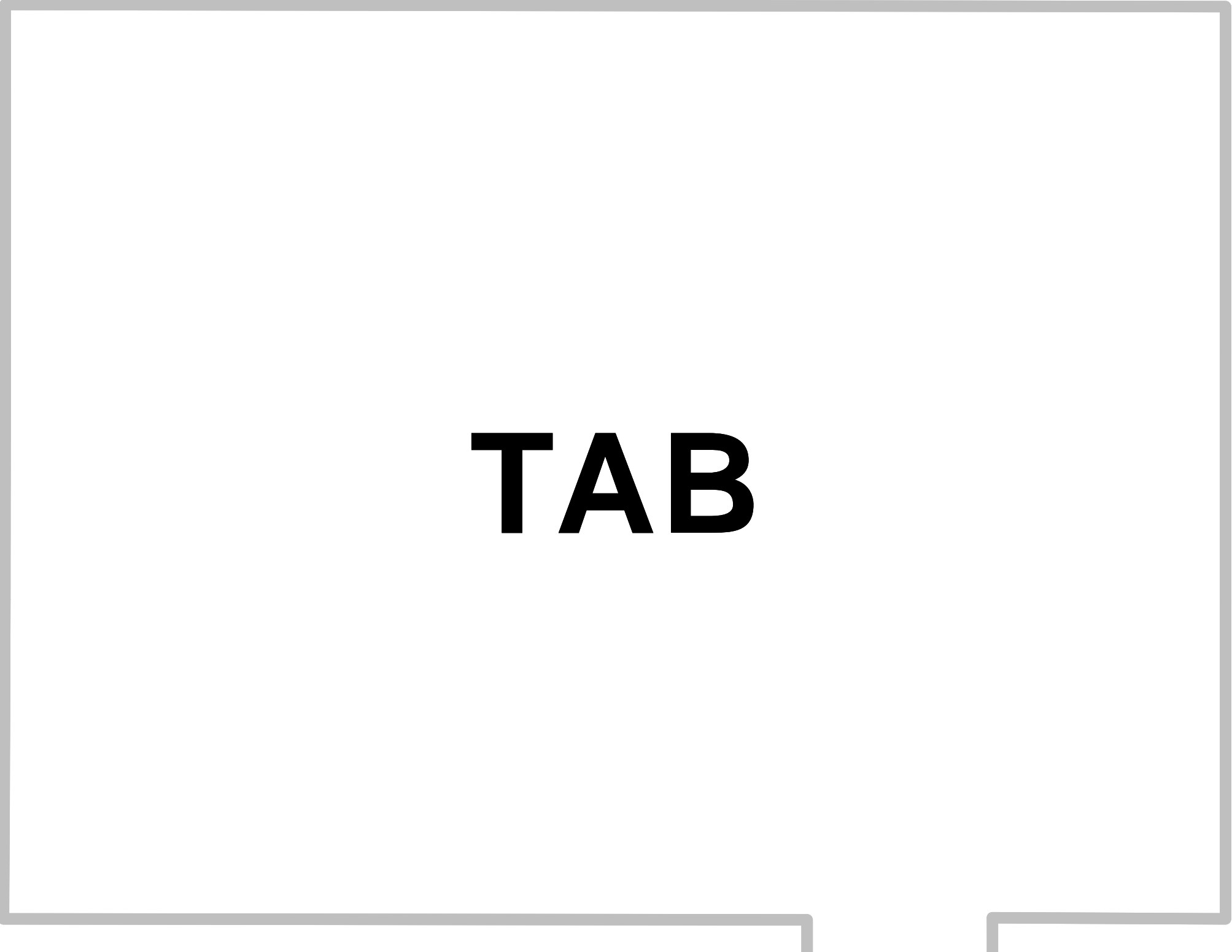
Risks & Outlook

Risks

- Geopolitics
- Commodity prices
- Global capital markets and economy
- Trade friction
- Select valuation risks

Outlook

- We believe fundamentals and valuations have become attractive in emerging markets.
- Inflationary pressures and the potential for substantial capital raising are notable risks.



TAB

Portfolio Management

Lazard U.S. Small-Mid Cap Equity Portfolio

U.S. Small-Mid Cap Equity Portfolio Management Team

	Years in Industry	Years at Lazard		Years in Industry	Years at Lazard
Daniel Breslin	19	9	Robert Failla, CFA	18	8
Michael DeBernardis	15	6	Andrew Lacey	16	16

Investment Resources¹

	Years in Industry	Years at Lazard		Years in Industry	Years at Lazard		Years in Industry	Years at Lazard
Dmitri Batsev	9	9	Mark Hudson	8	8	Jessica Rennie	10	1
Christopher Blake	16	16	Peter Hunsberger	22	20	Nina Saglimbeni	32	21
Daniel Breslin	19	9	Miriam Kim	12	3	Henry (Ross) Seiden	5	1
Rhett Brown	15	6	Andrew Lacey	16	16	Nicholas Sordoni	14	9
Gary Buesser	28	11	Jerry Liu	15	10	Ronald Temple	20	10
Michael DeBernardis	15	6	Bret Miller	4	4	Richard Tutino	25	14
Robert Failla	18	8	Dennis Neveling	5	5	Christopher Whitney	13	13
Martin Flood	18	15	David Pizzimenti	24	10	Michael Zaremsky	12	4

¹Team membership is current as of the date of this document. Personnel data are calculated as of year-end 2010; YTD 2011 experience/tenure is not reflected

Mutual Fund Performance Summary (Institutional Shares)

Lazard U.S. Small-Mid Cap Equity Portfolio

Annualized Periods (%)	YTD (March/ 2012)	Annualized					Since Inception (31 Oct 1991)
		20114Q	3 Years	5 Years	10 Years		
Lazard U.S. Small-Mid Cap Equity Portfolio (Net)	12.69	14.79	20.13	1.25	5.49	10.07	
Russell 2000/2500 Linked Index	12.99	14.52	18.41	1.07	6.10	8.90	
Russell 2500 Index	12.99	14.52	18.41	1.24	6.57	10.03	
Excess Return (bps) vs. Linked Index	-30	+17	+172	+18	-61	+117	

Annual Periods (%)

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Lazard U.S. Small-Mid Cap Equity Portfolio (Net)	-9.83	23.67	55.47	-34.46	-6.38	17.11	4.31	15.28	38.92	-17.97
Russell 2000/2500 Linked Index	-2.51	26.71	34.39	-35.47	-1.57	18.37	4.55	18.33	47.25	-20.48
Russell 2500 Index	-2.51	26.71	34.39	-36.79	1.38	16.17	8.11	18.29	45.51	-17.80
Excess Return (bps) vs. Linked Index	-732	-304	+2108	+101	-481	-126	-24	-305	-833	+251

As of December 31, 2011

All data in USD

The performance quoted represents past performance. Past performance does not guarantee future results. Performance is presented net of fees. The investment return and principal value of the Portfolio will fluctuate so that an investor's shares in the Portfolio, when redeemed, may be more or less than their original cost. Returns reflect reimbursement of expenses as described in the prospectus. For more complete information about the Lazard Funds and current performance, you may obtain a prospectus by calling 800.823.6300 or go to www.LazardNet.com. Read the prospectus carefully before you invest. The Lazard Funds are distributed by Lazard Asset Management Securities LLC. The Russell 2500 Index is comprised of the 2,500 smallest U.S. companies included in the Russell 3000 Index (which consists of the 3,000 largest U.S. companies by capitalization). The Russell 2000/2500 Linked Index is an index created by the Portfolio's Investment Manager, which links the performance of the Russell 2000® Index for all periods prior to August 25, 2008 and the Russell 2500 Index for all periods thereafter. The Russell 2000 Index is comprised of the 2,000 smallest U.S. companies included in the Russell 3000 Index. The index is unmanaged and has no fees. One cannot invest directly in an index.

What Helped/What Hurt

Lazard U.S. Small-Mid Cap Equity Portfolio

2011Q4

What Helped

- Stock selection in the financials sector
- Stock selection in the consumer discretionary sector

What Hurt

- Stock selection in the health care sector

2011

What Helped

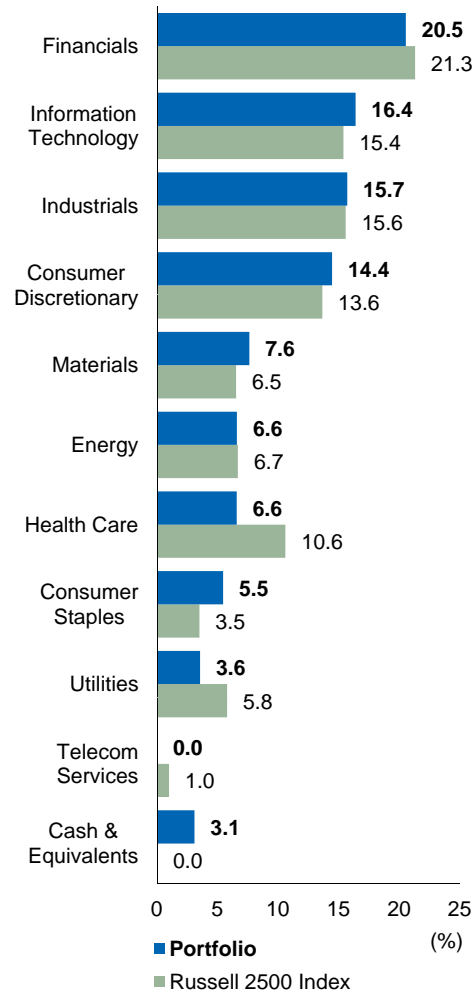
- No exposure to the telecom services sector

What Hurt

- Stock selection in the health care sector
- Stock selection in the consumer discretionary sector
- Stock selection in the information technology sector

Holdings by Sector

Lazard U.S. Small-Mid Cap Equity Portfolio



	% of Portfolio	% of Russell 2500 Index
Consumer Discretionary	14.4	13.6
American Eagle Outfitters		
ANN		
Bally Technologies		
Brown Shoe		
Iconix Brand Group		
Mathews International CI A		
Modine Manufacturing		
Newell Rubbermaid		
Tempur-Pedic International		
Tenneco		
Texas Roadhouse		
Williams Sonoma		
Consumer Staples	5.5	3.5
Central Garden & Pet CI A		
Energizer Holdings		
Ralcorp Holdings		
Energy	6.6	6.7
Energen		
Gulfmark Offshore		
Helmerich & Payne		
Key Energy Services		
QEP Resources		
Financials	20.5	21.3
Arch Capital Group		
CBRE Group		
Duke Realty		
East West Bancorp		
Essex Property Trust		
Kilroy Realty		
Lasalle Hotel Properties		
Macerich		
PacWest Bancorp		
Prosperity Bancshares		

	% of Portfolio	% of Russell 2500 Index
Financials (continued)		
Signature Bank		
Stifel Financial		
Tanger Factory Outlet Centers		
Wintrust Financial		
Health Care	6.6	10.6
Amerigroup		
Dentsply International		
Haemonetics		
Medicis Pharmaceutical CI A		
VCA Antech		
Waters		
Industrials	15.7	15.6
American Reprographics		
BE Aerospace		
Better Place		
Equifax		
Harsco		
Hub Group CI A		
Mastec		
Middleby		
Owens Corning		
Quanta Services		
Regal-Beloit		
Team		
Timken		
TriMas		
UTI Worldwide		
Information Technology	16.4	15.4
Autodesk		
Compuware		
Echo Global Logistics		
Flir Systems		
J2 Global Communications		
Lexmark International CI A		

	% of Portfolio	% of Russell 2500 Index
Information Technology (continued)		
NCR		
ON Semiconductor		
Polycm		
Quest Software		
Red Hat		
SS&C Technologies Holdings		
Xilinx		
Materials	7.6	6.5
Carpenter Technology		
Compass Minerals		
Cytec Industries		
Rock-Tenn CI A		
Rockwood Holdings		
Schweitzer-Mauduit International		
Solutia		
Telecom Services	0.0	1.0
Utilities	3.6	5.8
AGL Resources		
California Water Service Group		
New Jersey Resources		
Cash & Equivalents	3.1	0.0
Total Portfolio	100.0	100.0

As of December 31, 2011

The allocations and specific securities mentioned are based upon a portfolio that represents the proposed investment for a fully discretionary account. Allocations and security selection are subject to change.

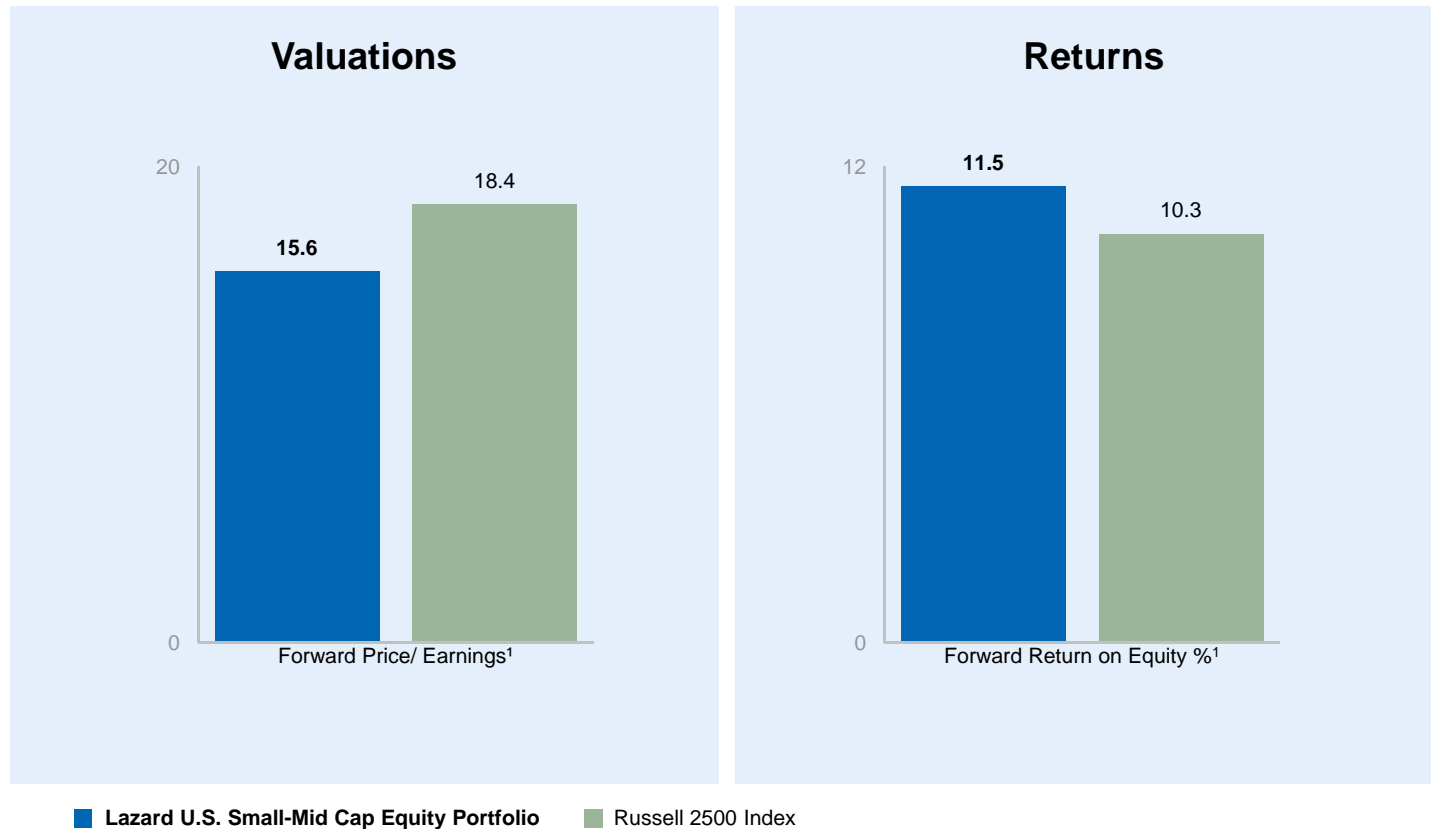
The securities mentioned are not necessarily held by Lazard for all client portfolios, and their mention should not be considered a recommendation or solicitation to purchase or sell these securities. It should not be assumed that any investment in these securities was, or will prove to be, profitable, or that the investment decisions we make in the future will be profitable or equal to the investment performance of securities referenced herein. There is no assurance that any securities referenced herein are currently held in the portfolio or that securities sold have not been repurchased.

Please note that cash is not viewed as a strategic asset class.

Source: Lazard, Russell Investments

Investment Characteristics (Forward Looking)

Lazard U.S. Small-Mid Cap Equity Portfolio



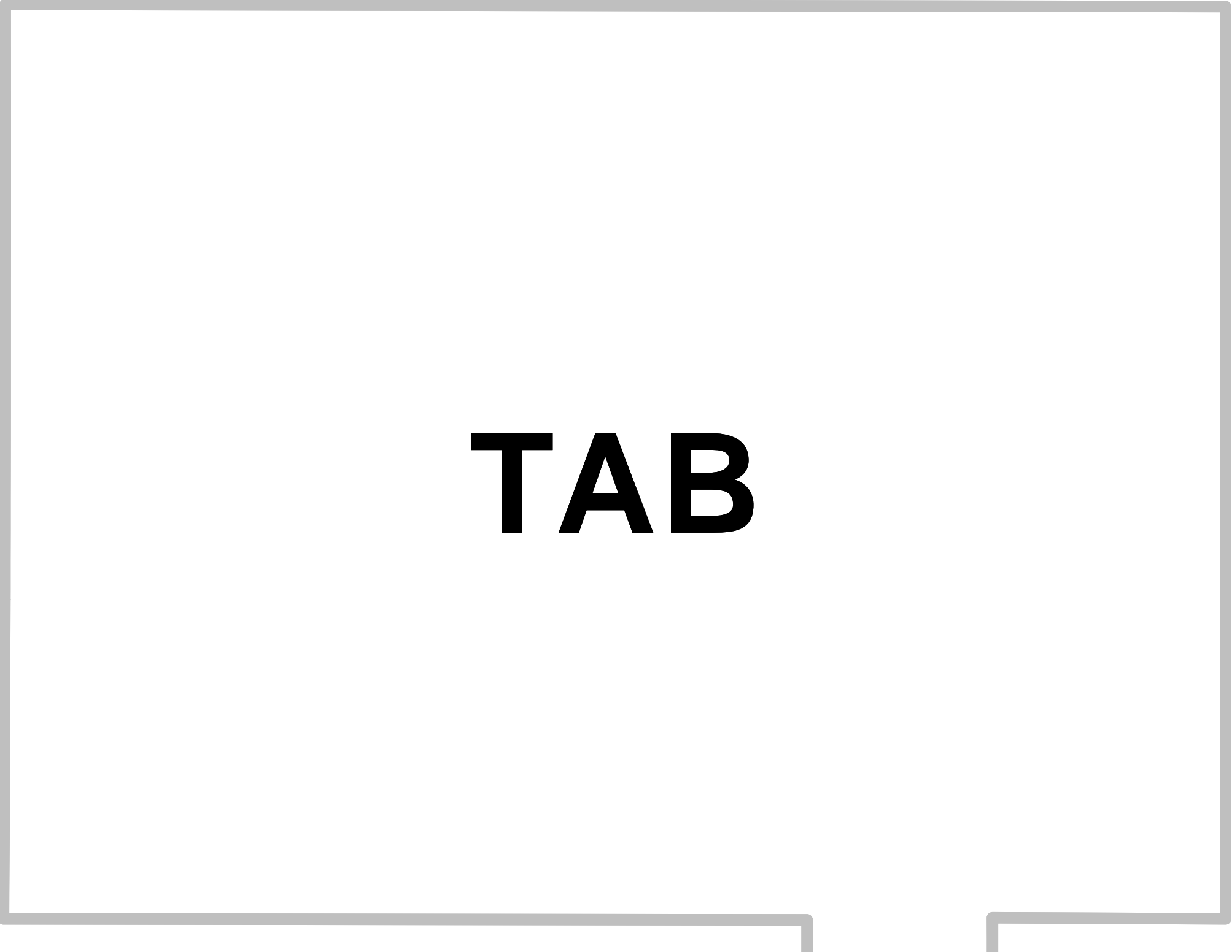
As of 31 December 2011

¹ Forward P/E is defined as P/E FY1 and Forward ROE is NTM.

The figures above represent expected returns. Expected returns do not represent a promise or guarantee of future results and are subject to change.

Investment characteristics are based upon a portfolio that represents the proposed investment for a fully discretionary account.

Source: Lazard, Russell Investments, I/B/E/S Consensus



TAB

Important Information

Certain information included herein is derived by Lazard in part from an MSCI index or indices (the “Index Data”). However, MSCI has not reviewed this product or report, and does not endorse or express any opinion regarding this product or report or any analysis or other information contained herein or the author or source of any such information or analysis. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any Index Data or data derived therefrom. The MSCI Index Data may not be further redistributed or used as a basis for other indices or any securities or financial products.

Alaska Retirement Management Board

Low Interest Rate Strategies

April 20, 2012

Gary Bader, Chief Investment Officer

Current Yield is Exceptionally Low

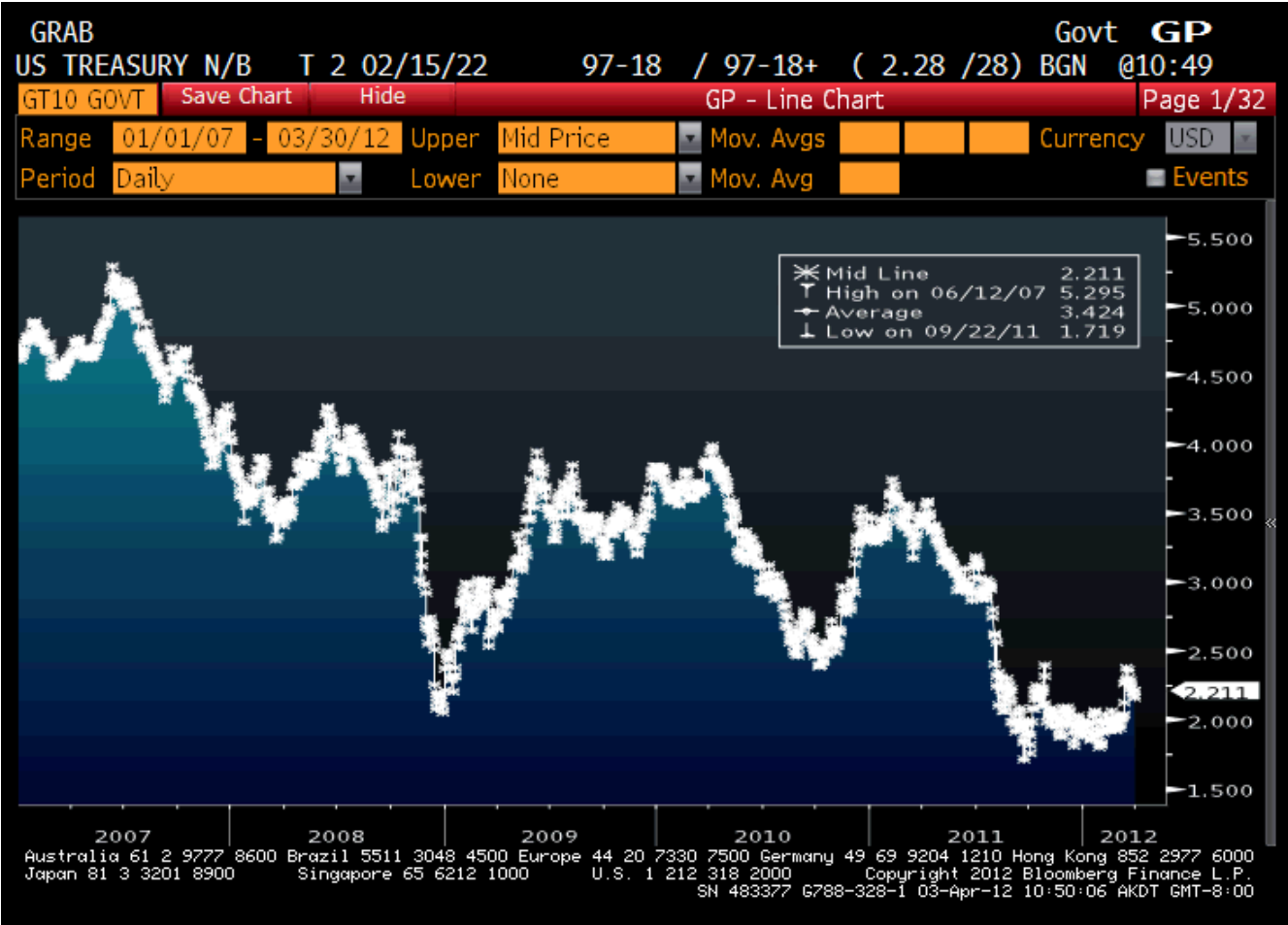
We can go lower; Uncharted waters going forward

BC Aggregate Index - Daily Yield to Worst from 1/2/01 to 12/30/11

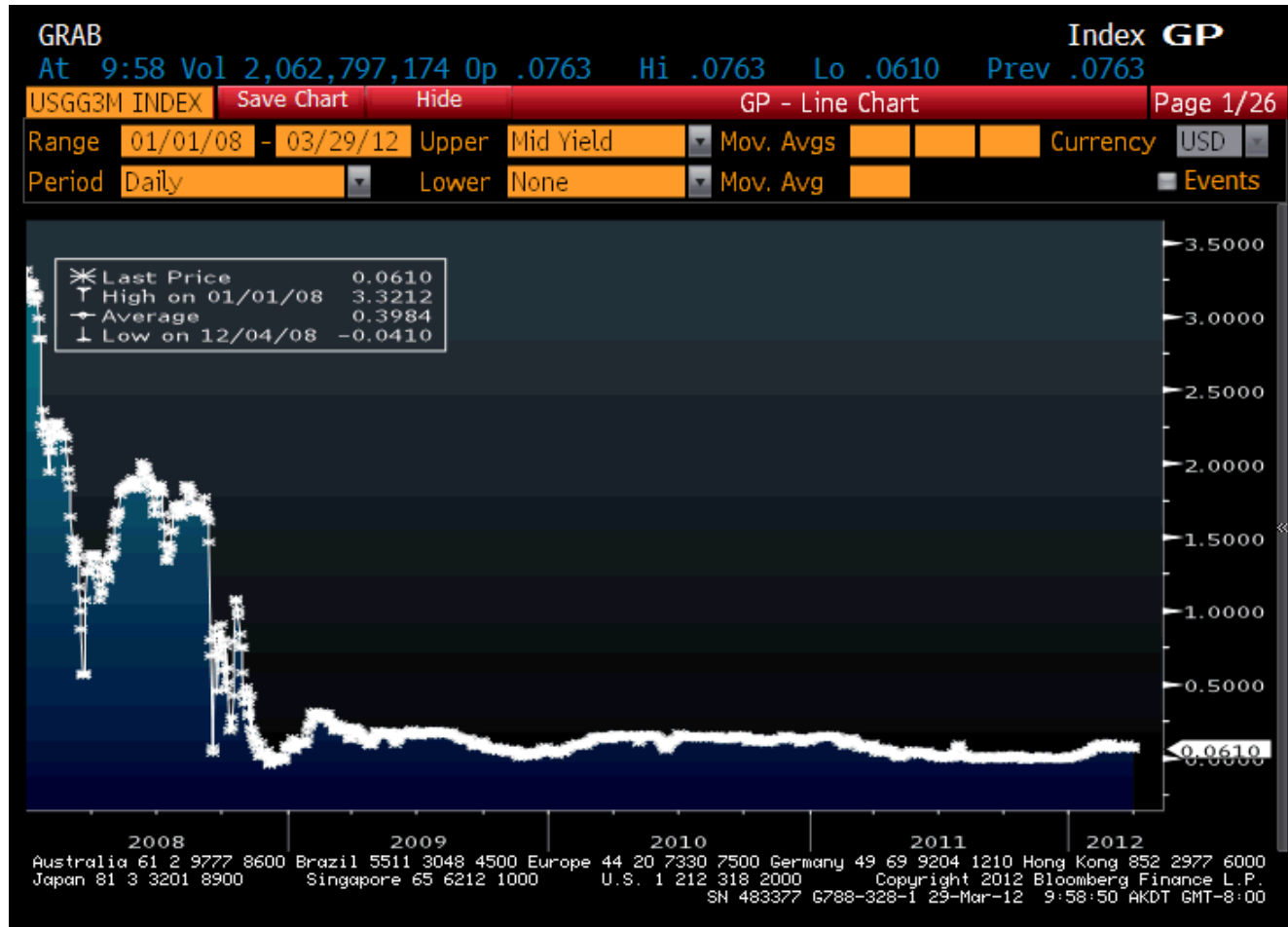


Source: Barclays Capital and Callan

History of 10-Year Treasury Nominal Returns

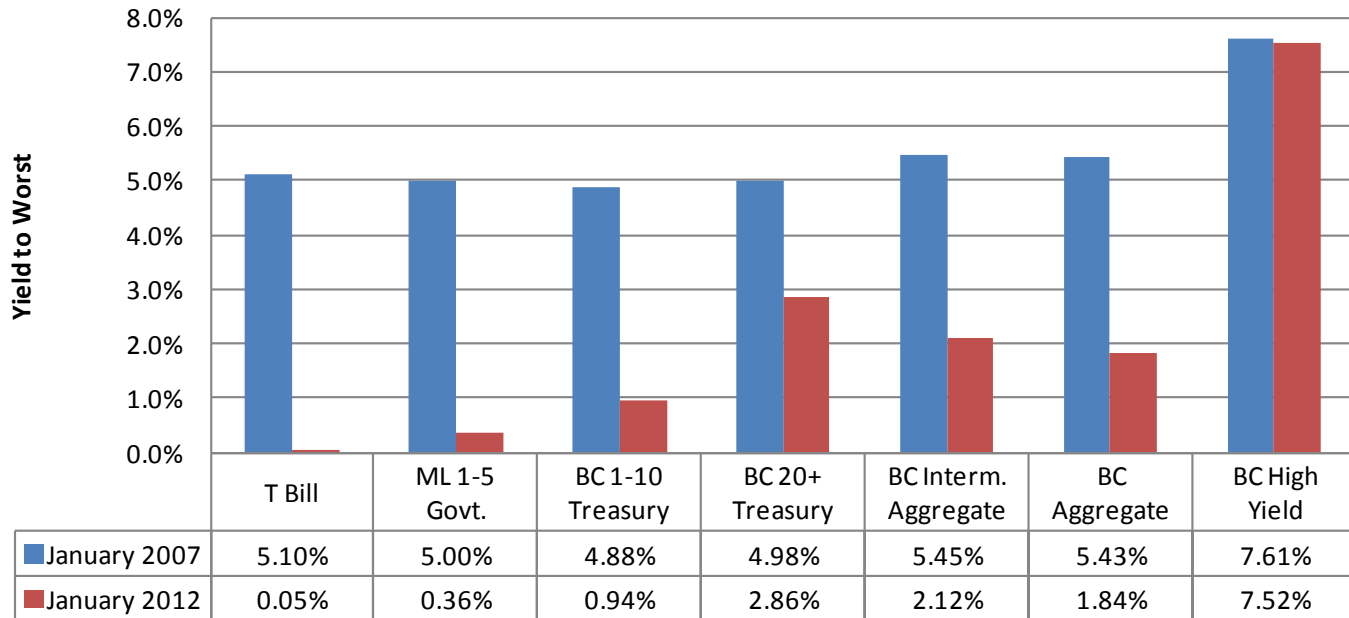


90-Day Treasury Bill Yield – 1/1/2008 to Present

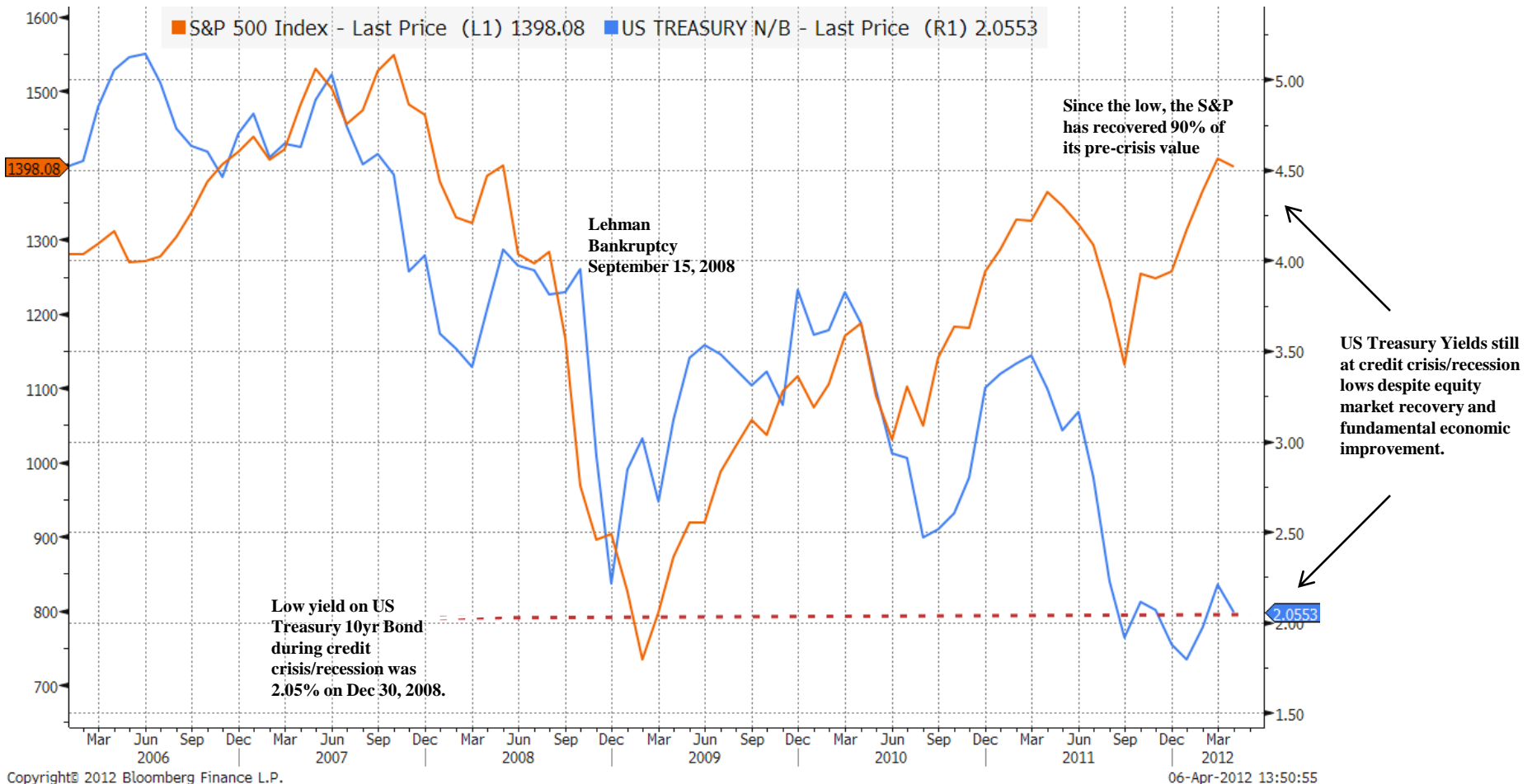


Yields Are Low

Yields: Then and Now



Treasury Yields Delinked From Equity Market



Federal Reserve is forcing lenders (bond holders) to lend (invest) at depressed rates.
What happens when monetary policy changes?

Increasing Current Yield Requires a Drop (Loss) in Principal

For Example:

2% Current Yield = \$2 divided by \$100

4% Current Yield = \$2 divided by \$50

2012 Capital Market Expectations

Return and Risk

Summary of Callan's Long-Term Capital Market Projections (2012-2021)

Asset Class	Index	Projected Return			Projected Risk		2011	
		1-Year Arithmetic	10-year Geometric *	Real	Standard Deviation	Projected Yield	10-year Geometric *	Standard Deviation
Equities								
Broad Domestic Equity	Russell 3000	9.20%	7.75%	5.25%	18.70%	2.00%	8.00%	18.10%
Large Cap	S&P 500	8.95%	7.60%	5.10%	18.00%	2.20%	7.85%	17.25%
Small/Mid Cap	Russell 2500	10.25%	7.90%	5.40%	23.00%	1.20%	8.25%	23.00%
International Equity	MSCI EAFE	9.30%	7.60%	5.10%	20.00%	2.00%	7.85%	19.75%
Emerging Markets Equity	MSCI EMF	11.50%	8.00%	5.50%	27.75%	0.00%	8.35%	27.50%
Global ex-US Equity	MSCI ACWI ex-US	9.85%	7.90%	5.40%	21.15%	1.70%	8.20%	20.90%
Fixed Income								
Defensive								
BC Govt 1-3		3.00%	3.00%	0.50%	2.50%	3.00%	3.25%	2.50%
Domestic Fixed	BC Aggregate	3.30%	3.25%	0.75%	4.25%	3.30%	3.75%	4.50%
TIPS	BC TIPS	3.10%	3.00%	0.50%	5.60%	3.10%	3.50%	5.90%
Long Duration	BC Long Govt/Credit	4.10%	3.45%	0.95%	11.80%	4.10%	4.00%	11.15%
High Yield	BC High Yield	6.00%	5.35%	2.85%	12.50%	6.00%	5.60%	11.55%
Non-US Fixed	Citi Non-US Govt	3.25%	2.85%	0.35%	9.50%	3.25%	3.35%	9.70%
Other								
Real Estate	Callan Real Estate	7.65%	6.40%	3.90%	16.95%	5.00%	6.75%	16.35%
Private Equity	VE Post Venture Cap	13.05%	8.90%	6.40%	30.60%	0.00%	9.00%	30.00%
Hedge Funds	Callan Hedge FoF	5.90%	5.55%	3.05%	10.00%	0.00%	5.90%	10.00%
Commodities	DJ-UBS	4.75%	3.25%	0.75%	17.90%	3.00%	3.75%	24.00%
Cash Equivalents	90-day T-bill	2.75%	2.75%	0.25%	0.90%	2.75%	3.00%	0.90%
Inflation	CPI-U	2.50%	2.50%		1.40%		2.50%	1.40%

* Geometric returns are derived from arithmetic returns and the associated risk (standard deviation).

Source: Callan

2011/2012 Capital Market Assumption Comparison

Asset Classes	Returns (10Y)			Standard Deviation			Correlation to Domestic Equity			Sharpe Ratio		
	2011	2012	Change (bps)	2011	2012	Change (bps)	2011	2012	Change	2011	2012	Change
Private Equity	9.05%	8.90%	(15)	30.0%	30.6%	60	0.95	0.95	0.00	0.20	0.20	(0.00)
Global Equity ex-US	8.20%	7.90%	(30)	20.9%	21.2%	28	0.85	0.83	(0.02)	0.25	0.24	(0.01)
Broad Domestic Equity	8.00%	7.75%	(25)	18.1%	18.7%	58	1.00	1.00	0.00	0.28	0.27	(0.01)
Real Estate	6.75%	6.40%	(35)	16.4%	17.0%	60	0.74	0.75	0.01	0.23	0.22	(0.01)
High Yield	5.60%	5.35%	(25)	11.6%	12.5%	95	0.61	0.62	0.01	0.23	0.21	(0.02)
Non-US Fixed	3.35%	2.85%	(50)	9.7%	9.5%	(20)	(0.07)	(0.07)	(0.00)	0.04	0.01	(0.03)
Domestic Fixed	3.75%	3.25%	(50)	4.5%	4.3%	(25)	0.01	0.00	(0.01)	0.17	0.12	(0.05)
Absolute Return	5.90%	5.55%	(35)	10.0%	10.0%	0	0.74	0.78	0.04	0.29	0.28	(0.01)
TIPS	3.50%	3.00%	(50)	5.9%	5.6%	(30)	(0.10)	(0.11)	(0.01)	0.08	0.04	(0.04)
Inflation	2.50%	2.50%	0	1.4%	1.4%	0			0.00			
Cash Equivalents	3.00%	2.75%	(25)	0.9%	0.9%	(0)	0.04	(0.04)	(0.08)			
Average:			(31)			21			(0.01)			(0.02)

Callan Efficient Portfolios 2011 portfolios were scaled to the risk level of the 2012 portfolios for return comparison	Returns (10Y)			Standard Deviation
	2011	2012	Change (bps)	2012
ARMB Mix 1	6.11%	5.77%	(34)	8.6%
ARMB Mix 2	6.58%	6.23%	(35)	10.3%
ARMB Mix 3	7.02%	6.66%	(36)	12.1%
ARMB Mix 4	7.43%	7.06%	(37)	13.9%
ARMB Mix 5	7.81%	7.42%	(39)	15.7%
ARMB Mix 6	8.15%	7.74%	(41)	17.5%
Average:			(37)	

Yields Need to Increase to Get 3.25% Over 10 Years

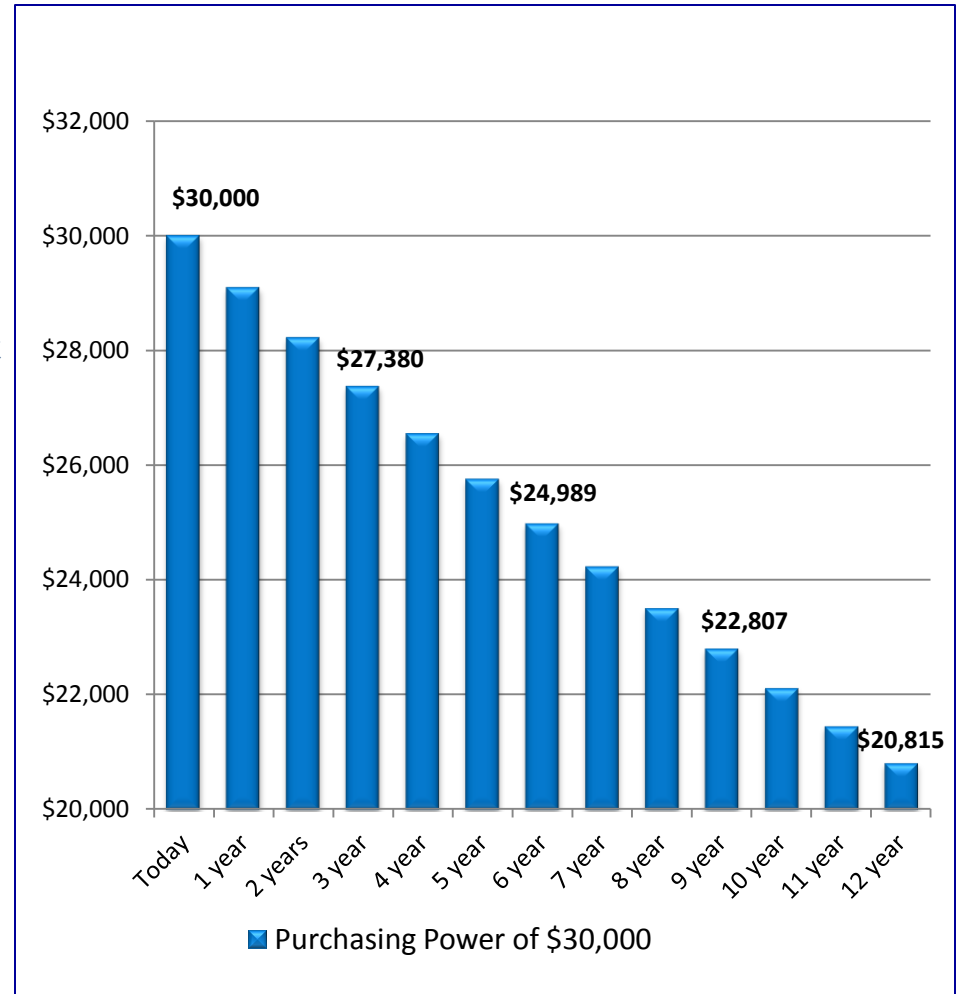
	% Increase	Capital Loss
Now	2.0%	-9%
In 1 Year	2.5%	-11%
In 2 Years	3.5%	-16%
In 3 Years	n/a	n/a

- Rising yields require bonds to experience a capital loss.
- The longer it takes for yields to rise, the larger the required rise in yields and associated loss.
- Using a simple model to assume a one-time increase in yields, yields need to increase within the next few years for the Callan return assumption to hold.

Using BC Aggregate Index. Assuming 4.5 year duration, parallel yield curve shift, no convexity effect and each year's return starting yield to worst. Note: this is a simple model and is used to illustrate in imprecise terms the yield increases and associated capital losses involved to attain the Callan 10-Year domestic fixed income return.

Inflation Risk of a Low Yielding Bond

- Because of their relative safety, bonds tend to offer relatively low returns. That makes them particularly vulnerable when inflation rises.
- For example, you buy a Treasury bond that pays interest of 3%. As long as you hold the bond until maturity and the U.S. government doesn't collapse, it's a pretty safe investment...unless inflation climbs.
- At 3% interest, a \$1-million bond portfolio will provide an investor with a \$30,000 annual income stream.
- In 12 years, however, the investor will only have about \$20,815 of buying power in today's dollars assuming a 3% inflation rate.



PERS/TRS Schedule of Contributions and Withdrawals

(in Thousands)	Employee and Employer Contributions	State of Alaska Additional Contributions	Total Contributions	Total Benefits and Expenditures	Contributions minus Benefits and Expenditures
Public Employees' Retirement System	517,436,000	165,841,000	683,277,000	850,946,000	(167,669,000)
Teachers' Retirement System	131,506,000	190,850,000	322,356,000	455,280,000	(132,924,000)
Total	648,942,000	356,691,000	1,005,633,000	1,306,226,000	(300,593,000)

Source: FY2011 CAFR

Larry Fink – BlackRock

- **Laurence (Larry) D. Fink**
 - Joined First Boston Corporation in 1976
 - One of the first mortgage-backed securities traders on Wall Street
 - Co-head of the Taxable Fixed Income Division
 - Headed the Mortgage and Real Estate Products Group
 - Founded BlackRock Inc. in 1988
 - Chairman and Chief Executive Officer of BlackRock, Inc.
 - World's largest money manager with \$3.5 trillion AUM
- **February, 2012 Interview with Bloomberg Television**
 - “Investors who seek the safety of treasury bonds will have minimal returns and will not be able to meet their needs with the U.S. Federal Reserve expected to keep interest rates low.”
 - “When you look at dividend returns on equities versus bond yields, to me it’s a pretty easy decision to be heavily in equities.”

Warren Buffett – Bond Comments

Warren Buffett is a noted value investor and the Chairman of Berkshire Hathaway. In his February 25, 2012 annual letter to investors, he makes the following comments with regard to the current outlook for fixed income investments:

“Most [fixed income investments] are thought of as “safe.” In truth they are among the most dangerous of assets. Their beta may be zero, but their risk is huge. Over the past century these instruments have destroyed the purchasing power of investors in many countries, even as the holders continued to receive timely payments of interest and principal.”

“Current rates ... do not come close to offsetting the purchasing-power risk that investors assume. Right now bonds should come with a warning label.”

“Today, a wry comment that Wall Streeter Shelby Cullom Davis made long ago seems apt: ‘Bonds promoted as offering risk-free returns are now priced to deliver return-free risk.’”

Bill Gross/Leon Cooperman Bond Comments

Bill Gross is a respected fixed income investor and the founder and co-CIO of PIMCO, the world's largest bond manager. Leon Cooperman is the founder of Omega Advisors, a successful hedge fund, and is a past Chairman and CEO of Goldman Sachs Asset Management.

In February, Leon Cooperman said that buying U.S. government bonds was the least attractive investment in a world of “financial repression.”

In response, Bill Gross said investors should be cautious about substituting dividend-paying stocks for Treasuries: “Comparing Treasury yields to corporate stock dividends, span a huge gap of risk...” “Stocks can go down too, just like bonds, and we certainly saw that in 2008.”

Bill Gross also made headlines in 2011 for selling all of his U.S. Treasury bonds early in the year before they rallied and then buying some of them back later in the year.

Callan Capital Market Review

ARMB 2012 Economic Environment and Capital Markets Review, Page 56

Over much of Callan's history, the difference between our shorter-term expectations and our long term numbers was modest; for most planning purposes our short term and long term expectations were the same.

Current conditions, *particularly in the fixed income markets*, suggest substantial difference in capital market expectations depending on time horizon, and the path from the current conditions to the long term expectations.

ARMB 2012 Economic Environment and Capital Markets Review, Page 39

The path to a rational set of long-term capital market outcomes is likely through an ugly shorter term period of rising interest rates, capital losses in fixed income, and volatile equity markets.

The Problems

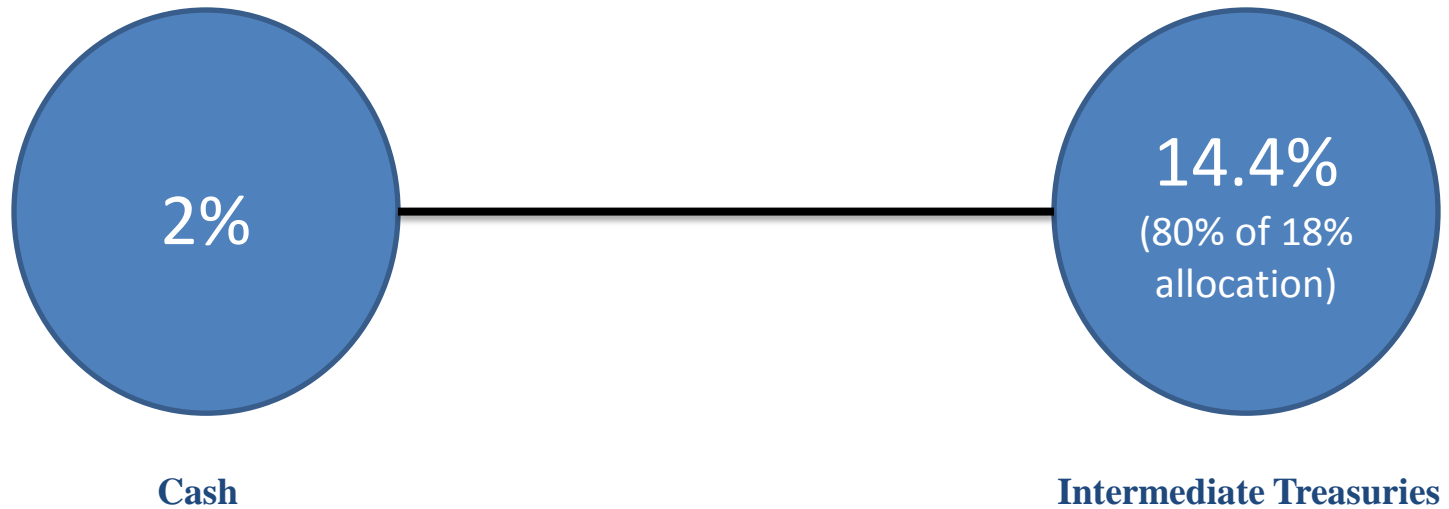
- **Fixed income returns are vulnerable to an increase in interest rates.**
- **Even without a reversal of domestic interest rates, domestic fixed income returns from Intermediate Treasuries are likely to produce a negative real rate of return.**
- **Lower interest income from fixed income investments will need to be replaced either by the sale of assets or replacement with other income yielding investments.**

Strategies to Address the Problems

- **Adopt a hedge fund alternative yield strategy**
- **Shorten the duration of domestic fixed income by decreasing the allocation to Intermediate T-Bonds and increasing short-term fixed income.**
- **Add a dividend paying yield strategy**
- **Add Master Limited Partnership strategy**
- **Permit more higher-yielding short duration securities in the domestic fixed income portfolio**

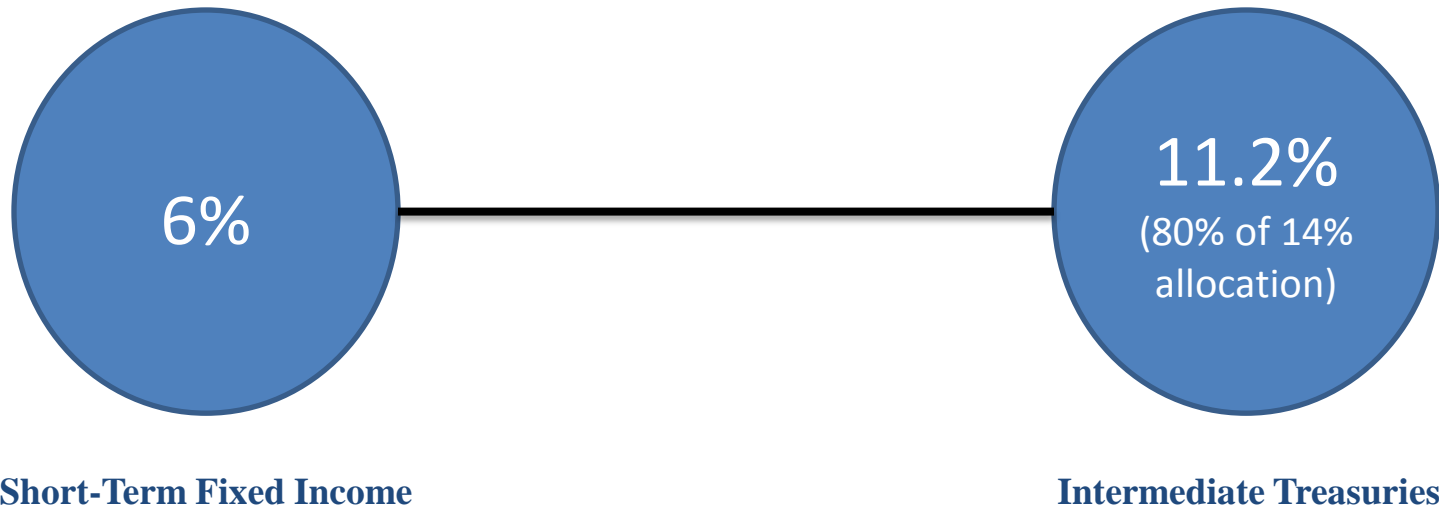
Cash vs. Bond Risk

Modify Domestic Fixed Income Portfolio



Fixed Income Risk Reduction

Domestic Fixed Income Investments



Substituting Short-Term Fixed Income for Intermediate Treasuries

Using the ARMB's current asset allocation and the 2012 capital market assumptions, the reduction in expected return and efficiency from substituting short-term fixed income for Intermediate Treasury fixed income is low.

	Short-Term Fixed Income	Intermediate Treasuries
Return	7.03%	7.11%
Standard Deviation	14.09%	14.09%
Sharpe Ratio	0.30	0.31

Increase Equity Yield

- **Add a dividend paying equity strategy.**

Why Own Stocks

“The prime purpose of a business corporation is to pay dividends regularly and, presumably, to increase the rate as time goes on.”

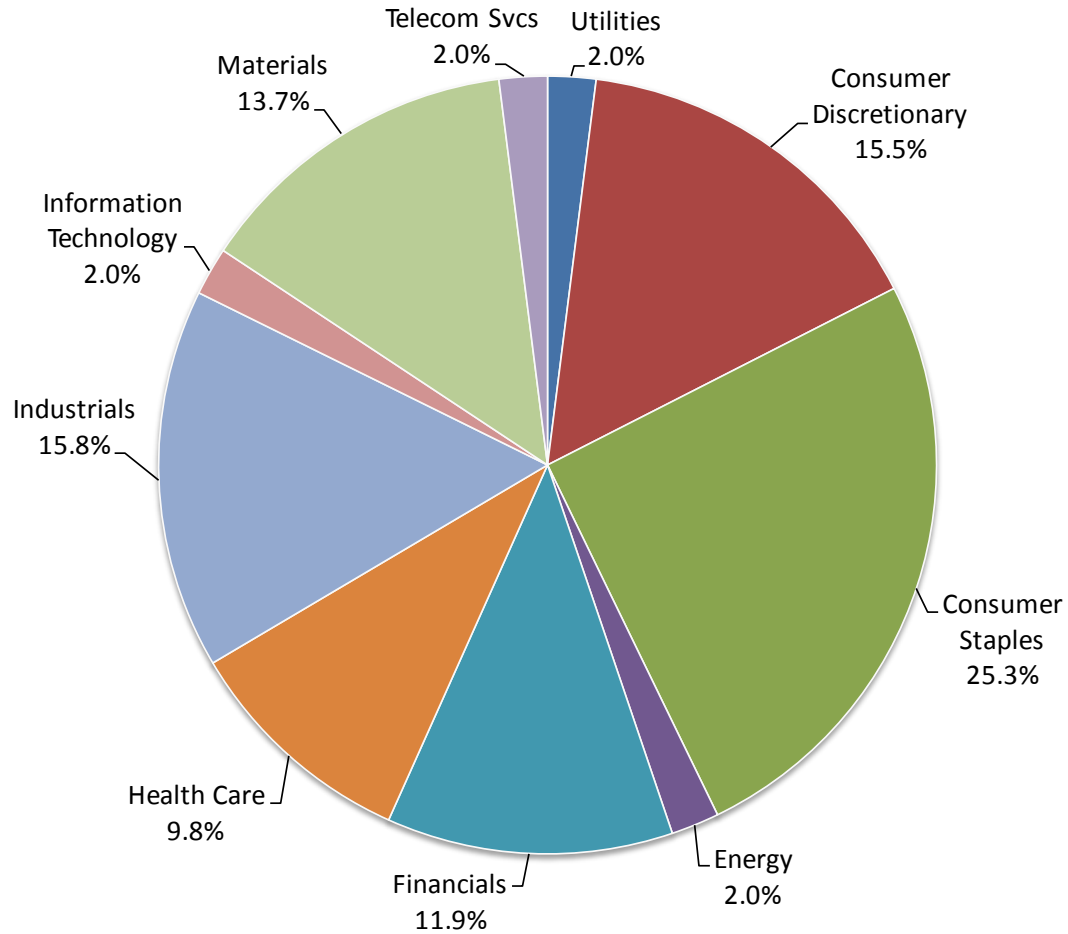
----Benjamin Graham, Security Analysis 1934

Equity Yield Fund Comparisons

	1-year	3-year	5-year	10-year	Std. Dev.	Size Component	Dividend Policy / Other Criteria
S&P 500 Dividend Aristocrats Index	8.33%	17.84%	4.59%	7.10%	16.52%	<ul style="list-style-type: none"> Be a member of the S&P 500 index Have a float adjusted market capitalization of at least US\$ 3 billion as of the rebalancing reference date. Have an average daily trading volume of at least US\$ 5 million for the six-months prior to the rebalancing reference date. 	<ul style="list-style-type: none"> Have increased dividends every year for at least 25 consecutive years
Dow Jones U.S. Select Dividend Index	12.42%	13.91%	-0.66%	5.90%	19.52%	<ul style="list-style-type: none"> Must be part of Dow Jones U.S. Index Must have a three-month average daily trading volume of 200,000 shares 	<ul style="list-style-type: none"> Have a nonnegative historical five year dividend-per-share growth rate Five-year average dividend to earnings-per-share ratio of less than or equal to 60% Paid dividends in each of the previous five years
Dow Jones U.S. Select Dividend Distributing Index						<ul style="list-style-type: none"> Constitution is similar to DJ US Select Dividend Index, but couples the performance of a base equity index with a theoretical cash component that is designed to reflect the dividends paid by its constituents in a given six-month period. Theoretical Cash Component = The cumulative gross cash dividend yielding EONIA, divided by the divisor of the Dow Jones U.S. Select Dividend Index Interest is accrued on the cash component using Euro Overnight Index Average (EONIA). 	
Dow Jones U.S. Dividend 100 Index	11.39%	16.10%	5.02%	8.62%	16.14%	<ul style="list-style-type: none"> The starting universe for the index is the Dow Jones U.S. Broad Market Index, which includes the 2,500 largest U.S. stocks based on full market capitalization. Excluded from the index universe are REITs, master limited partnerships, preferred stocks and convertibles. <ul style="list-style-type: none"> Minimum float-adjusted market capitalization of USD \$500 million Minimum 3-month average daily trading volume of USD \$2 million 	<ul style="list-style-type: none"> Minimum 10 consecutive years of dividend payments Eligible securities are ranked by each of four fundamentals-based characteristics: <ul style="list-style-type: none"> Cash flow to total debt Return on equity Dividend yield Five-year dividend growth rate
Russell 1000 Dividend Achievers Index	9.93%	11.64%	0.45%	3.18%	15.17%	<ul style="list-style-type: none"> Membership is based on the Russell 1000 Index. Avg daily cash volume of at least US\$500,000 in November and December prior to trading on the first business day in July. 	<ul style="list-style-type: none"> Companies incorporated in the United States must have paid increasing regular cash dividends for ten or more consecutive years Uses Mergent's Dividend Achievers methodology to create a comprehensive index of U.S. large cap companies with a proven history of dividend growth.
MSCI High Dividend Yield Indices	4.84%	14.56%	-1.45%	6.27%	21.15%	<ul style="list-style-type: none"> Are derived from country, regional, or composite level MSCI Equity indices (herein, "Parent Indices"). Offer reasonably broad market coverage Have moderate turnover due to the use of a market cap weighted scheme and appropriate buffer rules Are free float market capitalization weighted to ensure that their performance can be replicated in institutional and retail portfolios of reasonable size. 	<ul style="list-style-type: none"> Include only securities that offer a higher than average dividend yield relative to their respective Parent Index and pass dividend sustainability screens Securities entering the index must have a dividend yield which is at least 30% higher than the respective Parent Index yield. Only securities with reasonable payout and a non-negative 5Y Dividends per share (DPS) growth rate are eligible for inclusion in the High Dividend Yield Index.
Mergent's Dividend Achievers Indices	6.32%	13.46%	2.61%	2.87%	15.00%	<p>Funds/ETFs based off of Mergent created Indices include:</p> <ul style="list-style-type: none"> Vanguard Dividend Appreciation Index Fund Vanguard Dividend Appreciation ETF BlackRock Enhanced Dividend Achievers Trust PowerShares High Yield Equity Dividend Achievers Portfolio 	<ul style="list-style-type: none"> Specific methodology not disclosed. Includes companies that have increased their annual regular dividends for at least the past 10 consecutive years and have met specific liquidity screening criteria. The Dividend Achievers are typically companies with strong cash reserves, solid balance sheets and a proven record of consistent earnings growth.

*Calendar Year Returns

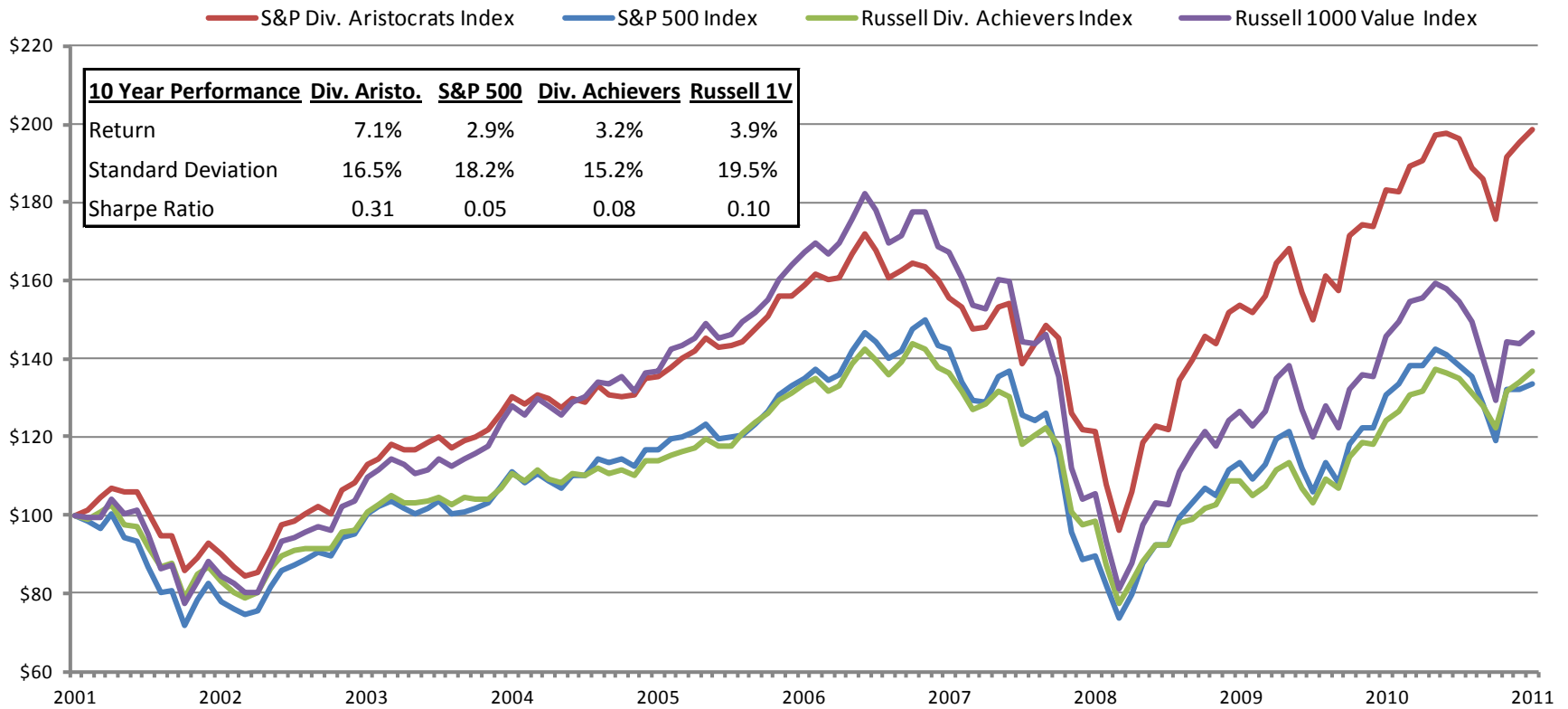
Dividend Aristocrats' Sector Weights



Source: S&P Indices. Data as of December 30, 2011.

Dividend Aristocrats' Performance

Dividend Aristocrats' – 10 Year Growth of \$100



Sources: Bloomberg LP and S&P Indices. Data as of December 30, 2011.

Methodology Comparison

	Dow Jones U.S. Dividend 100	S&P 500 Dividend Aristocrats
Universe	Must be a member of the Dow Jones U.S. Broad Market Index.	Must be a member of the S&P 500 Index.
Viability	Must have 10 consecutive years of dividend payments.	Must have increased dividends every year for at least 25 consecutive years.
Size	Must have a market cap of at least \$500 million.	Must have a market cap of at least \$3 billion.
Liquidity	Must have a minimum 3-month average daily trading volume of \$2 million.	Must have a minimum 6-month average daily trading volume of \$5 million.
Stock Diversification	Eligible securities are ranked by cash flow to total debt, return on equity, dividend yield, and five-year dividend growth rate. The top 100 stocks are selected to the index based on their composite score. No single stock can represent more than a 4.5% weight in the index.	The minimum number of constituent stocks should be 40. If fewer, stocks with a history of increasing dividends over the last 20 consecutive years are added in decreasing order of dividend yield until the criteria is met. If still not met, the remaining eligible S&P 500 stocks are added in decreasing order of dividend yield until met.

Sources: Dow Jones Indexes and S&P Indices

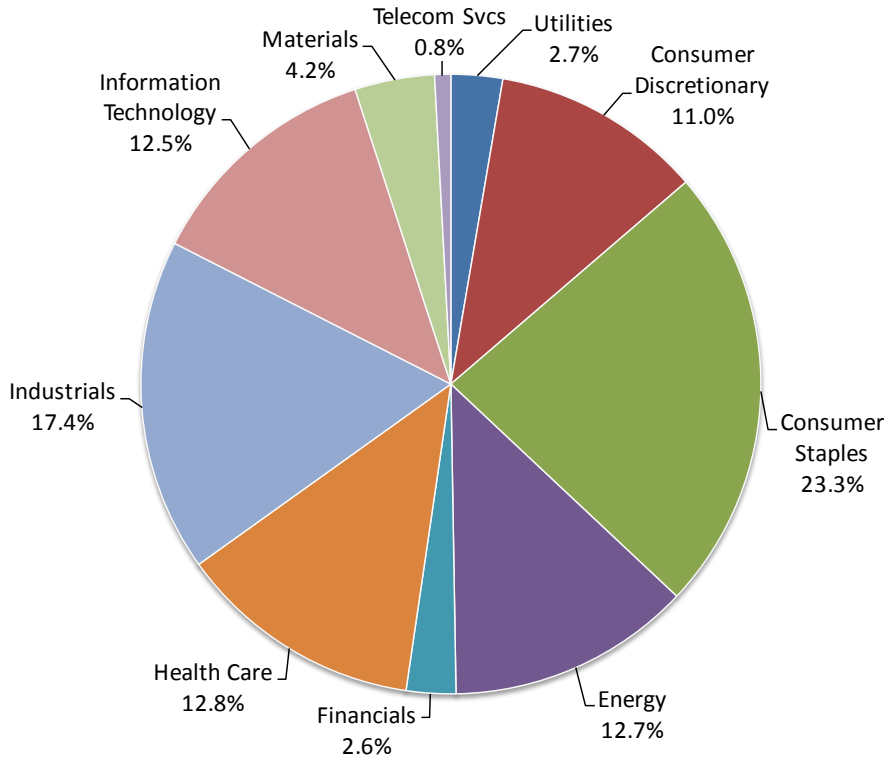
Methodology Comparison (cont.)

	Dow Jones U.S. Dividend 100	S&P 500 Dividend Aristocrats
Sector/Industry Diversification	Constituent stocks in any given industry cannot account for more than a 25% weight in the index as measured at the time of index construction, annual reconstitution, and quarterly rebalance.	Constituent stocks in any given sector should not account for more than a 30% weight in the index. If greater, stocks with a history of increasing dividends over the last 20 consecutive years are added in decreasing order of dividend yield until the criteria is met. If still not met, the remaining eligible S&P 500 stocks are added in decreasing order of dividend yield until the sector criteria is met.
Weighting	Constituents are weighted by market capitalization.	Constituents are equally-weighted.
Review Process	Index composition changes are made annually and constituents are reviewed quarterly to ensure dividend sustainability.	Index composition changes are made annually and constituents are rebalanced to equal-weight on a quarterly basis.

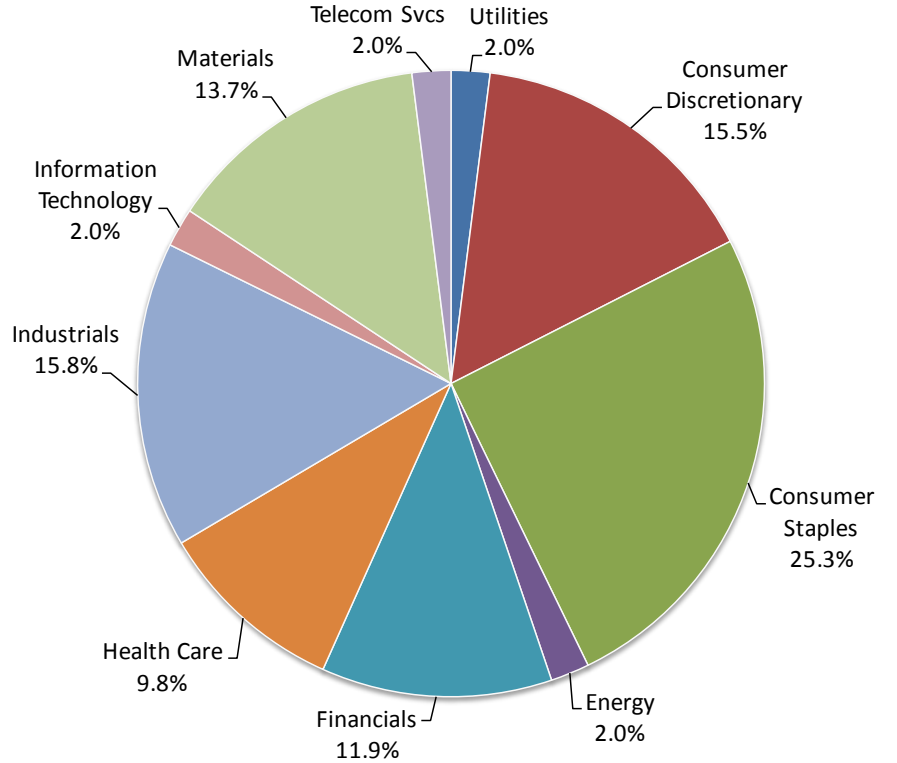
Sources: Dow Jones Indexes and S&P Indices

Sector Weight Comparison

Dow Jones U.S. Dividend 100 Index



S&P 500 Dividend Aristocrats Index



Sources: S&P Indices and Bloomberg LP. Based on GICS® Sector Weights. Data as of December 30, 2011.

Performance Comparison

	Dow Jones Dividend 100*†	Dividend Aristocrats*	S&P 500 Index*
	<u>Total Return</u>	<u>Total Return</u>	<u>Total Return</u>
		<u>Difference</u>	<u>Difference</u>
Annualized	8.62%	7.10%	2.92%
Cumulative	128.55%	98.64%	33.32%
Std. Dev.	16.14%	16.52%	18.24%
2011	11.39%	8.33%	2.11%
2010	17.72%	19.35%	15.06%
2009	19.34%	26.56%	26.46%
2008	-24.76%	-21.88%	-37.00%
2007	8.49%	-2.07%	5.49%
2006	23.73%	17.30%	15.79%
2005	3.99%	3.69%	4.91%
2004	20.69%	15.46%	10.88%
2003	21.33%	25.37%	28.68%
2002	-5.04%	-9.87%	-22.10%

* Data Source: Bloomberg

† Back-tested historical returns.

Anticipated Top 20 Holdings

Dow Jones U.S. Dividend 100 Index

Company Name	Ticker	Weight (%)
Intel Corp.	INTC	4.59
Coca-Cola Co.	KO	4.56
Exxon Mobil Corp.	XOM	4.50
Procter & Gamble Co.	PG	4.46
Johnson & Johnson	JNJ	4.43
Chevron Corp.	CVX	4.35
Wal-Mart Stores Inc.	WMT	4.02
PepsiCo Inc.	PEP	3.88
McDonald's Corp.	MCD	3.79
ConocoPhillips	COP	3.63
Abbott Laboratories	ABT	3.57
Home Depot Inc.	HD	2.92
United Technologies Corp.	UTX	2.49
Altria Group Inc.	MO	2.34
3M Co.	MMM	2.17
Bristol-Myers Squibb Co.	BMJ	2.16
Boeing Co.	BA	1.89
E.I. DuPont de Nemours & Co.	DD	1.86
Colgate-Palmolive Co.	CL	1.64
Honeywell International Inc.	HON	1.61
Total		64.86

Source: Dow Jones Indexes. Data as of March 21, 2012.

Reasons for Internal Investment

- **Save investment management fees and open the possibility of additional savings in the future.**
- **Tighter control over rebalancing and cash flow needs.**
- **Knowledge and experience of direct investing will help in monitoring broader equity portfolio and underwriting new opportunities.**
- **Increased involvement in equity analysis will promote staff interest and retention.**

Implementation of Direct Investment Program

- **Universe: Dividend paying stocks in the Dow Jones U.S. Broad market Index.**
- **Stocks listed in the Dow Jones U.S. Dividend 100 Index may not have a weight of +/- 0.5% of the index at the time of purchase.**
- **A stock not in the Dow Jones U.S. Dividend 100 Index may not have a portfolio weight of greater than 0.5% at the time of purchase.**
- **All stocks will have a minimum market capitalization of USD \$500 million and an average daily trading volume of \$2 million.**
- **At least 90% of the market value of the portfolio will be invested in constituents of the Dow Jones U.S. Dividend 100 Index.**

Competencies for Additional Investment in Dividend Paying Companies

- **Portfolio Investment staff have more than a decade of experience reviewing balance sheets and investing in the senior capital of corporations.**
- **Portfolio staff have implemented a semi-index REIT strategy that has exceeded the benchmark for the past two years.**
- **Portfolio staff have attended professional development opportunities relating to company and industry analysis offered by Fitch and SNL Securities.**
- **Back office has extensive experience accounting for the purchase of individual securities as well as resolving corporate governance and other issues with our custodian.**
- **Brokerage relationships are already in place to accommodate trading.**
- **Staff have traded equities for over 5 years.**
- **Custodian has measures in place to assure compliance with guidelines (Charles Rivers).**
- **Treasury's compliance unit has systems in place to monitor compliance.**
- **Proxy service will be engaged; possible Institutional Shareholder Services (ISS) to either recommend or vote proxies**

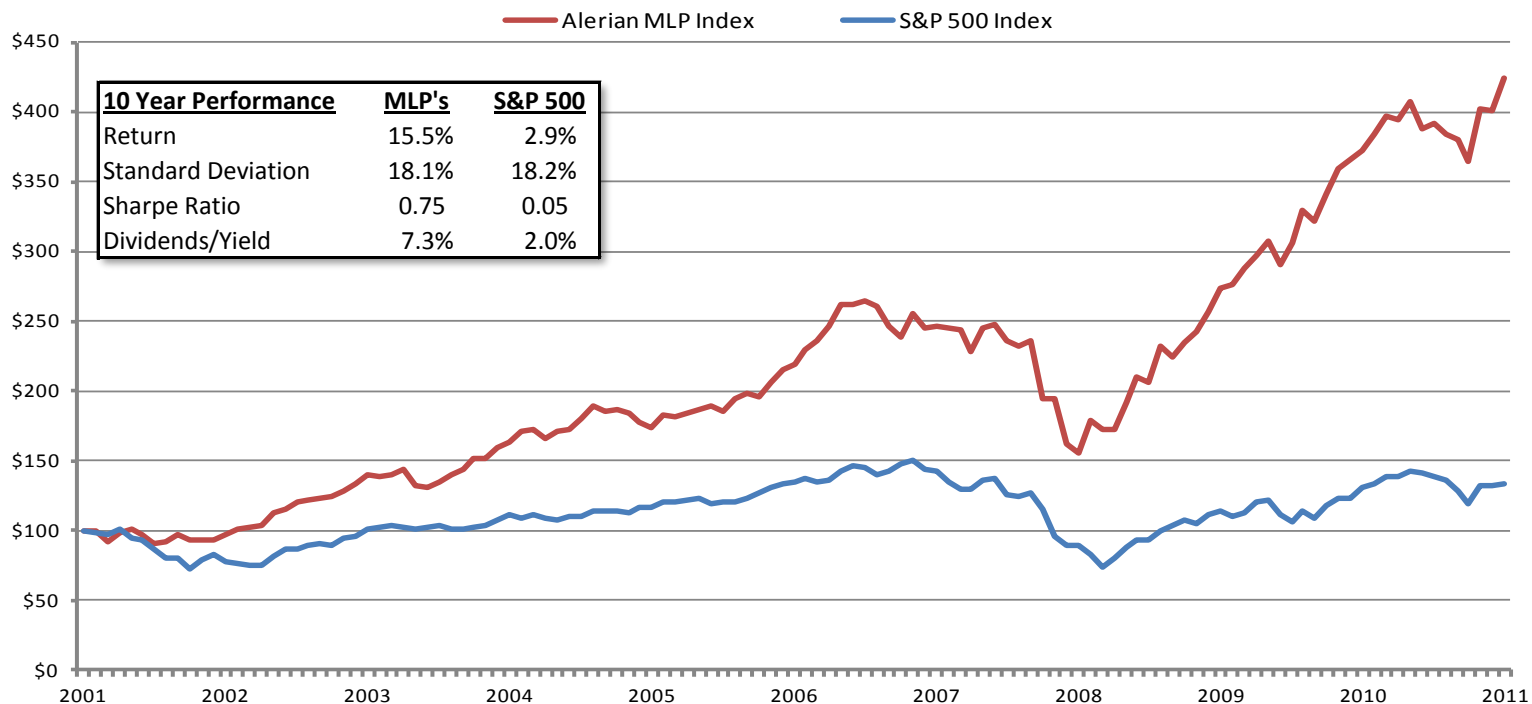
Master Limited Partnerships (MLP)

- **Modern form of MLP was defined by the Tax Reform Act of 1986 and the Revenue Act of 1987.**
- **Partnership must derive most (~90%) of its cash flows from real estate, natural resources and commodities.**
- **MLP has partnership structure, but issues investment units that trade like common stock.**
- **Partnership does not pay taxes from profit – the money is only taxed when unit holders receive distributions.**
- **MLP generate attractive dividend yields with a growth component.**

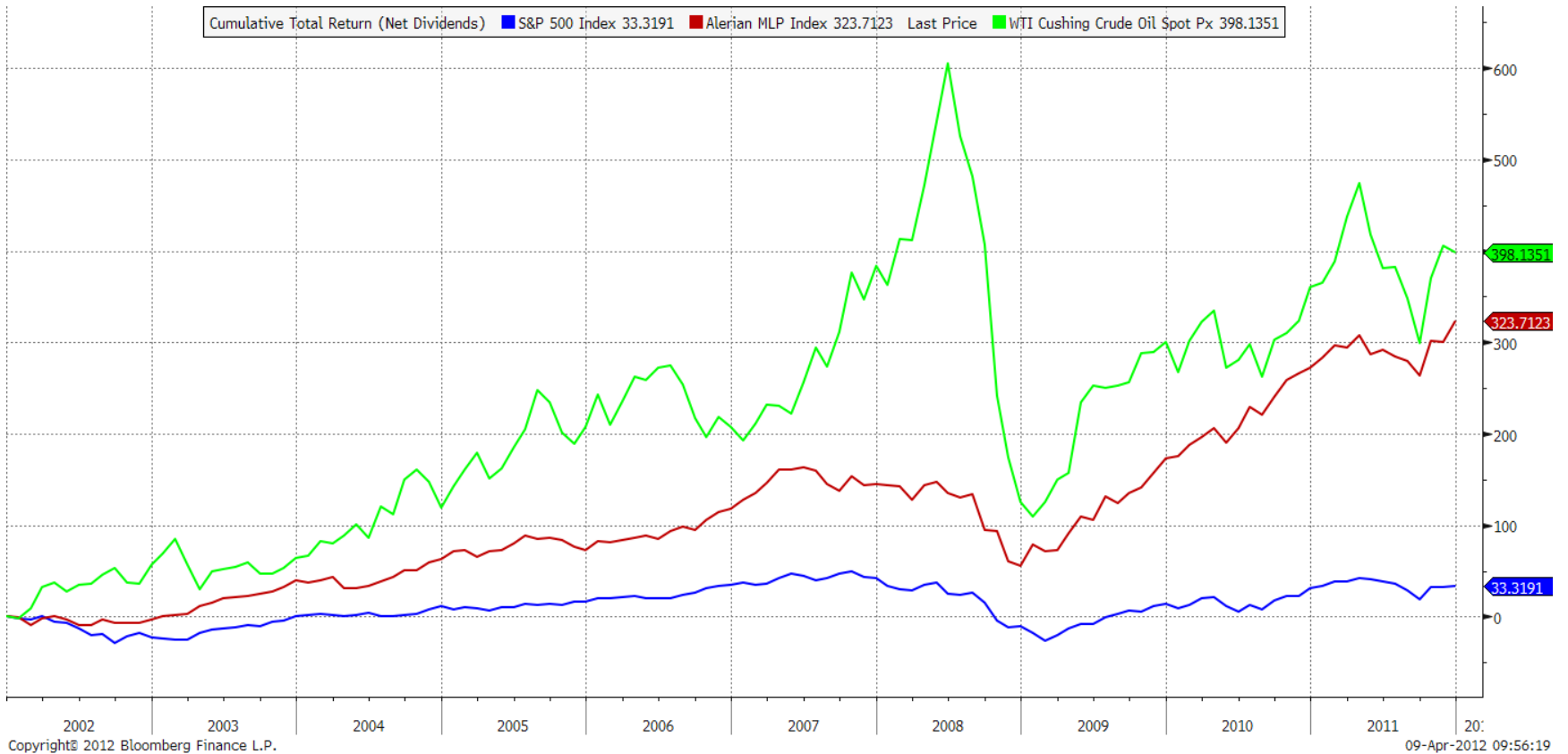
Master Limited Partnerships (MLP)

- MLP are publicly listed partnerships composed of natural resource and energy infrastructure operating companies.
- Typical MLP businesses are gas and oil pipelines, energy storage facilities, and energy processing and distribution networks.
- MLP energy infrastructure investments have provided high cash flows and low correlation to other asset classes over the past 10 years.

MLP's – 10 Year Growth of \$100



MLP, S&P 500, and Oil Prices



MLP Correlations

Correlations	Alerian MLP Index	S&P 500	S&P 500 Energy	S&P 500 Utilities	Oil - WTI	Natural Gas - Henry Hub
S&P 500	0.68	1.00				
S&P 500 Energy	0.57	0.75	1.00			
S&P 500 Utilities	0.61	0.73	0.67	1.00		
Oil - WTI	0.52	0.35	0.67	0.32	1.00	
Natural Gas - Henry Hub	0.05	(0.08)	0.28	0.16	0.34	1.00

MLP Risk Exposure

MLP have exposure to additional risks when compared with equities more broadly. These risks include exposure to:

- **Energy prices**
- **Changes in the level and mix of energy delivery**
- **Regulation at the federal, state, and local level**
- **Changes in tax policy**
- **Interest rates since MLP are both high yielding investments and can have leveraged capital structures**

Increase Flexibility in Core Fixed Income

- **The Intermediate US Treasury Investment Guidelines allow for the inclusion of non-Treasury securities up to 10% of the portfolio, at the time of purchase.**
- **This cap ensures that the portfolio will maintain high levels of liquidity and be available as a liquidity resource for the broader ARMB portfolio.**
- **This need for liquidity will decline as the allocation to short term fixed income increases from 2% to 6%.**
- **Staff proposes modifying the guidelines to increase the maximum exposure to non-Treasury securities from 10% to 30%.**
- **Staff does not intend to permanently increase the proportion of non-Treasuries to this new cap.**
- **Increasing the cap will allow staff to opportunistically purchase non-Treasury securities when relative yields increase.**

Proposed Fixed Income Supplements

Fixed Income Supplements:

- **Increase Allocation to Short-Term Fixed Income**
- **Equity Dividend Strategy**
- **Absolute Return Low Volatility Portfolio**
- **Master Limited Partnerships (MLP)**
- **Increase Flexibility in Core Fixed Income**

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Prisma – Yield Portfolio ACTION: X
DATE: April 20, 2012 INFORMATION: _____

BACKGROUND:

Prisma Capital Partners was hired in January of 2010 to manage an absolute return portfolio for the Alaska Retirement Management Board. Prisma is a high quality institutional asset manager with demonstrated success managing hedge fund portfolios. Prisma's current mandate with the ARMB is \$145 million.

STATUS:

Prisma manages funds for other clients that offer characteristics of fixed-income portfolios. The portfolios target low volatility, income in excess of intermediate treasury bonds, downside equity protection, and short-to-medium-term liquidity. ARMB staff and Prisma have discussed the possibility of adding this type of exposure as a sub-portfolio to Prisma's current mandate with the ARMB. The sub-portfolio would have exposure to credit-oriented strategies for income and yield and to macro strategies for downside protection. Without event-driven and equity-oriented strategies, the sub-portfolio is expected to have a lower return expectation of 3-month Treasury bills plus 450 basis points, compared with 500 basis points for the main portfolio. In all other respects, the combined portfolio would remain consistent with the ARMB's absolute return policy.

RECOMMENDATION:

That the Alaska Retirement Management Board direct staff to invest an additional \$50 million with Prisma Capital Partners in a sub-portfolio targeted at fixed income characteristics.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Dow Jones U.S. Dividend 100 Index

ACTION: X

DATE: April 20, 2012

INFORMATION: _____

BACKGROUND:

With the goal of establishing an equity yield focused strategy to supplement historically low treasury yields, staff researched the available dividend index methodologies and characteristics in selecting the most suitable option for ARMB's domestic equity portfolio. In analyzing the various index options, staff focused on the following characteristics: dividend yield, sustainability, size, liquidity, performance, risk, and stock/sector diversification.

STATUS:

After taking these factors into account, staff views the Dow Jones U.S. Dividend 100 Index as the best option. The Dow Jones U.S. Dividend 100 Index seeks to track the performance of 100 high dividend yielding stocks which also display fundamentally strong characteristics. Eligible securities must have a 10-year history of paying dividends and are ranked by cash flow to total debt, return on equity, dividend yield, and their five-year dividend growth rate.

As of March 30, 2012, the dividend yield on the Dow Jones U.S. Dividend Index was 3.02% compared to the S&P 500's 1.95% yield. The Dow Jones U.S. Dividend 100 Index (based on back-tested data) has outperformed the S&P 500 Index over the past 10 years by an annualized 4.55% (8.66% vs. 4.11%). More recently, the index has also outperformed the S&P 500 Index on a 1, 3, and 5-year basis. Over the past 10 years, the Dow Jones U.S. Dividend 100 Index has maintained a standard deviation below that of the S&P 500 Index (16.15% vs. 18.59%).

RECOMMENDATION:

The Alaska Retirement Management Board authorize a \$100 million investment in an internally managed dividend portfolio benchmarked against the Dow Jones U.S. Dividend 100 Index.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Master Limited Partnerships

ACTION: X

DATE: April 20, 2012

INFORMATION: _____

BACKGROUND:

Master limited partnerships (MLP's) are publically listed partnerships consisting of natural resource and energy infrastructure operating companies. Typical MLP businesses are gas and oil pipelines, energy storage facilities, and energy processing and distribution networks. The Alaska Retirement Management Board had an educational presentation on MLP's at the October 2011 ARMB Investment Education Conference.

STATUS:

Since the 2011 Education Conference, staff has further researched the potential for MLP investments in the ARMB portfolio. MLP investments are publicly listed on major exchanges and provide relatively transparent and liquid exposure to energy infrastructure. MLP's have provided high returns with a high yield component and have exhibited lower correlation to other asset classes.

MLP assets are long-lived, high-value assets like pipelines that generally operate in a regulated environment and often have monopoly or near-monopoly characteristics with substantial barriers to entry. Most MLP assets have strong operating leverage and cash flow growth which is driven by energy demand growth. MLP's generally don't have direct commodity price exposure and pricing is often indexed to inflation, which provides a built-in inflation hedge for the portfolio.

MLP investments as represented by the Alerian MLP Index have provided high returns, strong cash flows and low correlation to other asset classes over the past 10 years:

<u>10 Year Performance</u>	<u>MLP's</u>	<u>S&P 500</u>	<u>S&P Energy</u>	<u>S&P Util.</u>	<u>Oil-WTI</u>	<u>Nat. Gas</u>
Return - 10Y	15.5%	2.9%	11.6%	6.4%	17.4%	-16.7%
Stdev - 10Y	18.1%	18.2%	23.7%	17.9%	36.0%	25.7%
Sharpe - 10Y	0.75	0.05	0.41	0.25	0.43	(0.73)
Dividends/Yield	7.3%	2.0%				
MLP Correl.	1.00	0.68	0.57	0.61	0.52	0.05

Over this 10 year time period, MLP investments have delivered higher returns with a similar standard deviation and lower correlation to domestic equities. The dividend/yield component of the return was

7.3%, 47% of the total return. Subsequently, the dividend yield component of the Alerian MLP index has decreased, but remains high at 5.8% as of April 4, 2012.

MLP's are a relatively small, but growing, segment of the stock market. The market is currently composed of close to 100 partnerships with a market capitalization of approximately \$250 billion and roughly \$700 million in average daily volume. This compares with a roughly \$450 billion market cap and \$3 billion average daily volume for REITs. Institutional ownership is currently at 30% and has been growing over the past several years. Investors have a choice of investing in MLP's through several vehicles, including separate accounts, closed-end funds, and open-end funds for potential tax and liquidity reasons.

MLP's are exposed to some additional risks when compared with equities more broadly. These risks include exposure to (a) energy prices; (b) changes in the level and mix of energy delivery; (c) regulation at the federal, state, and local level; (d) changes in tax policy; and (e) interest rates since MLP's are both high yielding investments and can have leveraged capital structures. These risks can be mitigated to a certain extent through investment sizing and diversification.

Staff is recommending investment in MLP's since they have the potential to provide strong risk-adjusted returns, high yields, inflation hedging properties, and additional diversification to the ARMB portfolio.

RECOMMENDATION:

That the Alaska Retirement Management Board direct staff to engage Callan Associates to conduct a search for MLP managers.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Increase Cap on Non-Treasury Portion of
Intermediate Treasury Portfolio to 30%

ACTION: X

DATE: April 19-20, 2012

INFORMATION:

BACKGROUND:

The intermediate Treasury portfolio comprises 80% of the target allocation within the fixed income asset class. The other components include a 10% target allocation to high yield and a 10% target allocation to international fixed income. This portfolio was created in the Spring of 2010 following the adoption of Resolution 2010-3 by the Alaska Retirement Management Board in February 2010. The guidelines were further clarified in Resolution 2010-19 in December 2010.

The intended purpose of this portfolio was to provide diversification with a high level of liquidity. For this reason, the investment guidelines constrain the proportion of the portfolio comprised of Treasuries and short-term fixed income assets to be at least 90%.

STATUS:

Separately, staff is recommending an increase to the short-term fixed income asset class from 2% in FY12 to 6% in FY13. If this occurs, the need for liquidity from the intermediate Treasury portfolio will decrease. The prospective performance of the intermediate Treasury portfolio can be enhanced by relaxing the Treasury cap from 90% to 70%. This will allow staff to seek higher yield and increase flexibility to opportunistically purchase non-Treasury securities during periods when the yield difference between them and Treasury securities increases.

RECOMMENDATION:

Adopt Resolution 2012-09.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Intermediate U.S. Treasury Fixed Income Guidelines

Resolution 2012-09

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

WHEREAS, the Board has authorized investment in fixed income securities; and

WHEREAS, the Board will establish and from time to time as necessary modify guidelines for fixed income securities.

NOW THEREFORE BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the attached Intermediate U.S. Treasury Fixed Income Guidelines, attached hereto and made a part hereof, regarding investment in domestic fixed income securities.

This resolution repeals and replaces Resolution 2010-19.

DATED at Anchorage, Alaska this _____ day of April, 2012.

Chair

ATTEST:

Secretary

INTERMEDIATE U.S. TREASURY INVESTMENT GUIDELINES

- A. Purpose.** The emphasis of investments in fixed income securities shall be diversification, subject to defined constraints, to minimize risk.
- B. Barclays Capital U.S. Treasury: Intermediate Index Portfolio.**
- 1. Investment Structure.** Permissible U.S. dollar denominated debt investments shall be limited to the following:
 - a. Money market investments comprising:
 1. Repurchase agreements collateralized only by U.S. Treasury obligations, including bills, notes, and bonds, and only when the collateral carries a market value equal to or greater than 102% of the amount of the repurchase agreements, and only when the custodial bank appointed by retirement funds will take custody of the collateral; and
 2. Commercial paper rated at least Prime-1 by Moody's Investor Services, Inc. and A-1 by Standard and Poor's Corporation; and
 3. Negotiable certificates of deposit and bankers acceptances; provided that an issuing bank must have total assets in excess of \$5 billion.
 - b. United States Treasury obligations including bills, notes, bonds, other debt obligations issued by the United States Treasury, and backed by the full faith and credit of the U.S. Government.
 - c. Other full faith and credit obligations of the U.S. Government.
 - d. Securities issued or guaranteed by agencies and instrumentalities of the U.S. Government, but not explicitly backed by the full faith and credit of the U.S. Government.
 - e. Securities issued or guaranteed by municipalities in the United States.
 - f. Obligations of foreign governments, sovereign states, supranational entities, and their instrumentalities denominated in U.S. dollars.
 - g. Investment grade corporate debt securities comprising:

1. Corporate debt issued in the U.S. capital markets by U.S. companies; and
 2. Euro-dollar debt (that is, U.S. dollar-denominated securities issued outside the U.S. capital markets by U.S. companies or by foreign issuers); and
 3. Yankee debt (that is, U.S. dollar denominated obligations and issued in the U.S. capital markets by foreign issuers).
- h. Asset-backed Securities (ABS).
- i. Agency and non-agency mortgage-backed securities backed by loans secured by residential, multifamily and commercial properties including, but not limited to pass-throughs, collateralized mortgage loans (CMO's), project loans, construction loans and adjustable rate mortgages.
- j. Total return swaps referenced to components or sub-components of fixed income indices. To mitigate interest rate risk, the proceeds may not be invested in securities with a maturity beyond 90 days, unless invested in the Department of Revenue internally-managed Short-Term Fixed Income Pool.
- k. The internally managed short-term or substantially similar portfolio.
- 2. Limitation on Holdings.** The manager of the fixed-income portfolio shall apply appropriate diversification standards subject, however, to the following limitations based on the current market value of assets:
- a. The portfolio's effective duration may not exceed a band of +/-20% around the modified adjusted duration (or effective duration) of the Barclays Capital U.S. Treasury: Intermediate Index, unless the investment agreement with an external manager specifically allows for a different band.
 - b. Investments in fixed-income securities shall be placed solely in U.S. dollar denominated debt instruments.
 - c. The manager may not invest more than ~~30%~~ 10% of the portfolio in securities that are not nominal United States Treasury obligations or the internally managed short-term or substantially similar portfolio at the time of purchase.
 - d. Corporate, asset-backed and non-agency mortgage securities must be rated investment grade. The investment grade rating is defined as the median rating of the following three rating agencies: Standard & Poor's Corporation, Moody's and Fitch. Asset-backed and non-

agency mortgage securities may be purchased if only rated by one of these agencies if they are rated AAA. Corporate bonds may be purchased if rated by two of these agencies.

- e. The manager may not purchase more than 10% of the currently outstanding par value of any corporate bond issue.
- f. The manager may not invest more than 5% of the portfolio's assets in corporate bonds of any one company or affiliated group.

3. Coverage. The manager will execute trades with dealers that will execute orders promptly at the most favorable prices reasonably attainable.

- a. **Internally managed assets.** The manager may only execute trades with U.S. Treasury primary dealers; provided that the dealer shall have a minimum of \$200,000,000 in capital. This requirement does not apply to or restrict trades with direct issuers of commercial paper and mortgage-backed securities otherwise eligible for investment under these guidelines. The dealers must be able to execute orders promptly at the most favorable prices reasonably attainable.
- b. **Externally managed assets.** Internal cross trades are permitted at prevailing market levels, in accordance with Department of Labor's Prohibited Transaction Exemption 95-66.

4. Specific Exclusions on Investments. The manager shall apply appropriate limitations designed to reduce risk exposure at the time investment securities are purchased, and shall, at a minimum, apply the following limitations:

- a. There shall be no investment in private placements, except Rule 144A securities.
- b. The manager shall not sell securities short.
- c. The manager shall not purchase securities on margin.
- d. The manager shall not utilize options or futures.

5. Required Remedies. Recognizing that ratings and relative asset worth may change, the manager shall liquidate invested securities with care and prudence when the credit rating of a security falls below the minimum standards set in these guidelines or when the relative market value of that investment type exceeds the levels of holdings permitted in these guidelines. The manager is required to notify the chief investment officer to discuss the situation and the proposed liquidation strategy if it is not prudent simply to liquidate immediately.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Investment Advisory Council Member
Contract Expiration

ACTION: X

INFORMATION:

DATE: April 20, 2012

BACKGROUND:

AS 37.10.270 provides that the Alaska Retirement Management Board (Board) may appoint an investment advisory council (IAC) composed of at least three and not more than five members. Members shall possess experience and expertise in financial investments and management of investment portfolios for public, corporate, or union pension benefit funds, foundations or endowments. The contract for IAC member George Wilson expires June 30, 2012.

STATUS:

In February 2012, the Board completed a search and interview process for an IAC member. Rather than initiate another search at this time, it would be staff's intention to bring the question of conducting a search at the February 2013 meeting in order to have sufficient time to complete the process prior to June 30, 2013.

RECOMMENDATION:

That the Board authorize an extension of Mr. Wilson's contract through June 30, 2013.



ARMB Board Meeting

Investment Performance
Fourth Quarter 2011
Includes Final Real Estate

Michael J. O'Leary, CFA
Executive Vice President

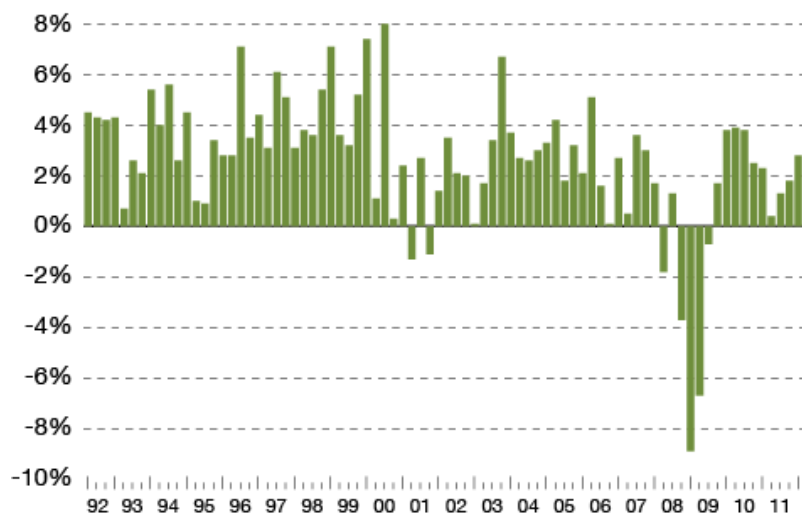
Paul M. Erlendson
Senior Vice President

Agenda

- Market review
- DB Plan Performance - Total Plan
- DB Plans Major Asset Categories
- DC Performance Update
- Comments regarding subsequent developments

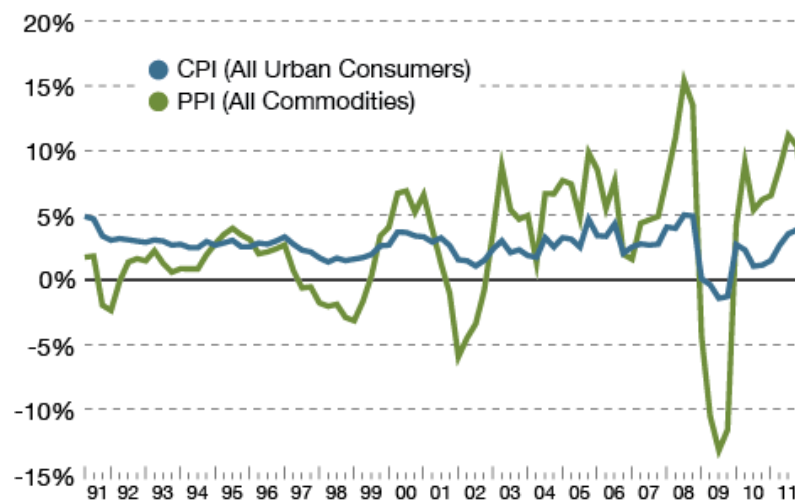
Recovery Continued

Quarterly Real GDP Growth* (20 Years)



Source: U.S. Department of Labor

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

Recent Quarterly Indicators

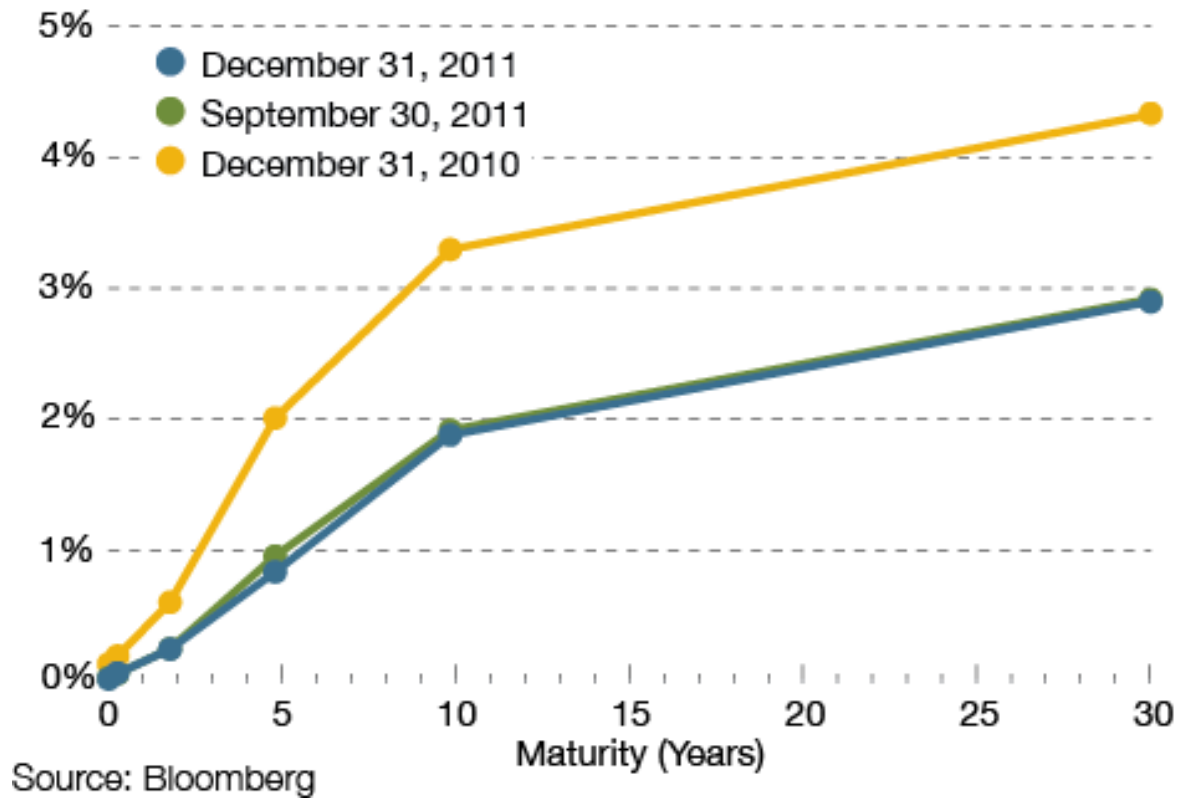
Economic Indicators (seasonally adjusted)	1Q10	2Q10	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11
CPI-All Urban Consumers (year-over-year)	2.3%	1.0%	1.1%	1.5%	2.7%	3.6%	3.9%	3.0%
PPI-All Commodities (year-over-year)	9.0%	5.5%	6.3%	6.6%	8.6%	11.2%	10.3%	5.5%
Employment Cost-Total Compensation Growth	2.6%	1.8%	1.8%	2.2%	2.1%	3.2%	1.4%	1.4%
Nonfarm Business-Productivity Growth	4.6%	-1.7%	2.3%	2.9%	-0.6%	-0.1%	2.3%	1.6%
GDP Growth*	3.9%	3.8%	2.5%	2.3%	0.4%	1.3%	1.8%	2.8%
Manufacturing Capacity Utilization (level %)	69.4	71.4	72.6	73.3	74.5	74.4	75.1	75.4
Consumer Sentiment Index (1966=1.000)	0.739	0.739	0.683	0.713	0.731	0.719	0.596	0.650

*The GDP estimates released on January 27, 2011 reflect the results of the comprehensive (or benchmark) revision of the national income and product accounts, according to the Bureau of Economic Analysis (BEA) Web site. More information on the revision is available at www.bea.gov/national/an1.htm.

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Reuters/University of Michigan

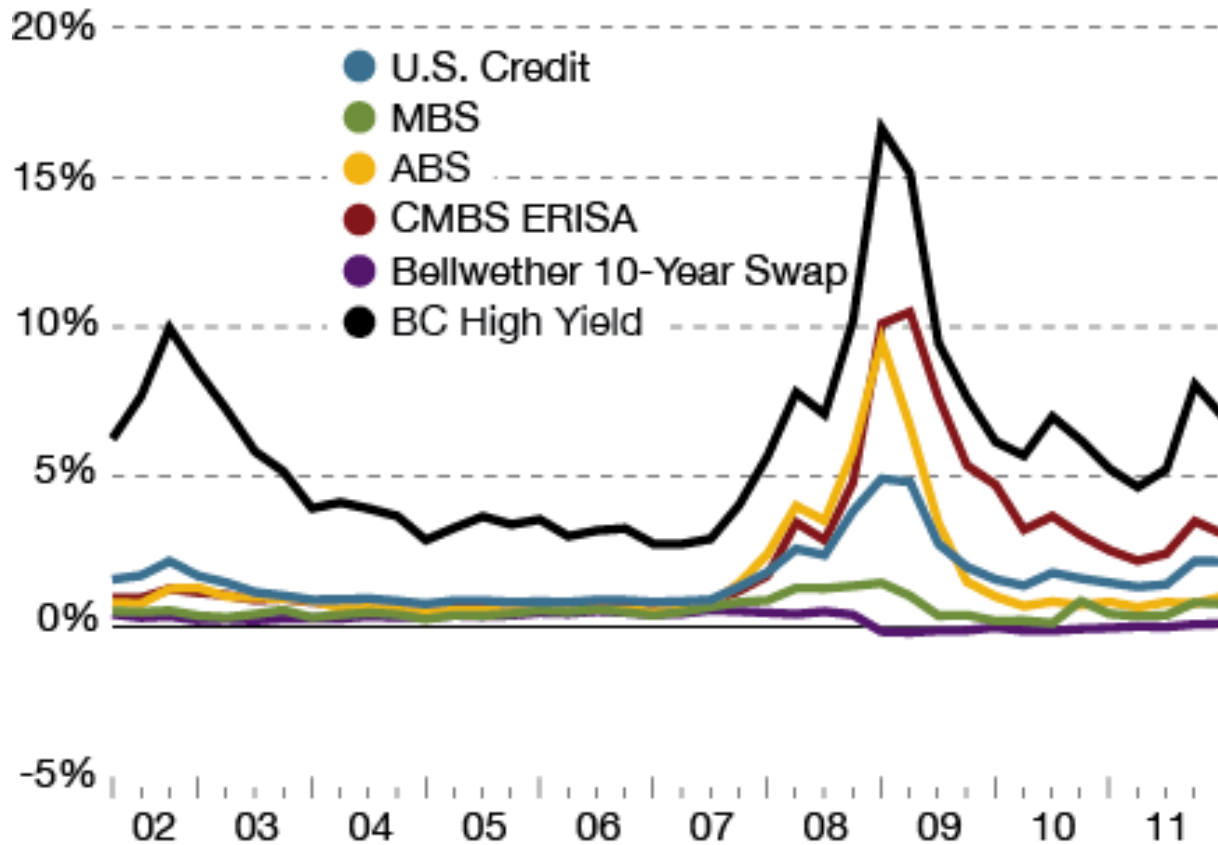
Fixed Income – Treasury Yield Curve

U.S. Treasury Yield Curves



Credit Spreads Narrowed

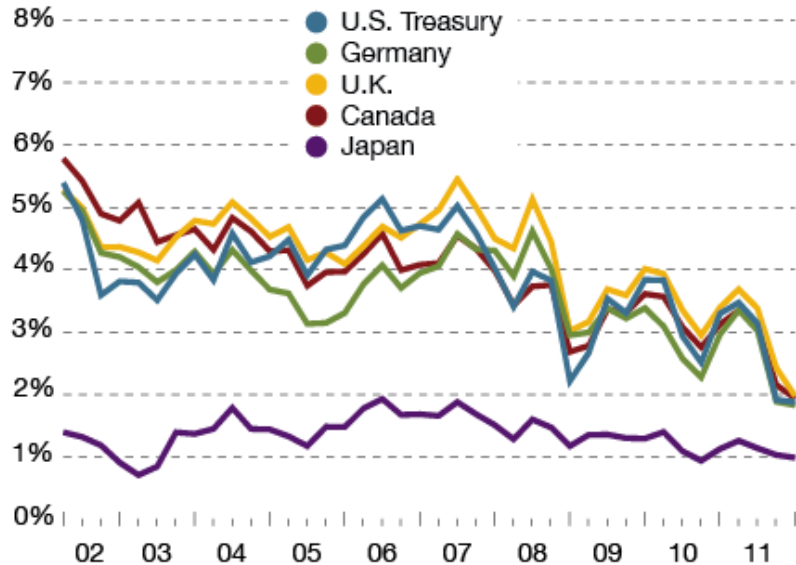
Effective Yield Over Treasuries



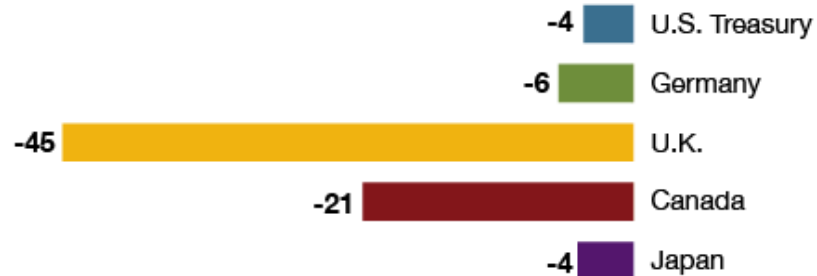
Source: Barclays Capital Inc.

More Spread Info

10-Year Global Government Bond Yields

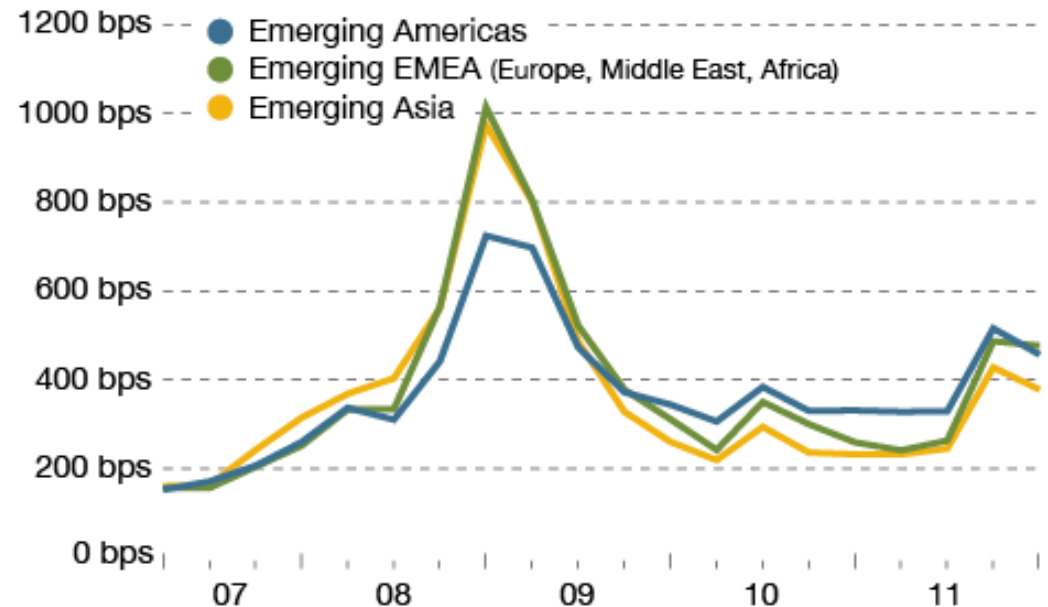


Change in 10-Year Yields from 3Q11 to 4Q11 (bps)



Source: Citigroup

Emerging Spreads by Region



Source: Barclays Capital Inc.

Asset Class Performance

Periods Ending December 31, 2011

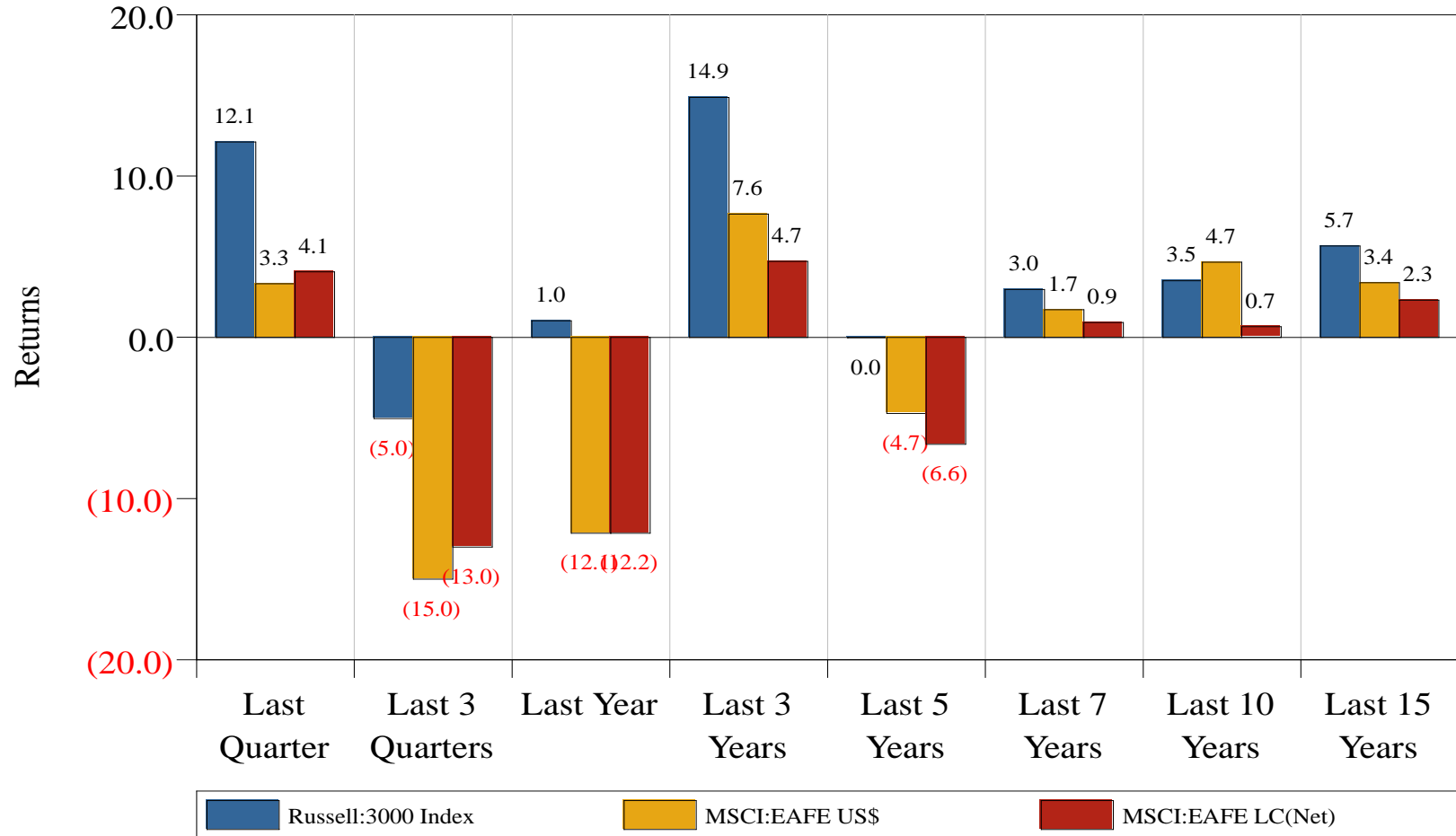
- For Quarter:
 - Equities on top
 - Emerging Markets better than Developed Intl
- For Year:
 - Bonds performed best
 - US equities better than cash
- Last 3 years:
 - Equities beat Bonds
 - Large difference between all 3 equities classes
- Last 5 years:
 - Cash beat US & Developed Intl Equities
- Last 10 years:
 - Emerging Markets best

Periodic Table of Investment Returns
for Periods Ended December 31, 2011

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell:3000 Index	12.1%	BC:Aggr Bd 7.8%	MSCI:Emer Markets 20.4%	BC:Aggr Bd 6.5%	MSCI:Emer Markets 14.2%
MSCI:Emer Markets	4.4%	Russell:3000 Index 1.0%	Russell:3000 Index 14.9%	MSCI:Emer Markets 2.7%	BC:Aggr Bd 5.8%
MSCI:EAFE US\$	3.3%	3 Month T-Bill 0.1%	MSCI:EAFE US\$ 7.6%	3 Month T-Bill 1.5%	MSCI:EAFE US\$ 4.7%
BC:Aggr Bd	1.1%	MSCI:EAFE US\$ (12.1%)	BC:Aggr Bd 6.8%	Russell:3000 Index 0.0%	Russell:3000 Index 3.5%
3 Month T-Bill	0.0%	MSCI:Emer Markets (18.2%)	3 Month T-Bill 0.1%	MSCI:EAFE US\$ (4.7%)	3 Month T-Bill 2.0%

Local Versus Dollar Returns

Returns for Various Periods
Current Quarter Ending December 31, 2011



Real Estate – Continued Improvement

Style Median and Index Returns* for Periods ended December 31, 2011

Private Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Real Estate Database (net of fees)	3.07	15.33	-1.92	-0.82	5.32	8.11
NCREIF Property**	2.96	14.26	2.43	3.09	8.06	9.41
Public Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
REIT Database	15.95	10.18	22.69	-0.50	11.73	10.80
FTSE NAREIT Equity	15.22	8.29	21.05	-1.42	10.20	8.91
Global Real Estate	Quarter	Year	3 Years	5 Years	10 Years	15 Years
REIT Global Database	7.72	-5.68	16.36	-4.46	10.80	--
FTSE EPRA/NAREIT Developed	7.36	-5.82	16.17	-5.28	9.59	6.39

*Returns less than one year are not annualized.

**Represents data available as of publication date.

All REIT returns are reported gross in USD.

Sources: Callan Associates Inc., NAREIT, NCREIF, The FTSE Group

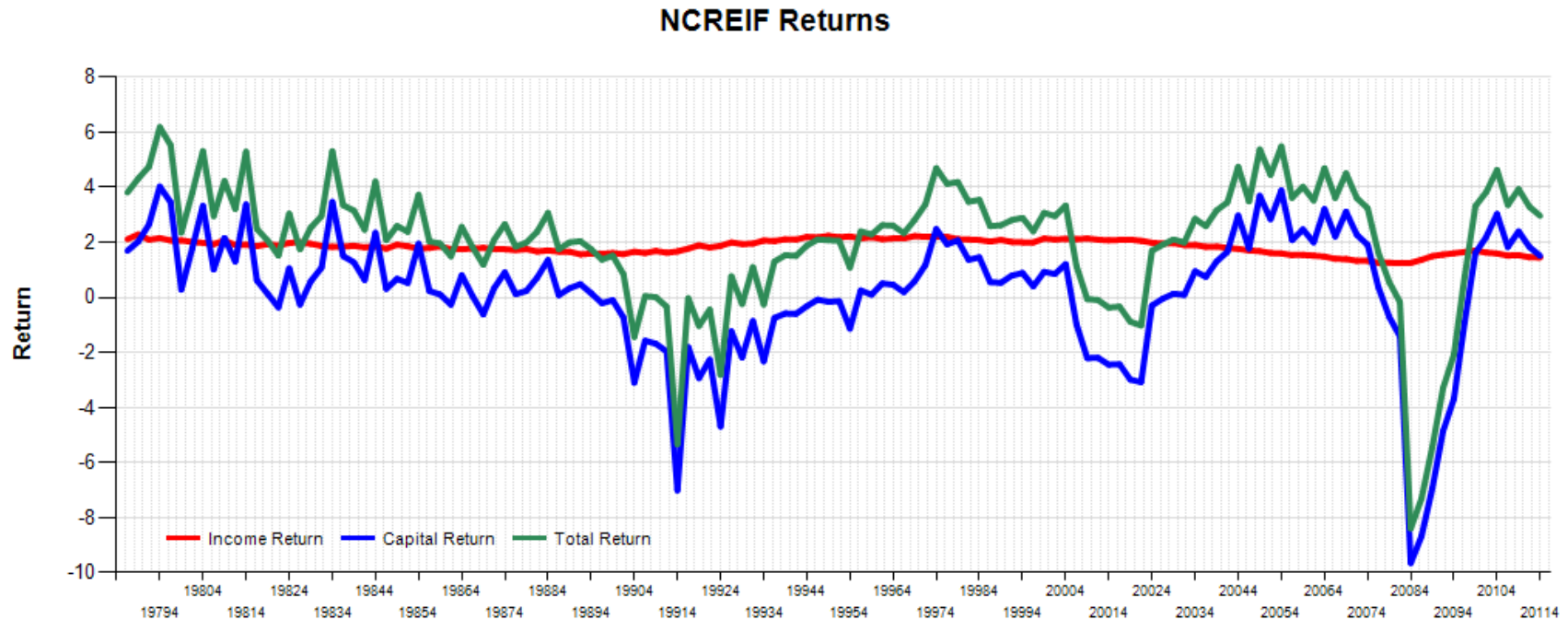
Overall Capitalization Rates

Sector	4Q11	3Q11	4Q10
Apartment	5.15%	5.04%	5.42%
Industrial	6.08%	5.98%	6.57%
Office	5.36%	5.46%	5.97%
Retail	6.26%	6.05%	6.59%

Rates based on unleveraged, value-weighted, appraisal capitalization data.

Source: NCREIF

Real Estate – Continued Improvement

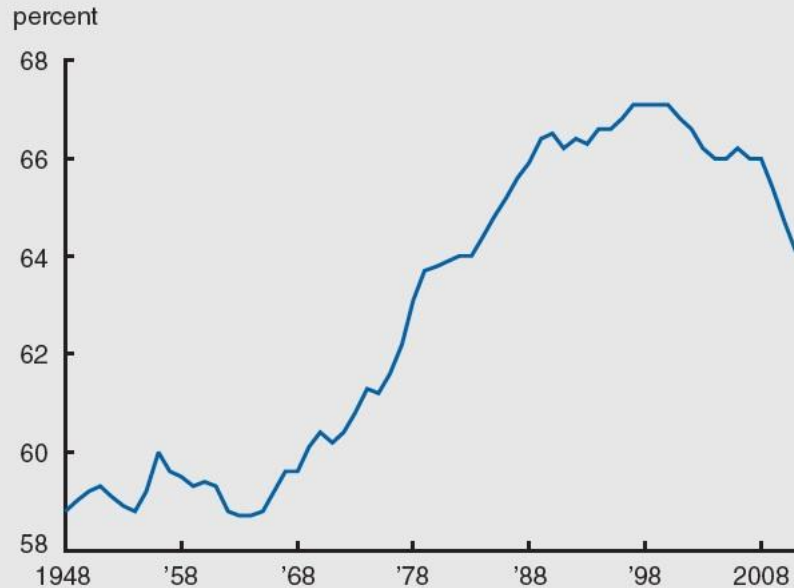


- Unlevered real estate enjoyed another positive quarterly return (2.96%). NCREIF Index trailing 4 quarter return = 14.3%.
- REITS began their recovery along with the stock market in early 2009. Over the trailing 12 months, FTSE NAREIT Index is up 8.3%.
- Over trailing three years NCREIF Property Index has a +2.4% return which compares unfavorably to REITS (+21.5%) and to domestic equity indices (Russell 3000 +14.9%).

How is employment?

Big decline in labor force participation rate – demographics or discouragement?

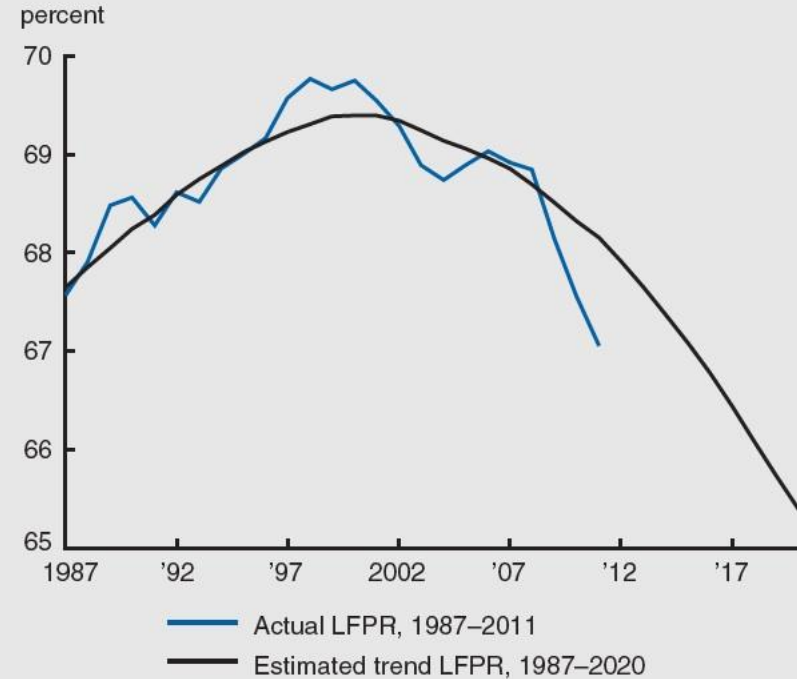
1. Actual LFPR, 1948–2011



NOTE: The labor force participation rate (LFPR) is the proportion of the civilian noninstitutional population aged 16 and older that is employed or unemployed and seeking work.

SOURCE: U.S. Bureau of Labor Statistics, *Current Population Survey*, from Haver Analytics.

3. Actual vs. trend LFPR, 16–79 year olds



NOTES: Trend labor force participation rate (LFPR) is the LFPR consistent with the contemporaneous composition of the work force and an economy growing at its potential. For details on the U.S. Census Bureau sources, see note 8.

SOURCES: Authors' calculations based on U.S. Bureau of Labor Statistics, *Current Population Survey*; and U.S. Census Bureau, population data and projections.

Source – Leeds on Finance

Participation rate up only in older age groups

Declining participation trends up to age 54

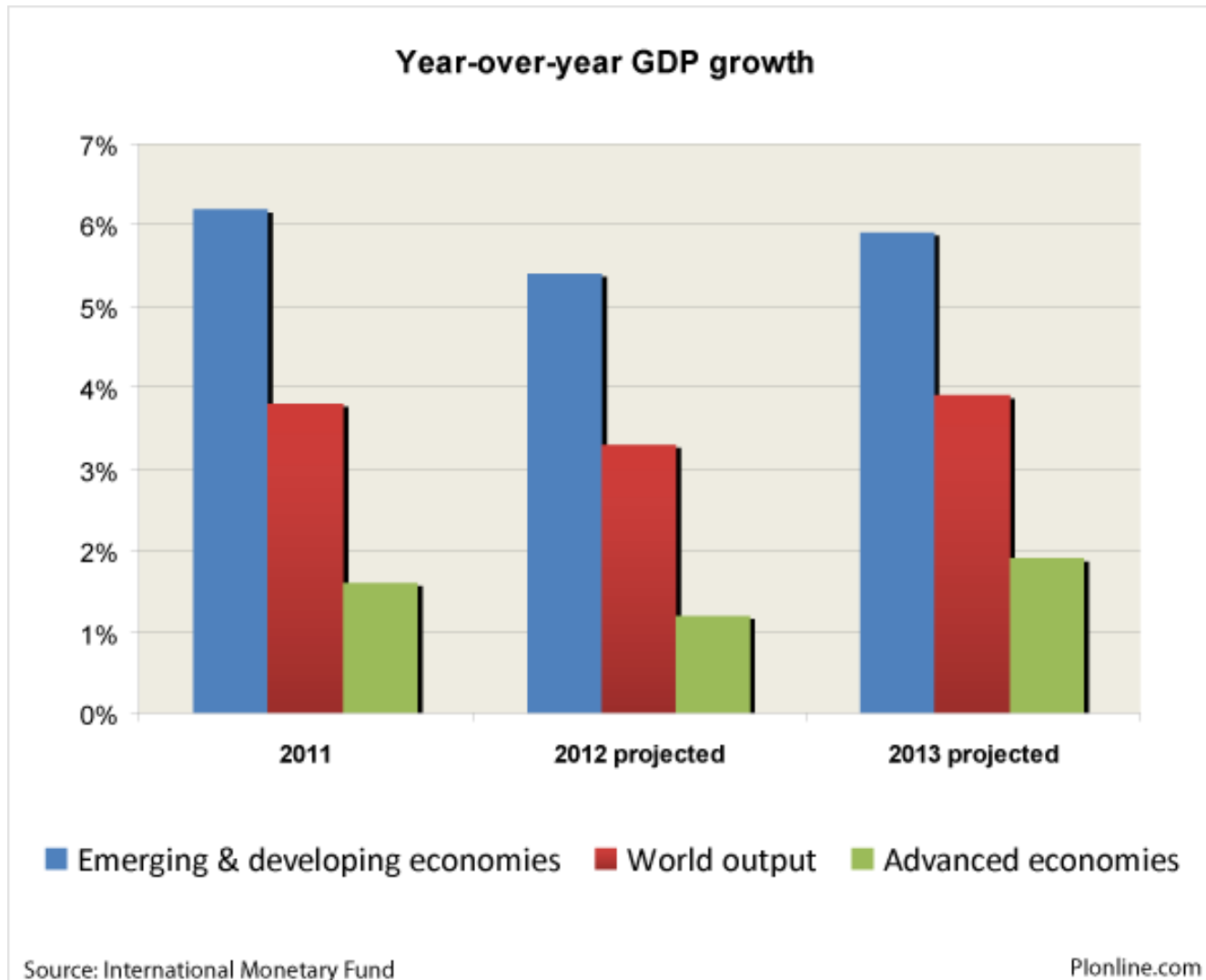
4. Decomposition of change in trend LFPR

Age group	2000		2011	
	Population share (1)	Trend LFPR (2)	Population share (3)	Trend LFPR (4)
16–19	7.7	51.9	7.2	38.4
20–24	9.3	76.8	9.5	74.4
25–54	58.9	83.4	54.8	82.7
55–70	17.2	48.9	22.2	54.5
71–79	6.9	10.2	6.3	14.3
Total	100.0	69.4	100.0	68.2
Total trend LFPR change, 2000–11			–1.2	
Due to aging			–0.8	
Due to other effects			–0.4	

NOTES: All values are in percent except for those in the final three rows, which are in percentage points. Trend labor force participation rate (LFPR) is the LFPR consistent with the contemporaneous composition of the work force and an economy growing at its potential. For details on the U.S. Census Bureau sources, see note 8.

SOURCES: Authors' calculations based on U.S. Bureau of Labor Statistics, *Current Population Survey*; and U.S. Census Bureau, population data and projections.

GDP Projections



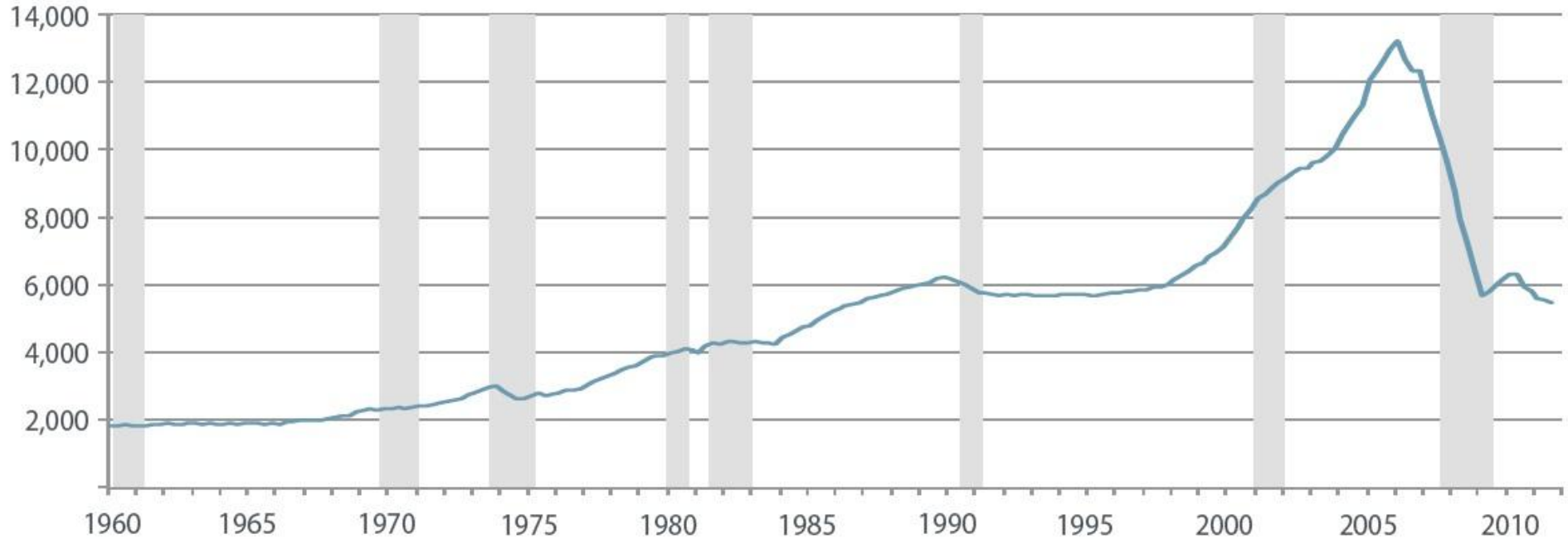
PREA Total Real Estate Return Expectations by Property Type



Source: Pension Real Estate Association

Amazing fall in home equity – easy to understand weak recovery pace

Figure 2: Equity in Household Real Estate (In Billions of 2005 Dollars)

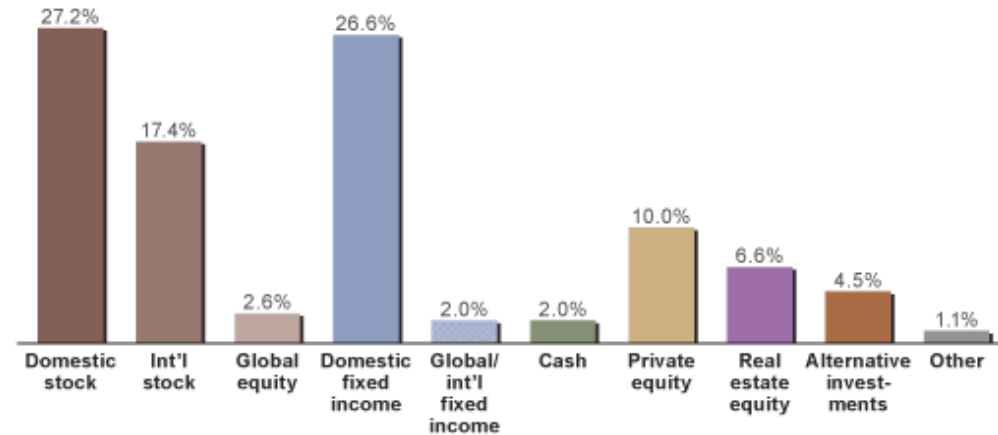


Source: Federal Reserve Board of Governors, Flow of Funds Accounts of the United States

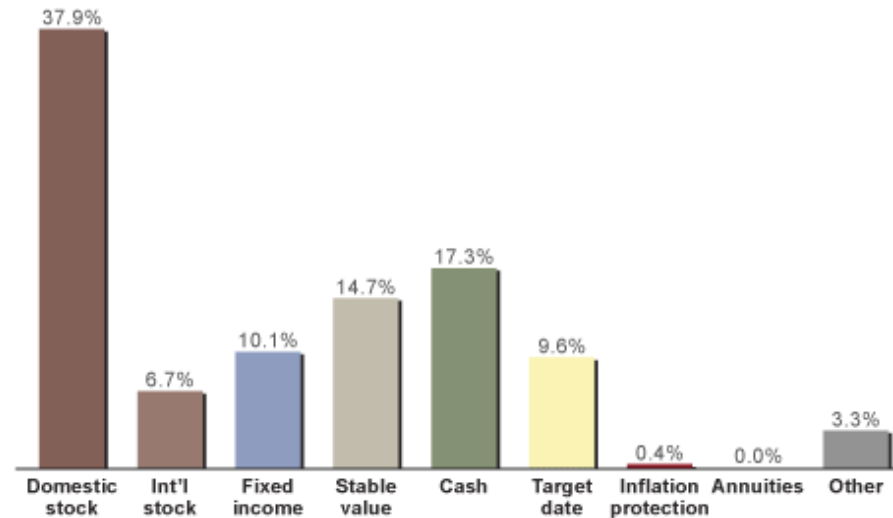
How does shift to DC impact investment demand?

One illustration

Top 200 defined benefit plans



Top 200 defined contribution plans

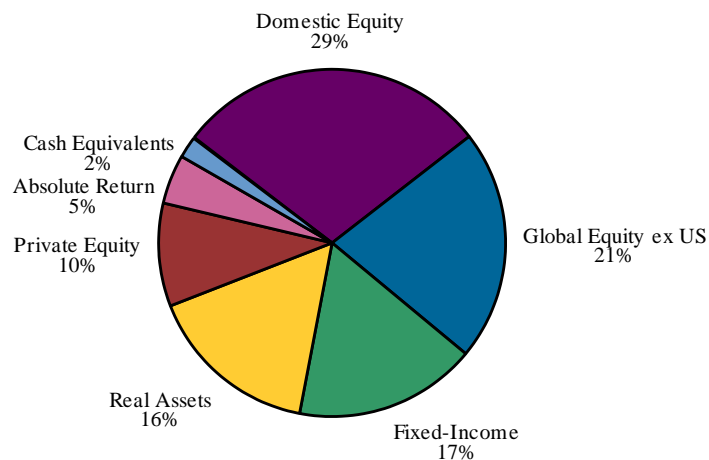


Source: P&I

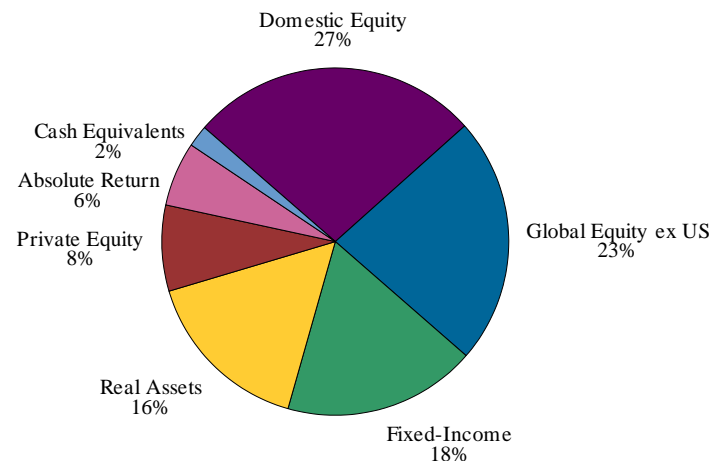
Asset Allocation – PERS

PERS is used as illustrative throughout the presentation. The other plans exhibit similar modest and understandable variations from strategic target allocations.

Actual Asset Allocation



Target Asset Allocation

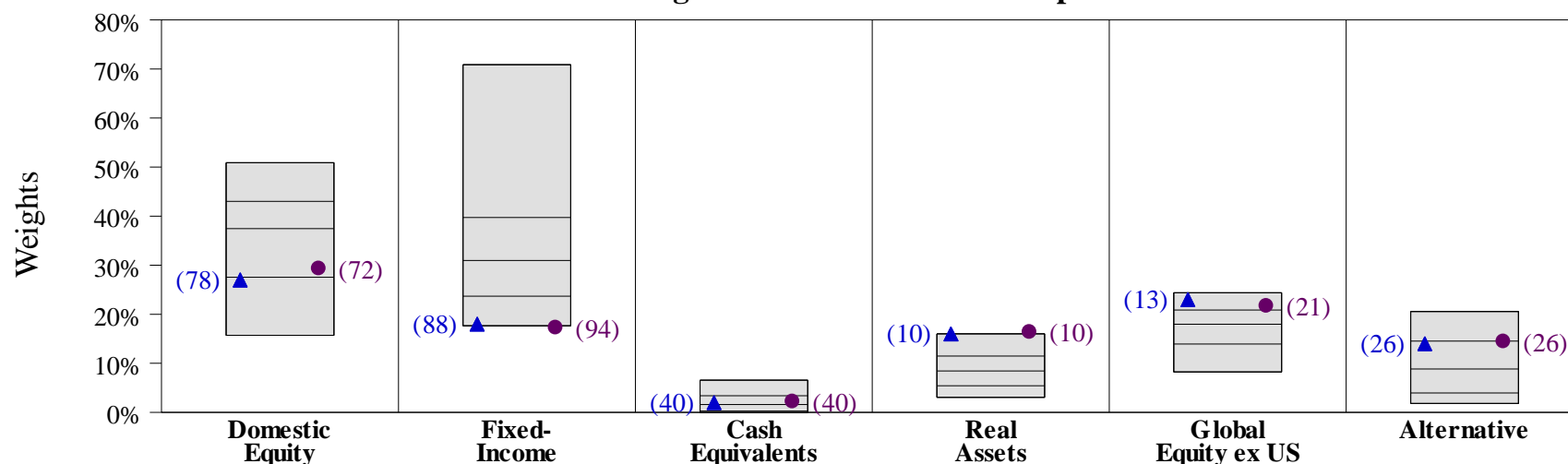


Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Domestic Equity	1,446,283	29.1%	27.0%	2.1%	104,684
Global Equity ex US	1,067,329	21.5%	23.0%	(1.5%)	(75,515)
Fixed-Income	846,034	17.0%	18.0%	(1.0%)	(48,365)
Real Assets	804,706	16.2%	16.0%	0.2%	9,684
Private Equity	478,920	9.6%	8.0%	1.6%	81,419
Absolute Return	227,154	4.6%	6.0%	(1.4%)	(70,979)
Cash Equivalents	98,458	2.0%	2.0%	0.0%	(920)
Total	4,968,883	100.0%	100.0%		

Asset Allocation Versus Public Funds (ERP)

Callan Public Fund Database

Asset Class Weights vs CAI Public Fund Sponsor Database



10th Percentile	50.91	70.87	6.56	16.02	24.38	20.56
25th Percentile	43.02	39.71	3.39	11.48	20.87	14.54
Median	37.47	30.96	1.60	8.45	17.97	8.85
75th Percentile	27.54	23.69	0.25	5.41	13.93	3.96
90th Percentile	15.70	17.68	0.01	3.06	8.24	1.83

Fund ●	29.11	17.02	2.01	16.17	21.48	14.21
Target ▲	27.00	18.00	2.00	16.00	23.00	14.00

% Group Invested	97.67%	100.00%	72.09%	47.67%	90.70%	48.84%
------------------	--------	---------	--------	--------	--------	--------

- Total fixed income is below target while real assets and alternatives are high when compared to other public funds. Policy is “growth” oriented as opposed to “income” oriented.

*Note that “alternative” includes private equity and absolute return

PERS Performance – Fourth Quarter 2011

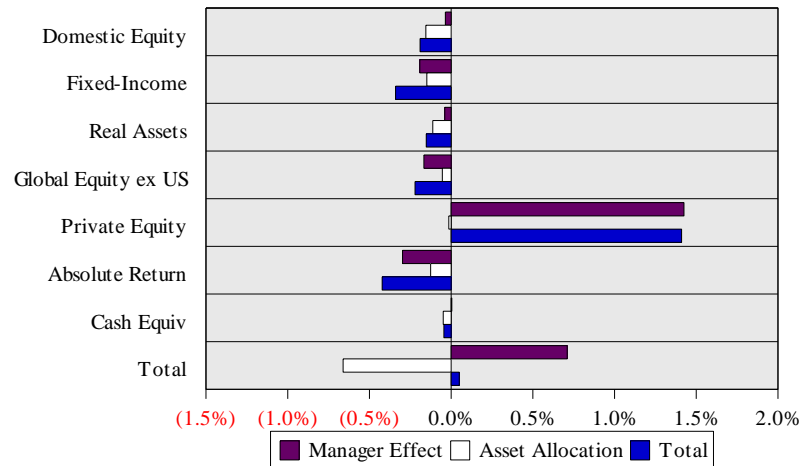
Relative Attribution Effects for Quarter ended December 31, 2011

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	27%	27%	12.79%	12.12%	0.18%	(0.01%)	0.17%
Fixed-Income	18%	18%	0.99%	1.14%	(0.03%)	0.01%	(0.02%)
Real Assets	16%	16%	3.08%	3.23%	(0.02%)	(0.02%)	(0.04%)
Global Equity ex US	21%	23%	3.41%	3.77%	(0.08%)	0.02%	(0.05%)
Private Equity	10%	8%	(4.87%)	10.21%	(1.57%)	0.07%	(1.50%)
Absolute Return	5%	6%	(1.27%)	1.25%	(0.12%)	0.04%	(0.08%)
Cash Equivalents	3%	2%	0.11%	0.00%	0.00%	(0.05%)	(0.05%)
Total			4.17%	= 5.75%	+ (1.64%)	+ 0.06%	(1.58%)

- Domestic Equity aided performance in the quarter while Private Equity detracted.
- Our sense is that PE is being affected by Q3 public equity decline (with a lag)

Trailing 12 Months

One Year Relative Attribution Effects



One Year Relative Attribution Effects

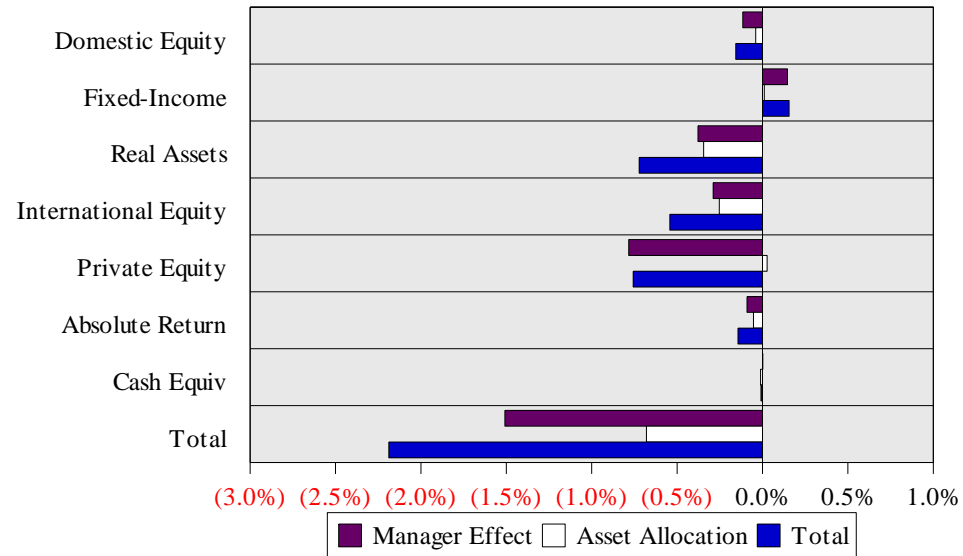
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	29%	28%	0.82%	1.03%	(0.04%)	(0.15%)	(0.19%)
Fixed-Income	17%	19%	5.17%	6.28%	(0.19%)	(0.15%)	(0.34%)
Real Assets	15%	16%	13.07%	12.91%	(0.04%)	(0.11%)	(0.15%)
Global Equity ex US	23%	23%	(13.95%)	(13.33%)	(0.17%)	(0.05%)	(0.22%)
Private Equity	9%	7%	12.89%	(4.71%)	1.42%	(0.01%)	1.41%
Absolute Return	5%	6%	(1.30%)	5.10%	(0.30%)	(0.13%)	(0.42%)
Cash Equiv	1%	2%	0.37%	0.10%	0.00%	(0.05%)	(0.04%)
Total			0.77%	0.72%	+ 0.71%	+ (0.66%)	0.05%

Factors that detracted include overweight in domestic equities, corresponding underweight in fixed income.

Factors that helped absolute & relative performance include substantial real asset allocation, overweight in PE and strong return relative to public equity

PERS Intermediate Term Performance

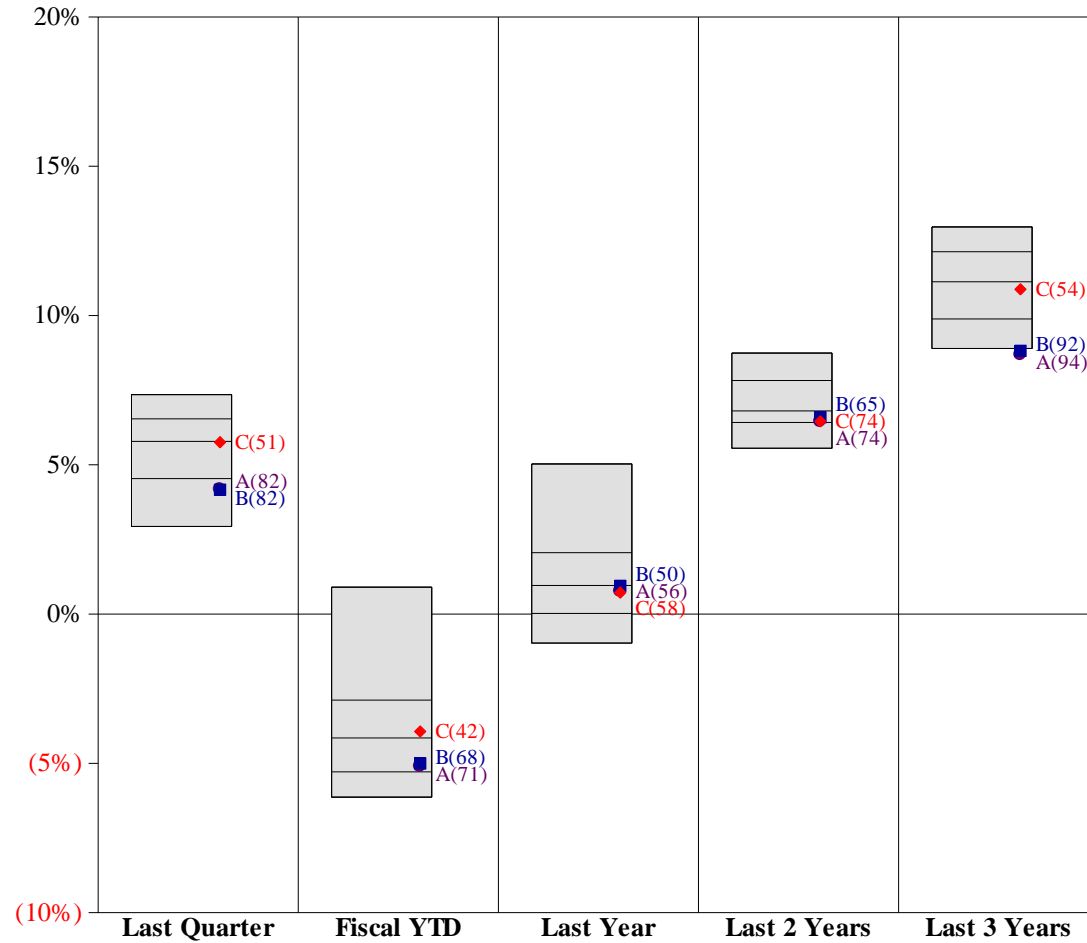
Three Year Annualized Relative Attribution Effects



Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	30%	30%	14.48%	14.88%	(0.12%)	(0.04%)	(0.16%)
Fixed-Income	18%	19%	8.39%	7.48%	0.15%	0.01%	0.16%
Real Assets	16%	16%	2.47%	4.46%	(0.38%)	(0.34%)	(0.72%)
International Equity	22%	22%	9.76%	11.20%	(0.29%)	(0.25%)	(0.54%)
Private Equity	9%	7%	5.62%	12.58%	(0.78%)	0.03%	(0.76%)
Absolute Return	5%	5%	3.45%	5.15%	(0.09%)	(0.05%)	(0.14%)
Cash Equiv	1%	1%	-	-	0.00%	(0.01%)	(0.01%)
Total			8.69%	10.88%	+ (1.51%)	+ (0.68%)	(2.19%)

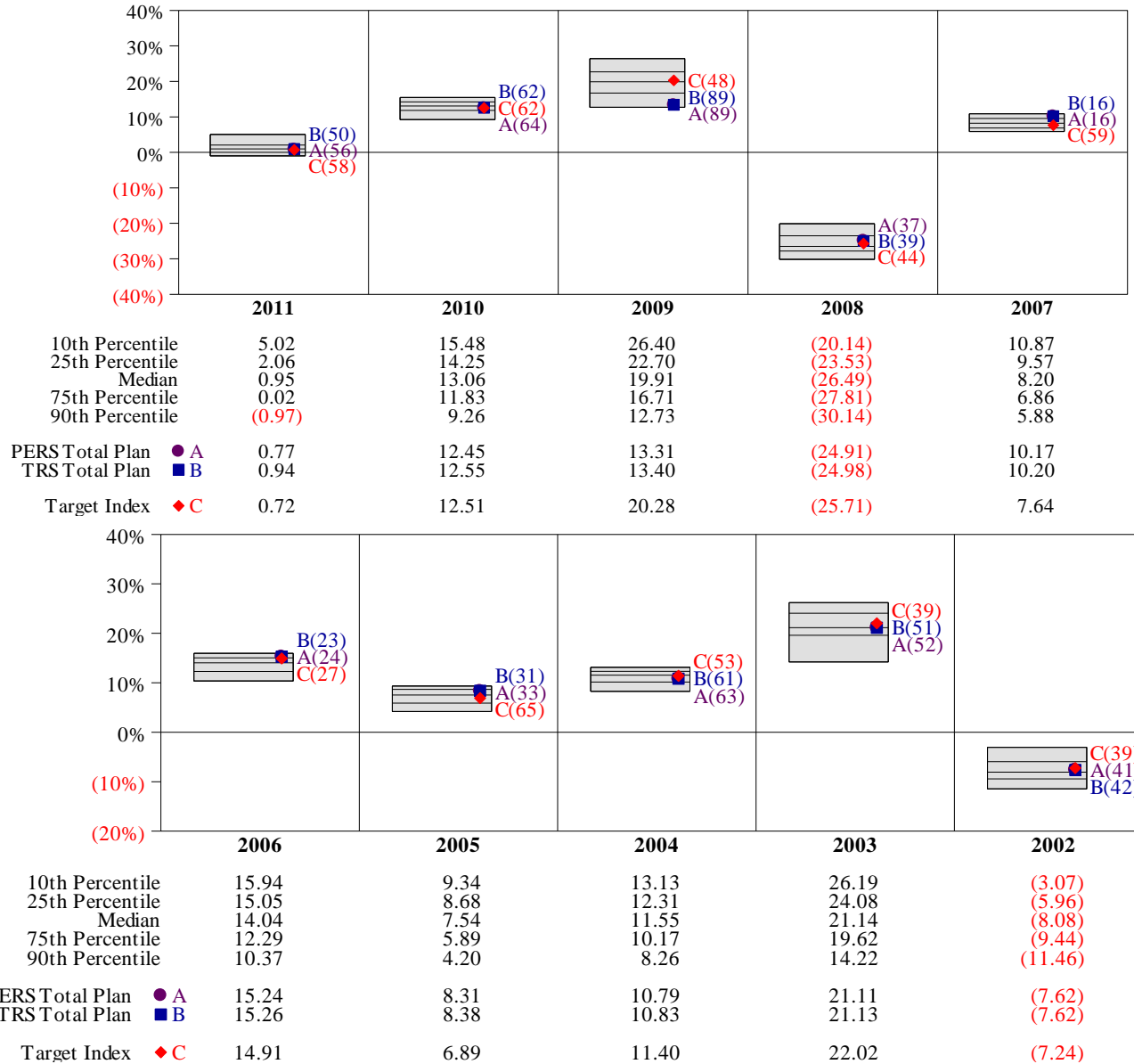
Cumulative Total Fund Returns



	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years
10th Percentile	7.35	0.90	5.02	8.74	12.97
25th Percentile	6.54	(2.88)	2.06	7.82	12.14
Median	5.78	(4.15)	0.95	6.80	11.13
75th Percentile	4.54	(5.29)	0.02	6.42	9.89
90th Percentile	2.94	(6.13)	(0.97)	5.55	8.89
PERS Total Plan ● A	4.17	(5.10)	0.77	6.45	8.69
TRS Total Plan ■ B	4.17	(5.00)	0.94	6.59	8.81
Target Index ◆ C	5.75	(3.93)	0.72	6.45	10.88

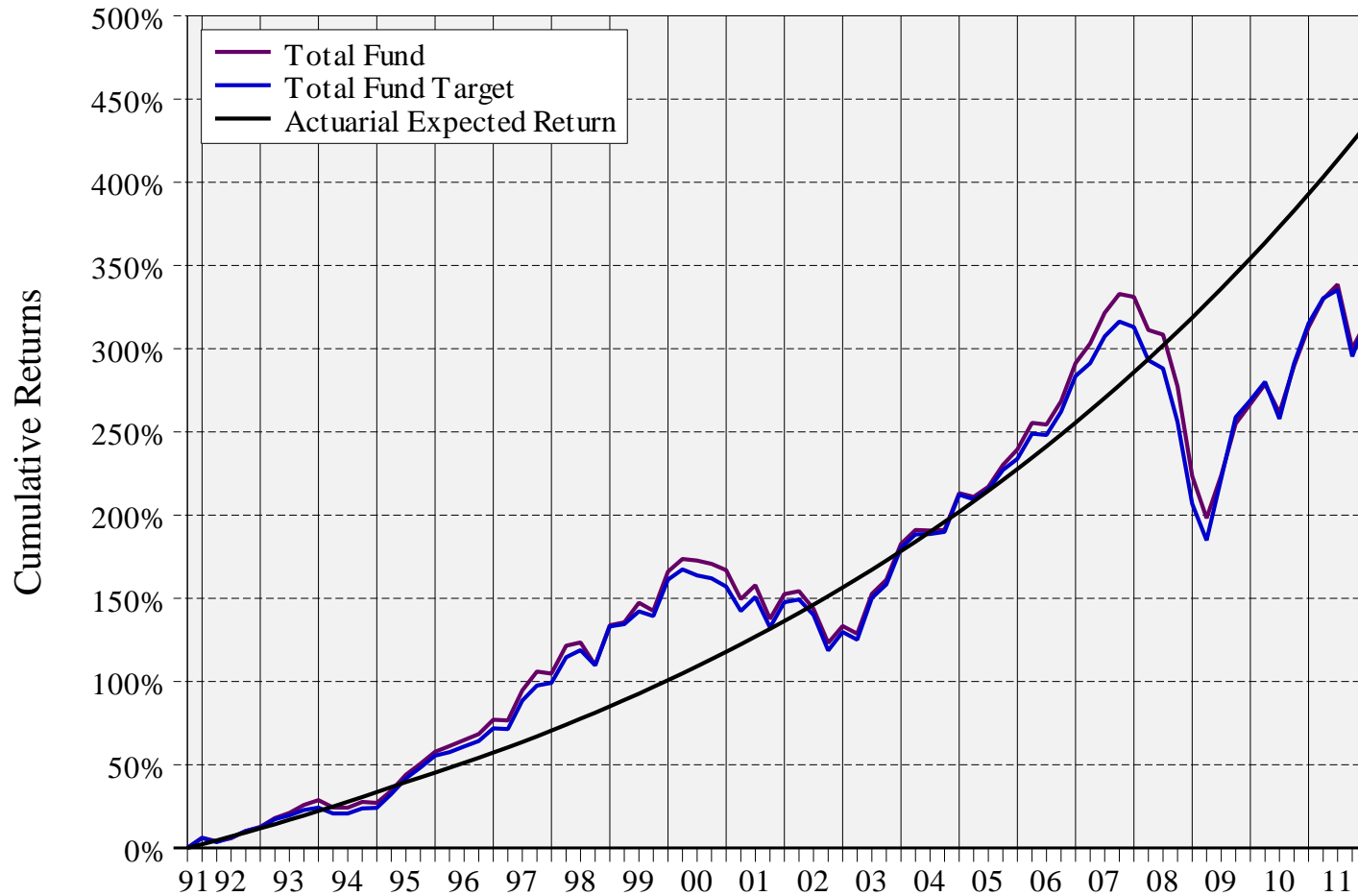
Calendar Period Performance

Relative to Public Fund Database



Long-term Return Relative to Target -TRS

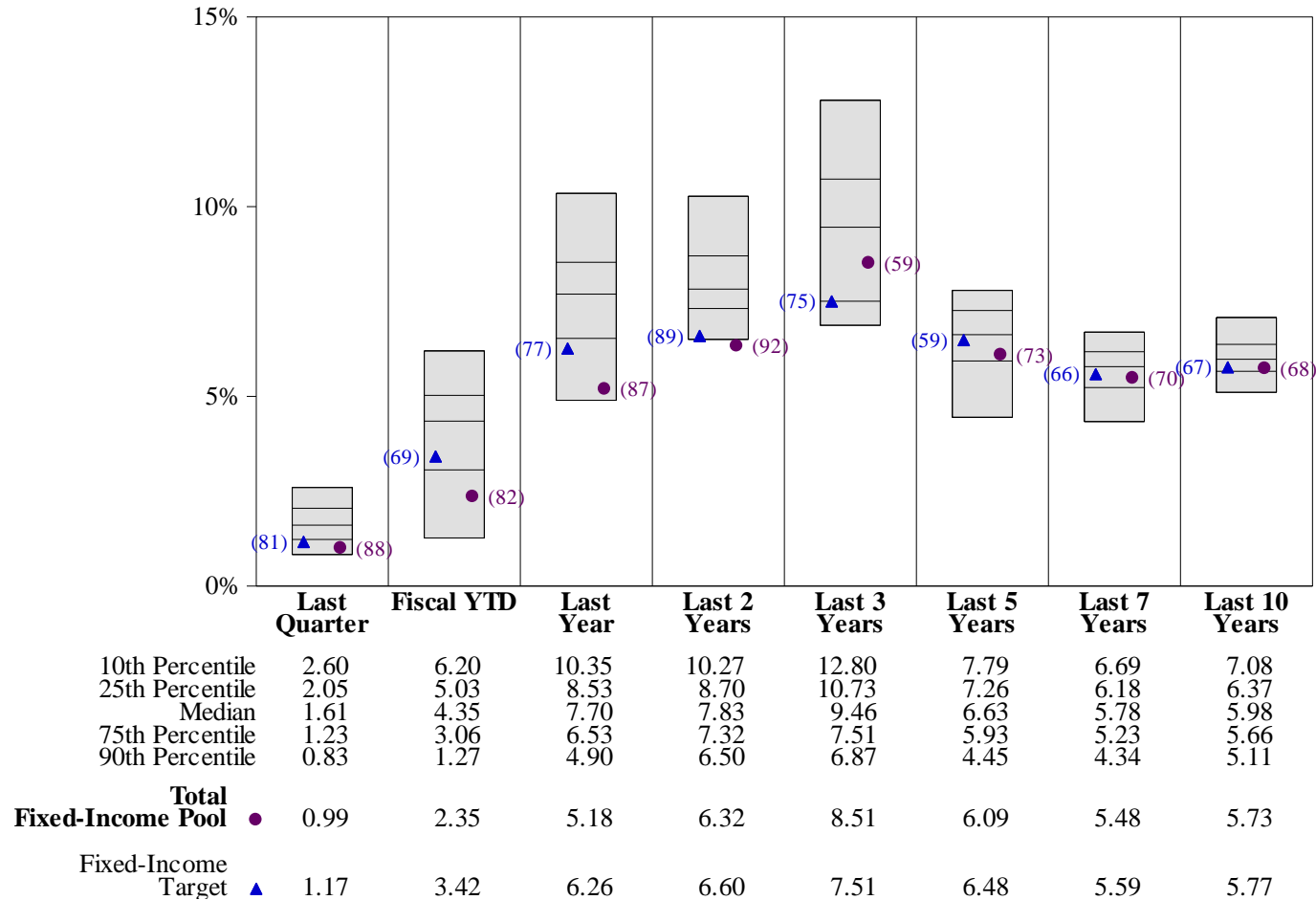
Cumulative Returns Actual vs Target



Total Bond Performance

Includes In-House and External Portfolios

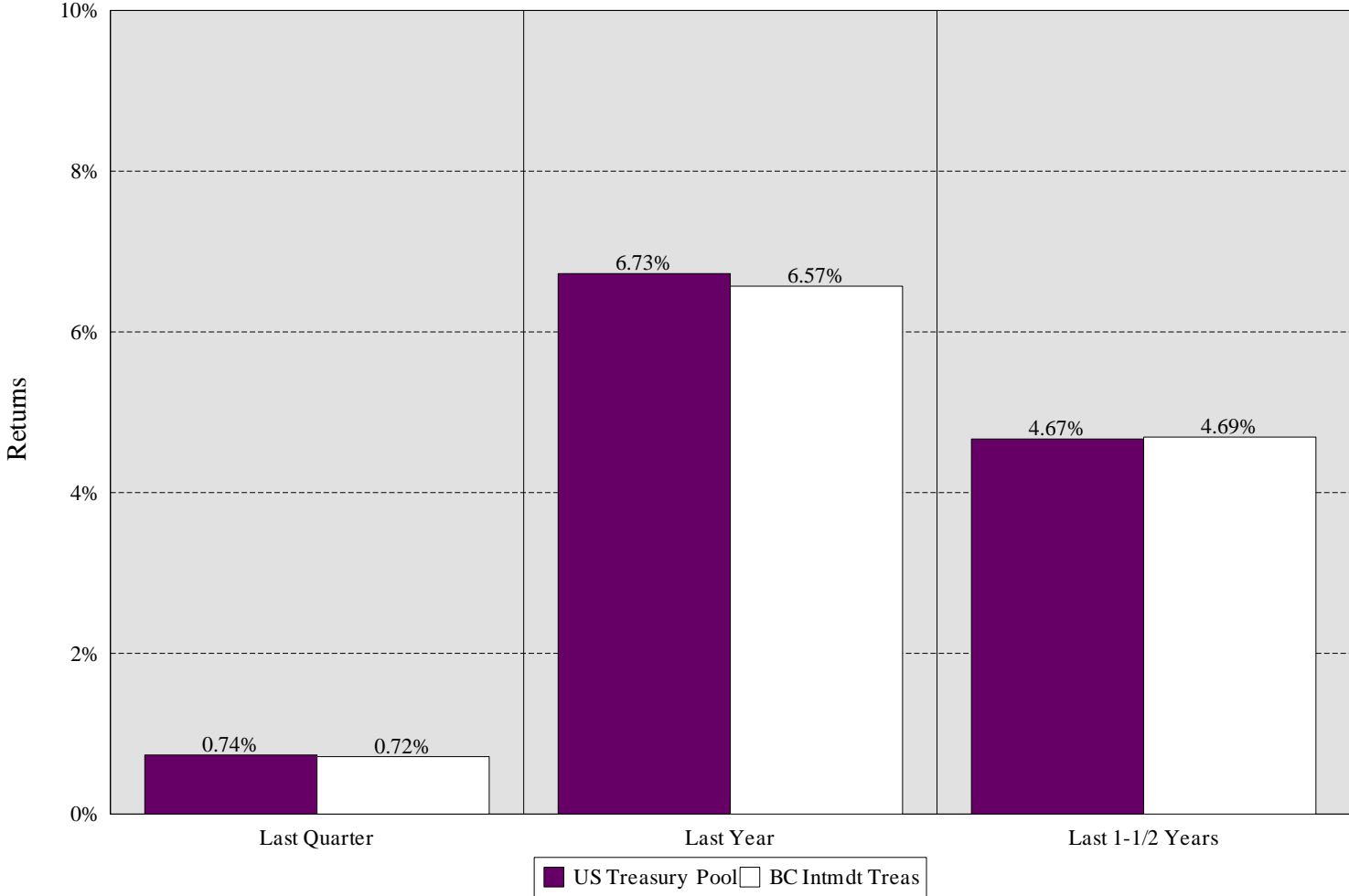
Performance vs Public Fund - Domestic Fixed (Gross)



- Please note that the fixed income target was changed for fiscal 2011. This change reflects the shift from BC Aggregate to BC Intermediate Treasury Index for the majority of fixed assets.

In-House Portfolio

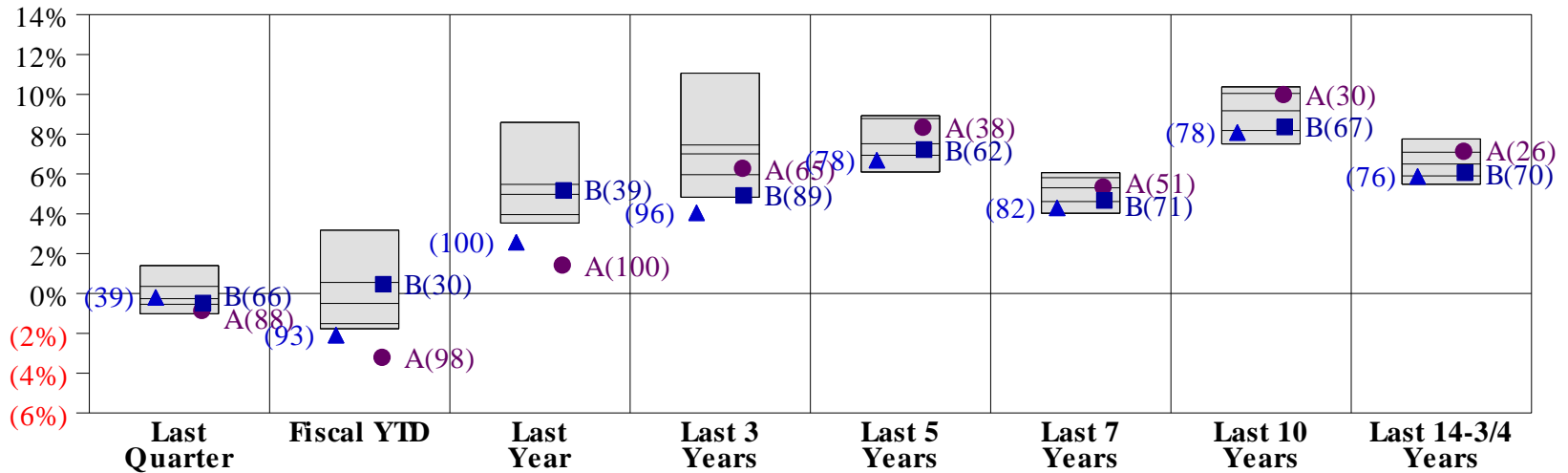
Compared to BC Intermediate Treasury Index



Non-US Fixed Income

Mondrian

Performance vs CAI Non-U.S. Fixed-Inc Style (Gross)

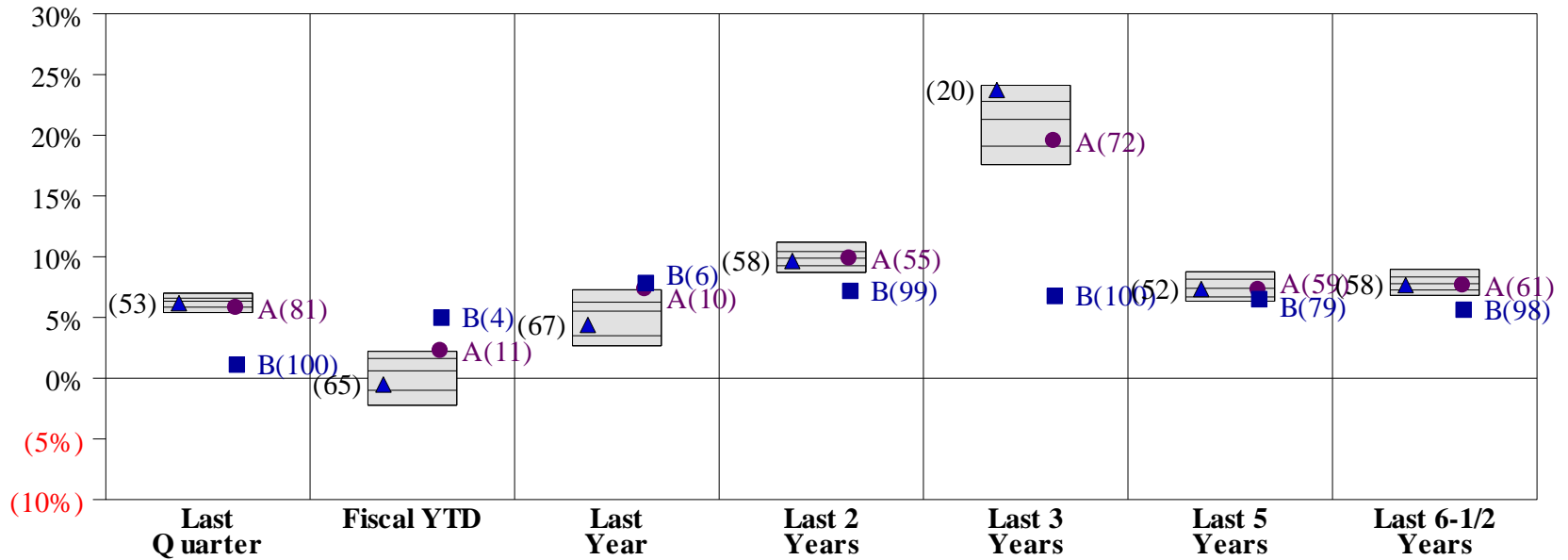


	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 14-3/4 Years
10th Percentile	1.40	3.18	8.59	11.06	8.92	6.07	10.37	7.76
25th Percentile	0.36	0.56	5.48	7.45	8.78	5.81	10.04	7.09
Median	(0.26)	(0.50)	4.98	7.01	7.52	5.31	9.18	6.50
75th Percentile	(0.54)	(1.52)	3.96	5.97	6.94	4.61	8.19	5.91
90th Percentile	(1.01)	(1.77)	3.54	4.83	6.10	4.04	7.51	5.49
Mondrian Investment Partners Citi WGBI Non-US Idx	● A (0.92)	(3.26)	1.37	6.22	8.28	5.29	9.92	7.07
Non-US Idx	■ B (0.48)	0.47	5.17	4.92	7.23	4.67	8.36	6.06
Mondrian Benchmark	▲ (0.19)	(2.09)	2.58	4.05	6.69	4.30	8.09	5.88

High Yield Bonds

Mackay Shields

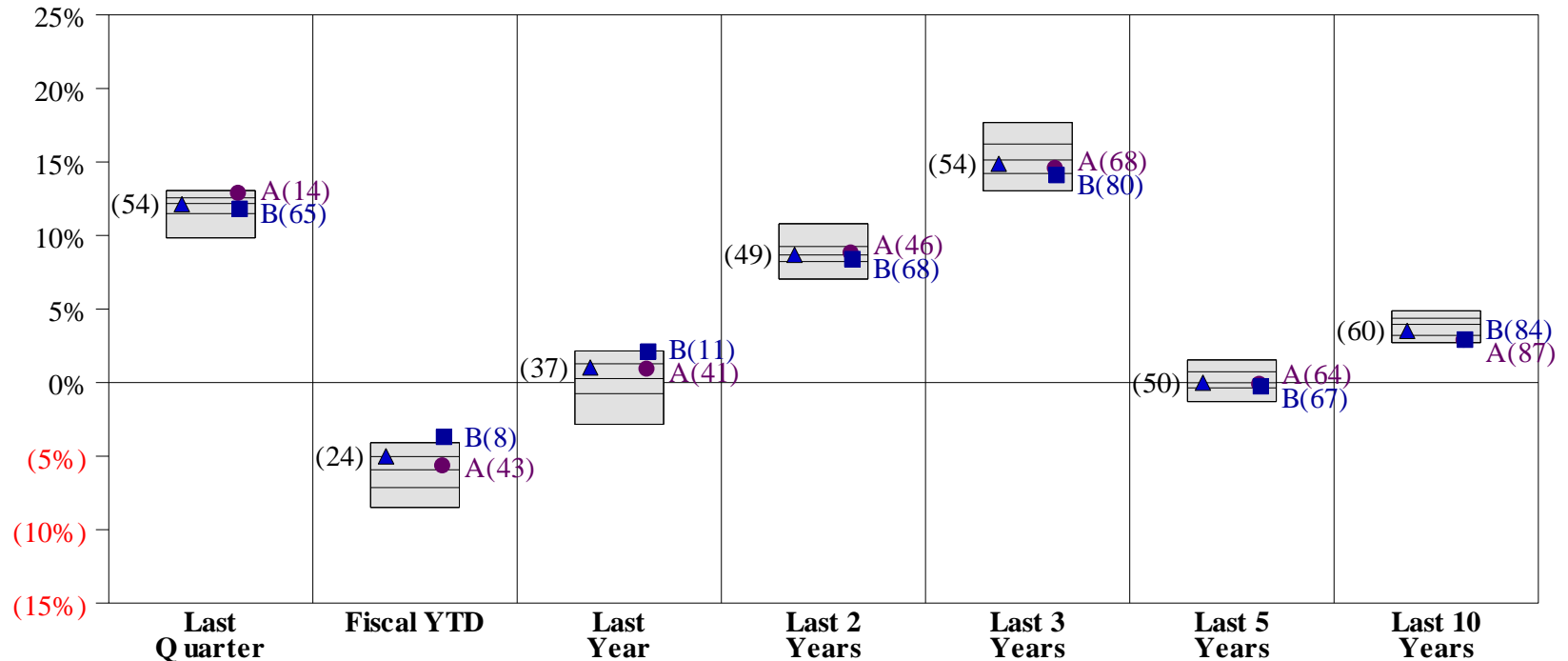
Performance vs CAI High Yield Fixed-Inc Style (Gross)



	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6-1/2 Years
10th Percentile	7.00	2.21	7.28	11.19	24.10	8.76	8.97
25th Percentile	6.58	1.62	6.25	10.43	22.79	8.16	8.33
Median	6.33	0.59	5.51	9.88	21.30	7.39	7.78
75th Percentile	5.84	(1.00)	3.49	9.25	19.09	6.69	7.27
90th Percentile	5.41	(2.22)	2.66	8.71	17.58	6.34	6.82
MacKay Shields ● A	5.71	2.18	7.25	9.78	19.45	7.19	7.58
BC Aggregate ■ B	1.12	4.98	7.84	7.19	6.77	6.50	5.64
High Yield Target ▲	6.18	(0.52)	4.38	9.65	23.72	7.33	7.66

Total Domestic Equity

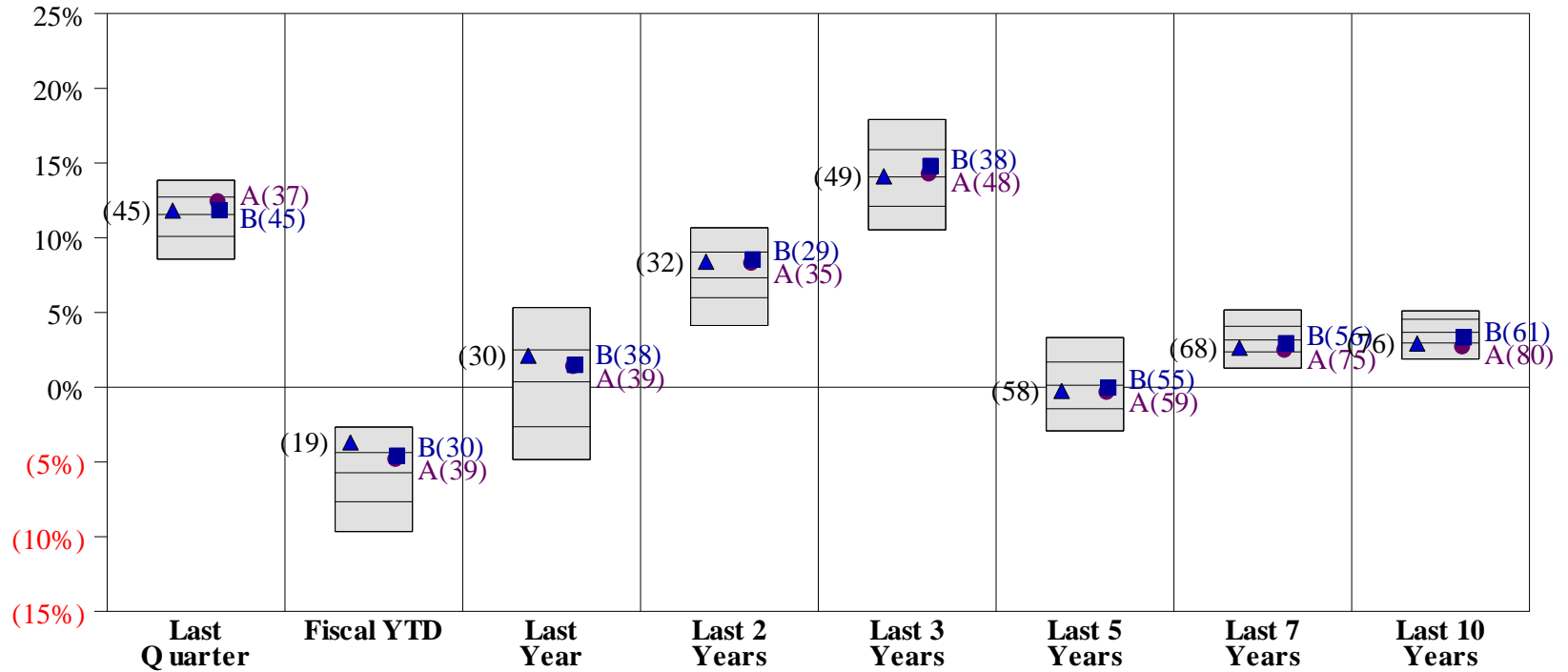
Performance vs Public Fund - Domestic Equity (Gross)



	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	13.06	(4.09)	2.15	10.80	17.68	1.54	4.88
25th Percentile	12.56	(5.03)	1.28	9.24	16.22	0.73	4.37
Median	12.17	(5.93)	0.27	8.68	15.14	(0.01)	3.97
75th Percentile	11.50	(7.14)	(0.76)	8.22	14.22	(0.36)	3.21
90th Percentile	9.85	(8.49)	(2.83)	7.05	13.04	(1.29)	2.72
Domestic Equity Pool	● A 12.78	(5.76)	0.82	8.73	14.46	(0.21)	2.78
Standard & Poor's 500	■ B 11.82	(3.69)	2.11	8.39	14.11	(0.25)	2.92
Russell 3000 Index	▲ 12.12	(5.01)	1.03	8.69	14.88	(0.01)	3.51

Large Cap Domestic Equity Pool

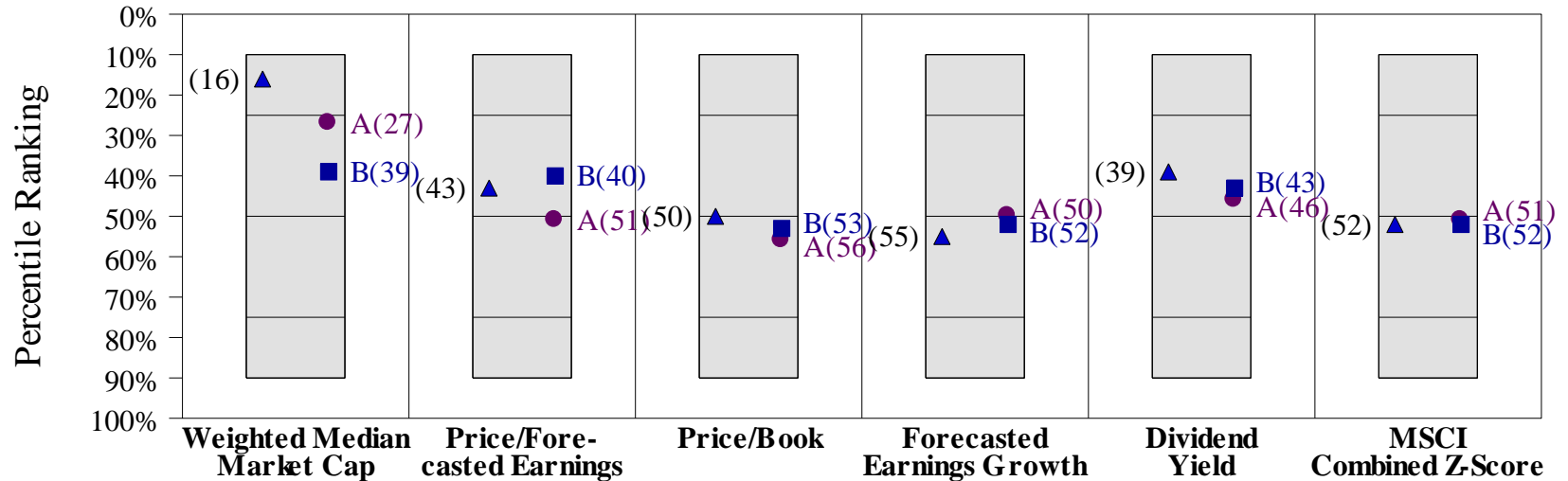
Performance vs CAI Large Capitalization Style (Gross)



10th Percentile	13.85	(2.67)	5.33	10.67	17.91	3.32	5.17	5.10
25th Percentile	12.73	(4.38)	2.49	9.04	15.89	1.68	4.08	4.54
Median	11.56	(5.72)	0.36	7.33	14.07	0.13	3.16	3.67
75th Percentile	10.09	(7.66)	(2.64)	5.99	12.10	(1.44)	2.37	2.95
90th Percentile	8.58	(9.66)	(4.84)	4.13	10.53	(2.92)	1.28	1.89
Large Cap Pool	● A 12.33	(4.90)	1.31	8.21	14.18	(0.43)	2.39	2.61
Russell 1000	■ B 11.84	(4.58)	1.50	8.55	14.81	(0.02)	2.95	3.34
S&P 500 Index	▲ 11.82	(3.69)	2.11	8.39	14.11	(0.25)	2.64	2.92

Large Cap Total Equity Characteristics

**Portfolio Characteristics Percentile Rankings
Rankings Against CAI Large Capitalization Style
as of December 31, 2011**



10th Percentile
25th Percentile
Median
75th Percentile
90th Percentile

56.88
44.45
34.07
26.92
21.24

14.73
13.30
11.44
10.54
9.76

3.54
3.04
1.99
1.55
1.35

18.20
15.11
12.12
10.32
9.07

2.78
2.48
2.03
1.30
0.83

1.46
1.00
0.11
(0.52)
(0.80)

Large Cap Pool ● A 42.53
Russell 1000 ■ B 36.39
S&P 500 Index ▲ 51.15

11.42
11.98
11.80

1.90
1.96
1.99

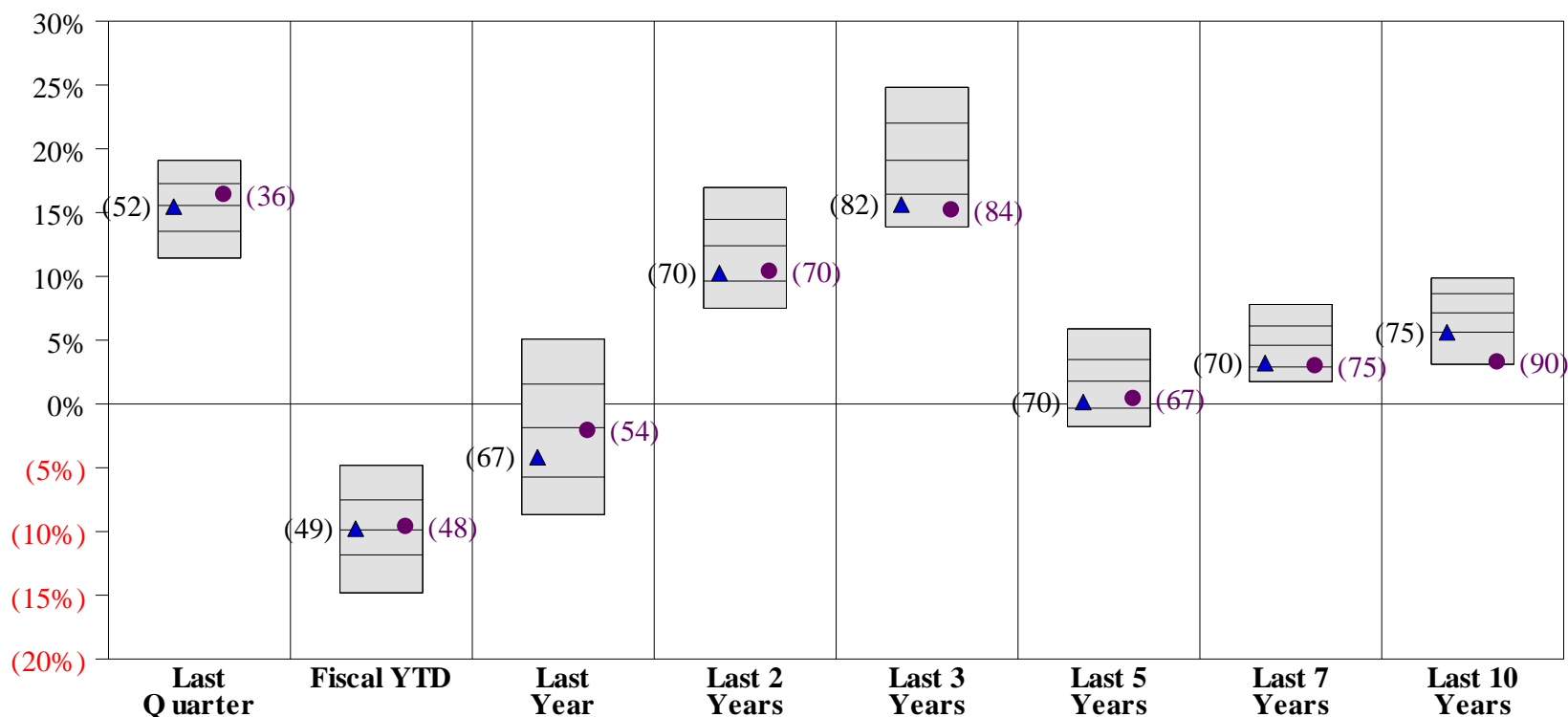
12.00
11.73
11.59

2.09
2.13
2.21

0.09
0.07
0.06

Small Cap Pool

Performance vs CAI Small Capitalization Style (Gross)



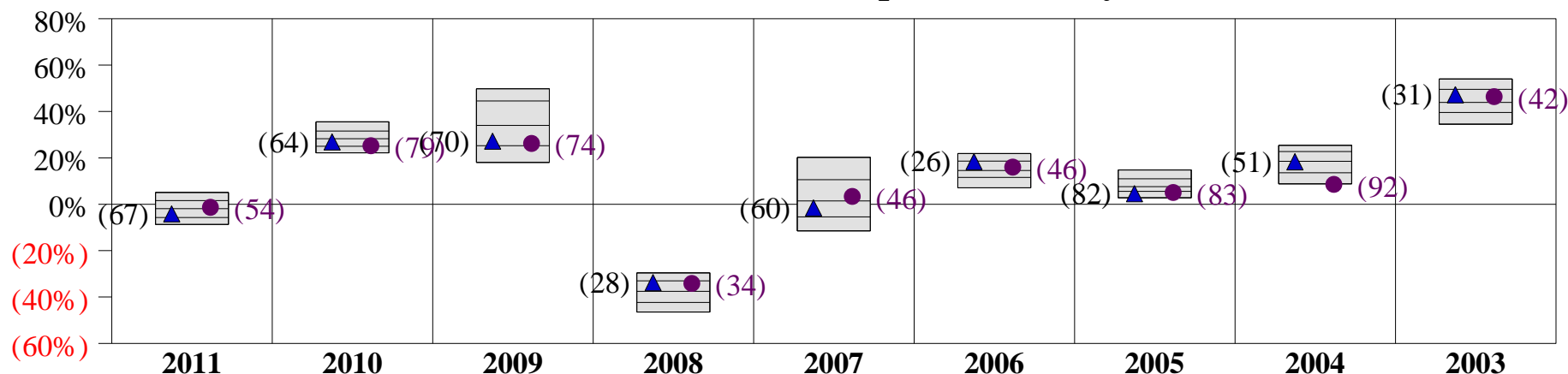
	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	19.10	(4.82)	5.09	16.95	24.82	5.88	7.80	9.87
25th Percentile	17.27	(7.51)	1.55	14.47	22.01	3.48	6.11	8.64
Median	15.55	(9.88)	(1.87)	12.40	19.09	1.78	4.60	7.13
75th Percentile	13.52	(11.83)	(5.73)	9.63	16.44	(0.34)	2.90	5.63
90th Percentile	11.44	(14.81)	(8.68)	7.50	13.87	(1.77)	1.76	3.11

Small Cap Pool ●	16.34	(9.71)	(2.16)	10.30	15.12	0.34	2.91	3.21
Russell 2000 Index ▲	15.47	(9.77)	(4.18)	10.25	15.63	0.15	3.20	5.62

Small Cap Performance

Calendar Periods

Performance vs CAI Small Capitalization Style (Gross)

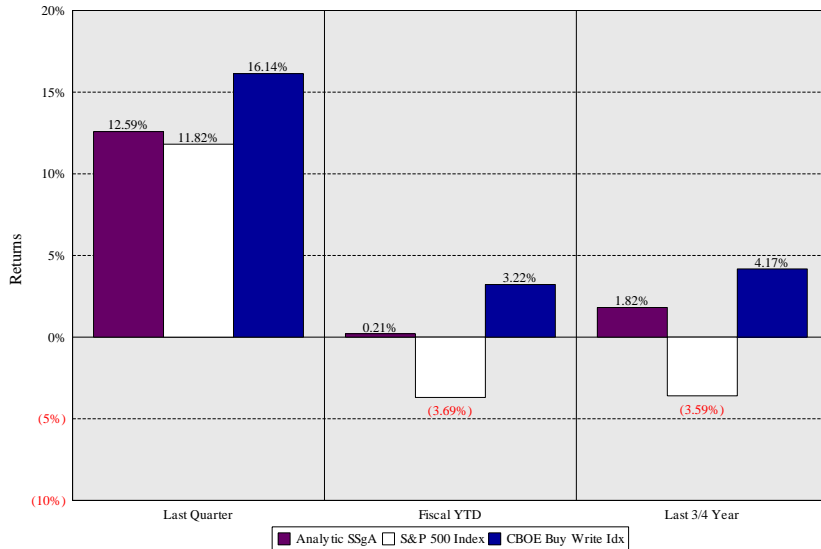


	2011	2010	2009	2008	2007	2006	2005	2004	2003
10th Percentile	5.09	35.55	49.83	(29.58)	20.20	21.82	14.79	25.44	54.03
25th Percentile	1.55	31.53	44.57	(33.03)	10.55	18.62	10.97	22.73	49.55
Median	(1.87)	28.25	33.98	(37.57)	1.39	14.59	7.55	18.56	43.84
75th Percentile	(5.73)	24.99	25.24	(42.30)	(5.47)	11.58	5.55	13.61	39.60
90th Percentile	(8.68)	22.15	18.02	(46.48)	(11.43)	7.13	2.77	8.83	34.55
Small Cap Pool ●	(2.16)	24.35	25.40	(34.97)	2.53	15.24	4.28	7.65	45.62
Russell 2000 Index ▲	(4.18)	26.85	27.17	(33.79)	(1.57)	18.37	4.55	18.33	47.25

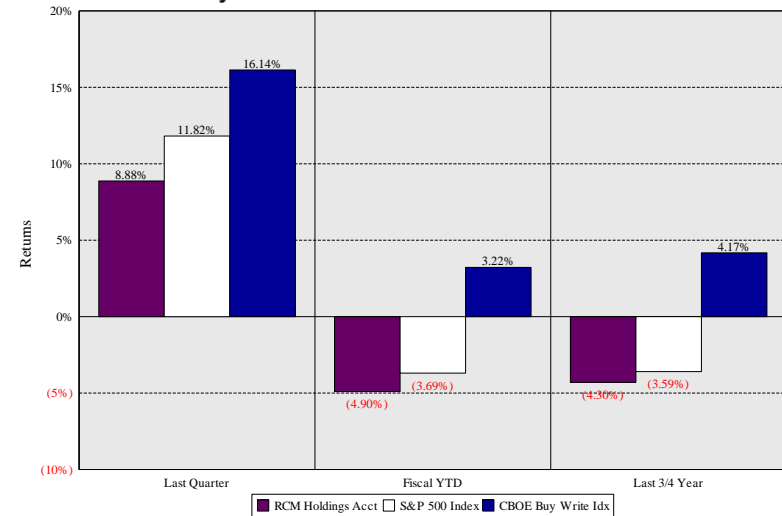
Other Equity

Convertible Bonds, Option Strategies

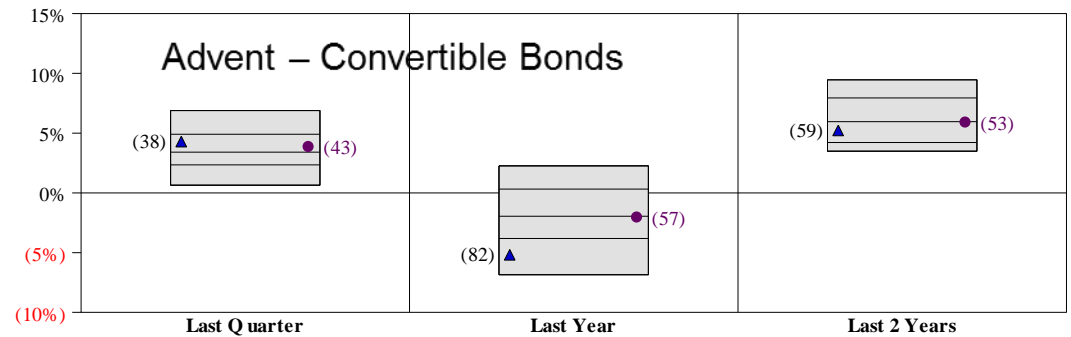
Analytic Buy-Write



RCM Buy Write



Performance vs CAI Convertible Bonds Database (Gross)



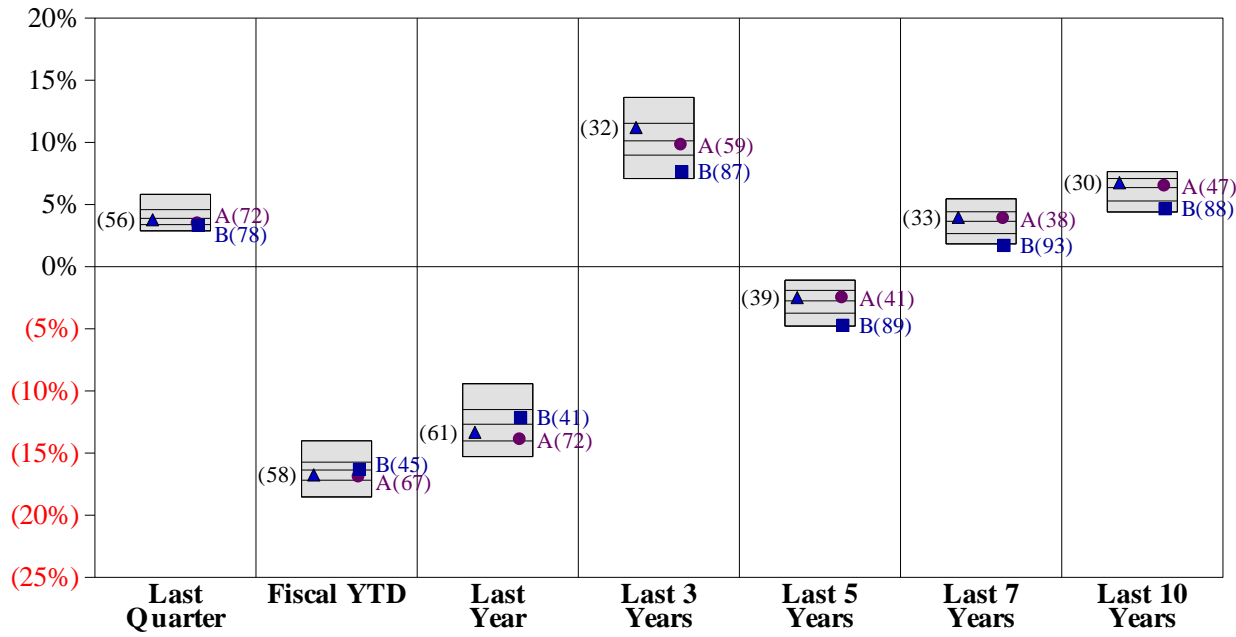
- While it is much too soon to form conclusions regarding the success, all three portfolios did worse than the equity market in the strong market (as expected).
- The target is to produce equity-like long term returns with lower volatility.

10th Percentile	6.89	2.26	9.46
25th Percentile	4.91	0.32	7.94
Median	3.41	(1.95)	5.96
75th Percentile	2.34	(3.82)	4.21
90th Percentile	0.65	(6.85)	3.49
Advent Capital	3.78	(2.13)	5.81
ML All Conv	4.29	(5.18)	5.23

International Equity

Compared to Other Public Funds

Performance vs Public Fund - International Equity (Gross)

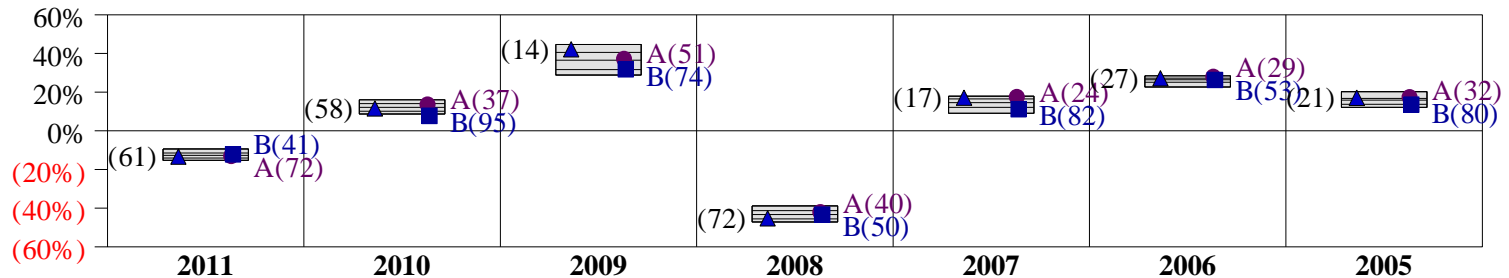


	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	5.82	(14.01)	(9.41)	13.61	(1.09)	5.46	7.65
25th Percentile	4.60	(15.73)	(11.49)	11.54	(1.91)	4.43	7.09
Median	3.89	(16.37)	(12.68)	10.13	(2.75)	3.65	6.37
75th Percentile	3.38	(17.18)	(14.02)	8.97	(3.74)	2.66	5.29
90th Percentile	2.89	(18.52)	(15.28)	7.09	(4.78)	1.85	4.41
Employees' Total Int'l Equity MSCI EAFFE Index	● A 3.41	(16.97)	(13.95)	9.76	(2.56)	3.83	6.44
	■ B 3.33	(16.31)	(12.14)	7.65	(4.72)	1.71	4.67
MSCI ACWI ex-US Index	▲ 3.77	(16.75)	(13.33)	11.20	(2.48)	3.97	6.76

International

Calendar Periods

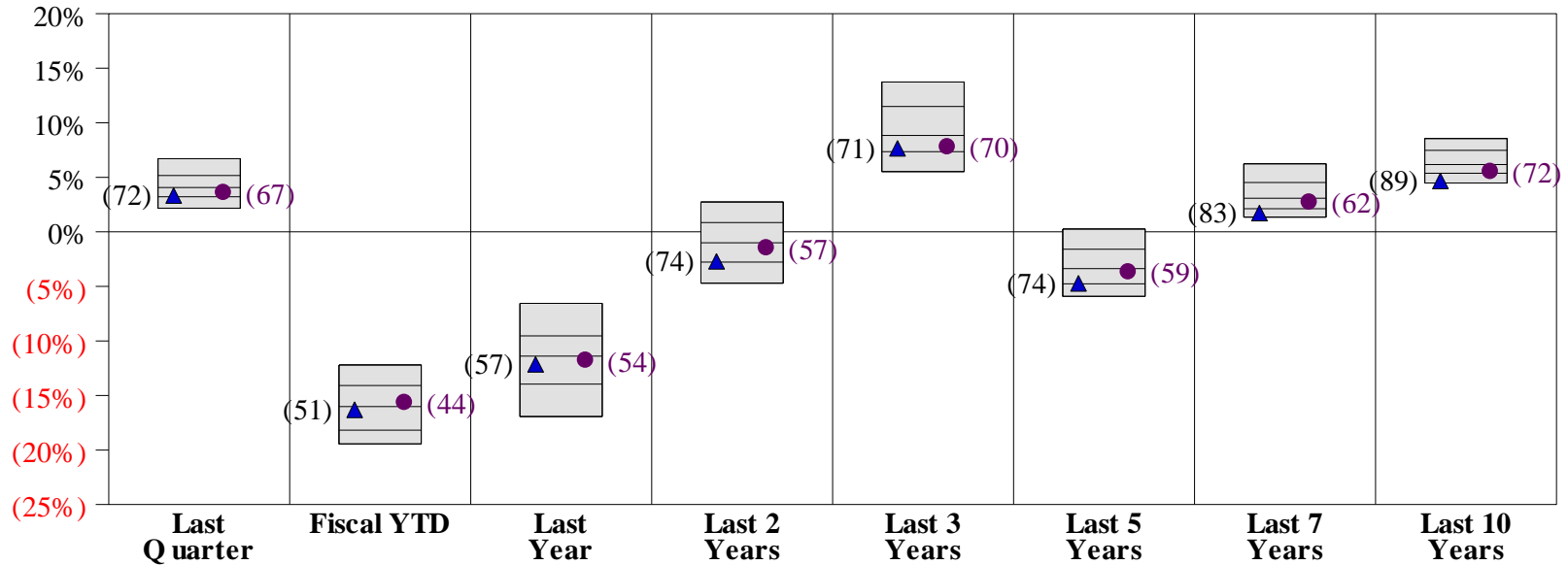
Performance vs Public Fund - International Equity (Gross)



	2011	2010	2009	2008	2007	2006	2005
10th Percentile	(9.41)	16.00	44.65	(38.84)	17.89	28.48	20.22
25th Percentile	(11.49)	14.12	40.56	(41.28)	16.50	27.22	16.81
Median	(12.68)	12.18	36.53	(43.30)	14.59	26.44	15.89
75th Percentile	(14.02)	10.12	31.65	(45.51)	12.13	25.15	13.76
90th Percentile	(15.28)	8.70	28.94	(47.15)	9.11	22.70	12.19
Total International Equity	● A (13.95)	12.70	36.35	(43.03)	16.61	27.06	16.53
MSCI EAFE Index	■ B (12.14)	7.75	31.78	(43.38)	11.17	26.34	13.54
MSCI ACWI ex-US Index	▲ (13.33)	11.60	42.14	(45.24)	17.12	27.16	17.11

International ex EM Versus Managers

Performance vs CAI Non-U.S. Equity Style (Gross)



10th Percentile
25th Percentile
Median
75th Percentile
90th Percentile

Int'l Equity Pool (ex Emerging. Mkt) ●

MSCI EAFE Index ▲

Last Quarter

Fiscal YTD

Last Year

Last 2 Years

Last 3 Years

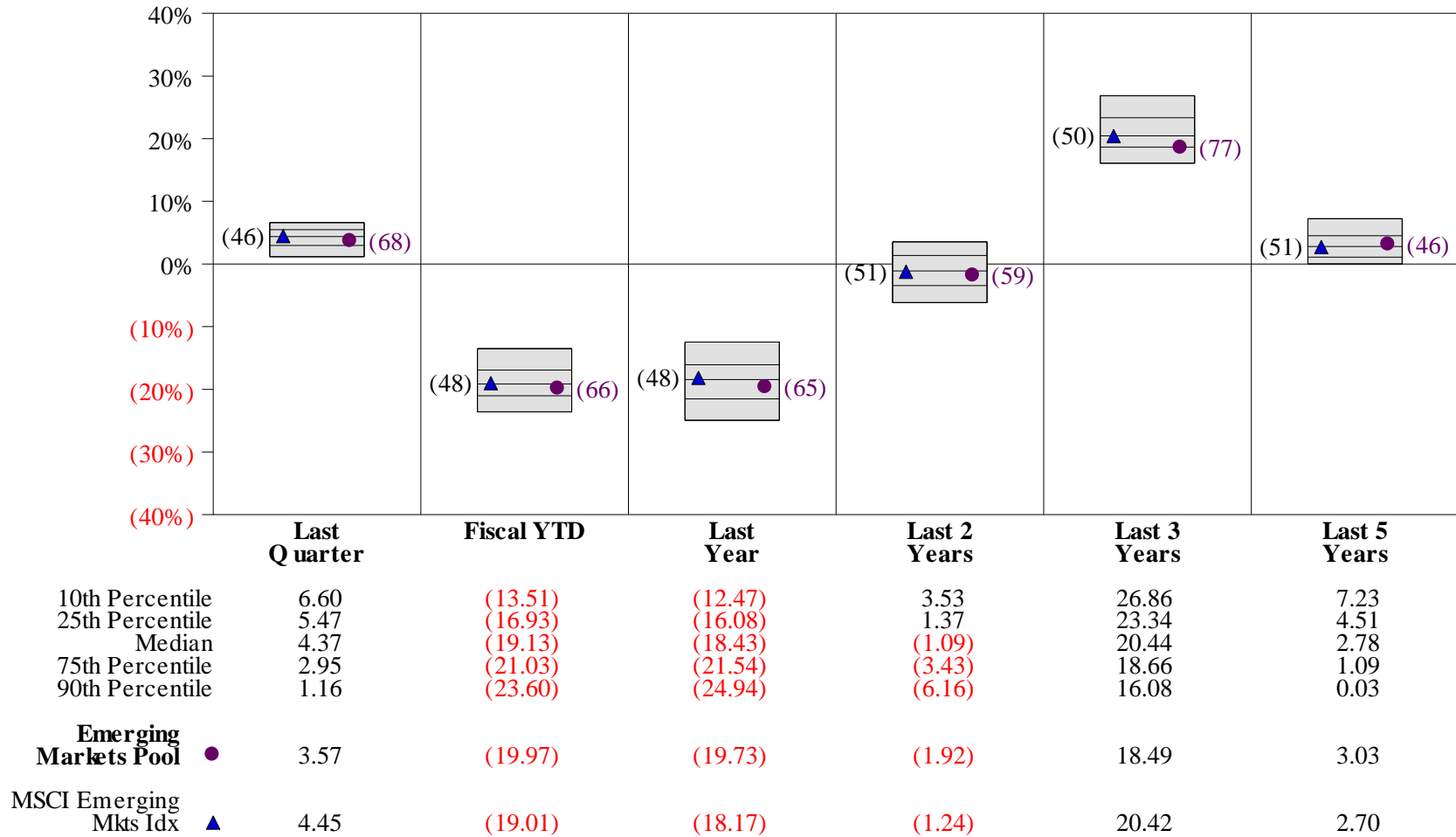
Last 5 Years

Last 7 Years

Last 10 Years

Emerging Markets Pool

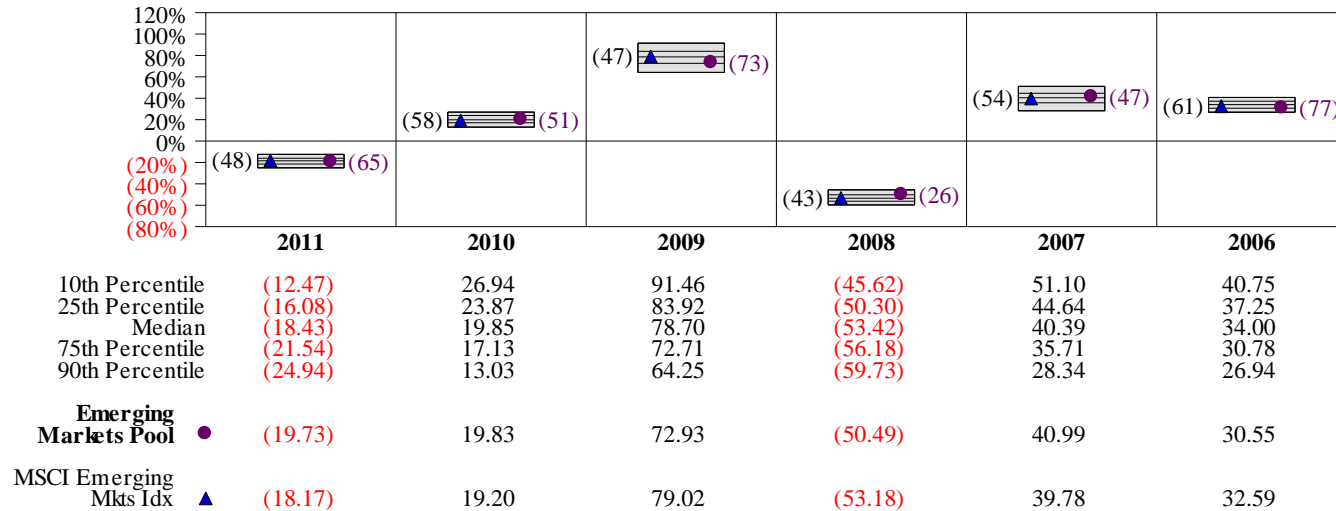
Performance vs CAI Emerging Markets Equity DB (Gross)



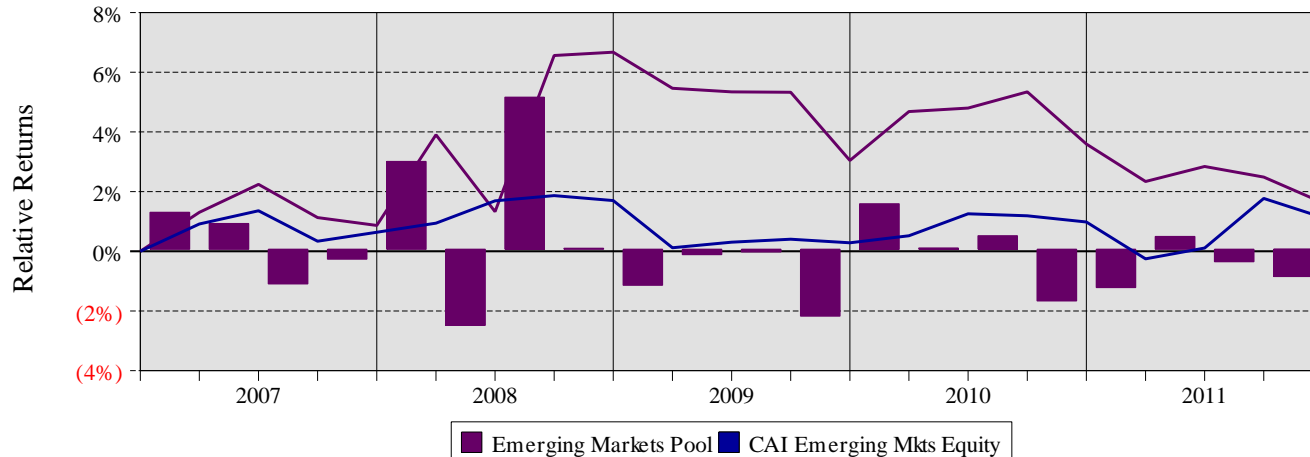
Emerging Markets Pool

Calendar Periods

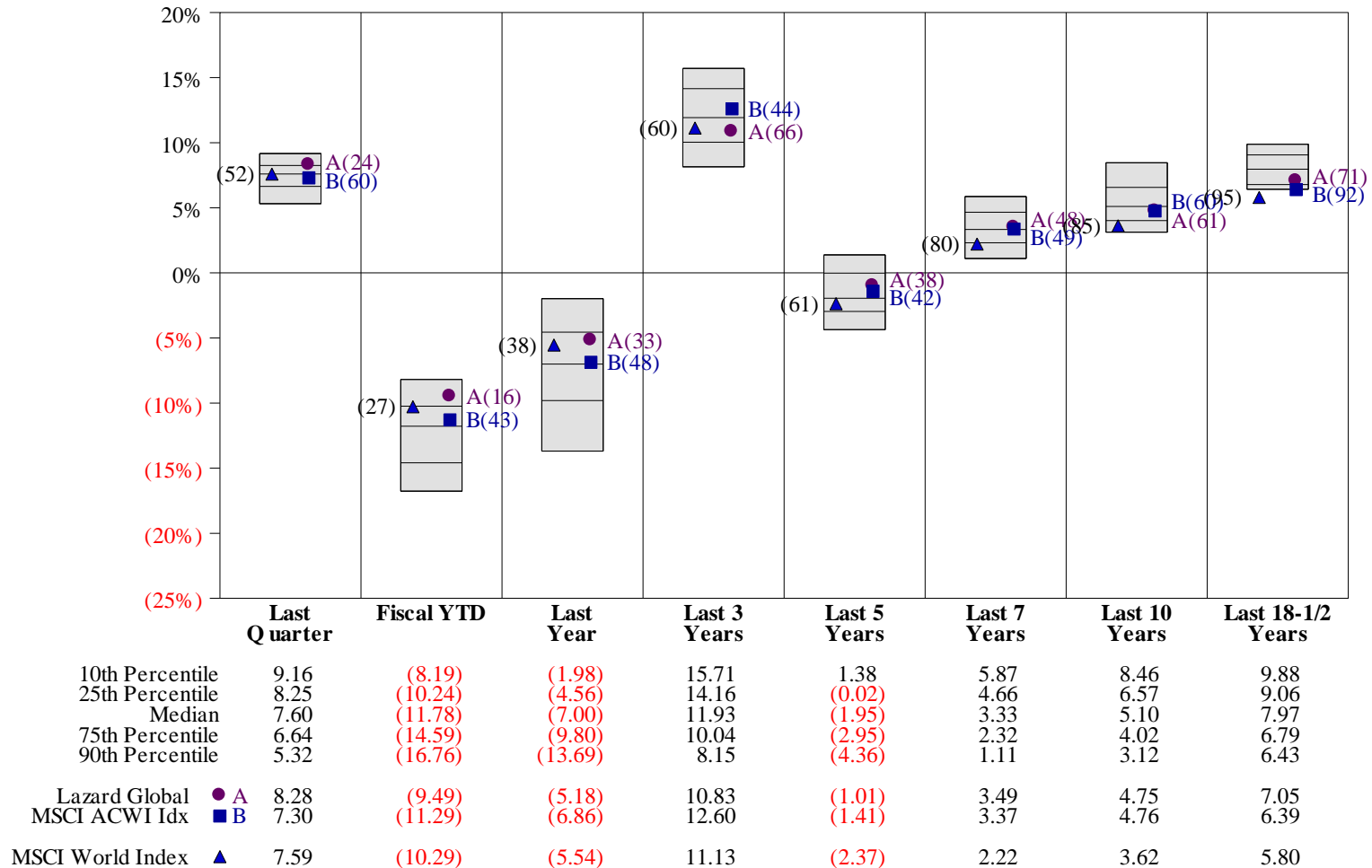
Performance vs CAI Emerging Markets Equity DB (Gross)



Cumulative and Quarterly Relative Return vs MSCI Emerging Mkts Idx



Performance vs CAI Global Equity Broad Style (Gross)



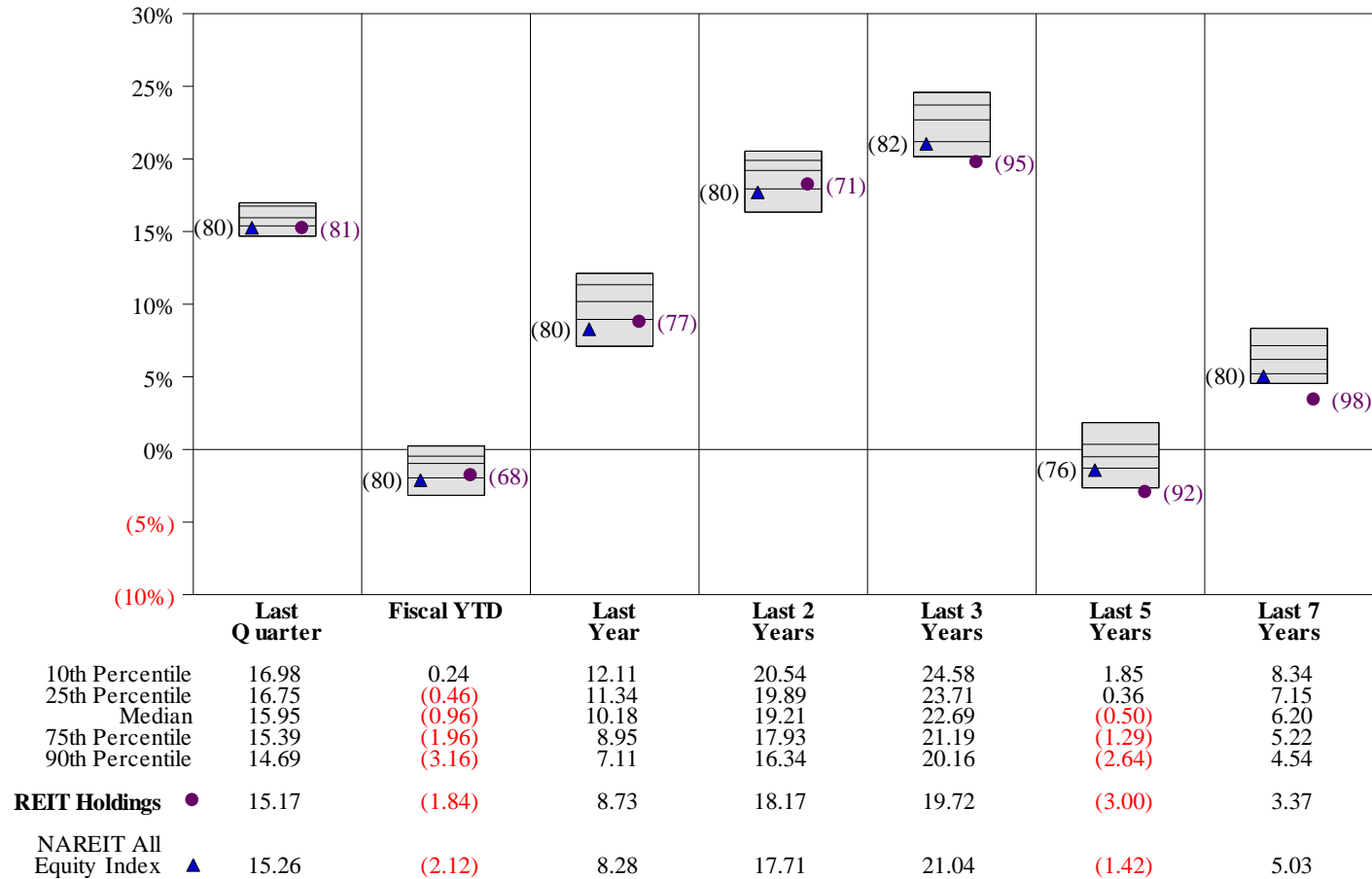
Real Assets Category

	Last Quarter	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years
Real Assets	3.08%	3.25%	13.14%	2.34%	-
Real Assets Target (1)	3.23%	6.38%	12.91%	4.46%	5.21%
Real Estate Pool	3.81%	3.31%	15.37%	(1.20%)	(2.12%)
Real Estate Target (2)	4.19%	5.71%	13.91%	4.76%	3.17%
Private Real Estate	2.55%	3.87%	16.11%	(2.16%)	(2.22%)
NCREIF Total Index	2.96%	6.36%	14.26%	2.43%	3.09%
REIT Internal Portfolio	15.17%	(1.84%)	8.73%	19.72%	(3.00%)
NAREIT Equity Index	15.26%	(2.12%)	8.28%	21.04%	(1.42%)
Total Farmland	1.10%	1.71%	9.47%	7.02%	9.48%
UBS Agrinvest	1.17%	1.80%	10.78%	6.67%	9.71%
Hancock Agricultural	0.98%	1.57%	7.39%	7.88%	9.63%
ARMB Farmland Target (3)	6.71%	9.21%	14.93%	9.92%	12.00%
Total Timber	2.05%	2.66%	5.47%	4.88%	-
Timberland Investment Resources	0.99%	1.72%	2.96%	4.02%	-
Hancock Timber	3.73%	4.14%	9.85%	-	-
NCREIF Timberland Index	0.51%	0.16%	1.58%	(1.15%)	4.61%
TIPS Internal Portfolio	2.88%	7.89%	14.50%	10.63%	-
BC US TIPS Index	2.69%	7.32%	13.56%	10.38%	7.95%
Total Energy Funds *	2.51%	2.97%	5.93%	5.79%	10.48%
CPI + 5%	0.57%	2.34%	8.21%	7.75%	7.41%

- Please note that real estate returns are provided by ARMB's real estate consultant

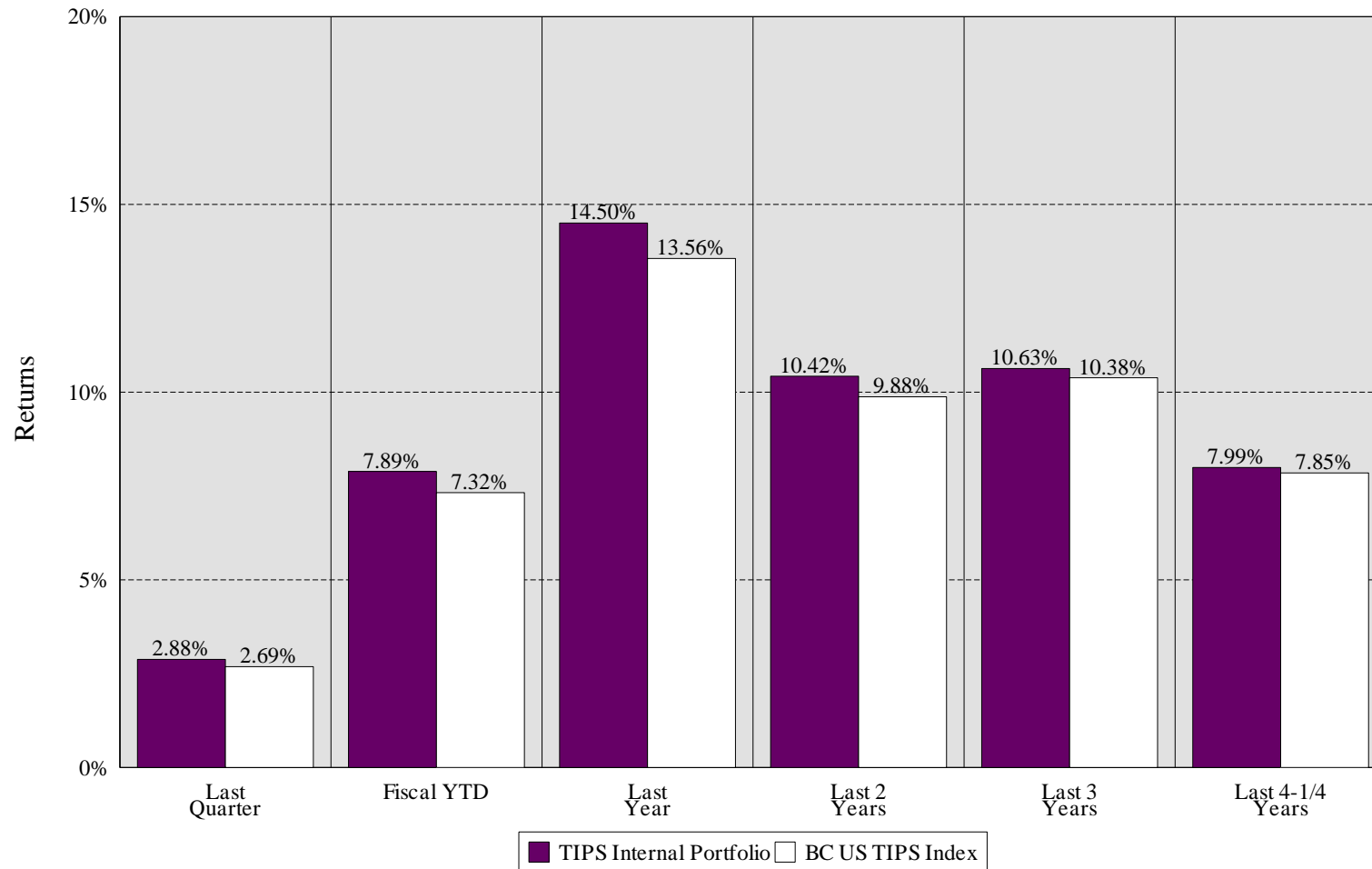
REIT Portfolio

Performance vs CAI Real Estate-REIT DB (Gross)



- Good Results Relative to Market over quarter, year, and two year spans

Internally Managed TIPS Portfolio

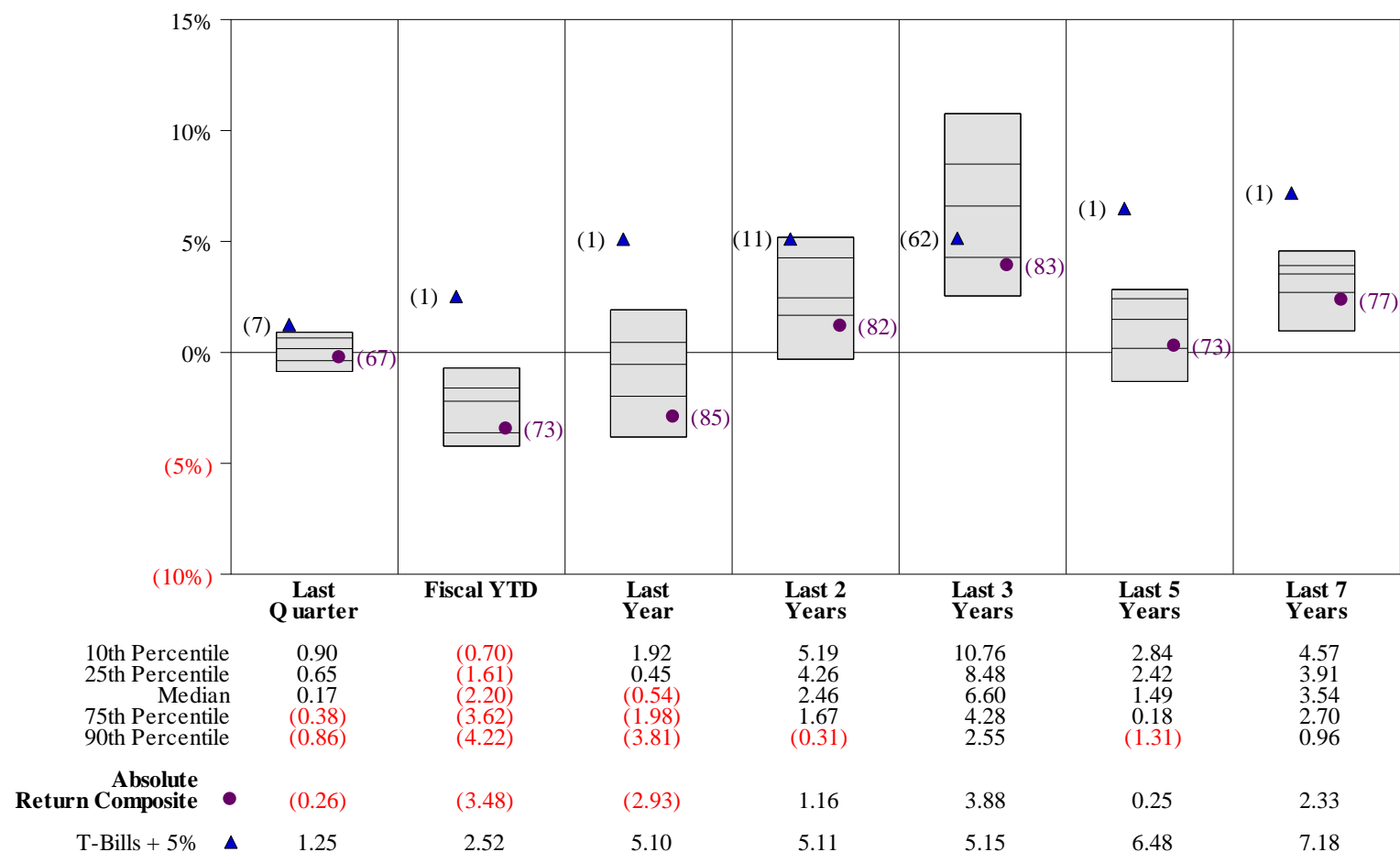


- Index+ performance at minimal cost

Absolute Return Composite

Reflects December 31 values, while SS data used to calculate total fund is lagged 1-month

Performance vs Absolute Return Hedge FoFs Style (Net)



Summary Manager Views

Managers With Strong Relative Performance for 1-year and 5-year (or since Inception)

- LC Domestic Equity
 - Barrow Hanley and Quantitative both have strong relative performance versus Value index and peers for the year and since inception
- SC Domestic Equity
 - Jennison Associates
 - Lord Abbett
 - Luther King
- International Equity
 - Brandes
 - Lazard
 - Schroder & Mondrian – Intl SC – too early but both good through 5 quarters
- Emerging Markets
 - Lazard – Inception was 4 years ago
- Global
 - Lazard

Summary Manager Views

Disappointing Performance for Either 1 or 5 Year Periods (or since inception)

- Domestic Equity
 - Relational – LC Value – trails S&P for year and last 5-year period but now outpaces Value Index
 - RCM – Large Cap Growth – trailing both benchmarks over last year but above S&P for 5-years
 - SSgA SC Value Index– both trailing 1-year & since inception below target
- High Yield
 - Mackay Shields – strong for 1-year but still slightly under target over last 5 years
- International Fixed
 - Mondrian trailing over last year, but good 5–year results
- International Equity
 - Capital Guardian – trailing slightly over last year but better than target over 5-year span
 - McKinley – trailing over both time periods
- Emerging Markets
 - Capital Guardian – trails benchmark for 1-year, at benchmark for 5-years
 - Eaton Vance – slightly behind over last year and larger shortfall since inception
- Absolute Return
 - Crestline and Mariner – trailing over both time periods
 - GAM and Prisma – trailing 1-year return and since inception (1.75 years)

Individual Account Option Performance

Balanced & Target Date Funds

Investment Manager	Market Value (\$mm)	1/2 Year Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Balanced & Target Date Funds											
Alaska Balanced Fund CAI Mt Fd: Dom Bal Style Passive Target	\$1,075	0.5 1	4.4 7	9.8 81	4.3 5	4.9 10	7.9 99		-0.0 6	0.6 100	0.4 1
		0.7 1	4.6 6	9.4 83	4.3 5	4.8 10	7.4 99				0.4 1
Long Term Balanced Fund CAI Mt Fd: Dom Bal Style Passive Target	\$369	-2.5 32	2.2 29	11.5 53	2.5 18	4.1 18	13.4 88		-0.1 29	0.5 100	0.1 18
		-2.3 28	2.4 28	11.2 60	2.6 18	4.1 17	13.0 89				0.1 17
Target 2010 Trust CAI Tgt Date 2010 Custom Index	\$8	-1.9 35	2.4 28								
		-2.0 36	2.2 31								
Target 2015 Trust CAI Tgt Date 2015 Custom Index	\$88	-2.8 32	1.8 23	10.2 74	4.1 2	5.0 2	10.8 90		0.7 1	0.4 100	0.2 3
		-3.0 34	1.7 24	10.0 79	3.8 2	4.8 2	10.9 90				0.2 5
Target 2020 Trust CAI Tgt Date 2020 Custom Index	\$41	-3.7 34	1.2 18	11.9 52	1.3 32	3.9 10	15.6 75		0.2 13	0.5 100	-0.0 32
		-3.8 39	1.1 20	11.7 57	1.2 35	3.8 11	15.7 72				-0.0 35
Target 2025 Trust CAI Tgt Date 2025 Custom Index	\$24	-4.4 16	0.7 5	12.8 31	0.1 44		18.5 57		0.1 37	0.4 100	-0.1 46
		-4.6 19	0.6 5	12.7 36	0.0 45		18.7 56				-0.1 47
Target 2030 Trust CAI Tgt Date 2030 Custom Index	\$13	-5.2 22	0.1 8								
		-5.3 22	0.0 9								
Target 2035 Trust CAI Tgt Date 2035 Custom Index	\$14	-5.9 17	-0.5 4								
		-5.9 18	-0.5 4								
Target 2040 Trust CAI Tgt Date 2040 Custom Index	\$16	-5.9 12	-0.5 7								
		-6.0 14	-0.6 7								
Target 2045 Trust CAI Tgt Date 2040 Custom Index	\$18	-6.0 13	-0.5 7								
		-6.0 14	-0.6 7								
Target 2050 Trust CAI Tgt Date 2050 Custom Index	\$21	-5.9 7	-0.5 7								
		-6.0 7	-0.6 7								
Target 2055 Trust CAI Tgt Date 2055 Custom Index	\$7	-5.9 1	-0.5 1								
		-6.0 1	-0.6 1								

Returns:
■ above median
■ third quartile
■ fourth quartile

Risk:
■ below median
■ second quartile
■ first quartile

Risk Quadrant:


Excess Return Ratio:
■ above median
■ third quartile
■ fourth quartile

Tracking Error:
■ below median
■ second quartile
■ first quartile

Sharpe Ratio:
■ above median
■ third quartile
■ fourth quartile

Passive Options

Gross & Net of Fee

Investment Manager	Market Value (\$mm)	1/2 Year Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Index Funds (Gross of Fee)											
State Street S&P Fund (i) CAI Large Cap Core Style	\$219	-3.7 30	2.1 40	14.2 48	-0.2 70	2.7 82	21.1 49		0.6 8	0.1 100	-0.1 72
S&P 500 Index		-3.7 30	2.1 40	14.1 50	-0.2 72	2.6 84	21.1 48				-0.1 73
Russell 3000 Index (i) CAI Large Cap Style	\$12	-4.9 39	1.1 40	15.0 36						0.1 100	
Russell 3000 Index		-5.0 40	1.0 42	14.9 37	-0.0 55	3.0 56	21.9 50				-0.1 54
World Eq Ex-US Index (i) CAI Non-U.S. Equity Style	\$10	-16.8 59	-13.7 73	11.1 29						1.7 100	
MSCI ACWI x US (Net)		-16.9 59	-13.7 73	10.7 33	-2.9 44	3.5 41	26.6 27				-0.2 41
Long US Treasury Bond Index (i) CAI Extended Mat FI Style	\$22	27.0 8	29.8 8	7.6 83						0.4 96	
BC Long Treas		27.0 8	29.9 8	7.4 89	11.0 30	9.0 30	16.3 8				0.6 92
US Treasury Infl Prctd SEC (i) CAI Real Return	\$19	7.3 67	13.4 54	10.2 55						0.1 95	
BC US TIPS Index		7.3 66	13.6 48	10.4 31	8.0 60	6.1 69	5.4 26				1.2 68
World Gov't Bond Ex-US Indx (i) CAI Non-U.S. F-I Style	\$5	0.4 37	5.2 38	4.8 91						0.9 94	
Citi WGBI Non-US Idx		0.5 30	5.2 39	4.9 89	7.2 62	4.7 71	10.3 44				0.6 66
US Real Estate Invmt Trust (i) CAI Real Estate-REIT DB	\$21	-1.5 63	9.2 67	21.8 61						1.9 98	
US Select REIT Index		-1.4 62	9.4 65	21.6 63	-2.0 86	4.9 82	36.3 13				-0.1 87

Investment Manager	Market Value (\$mm)	1/2 Year Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	5 Year Risk	5 Year Risk Quadrant	5 Year Excess Rtn Ratio	3 Year Tracking Error	5 Year Sharpe Ratio
Index Funds (Net of Fee)											
BlackRock Govt/Credit Bond Fund (i) CAI Core Bond Mut Fds	\$53	5.9 7	8.6 8	6.2 93	6.3 36	5.4 45	4.7 46		-1.2 99	0.2 99	1.0 62
BC Govt/Credit Bd		6.0 6	8.7 8	6.6 92	6.5 33	5.5 41	4.7 47				1.1 56
Intermediate Bond Fund (i) CAI Intermediate F-I Mut	\$14	3.8 27	5.9 32	3.4 84	5.8 25	4.9 25	4.3 25		-0.2 75	0.0 100	1.0 68
BC Gov Inter		3.9 26	6.1 31	3.5 83	5.9 24	5.0 25	4.2 27				1.0 63

Returns:
■ above median
■ third quartile
■ fourth quartile

Risk:
■ below median
■ second quartile
■ first quartile

Risk Quadrant:


Excess Return Ratio:
■ above median
■ third quartile
■ fourth quartile

Tracking Error:
■ below median
■ second quartile
■ first quartile

Sharpe Ratio:
■ above median
■ third quartile
■ fourth quartile

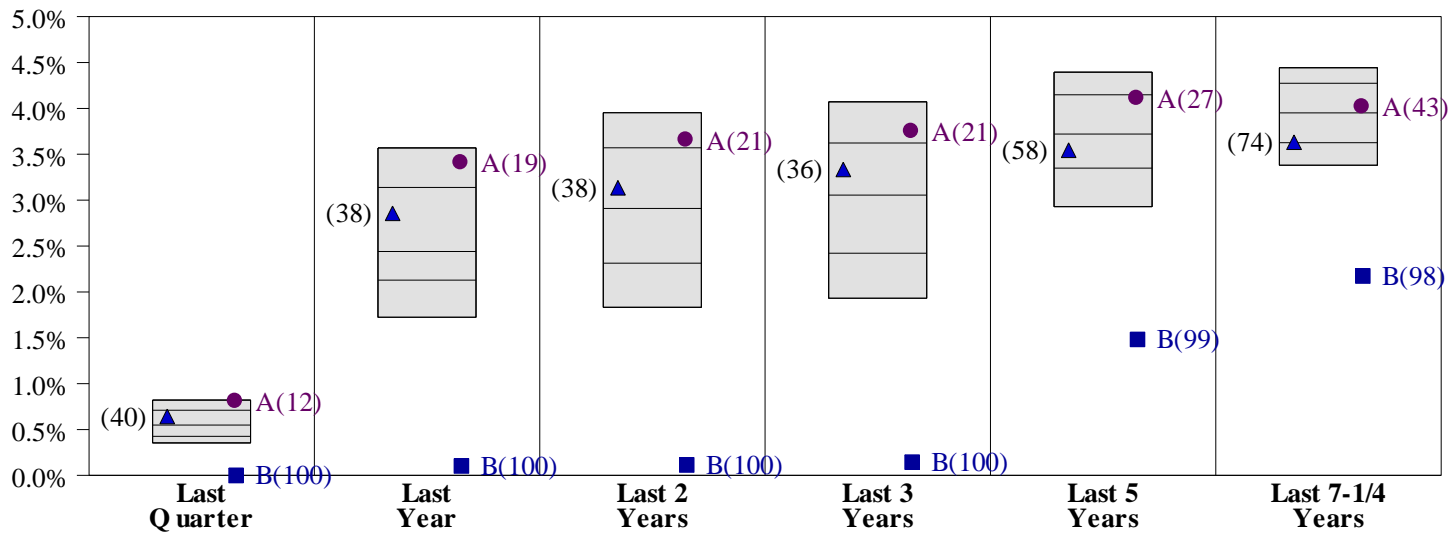


Select Individual Option Exhibits

SBS Stable Value Option

\$ 316 million

Performance vs CAI Stable Value Database (Gross)



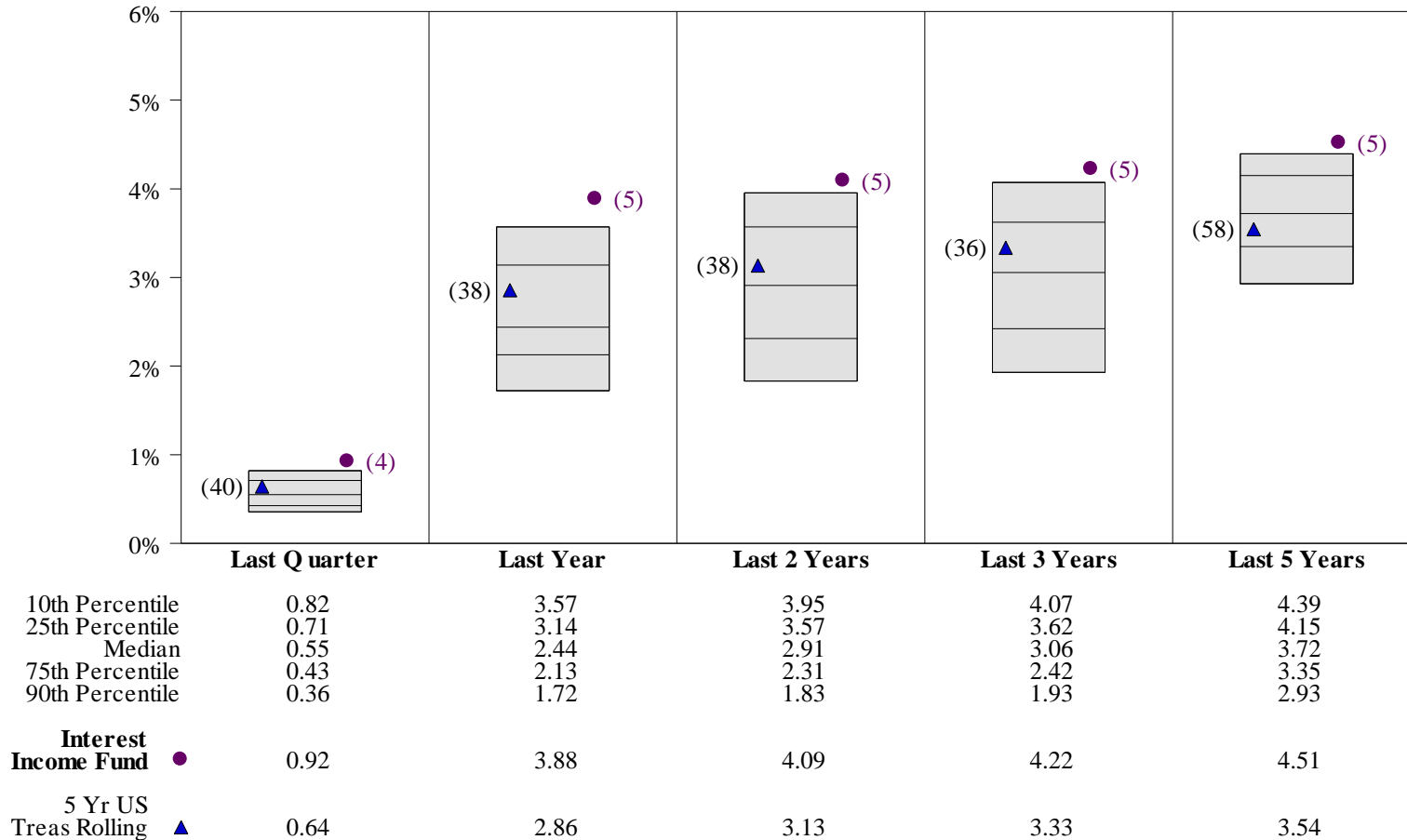
	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 7-1/4 Years
10th Percentile	0.82	3.57	3.95	4.07	4.39	4.44
25th Percentile	0.71	3.14	3.57	3.62	4.15	4.27
Median	0.55	2.44	2.91	3.06	3.72	3.95
75th Percentile	0.43	2.13	2.31	2.42	3.35	3.63
90th Percentile	0.36	1.72	1.83	1.93	2.93	3.38

T. Rowe Price Stable Value Fund	● A	0.80	3.40	3.65	3.74	4.11	4.01
3-month Treasury Bill	■ B	0.00	0.10	0.11	0.15	1.48	2.17
5 Yr US Treas Rolling	▲	0.64	2.86	3.13	3.33	3.54	3.63

Deferred Compensation Plan

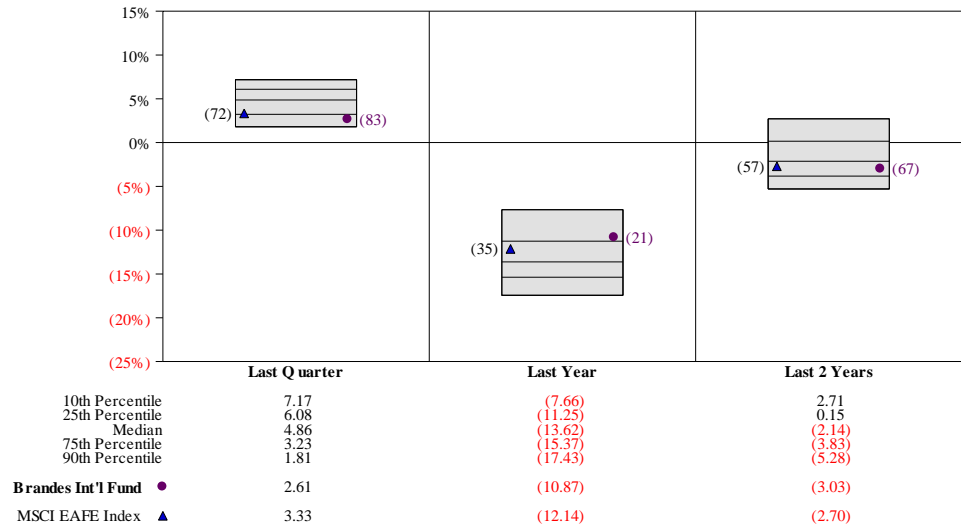
Interest Income \$175 million

Performance vs CAI Stable Value Database (Gross)



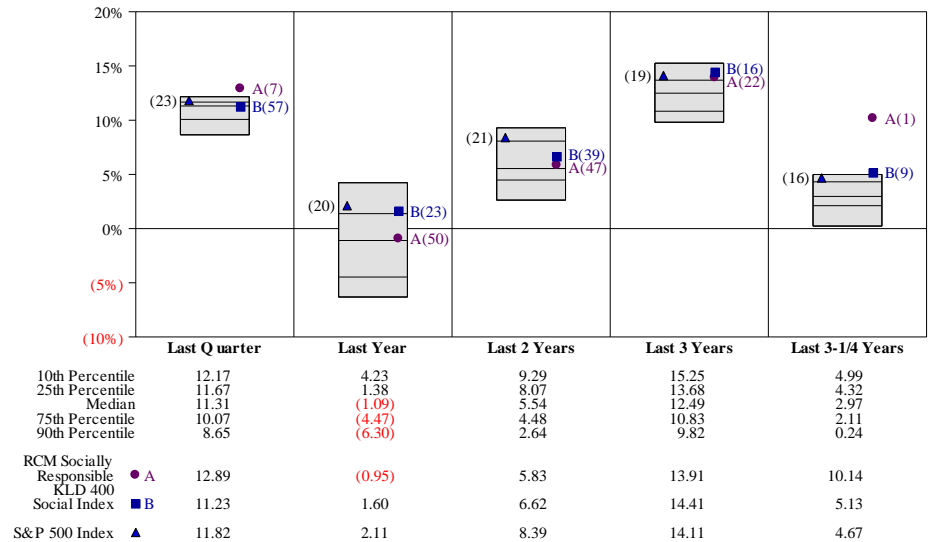
SBS Active Options

Performance vs CAIMF - Non-US Equity Style (Net)



Brandes
International Equity

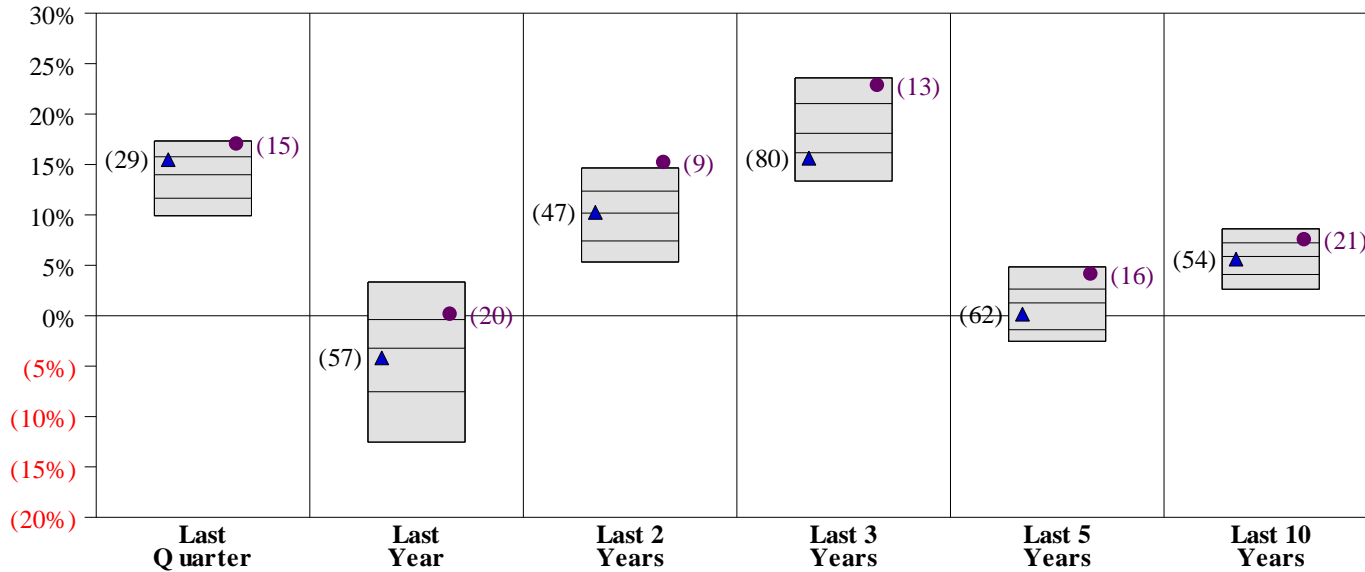
Performance vs CAIMF - Core Equity Style (Net)



RCM – Socially Responsible
Large Cap Domestic Equity

T. Rowe Price Small Cap Equity

Performance vs CAI MF - Small Cap Broad Style (Net)



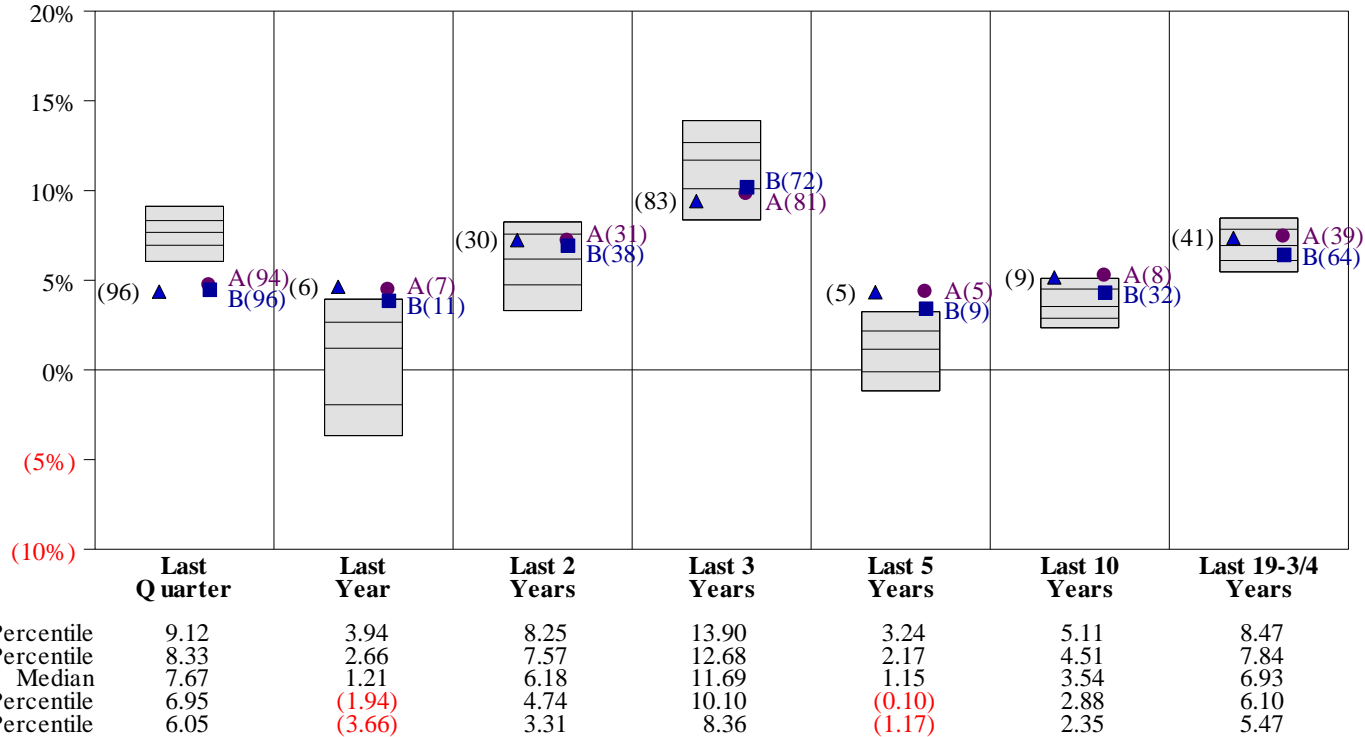
	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	17.33	3.34	14.65	23.59	4.84	8.62
25th Percentile	15.76	(0.39)	12.36	21.03	2.65	7.23
Median	13.99	(3.22)	10.18	18.09	1.27	5.87
75th Percentile	11.65	(7.55)	7.42	16.17	(1.39)	4.10
90th Percentile	9.92	(12.53)	5.32	13.36	(2.54)	2.62

	Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years
T. Rowe Price Small-Cap Stock Trust ●	16.93	0.05	15.11	22.75	4.02	7.43
Russell 2000 Index ▲	15.47	(4.18)	10.25	15.63	0.15	5.62

Balanced

\$1.08 Billion

Performance vs CAIMF - Domestic Balanced Style (Net)

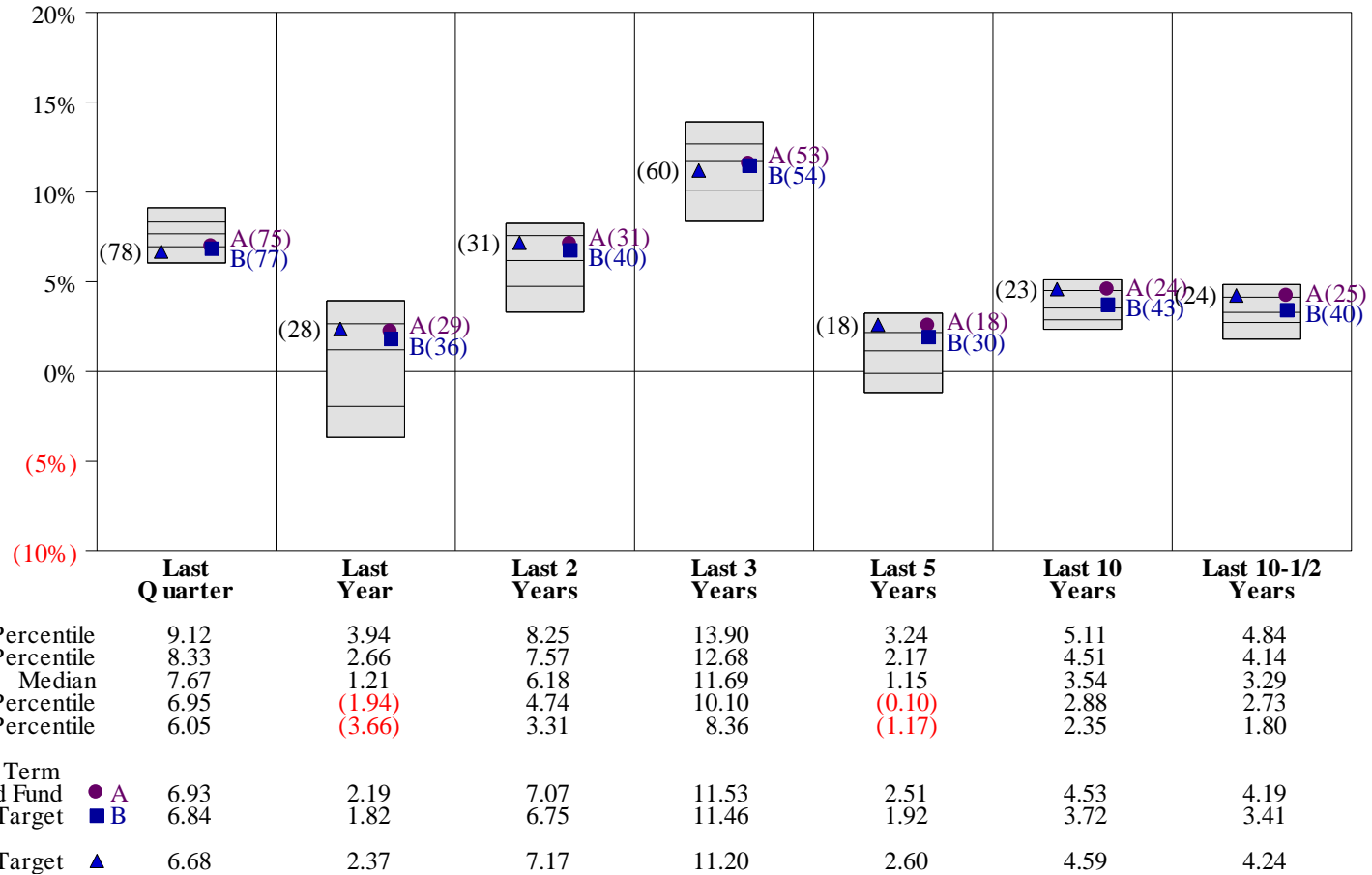


		Last Quarter	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 10 Years	Last 19-3/4 Years
Alaska								
Balanced Fund	● A	4.68	4.43	7.17	9.77	4.33	5.22	7.40
Active Target	■ B	4.47	3.85	6.93	10.19	3.41	4.31	6.41
Passive Target	▲	4.37	4.64	7.24	9.41	4.33	5.16	7.36

Long-Term Balanced

\$369 million

Performance vs CAI MF - Domestic Balanced Style (Net)

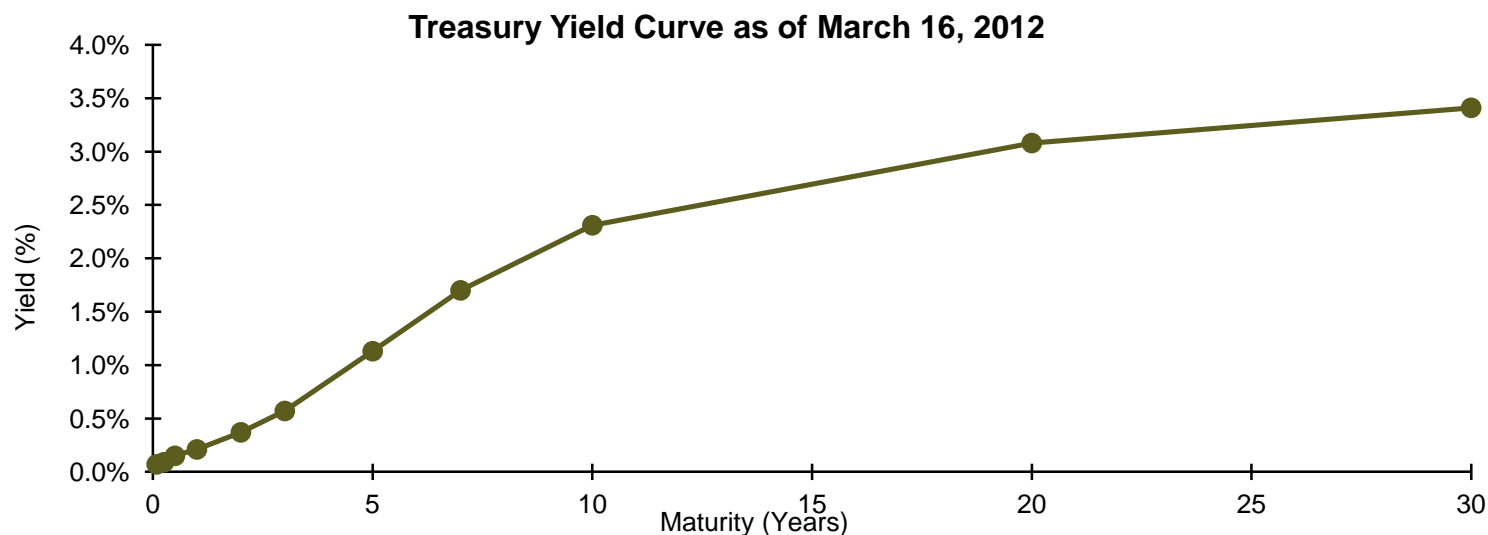


Subsequent Market Results

YTD Through 3/16/12

Index	YTD
Barclays Aggregate	-0.04%
US Treasury	-1.73%
1-3 Year Treasury	-0.17%
7-10 Year Treasury	-2.34%
US Credit	1.58%
High Yield	0.16%

Index	YTD
S&P 500	12.19%
Russell 2000	12.32%
MSCI EAFE	12.49%
MSCI Emerging Markets	16.42%
Dow Jones UBS Commodity Index	3.96%



April 6, 2012



ARMB
Annual Asset Allocation Update

Michael J. O'Leary CFA
Executive Vice President

Overview

2012 Capital Market Projections

- As previously reported, Callan's 2012 capital market projections are lower than those developed in prior years.
- Callan has also counseled clients to attempt to avoid increasing "acceptable" risk levels in pursuit of returns comparable to those that appeared attainable in environments characterized by significantly higher levels of interest rates.
- Historically, ARMB has set policy with the use of customized "asset class" buckets. Specifically, ARMB has set policy using:
 - ARMB Fixed which is a blend of the following three sub-asset class building blocks: Intermediate-Term Treasury securities; Non-US Dollar Denominated Bonds and High Yield Bonds. These three were weighted 80/10/10 respectively.
 - ARMB Real Assets which is a blend of Real Estate (both public and private); Farmland; Timber ; Treasury Inflation Protected Securities (TIPS) and Private energy related investments.
- Staff and Callan believe that these custom aggregations provide significant managerial flexibility while maintaining desired portfolio balance and liquidity. Unfortunately, the use of these aggregations complicates efficient frontier modeling. We address this complexity by initially using the underlying building blocks to create an unconstrained efficient frontier and then separately build a constrained efficient frontier once those involved in formulating a recommendation for board consideration.
- Given the maturity of the DB programs, assuring adequate liquidity has become increasingly important. This qualitative assessment has been addressed by forcing allocations to short-term fixed income securities. In the 2012 analysis, the allocation was increased from 2% to 6%. In part, this change was driven by risk associated with today's low interest rate environment and the resultant risk of loss associated with rising rates. We also modified the definition to provide the fixed to invest in non-cash securities (primarily instruments with a slightly longer maturity).

Individual asset category return and risk characteristics

Risk and Return Assumptions

Asset Class	Projected Arithmetic Return	Projected Standard Deviation	3 Yr. Geometric Mean Return	5 Yr. Geometric Mean Return	10 Yr. Geometric Mean Return
Broad Domestic Equity	9.21%	18.72%	7.85%	7.78%	7.74%
Large Cap	8.95%	18.00%	7.70%	7.64%	7.60%
Small/Mid Cap	10.25%	23.00%	8.08%	7.99%	7.92%
International Equity	9.30%	20.00%	7.70%	7.63%	7.58%
Emerging Markets Equity	11.50%	27.75%	8.24%	8.10%	7.99%
Global (ex-US) Equity	9.85%	21.16%	8.05%	7.97%	7.92%
Private Equity	13.05%	30.60%	9.07%	8.90%	8.78%
Intndt Treas	3.15%	4.00%	3.11%	3.11%	3.11%
ARMB Fixed	3.45%	4.10%	3.41%	3.41%	3.41%
Domestic Fixed	3.30%	4.25%	3.26%	3.25%	3.25%
High Yield	6.00%	12.50%	5.40%	5.37%	5.35%
Non US Fixed	3.25%	9.50%	2.87%	2.85%	2.84%
Real Assets	6.74%	13.58%	6.04%	6.00%	5.98%
TIPS	3.10%	5.60%	2.99%	2.98%	2.98%
Real Estate	7.65%	16.95%	6.50%	6.45%	6.41%
Absolute Return	5.90%	10.00%	5.56%	5.54%	5.53%
Short-Term Fixed Income	2.75%	0.90%	2.77%	2.77%	2.77%

Asset Mix Alternatives Using Custom ARMB Groupings

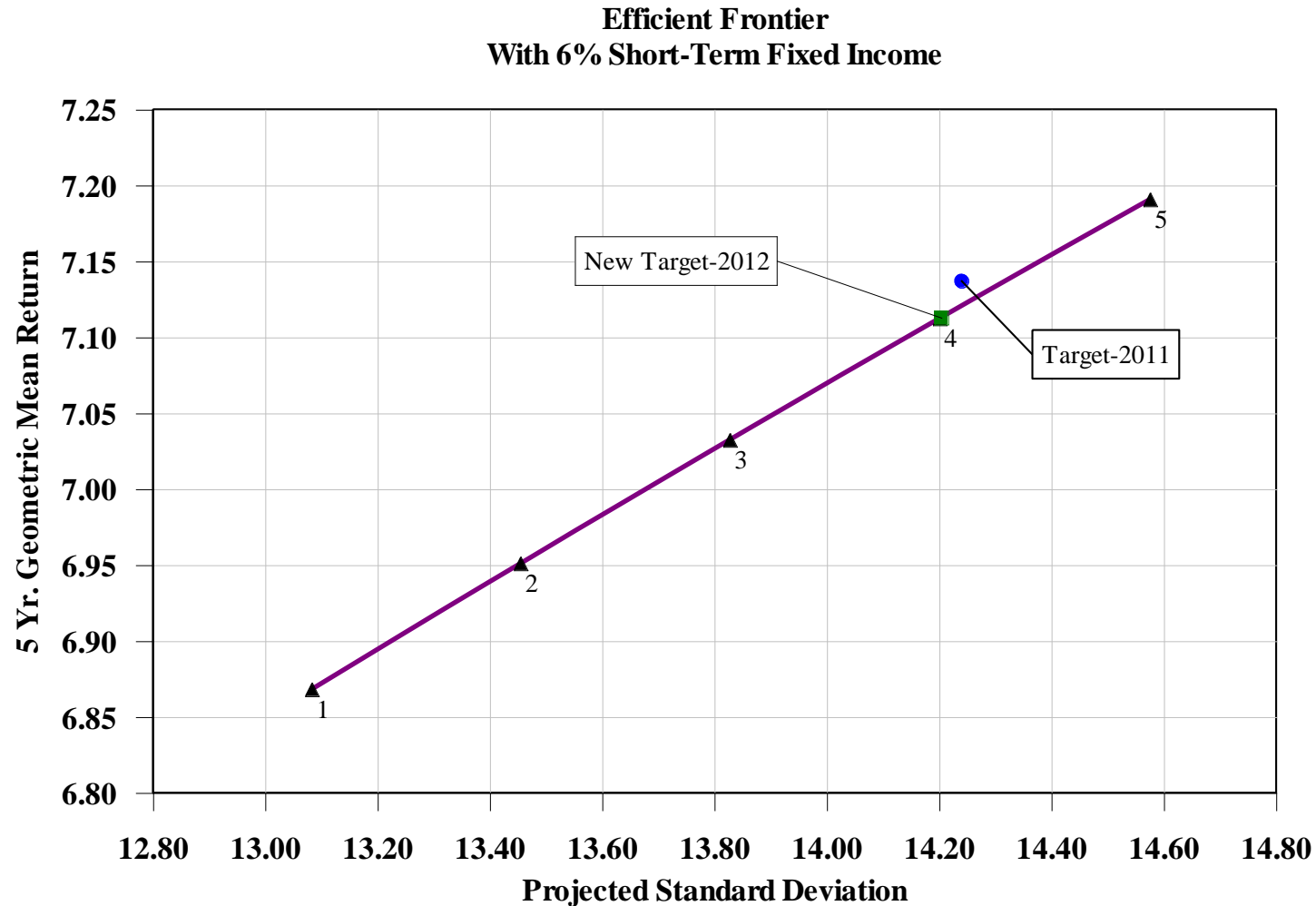
Current Target & Potential Target Largely Constrained But Close to the Unconstrained Efficient Frontier

Portfolio Component	Min	Max	Mix 1	Mix 2	Mix 3	New Target-20	Target-2011	Mix 5
Broad Domestic Equity	0.0%	100.0%	23.5%	24.7%	25.9%	27.0%	27.0%	28.4%
Global (ex-US) Equity	0.0%	100.0%	20.3%	21.1%	22.0%	23.0%	23.0%	23.7%
Private Equity	8.0%	100.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Real Assets	16.0%	100.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
ARMB Fixed	0.0%	100.0%	20.2%	18.2%	16.1%	14.0%	18.0%	11.9%
Absolute Return	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Short-Term Fixed Income	6.0%	100.0%	6.0%	6.0%	6.0%	6.0%	2.0%	6.0%
Totals			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Projected Arithmetic Return			7.50%	7.63%	7.75%	7.88%	7.90%	8.00%
Projected Standard Deviation			13.08%	13.45%	13.83%	14.20%	14.24%	14.58%
5 Yr. Geometric Mean Return			6.87%	6.95%	7.03%	7.11%	7.14%	7.19%
10 Yr. Geometric Mean Return			6.85%	6.93%	7.01%	7.09%	7.11%	7.16%
10 Yr. Simulated Sharpe Ratio			0.31%	0.31%	0.31%	0.31%	0.31%	0.30%

Note that the use of minimum and maximum constraints limits the range of alternative policies but unconstrained optimizations were considered when staff and advisors evaluated alternatives.

Comparison of Alternative Mixes

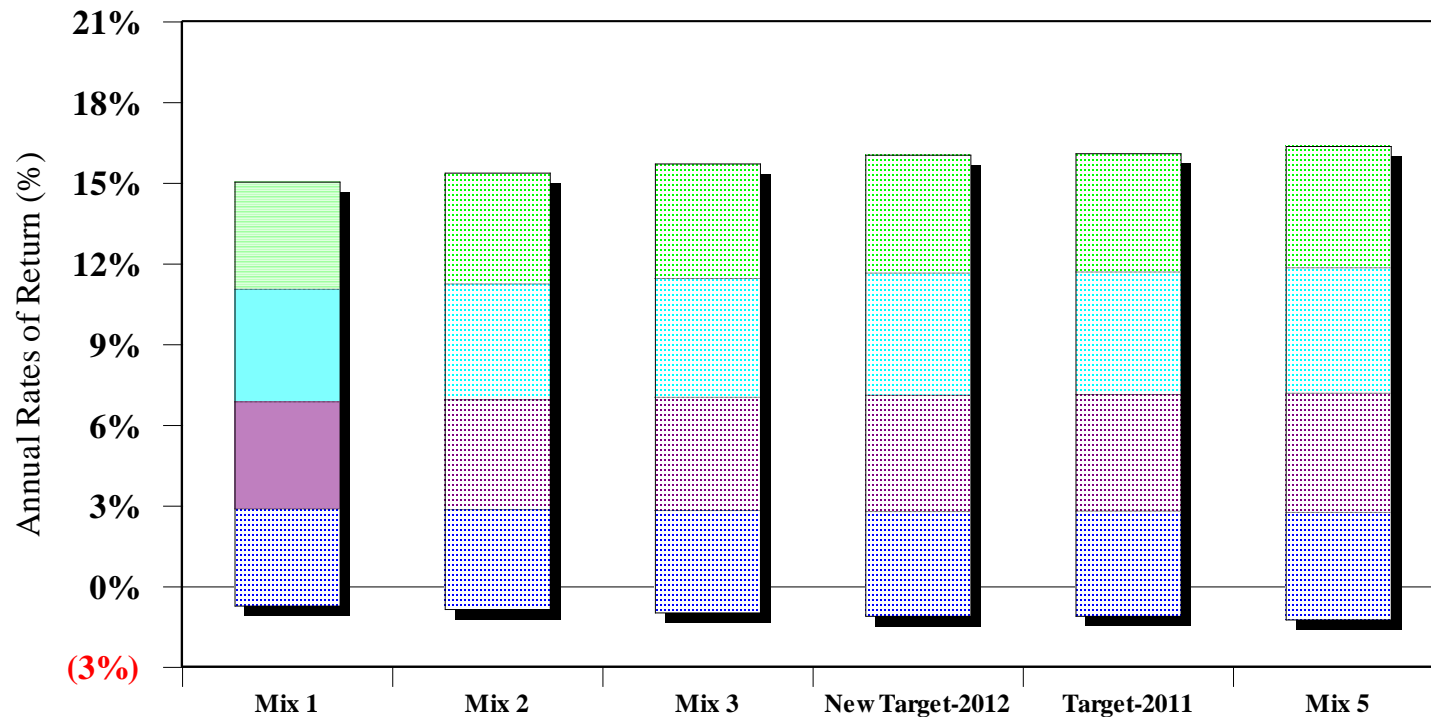
The 2011 target is above the efficient frontier line because of lower allocation to Short-Term Fixed Income.



5 Year Projected Range of Returns for Alternative Policies

Note that the proposed 2012 Target is very similar to the 2011 Target. Last year the estimated risk level for the 2011 Target was 13.82%.

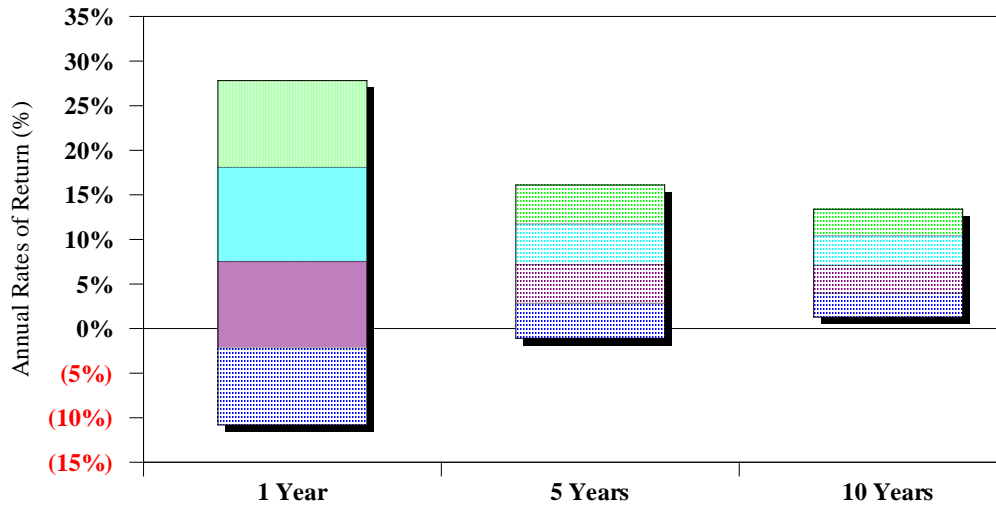
Range of Projected Rates of Return
Projection Period: 5 Years



	Mix 1	Mix 2	Mix 3	New Target-2012	Target-2011	Mix 5
10th Percentile	15.05%	15.39%	15.72%	16.05%	16.10%	16.38%
25th Percentile	11.03%	11.23%	11.44%	11.64%	11.68%	11.84%
Median	6.85%	6.93%	7.01%	7.09%	7.12%	7.16%
75th Percentile	2.86%	2.84%	2.81%	2.77%	2.78%	2.73%
90th Percentile	(0.72%)	(0.84%)	(0.97%)	(1.10%)	(1.10%)	(1.23%)

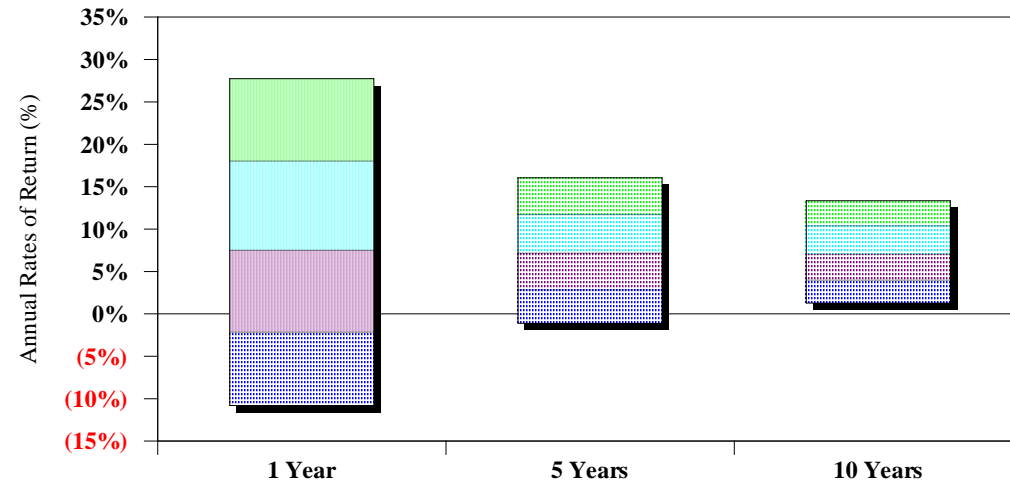
Comparison of 2011 and proposed 2012 policies over 3 time frames

Range of Projected Rates of Return
Target - 2011 Policy



10th Percentile	27.82%	16.10%	13.39%
25th Percentile	18.02%	11.68%	10.35%
Median	7.45%	7.12%	7.02%
75th Percentile	(2.22%)	2.78%	3.93%
90th Percentile	(10.81%)	(1.10%)	1.29%

Range of Projected Rates of Return
Proposed New Target -2012



10th Percentile	27.73%	16.05%	13.35%
25th Percentile	17.96%	11.64%	10.32%
Median	7.43%	7.09%	7.00%
75th Percentile	(2.22%)	2.77%	3.91%
90th Percentile	(10.79%)	(1.10%)	1.28%

This side by side comparison illustrates that the expected range of returns for the proposed policy and the existing policy over three different time horizons is quite small.

Military & Naval Militia Retirement Plan

Comparison of 2011 Policy and proposed 2012 Policy

Asset Mix Alternatives Military Retirement 6% Short-Term Fixed Income

Portfolio Component	Min	Mix 1	Mix 2	MilPos2011	Mil2011Tar	Mix 3	Mix 4	Mix 5
Broad Domestic Equity	0%	20%	24%	26%	27%	28%	32%	37%
Global (ex-US) Equity	0%	12%	14%	17%	17%	17%	20%	23%
ARMB Fixed	0%	53%	56%	51%	54%	49%	42%	34%
Short-Term FI	6%	15%	6%	6%	2%	6%	6%	6%
Totals		100%	100%	100%	100%	100%	100%	100%
Projected Arithmetic Return		5.25%	5.69%	5.99%	6.08%	6.13%	6.56%	7.00%
Projected Standard Deviation		6.71%	7.89%	8.73%	8.96%	9.11%	10.37%	11.65%
5 Yr. Geometric Mean Return		5.13%	5.51%	5.75%	5.82%	5.86%	6.20%	6.52%
10 Yr. Geometric Mean Return		5.13%	5.50%	5.74%	5.81%	5.85%	6.18%	6.50%

A modest change is recommended in an effort to incorporate the 6% Short-Term minimum requirement while limiting the reduction in expected return.

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT: Asset Allocations – ACTION: X
Resolutions 2012-05, 2012-06, 2012-07
DATE: April 20, 2012 INFORMATION: _____

BACKGROUND:

The Alaska Retirement Management Board (Board) sets and reviews the asset allocations on behalf of all plans over which it has fiduciary responsibility. This process incorporates five-year capital market assumptions, board goals, actuarial assumptions, and other factors.

STATUS:

At the February 2012 meeting of the Board, Callan Associates, Inc. (Callan) presented the 2012 capital market projections that are the basis for the asset allocation and optimization process. On April 2, 2012, Chief Investment Officer Gary Bader conferred with Michael O’Leary of Callan and Investment Advisory Council (IAC) members Dr. William Jennings, Mr. George Wilson, and Dr. Jerrold Mitchell regarding asset allocation for the next fiscal year.

Staff, the IAC, and Callan recommend the following strategic asset allocations after considering current asset allocations and a range of optimal portfolios produced by Callan:

Resolution 2012-05 – Public Employees’, Teachers’ and Judicial Retirement Systems
Public Employees’, Teachers’, and Judicial Retirement Health Trust Funds
Retiree Major Health Insurance Fund
Health Reimbursement Arrangement Fund
PERS Peace Officers/Fighters Occupational Death & Disability Fund
PERS, TRS, All Other Death & Disability Fund

Resolution 2012-06 – Alaska National Guard and Naval Militia Retirement Systems

Resolution 2012-07 – Public Employees’ and Teachers’ Retirement Systems Defined Contribution Holding Accounts

RECOMMENDATION:

That the Alaska Retirement Management Board adopt Resolutions 2012-05, 2012-06, and 2012-07, approving the asset allocations for fiscal year 2013.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Asset Allocation
For the Public Employees', Teachers' and Judicial Retirement Systems
Public Employees', Teachers', and Judicial Retirement Health Trust Funds
Retiree Major Health Insurance Fund
Health Reimbursement Arrangement Fund
PERS Peace Officers/Fighters Occupational Death & Disability Fund
PERS, TRS, All Other Death & Disability Fund

Resolution 2012-05

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee of the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policies for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has reviewed the actuarial assumptions; and

WHEREAS, the Board has reviewed the asset allocation set forth in the study prepared by the external investment consulting firm of Callan Associates, Inc.; and

WHEREAS, a prudent, diversified portfolio reduces risk and volatility and considers short term and long term earnings requirements for the Funds; and

WHEREAS, the Board shall continue to review, evaluate and make appropriate adjustments to asset allocation for the retirement plans on a periodic basis;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD that the following asset allocation be established for the Public Employees', Teachers' and Judicial Retirement Systems; Public Employees', Teachers', and Judicial Retirement Health Trust Funds; Retiree Major Health Insurance Fund; Health Reimbursement Arrangement Fund; PERS Peace Officers/Firefighters Occupational Death & Disability Fund; and the PERS, TRS, All Other Death & Disability Fund, effective July 1, 2012:

Target Asset Allocation

<u>Asset class</u>	<u>Allocation</u>	<u>Range</u>
Broad Domestic Equity	27%	± 6%
Global Equity Ex-US	23%	± 4%
Private Equity	8%	± 5%
Real Assets	16%	± 8%
Absolute Return	6%	± 4%
Fixed Composite	14%	± 5%
<u>Short-Term Fixed Income</u>	<u>6%</u>	- 6%/+1%
Total	100%	

Expected Return – 5-Year Geometric Mean	7.11%
Projected Standard Deviation	14.20%

This resolution repeals and replaces Resolution 2011-05.

DATED at Anchorage, Alaska this ____ day of April, 2012.

Chair

ATTEST:

Secretary

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Asset Allocation
For the Alaska National Guard and Naval Militia Retirement Systems

Resolution 2012-06

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee of the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has reviewed the actuarial assumptions for the Alaska National Guard and Naval Militia Retirement Systems; and

WHEREAS, the Board has reviewed the asset allocation set forth in the study prepared by the external investment consulting firm of Callan Associates, Inc.; and

WHEREAS, a prudent, diversified portfolio reduces risk and volatility and considers short term and long term earnings requirements for the Funds; and

WHEREAS, the Board shall continue to review, evaluate and make appropriate adjustments to asset allocation for the retirement plans on a periodic basis;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD that the following asset allocation be established for the Alaska National Guard & Naval Militia Retirement System, effective July 1, 2012:

Target Asset Allocation

<u>Asset class</u>	<u>Allocation</u>	<u>Range</u>
Broad Domestic Equity	26%	± 6%
Global Equity Ex-US	17%	± 4%
Fixed Composite	51%	± 10%
<u>Short-Term Fixed Income</u>	<u>6%</u>	- 6%/+1%
Total	100%	

Expected Return – 5-Year Geometric Mean	5.75%
Projected Standard Deviation	8.73%

This resolution repeals and replaces Resolution 2011-06.

DATED at Anchorage, Alaska this ____ day of April, 2012.

Chair

ATTEST:

Secretary

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Asset Allocation
For the Public Employees' and Teachers' Retirement Systems Defined Contribution
Holding Accounts

Resolution 2012-07

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee of the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has reviewed the actuarial assumptions for the Public Employees' Retirement System and the Teachers' Retirement System; and

WHEREAS, the Board has reviewed the asset allocation set forth in the study prepared by the external investment consulting firm of Callan Associates, Inc.; and

WHEREAS, a prudent, diversified portfolio reduces risk and volatility and considers short term and long term earnings requirements for the Funds; and

WHEREAS, the Board shall continue to review, evaluate and make appropriate adjustments to asset allocation for the retirement plans on a periodic basis.

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the following asset allocation be established for the Public Employees' and Teachers' Retirement Systems Defined Contribution Holding Accounts, effective July 1, 2012:

Target Asset Allocation

<u>Asset class</u>	<u>Allocation</u>	<u>Range</u>
Short-Term Fixed Income	100%	± 0%
Expected Return	2.77%	
Projected Standard Deviation	0.90%	

This Resolution repeals and replaces Resolution 2011-07.

DATED at Anchorage, Alaska this ____ day of April, 2012.

Chair

ATTEST:

Secretary

**ALASKA RETIREMENT MANAGEMENT BOARD
M E M O R A N D U M**

To: ARMB Trustees
From: Judy Hall
Date: April 9, 2012
Subject: Financial Disclosures

As required by AS 37.10.230 and Alaska Retirement Management Board policy relating to investment conduct and reporting, trustees and staff must disclose certain financial interests. We are hereby submitting to you a list of disclosures for individual transactions made by trustees and staff.

Name	Position Title	Disclosure Type	Disclosure Date
Victor Djajalie	Investment Officer	Equities	3/29/12
Bob Mitchell	Investment Officer	Equities	2/13/12 3/29/12

Alaska Retirement Management Board
2012 Meeting Calendar

February 15	Committee Meetings: Audit
February 16-17 Thursday-Friday Juneau	*Review Capital Market Assumptions *Manager Presentations *Actuarial Audit Report
April 19-20 Thursday-Friday Anchorage	*Adopt Asset Allocation *Performance Measurement - 4 th Quarter *Buck Consulting Actuary Report *GRS Actuary Certification *Review Private Equity Annual Plan Pathway Capital Management *Manager Presentations
June 20	Committee Meetings: Audit
June 21-22 Thursday-Friday Anchorage	*Final Actuary Report/Adopt Valuation/Contribution Rates *Performance Measurement - 1 st Quarter *Manager Presentations
September 19	Committee Meetings: Audit Budget Defined Contribution Plan
September 20-21 Thursday-Friday Fairbanks	*Audit Results/Assets - KPMG *Approve Budget *Performance Measurement - 2 nd Quarter *Real Estate Annual Plan *Real Estate Evaluation - Townsend Group *Manager Presentations
October 25-26 New York City	Education Conference
December 5	Committee Meetings: Audit
December 6-7 Thursday-Friday Anchorage	Audit Report - KPMG Performance Measurement - 3 rd Quarter Manager Review (Questionnaire) Private Equity Review Economic Round Table *Manager Presentations