
ALASKA RETIREMENT MANAGEMENT BOARD

BOARD OF TRUSTEES AGENDA

April 23-24, 2015

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

Teleconference # 1-800-315-6338 Pass Code 12762#

Thursday, April 23, 2015

I. 9:00 am Call to Order
II. Roll Call

III. Public Meeting NoticeIV. Approval of Agenda

V. Communications, Public/Member Participation, and Appearances

(Three Minute Limit)

VI. Approval of Minutes: February 12-13, 2015

VII. 9:15 Reports

1. Chair Report

2. Committee Reports

- A. Actuarial Committee, Kris Erchinger, Chair
- B. Defined Contribution Plan Committee, Sam Trivette, Chair
- 3. Retirement & Benefits Division Report

 John Boucher, Deputy Commissioner, DOA
- 4. Treasury Division Report Pamela Leary, Director
- 5. Chief Investment Officer Report, Gary Bader
- 9:45-10:00 6. Fund Financial Report

 Scott Jones, State Comptroller

 Kevin Worley, CFO, Division of Retirement & Benefits
- 10:05-10:50 7. Private Equity Tactical Plan
 Action: Resolution 2015-02 Private Equity Plan
 Zachary Hanna, State Investment Officer

10:50 - Break 15 Minutes

- 11:05-11:45 8. Pathway Capital Management *Jim Chambliss and Canyon Lew*
- 11:45-12:00 9. Executive Session

Lunch - 12:00 - 1: 15 pm

- 1:15-2:00 10. Zebra Capital

 Roger Ibbotson, John Holmgren and Peter Schaffer
- 2:05-2:50 11. T Rowe Price

 Chris Dyer, Charles Shriver, Toby Thompson

 And John Plowright

2:50 - Break 10 Minutes

- 3:00-3:45 12. State Street Global Advisors

 Rosalind Jacobsen and Ric Thomas
- 3:50-4:30 13. Prisma Capital Partners

 Eric Wolfe and Helenmarie Rodgers

Recess

Friday, April 24, 2015

9:00 Call to Order

9:00-10:00 14. Performance Measurement - 4th Quarter Paul Erlendson and Dana Brown Callan Associates, Inc.

10:05-10:15 15. Cash Equitization

Bob Mitchell, Senior Investment Officer

10:15 - Break 10 Minutes

10:25-10:35 16. Adopt Asset Allocation:

Resolution 2015-03:

DB PERS/TRS/JRS

PERS/TRS/JRS Retiree Health Trusts

Retiree Major Medical HRAP/ODD

Resolution 2015-04: DB NGNMRS

Gary Bader, Chief Investment Officer

Paul Erlendson, Callan Associates, Inc.

Action: DC PERS/TRS Holding Account Pamela Leary, Director, Treasury Division

10:45-11:05 Investment Actions

- A. DC Plan 2060 Target Date Trust
- B. Prisma Capital
- C. Zebra Capital Management LLC
- D. Investment Advisory Council Position

VIII. Unfinished Business

Disclosure Reports
 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.)

State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD **MEETING**

Location

Centennial Hall Egan Room Juneau, Alaska

MINUTES OF February 12 - 13, 2015

Thursday, February 12, 2015

CALL TO ORDER

CHAIR GAIL SCHUBERT called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:00 a.m.

ROLL CALL

Nine ARMB trustees were present at roll call to form a quorum.

Board Members Present

Gail Schubert, Chair Sam Trivette, Vice-Chair Gayle Harbo, Secretary Tom Brice (absent February 13)

Kristin Erchinger

Commissioner Sheldon Fisher

Commissioner Randall Hoffbeck (telephonic February 12)

Martin Pihl

Sandi Ryan

Board Members Absent

None

Investment Advisory Council Members Present

Dr. William Jennings Dr. Jerrold Mitchell Robert Shaw

Investment Advisory Council Members Absent

None

Department of Revenue Staff Present

Gary M. Bader, Chief Investment Officer

Scott Jones, State Comptroller

Bob Mitchell, State Investment Officer

Zachary Hanna, State Investment Officer

Steve Sikes, State Investment Officer

Shane Carson, State Investment Officer

Paul Hackenmueller, State Investment Officer

Joy Wilkerson, State Investment Officer

Steve Verschoor, State Investment Officer

Nicholas Orr. State Investment Officer

Emily Howard, State Investment Officer

Victor Djajalie, State Investment Officer

Casey Colton, State Investment Officer

Sean Howard, State Investment Officer

Pamela Leary, Director, Treasury Division

Jerry Burnett, Deputy Commissioner

Judy Hall, Board Liaison

Department of Administration Staff Present

Jim Puckett, Chief Operating Officer, Division of Retirement & Benefits Kevin Worley, Chief Financial Officer, Division of Retirement & Benefits Kathy Lea, Chief Pension Officer, Division of Retirement & Benefits Mike Barnhill, Policy Analyst, OMB John Boucher, Senior Economist, OMB

Consultants, Invited Participants, and Others Present

Stuart Goering, Department of Law, Assistant Attorney General

Paul Erlendson, Callan Associates, Inc.

Dana Brown, Callan Associates, Inc.

Andrew Susser, MacKay Shields

Kirk Kashevaroff, MacKay Shields

Doug Bratton, Crestline Investors

Keith Williams, Crestline Investors

Jesus Payan, Crestline Investors

Jim McCandless, UBS Agrivest

Tom Johnson, TIR Timber

Mark Seaman, TIR Timber

Chris Mathis, TIR Timber

Larry Semmens, Chief of Staff to Senator Peter Micciche

PUBLIC MEETING NOTICE

JUDY HALL confirmed that public meeting notice requirements had been met.

APPROVAL OF AGENDA

MR. BRICE moved to approve the agenda. MS. RYAN seconded the motion.

MR. BADER requested that an executive session to discuss higher and better uses of land assets be placed after the afternoon break.

MS. ERCHINGER moved to adopt this amendment to the agenda. MRS. HARBO seconded the motion.

The agenda was approved as amended.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

None.

APPROVAL OF MINUTES: December 4-5, 2014

MRS. HARBO moved to approve the minutes of the December 4 - 5, 2014 meeting of the ARMB. MS. RYAN seconded the motion.

The minutes were approved.

REPORTS

1. CHAIR REPORT

None.

2. COMMITTEE REPORTS

A. Audit Committee

MR. PIHL reported that the Audit Committee had the largest attendance ever at the meeting in Juneau the day before this board meeting. The Commissioner of Administration was there for part of it, as well as both deputy commissioners, representatives from OMB and Treasury, administrative staff, and several ARM Board trustees. KPMG was also at the meeting.

Reports were received from the Department of Administration, and the Division of Retirement and Benefits reported on the employer audit program and on measures being taken to transition the retirement of Kay Gouyton after 37 years and keep the program going smoothly. MR. PIHL stated that legislation was being prepared to strengthen the authority of the DRB in its employer audit compliance and premium payment efforts, which the ARMB has consistently supported.

KPMG updated the Audit Committee on GASB 67 and 68 and its impacts on financial reporting,

and the dates of analysis and position of that will be released soon. The Department of Revenue gave a summation of the compliance teamwork for the year and the goals for 2015; the Audit Committee receives monthly reports on that work. The committee also had discussions on how budget constraints and expected personnel reductions will affect the pension system and its funding, and the impact on the state and constituents of the use of the percent of pay method.

B. Legislative Committee

CHAIR SCHUBERT reported that the Legislative Committee also met the day before the meeting of the full ARM Board. They received a long-term liquidity update from MR. BADER, and reviewed the Buck summary. The Legislative Committee also discussed the possibility of creating an actuarial committee so that the board has some input into the assumptions, and discussed the impacts and effects of level dollar as opposed to level percent of pay.

CHAIR SCHUBERT reported that the Legislative Committee also reviewed the charter. Board members were given a copy of the charter showing the proposed revisions, which the Legislative Committee recommended that the full Board adopt.

MR. PIHL moved to adopt the revised charter. MS. RYAN seconded the motion.

The charter was adopted as revised.

MS. ERCHINGER presented a synopsis of the Buck Consultants summary of the impacts of House Bill 385 and Senate Bill 119 which the Trustees had requested at the December meeting. The Trustees had specifically asked for an explanation of what the impacts would be on municipalities and the state if legislation were proposed to increase the employer contribution rate cap from 22 percent to 23 percent. They also asked what the impact would be of an additional \$1 billion contribution into PERS in 2016, and requested a comparison of the impacts of level dollar versus percent of pay.

MS. ERCHINGER summarized Buck's analysis of the impact on PERS of the legislation which placed \$1 billion into PERS and \$2 billion onto TRS, focusing on PERS because the state pays the bulk of TRS. The overall costs to employers increased by \$5.6 billion, because the legislation also changed the amortization method from the level dollar approach to level percent of pay and extended the amortization period by nine years. Assuming the state's share of that is 60 percent, the overall impact of that legislation is approximately a \$3.1 billion increase to the State of Alaska, and an overall increase to municipalities of about \$2.5 billion.

The impact of increasing the 22 percent employer rate cap by 1 percent would increase employer costs by \$920 million, 60 percent of which would be to the state as an employer, and state assistance would decrease by \$860 million.

In its analysis of the impact of an additional \$1 billion to PERS, Buck assumed that that would be a direct savings to the State of Alaska because that would go toward state assistance. Therefore, it doesn't have an impact on municipalities, but it would decrease state assistance by \$1.9 billion, like

saving two dollars for every one dollar put in. The shift to level percent of pay and extending the amortization period by nine years results in an added cost to the system of \$5.7 billion. Sticking with level percent of pay but shaving off the nine-year extension of the amortization would save employers \$4.7 billion overall because the contributions would come into the system earlier, and those would earn interest and eliminate the need for the employers to make those contributions.

CHAIR SCHUBERT thanked MS. ERCHINGER for the report, and added that the committee agreed unanimously that it was a very good move of Governor Parnell to put \$3 billion into the pension funds when he did.

3. DIVISION OF RETIREMENT & BENEFITS REPORT

A. Membership Statistics/Buck Invoices/HRA Rates

MR. PUCKETT directed board members to the packet, which included membership statistics for 2014; he commented that the active population is basically the same as last year, but the active DB population is trending down and the DC population has been trending upward. The retiree and beneficiary population is increasing between 1,500 and 1,600 per year, and for the fifth consecutive year, the division has processed more than 2,000 retirements in a year. MR. PUCKETT recognized the good service of the retirement processing team, which has the same number of employees as in 2007. He added that the survivor benefit processing team has seen a 67 percent growth in their work since 2009.

MR. PUCKETT noted that the list of Buck Consultants invoices is longer than usual, because Buck had done a lot of work related to HB 385 and SB 119 and a few other things besides the regular work that they would provide during the first half of a fiscal year. MR. TRIVETTE requested a summary of annual costs for Buck since they were hired in 2005. MR. PUCKETT said that they can provide that information at the next meeting.

MS. ERCHINGER commented that it appeared that some termination studies that are required of cities proposing terminations have been billed to the system; MR. PUCKETT said that he would have to check on that, and would get an answer to the board.

B. Legislative Update

MR. PUCKETT reviewed the pending bills that are of interest to the ARM Board.

- HB 3 takes care of some shortcomings on work-related injuries that lead to death, providing survivor benefits to the surviving spouse, including major medical coverage.
- HB 8 cleans up some language for powers of attorney, and is of no concern at all in its current form.

- HB 47 is a reintroduction of a bill from last session to provide some relief from the salary floor amount for those municipalities whose population dropped more than 25 percent between the 2000 and 2010 census. DRB is monitoring that one closely.
- HB 66 also fills a shortcoming for survivor benefits, providing major medical coverage for TRS and PERS in occupational deaths only.
- HB 90 reopens the PERS defined benefit plan to members defined as "protective occupation employees," police and firefighters. It would include some of them using the current PERS definition, and it would expand the pension plan provision to administrative professionals or clerical employees of a municipal police or fire department, the university fire department, or the Department of Public Safety, regardless of date of hire. MR. PUCKETT said that HB 90 would create a ninemember board made up of union members which would make recommendations to the ARM Board for policies and strategies and procedures, set contribution percentages, actuarial equivalent value, and enter into a contract for actuarial services. DRB will be keeping a close eye on this bill.

MR. TRIVETTE asked whether a medical plan has been put forth in writing yet for the defined contribution people. MR. PUCKETT replied that nothing definitive has been put forth yet, but it is a topic of conversation with the new administration.

4. TREASURY DIVISION REPORT

DIRECTOR PAM LEARY gave an update on the FY 2016 budget requests. Three items affect the ARM Board component of the budget. One is custody and management fees, for which the budget includes an additional 8.1 request, and a supplemental request of 10.1 because they are nearing and expect to surpass the budget authorization for FY 15.

The Treasury Division has also requested an increase for salaries to move them closer to market, and two new investment officers as part of the move toward more internal management. MS. LEARY noted that one position would also be eliminated in the FY 16 budget for Treasury. MS. HARBO asked if the division expected to save money on fees by paying in-house managers, so they would pay for themselves, and MS. LEARY said yes.

5. CHIEF INVESTMENT OFFICER REPORT

Chief Investment Officer GARY BADER referred to his report, in which Item No. 1 is an example of rebalancing the portfolios. He noted that all of these are on file in his office if board members are curious, and the portfolios are rebalanced frequently to stay within the Board's target asset allocations.

MR. BADER pointed out several related transactions pertaining to the Blue Glacier Fund, transfers which were made because of changes the Board made in the absolute return strategy.

MR. BADER noted that Item No. 4 reports transfers to Baillie Gifford and Allianz, which are the international manager hires that were approved by the Board at the April 2014 meeting.

MR. BADER briefly reviewed each item in his report, then discussed the final three in more detail. Item No. 18 pertains to Everest Capital, which had a fund that was heavily invested in Swiss francs, and the market went against them and took all the earnings and the assets of that fund. The ARM Board is invested with Everest Capital, but with a different fund. Staff has questioned Everest and reviewed the portfolio, and are confident that the fund that the ARMB is invested in is in good shape. However, MR. BADER asked the Board to approve putting Everest Capital on the watch list.

MRS. HARBO moved to place Everest Capital, the frontier market strategy, on the watch list. MS. RYAN seconded the motion.

There was no objection and the motion passed unanimously.

Regarding Item No. 19, MR. BADER informed the Board that staff has decided to take a pass on Apollo Aviation for the time being. The Board had approved investing in this fund subject to staff and Callan's approval, but they could not come to agreement about certain accounting issues and how they value assets, and the fund is closing soon. They may consider it again when another opportunity comes around.

The last item relates to a strategy approved by the Board a long time ago, a multi-asset strategy with Goldman Sachs. Staff felt that some of the things in the Goldman contract were incompatible with the defined contribution plans, so they have informed Goldman Sachs that they no longer intend to engage them for this program. MR. BADER stated that they intend to present at the next Defined Contribution Committee meeting some strategies that might take the place of what the Goldman offering would have done for the portfolio.

MRS. HARBO asked how many companies are on the watch list, and MR. BADER replied that he would have to report back later on that.

6. FUND FINANCIAL REPORT

State Comptroller SCOTT JONES reviewed the financial statements for the six months ending December 31, 2014. The ending invested assets were \$27.6 billion, with a change in invested assets of a little over 6 percent. This total comprises the PERS system with \$15.8 billion, the TRS system with \$7.4 billion, the JRS with \$168 million, the National Guard with \$37 million, SBS with 3.4 billion, and Deferred Compensation with \$799 million. MR. JONES stated that non-participant directed plans year-to-date are at a \$33 million loss and participant directed plans are at a gain of \$61 million. Everything is within the target range for asset allocation in the various funds. MR. JONES stated that in January the systems lost a little bit of money, but the non-participant directed plans had shown improvement with some earnings in February.

MR. WORLEY reviewed the DRB supplement report, noting the contributions and monthly payouts of the different plans. MR. TRIVETTE requested that MR. WORLEY prepare a more detailed report, since there is so much material to cover in a short time, including comments on what he thinks is causing the things that are happening. MR. WORLEY said that he would do that.

MR. WORLEY discussed the HRA, Health Reimbursement Arrangement, which is an annual calculation required by statute, with the contributions by employers determined by 3 percent of the average annual compensation of all employees of all employers in the TRS and PERS. This is different than the other contributions that employers make in that the other contributions are a rate, but the HRA is an actual amount. MR. WORLEY pointed out the supplemental schedule which lists the HRA from FY 08 through the current FY 16. It has risen from about \$1,500 in 2008 to \$2,000 in 2016, which is about a 33 percent annual increase.

MRS. HARBO had several questions:

- Do the employees get an annual statement, and do they know how much is in their account and how they can access it? She noted that under the DC plan, there aren't any retirees, but there are now nine survivors, and she asked what kind of HRA or health benefits they can get.
- What happens to the HRA account when members leave, since only the employer, not the employee, has contributed?
- Since the DC program started in 2006, the ARMB has received statistics on members who are active and those who have terminated, but they don't know how many DC people have actually left and taken all their money out. What happened to all the money that went into accounts for those people that actually left the system and got refunds, which for the first six months of this year amounts to \$21 million?

MR. WORLEY responded that he would answer those questions in a report and prepare to discuss it at the April meeting.

MR. BRICE asked whether there is a way to track where funds go from separation of services, whether they are rolled into another plan or taken as cash distributions. MR. WORLEY replied that they can track when people roll their money directly into another fund, but if they take a distribution to themselves and then later roll it into a fund, the division wouldn't know that.

MRS. HARBO repeated her question about what happens to the HRA fund when people are terminated. MR. WORLEY replied that the money stays within the HRA, and is not refunded to the employer. If the employee came back, the account would be reinstated, but the employee would not have access to it at any time once they have terminated. In any case, they have to meet the criteria for being able to use the HRA, and they won't have access to it until they retire.

MR. TRIVETTE requested that the report also explain who pays for the maintenance of these

individual accounts, noting that they have previously discussed this and have not gotten a clear answer. He also asked whether any of the nine beneficiaries have accessed these accounts yet. MR. WORLEY said that he would include that information in his report as well.

CHAIR SCHUBERT recessed the meeting from 9:57 a.m. to 10:13 a.m.

7. MANAGER REVIEW/GEMS ANALYSIS

MR. BADER reported that the manager review questionnaire had been sent to all the managers that the ARMB has, and they all responded. In November, Judy Hall, the IAC members, and Paul Erlendson and Dana Brown from Callan all met in San Francisco to discuss the managers. Also, some other Callan representatives, Jay Kloepfer and Karen Harris, discussed the GEMS methodology. MR. BADER requested that DR. JENNINGS summarize the GEMS strategy for the Board.

DR. JENNINGS noted that the GEMS system is highly mathematical, reflecting its actuarial roots, and overall, the IAC's assessment is that it's probably a useful complement to the Callan process, but it shouldn't supplant or replace that. It is a way to calibrate the main capital management assumption process.

MR. BADER discussed the managers and issues that the IAC wants to continue to watch:

- Allianz: Will they be looking for more fees from other sources because of the exit of assets from PIMCO due to the departure of Bill Gross? MR. BADER said that they will continue to monitor that situation, but they don't think there are any imminent changes coming.
- DePrince, Race, Zollo: Their performance has lagged, but they have a long history of satisfactory returns, so as long-term investors, ARMB will stay with them.
- McKinley Capital: A higher and higher proportion of their assets under management are
 from the ARMB and the Alaska Permanent Fund. There is also some concern about their
 succession plan, so the next time they report to the ARMB, they will be asked to explain
 how the firm will be managed in the future.
- Luther King: Concerns are similar to those about McKinley Capital.
- The Capital Group: The returns are doing okay, but are difficult to analyze because Capital's methodology is really dispersed, with different research analysts contributing to the portfolio.
- Master Limited Partnerships: This asset class did extremely well and was a major contributor to last year's strong performance, as the Board got into it at just the right time. Now the value of their shares has declined with the lower energy prices, to the point that MR. BADER has asked staff to report on the possibility of putting more money into it.
- Relational Investors: This was a governance-type investor which has notified ARMB of their intent to close down their fund, with no indication that they intend to have a successor fund.
- Victory Capital has had a number of ownership changes, so it's being watched, although the returns tend to be satisfactory.

• Brandes has done well in the past year. ARMB stuck with them through a rough patch when international value stocks were out of favor, but they seem to be coming back now.

MR. BADER reported that they also talked about hedging, which staff has seen as a zero-sum game; you win some, you lose some, but in the long run are probably better off without the investment management fees. However, MR. BADER suggests reviewing that assumption.

MR. BADER commented that several years ago the Board made an exit from securities lending, which turned out to be timely, and their consensus is to stay away from it now.

Regarding asset allocation, MR. BADER noted that the more asset classes an investor has, the more difficult it is to rely on an optimizer to allocate resources among them, because it becomes very sensitive to the assumptions that are used. MR. ERLENDSON will discuss this in more detail in Callan's presentation on capital market assumptions.

Finally, they discussed the role of the IAC. MR. BADER said that the Board's collective view is that the Investment Advisory Council is a resource and counselor to the ARM Board, and it is the Board's decision whether to expand or reduce the IAC's role.

MR. BRICE asked about the statement that Capital Group, which manages international large cap assets, was "in general, not responsive to questionnaire." He asked if the IAC had any feedback on why they weren't responsive; DR. MITCHELL replied that managers put in varying amounts of effort on the survey, and the responses were probably prepared by assistants, not the sort of people who actually manage the money and report to the Board.

MR. PIHL asked if some analysis could be done on the return that would be available through more passive investments at home in the S & P 500, noting that it seems some managers have not paid their way in recent years. MR. BADER pointed out that this is a continuing discussion, and he has presented analyses of active versus passive management five times in 12 years. MR. BADER explained some of the actions the Board has done and proposed relating to this issue, such as the equity yield fund, and said that they hope to do more once they demonstrate to the Board their ability to do it successfully. MRS. HARBO commented that she is glad to hear that the Board is going to invest more in equity yield and internally manage it, because it has been a good money-earner, and if they hire more people to help with investments, they'll pay for themselves by internally managing these funds.

MR. TRIVETTE commented that he appreciates the work that staff has done, and it is clear now that they are saying that GEMS is a good supplement but not a primary system. He remarked that GRS didn't get a chance to review the Buck report, and it bears watching to make sure that they are not allowed to use GEMS as the primary system. MR. BADER said that he thinks Buck is using it to say that they would not be comfortable with an earnings assumption that was outside of the GEMS assumption, but a more conservative approach is not troubling at all.

CHAIR SCHUBERT thanked MR. BADER for his report, and welcomed COMMISSIONER

8. MACKAY SHIELDS

ANDREW SUSSER, senior portfolio manager, and KIRK KASHEVAROFF of client service marketing at MacKay Shields presented an overview of what has been going on in the high yield market. The drop in energy prices led to a lot of selling of high yield bonds late in 2014, but energy bonds have started to recover. MR. SUSSER explained that they have a very disciplined investment process and will not buy a high yield bond unless the company has at least one and a half times asset coverage, which is the value of the company divided by the amount of debt the company has. A lot of the bonds earlier in 2014 needed \$100-a-barrel oil to survive, so they didn't buy those. MR. SUSSER said that they have been underweight in energy in the first three quarters, but in the fourth quarter when they became cheap, they bought more of companies that fit their process.

Overall in the high yield market, the quality is good, MR. SUSSER said, and the bonds in the ARMB portfolio are excellent. It's a conservative portfolio with a yield a little lower than the index, but with low volatility compared to market and an average credit quality higher than the market. MR. SUSSER compared statistics of the ARMB portfolio to market in duration, coupon rates, dollar price lower than par, and performance.

MR. ERLENDSON noted that MR. SUSSER had taken over leadership last year, and asked him how much time he was spending leading the team versus interacting with clients. MR. ERLENDSON also asked where they are in the process of finding another sector analyst to do the research that leads to the results that they produce. MR. SUSSER replied that he has many more responsibilities now, but his experienced team helps handle client interactions so that he can do more credit work. He said that they have interviewed several candidates for the sector PM position, looking for somebody who has long experience in high yield and is very smart, who can subordinate themselves to MacKay Shields' investment process, and who will get along with everyone, because they all work closely together. As part of the selection process, they will have the candidates come in and do some credit reviews.

MR. TRIVETTE asked whether as a subsidiary of New York Life they have enough freedom from the large corporation or if they are being pressured to some degree. MR. SUSSER replied that they operate autonomously, although they have a CEO who reports to people at New York Life. MR. KASHEVAROFF added that the purchase was made in 1984, so any growing pains a firm may have from being absorbed by a large insurance company are long under the bridge. MacKay Shields pays New York Life a dividend every year, and New York Life mostly leaves them alone. MR. KASHEVAROFF said that MacKay Shields has a separate compensation scheme and health plan, and they have never been treated as asset gatherers.

MR. ERLENDSON commented that on the charts, credit ratings and default rates look rosy, and asked whether it goes on like that in perpetuity, or whether this could be like 2007 again. MR. SUSSER explained that in 2007, new issuance was of a lower quality, and compared other aspects

of high yield then versus now. He stated that he does not think there will be a repeat of 2007, but acknowledged that high yield is a high-risk asset class which may be sensitive to rising interest rates, economic recession, and even natural disasters. However, it gives a very big coupon as a cushion, and investors get a lot of money back pretty quickly. MR. SUSSER concluded by saying that he thinks that the portfolio will perform well in the next year and the default rate will be low, and they will look back at today's energy bond prices as a buying opportunity.

9. ARMB EQUITY YIELD STRATEGY

MR. BADER reminded the Board that in April 2012, they authorized staff to begin an internally managed public equity investment program called the ARMB Equity Yield Strategy. At the time, it was understood that stocks would be selected from the dividend-paying stocks in the Dow Jones U.S. Broad Market Index; the stocks in the portfolio would have a weight of plus or minus 50 basis points of its weight in the Dow Jones 100 Dividend Index at the time of purchase; that stocks not in the index would have a weight no greater than 50 basis points at the time of purchase; that all stocks would have a minimum market capitalization of \$50 million and an average daily trading volume of at least \$2 million per day; and that at least 90 percent of the market value of the portfolio would be invested in constituents of the Dow Jones U.S. 100 Dividend Index.

Performance would be measured by whether the stock selection resulted in exceeding the index or underperforming it. MR. BADER presented a tabulation of the monthly returns of the portfolio versus the index, showing that in 14 of 23 months since inception, the internally managed fund has exceeded the index. Comparing the characteristics of the portfolio to the index, the price of earnings ratio of the internally managed fund is slightly less than the index, while the yield and price-to-book ratios are about the same.

MR. BADER described the work of Joseph Piotroski on the value of financial statement analysis in stock selection. Piotroski developed the F-Score analysis, a simple accounting-based selection strategy for evaluating a stock's financial performance. It involves nine variables, all taken from a company's financial statement. One point is awarded for each test, so a total of nine points are available, and an 8 or 9 is the strongest score. Research suggests that this type of analysis can be an effective value filter. The ARMB Equity Yield Strategy's investment process begins with two internally developed models, with Piotroski's scores being one of the inputs. They also consider dividends, price to book, price to EBIDTA, price to cash flow, and price to the average price over the last three months, as well as Zack's Research Score, which is a service that they subscribe to.

MR. BADER described the process of rebalancing the portfolio quarterly. They earn dividends and reinvest them monthly, following a rubric designed to maintain balance. MR. BADER reviewed some of the portfolio's holdings, and noted that in the two years they have been managing this strategy, they have saved about \$600,000 that might have been spent on active manager fees, while outperforming their target benchmark.

MR. BADER proposed some changes to be made to the constraints under which they operate this fund. He summarized the proposed revised investment constraints: The universe would continue to be the Dow Jones U.S. Broad Market Index. A stock not in the Dow Jones U.S. Dividend 100

Index may not have a portfolio weight of greater than 3 percent at the time of purchase. All stocks would have a minimum market capitalization of at least \$500 million and an average trading volume of \$2 million per day. At least 50 percent of the market value of the portfolio will be invested in constituents of the Dow Jones U.S. Dividend 100 Index.

These changes would allow them to invest in non-dividend-paying stocks, and to broaden the opportunity set by requiring only 50 percent instead of 90 percent of the investments to be in Dow Jones Dividend 100 members. MR. BADER stated that they further propose increasing the assets in this strategy by about \$350 million to bring the total assets under management to about \$500 million. Using 30 basis points for the average active manager fee, this would save about \$1.5 million annually in manager fees. MR. BADER said that if this change is approved by the Board, his intent would be to direct staff to get more industry-oriented, and that's why they are requesting more analysts to do this. He said that they calculated this once for the fixed income portfolio in which they manage \$20 billion, and it costs less than a point to use internally managed people.

MR. PIHL asked whether they would be able to track the performance of the dividend group versus the new non-dividend-paying group and see what the new group either adds to or subtracts from the performance. MR. BADER replied that they would be able to do that, although any type of recordkeeping has associated costs. However, he expects non-dividend-paying stocks to be used only rarely.

MS. ERCHINGER asked how many additional analysts they think they need, and whether the new people would be working on other portfolios than just this one. MR. BADER answered that his long-term vision is to have an investment staff comparable to what you would find in New York, that they would have more than one equity strategy, and that eventually they would get to small cap. MR. BADER said that he hopes to recruit two staff, hopefully Alaskans. MS. ERCHINGER commented that her position on internally managed funds has morphed over that last few years as a result of the outstanding job done by ARMB staff, and it's good to see reductions in management fees and Alaskans being put to work to keep that money in the state.

The Board took up Item 13C from the agenda, the action memo pertaining to the modification of the equity yield portfolio, at the conclusion of Mr. Bader's presentation.

MRS. HARBO moved to approve the proposed changes to the investment constraints of the ARMB Internally Managed Equity Yield Portfolio. MS. RYAN seconded the motion.

A roll call vote was taken, and the motion passed unanimously.

CHAIR SCHUBERT recessed the meeting from 11:45 a.m. to 1:29 p.m.

10. CRESTLINE INVESTORS

DOUG BRATTON, President and CEO of Crestline, and KEITH WILLIAMS, the head of the Opportunistic Strategies group, reported on the absolute return mandate called the Blue Glacier Fund.

MR. BRATTON explained that Crestline has about \$9.5 billion of assets under management, 95 percent of which are from institutional investors. Their current primary focus is on credit and opportunistic strategies. The Blue Glacier Fund focuses on the area between hedge funds and private equity.

MR. BRATTON explained that there are three primary characteristics of the opportunistic strategies that they use. They have a one-to-three year average shelf life; they have a shallow J-curve, so money gets invested fairly quickly; and they have about 12 to 16 percent net return expectations. MR. BRATTON gave some examples of opportunistic strategies, ranging from "corporate distressed" to "real assets" such as oil and gas industry assets with royalties. He said that the Blue Glacier portfolio is very diversified, with hundreds of individual investments; they have committed about \$275 million, and about \$108 million has been called. The value of that \$108 million is about \$142 million, which is about \$35 million in profit. The portfolio is just now being invested and will pay out in three to four years, but it is performing well so far.

MR. BRATTON proposed some changes to the mandate to give the portfolio more flexibility. He proposed creating a recurring series of opportunistic funds as a way to have it be "evergreen", and including direct investing in the mandate, which would allow for quicker, more consistent capital deployment, more tactical investment approaches, and the opportunity to take advantage of co-investments with certain managers.

MR. BRICE asked about the risks of direct investing; MR. WILLIAMS replied that when considering direct investing versus fund investing, it comes down to the manager's ability to source, to underwrite, to structure, and to manage the asset in general. The biggest risk would be not picking the right team.

MR. BRICE asked in what economic environments the direct investing strategy works best and in what environments is it most volatile. MR. BRATTON said that today's environment is probably best, because banks that had been active in these strategies have backed away because of regulatory changes. The best opportunity set would be after a dislocation like in 2008, but right now is very good.

MR. BRATTON explained that the team at Crestline all has direct investing backgrounds, and when they built the opportunistic strategy, it had three legs: fund investing, secondary investing, and direct investing. The Blue Glacier mandate doesn't have the capability to do direct investing, but some of their other clients' mandates do, and that's one reason they would like to add to this mandate.

MR. ERLENDSON inquired about capacity constraints, limits on the assets that Crestline can take and still effectively participate in this market without bidding up prices to make that incremental value disappear. MR. WILLIAMS replied that they are usually investing in areas that have some inefficiency, and when the spread starts to shrink, they focus elsewhere.

MR. BADER asked MR. WILLIAMS to tell the Board about his resume and those of other team members. After that, MR. WILLIAMS described the four categories of direct investments that they would invest in:

- The asset-based cash flow deal, which is a pool of assets that have a cash flow stream, which can either be purchased or lent against.
- Direct lending and structured equity, which is providing capital to lower middle market and middle market companies.
- Distressed or special situations, such as rescue lending, distressed asset purchases, or taking advantage of dislocations in the liquid credit market.
- Side pocket restructuring/lift-out of hedge fund secondaries where there was an asset/liability mismatch.

MR. WILLIAMS then discussed specialty lending, an opportunity that they see as being created by the financial crisis, in which they can achieve significant illiquidity premium relative to high yield and leveraged loans with more structural protection by making loans to middle market and lower middle market companies. He described it as a tale of two borrowers, some who need certainty of execution and some who don't. Those who don't can go to an investment banker who can pull together a group of lenders and price it accordingly. However, for those that need certainty of execution, there are only a handful of people that can provide and close on a \$200 million loan. Crestline focuses on senior-secured first-lien lending, in which they have a lien on the assets. These are highly structured securities underwritten with downside protection. Crestline likes market leaders with recurring revenue, and they think that it is a very robust, fragmented market. They believe there is a "core opportunity set" of 150,000 companies with revenues between \$25 million and \$100 million, and they only need to select 30.

MR. WILLIAMS emphasized that Crestline is unique in having over 40 years of direct lending experience in the middle market, and those involved have built a similar team in the past at Goldman Sachs. They have the ability to club up with others to invest in upper middle market deals, and they do their own direct sourcing. Also, the Crestline platform of specialty funds, its network with Bass, and the fact that a majority of the team has special situations background and they have worked together for many years contribute to their strength.

MR. WILLIAMS pointed out benefits to the investor, such as getting paid for the illiquidity and the fact that the assets will generate cash flow. Trustees asked some questions about the specialty lending strategy and the associated fees. COMMISSIONER FISHER asked whether specialty lending would entail another commitment of capital or would be part of the commitment they currently have with Crestline; MR. BADER said that it would entail a \$50 million capital commitment.

11. UBS AGRIVEST

MR. BADER introduced UBS Agrivest as one of ARMB's two managers of farmland, which has been one of the most successful asset classes over the years. MR. BADER added that he believes the ARMB owns more farmland than any other public fund, and it has worked out well.

JIM MCCANDLESS explained that the UBS Agrivest group is based in Hartford in the same

offices as the UBS realty investment team that manages some of the ARMB's commercial property investments, and they share accounting and legal staff. The Agrivest group has regional offices in Chicago, Illinois; Nampa, Idaho; Lodi, California; and Dallas, Texas. The regional offices are responsible for the origination, underwriting, asset management, and disposition of farm properties in the portfolio.

MR. MCCANDLESS presented an overview of the farm economy, which has had a pretty good run for the last 10-12 years, with outstanding levels of income for farmers, increasing farmland values, and generally a very strong financial condition for all participants in the farm economy. Net farm income has been at record highs the past couple of years, but is projected to decline or remain flat as commodity prices decline due to large supply. Farmland values are also leveling off, and declining in places where they had risen significantly. MR. MCCANDLESS discussed the importance of diversifying among annual crops, which include commodity crops and vegetables, and permanent crops. He also addressed the water issues in California, explaining that the ARMB properties are in areas that have strong water supplies and rights.

MR. MCCANDLESS described the ARMB's Midnight Sun portfolio as of December 31, 2014. It holds 64 farms in 13 states, just over 97,000 acres. Those farms had a cost basis of \$324 million and a market value of \$504 million. Permanent crops comprise 12.6 percent, below the target of 20 percent. MR. MCCANDLESS showed that the portfolio was within the constraints established in the investment guidelines. He noted that the total amount invested so far is \$324 million, and they have \$27.7 million left to allocate, with \$11 million of that closing this week on a citrus grove in Florida. The fund is producing a 4 percent return over rolling five-year periods with a minimum of 3 percent distributed income for individual properties after fees and capital expenditures.

12. TIR TIMBER

MR. BADER introduced Timberland Investment Resources as one of ARMB's two timberland investment managers, with assets under management of \$268 million.

MARK SEAMAN, President of Timberland Investment Resources, introduced himself, TOM JOHNSON with client services, and CHRIS MATHIS, the director of real estate. They are three of the eight partners in the firm.

MR. SEAMAN thanked the ARM Board for the business since 2008. The original mandate was to assemble a \$100 million portfolio, and that was increased to \$244 million, with the current market value of \$268 million noted by MR. BADER. The goals of the mandate were to have diversification across species, product type, age class, and geography. The return objectives were an absolute return objective of 5 percent real, and a relative objective of the NCREIF Timberland Index Benchmark.

MR. JOHNSON described the geographic footprint of the portfolio and presented a summary of their acquisition activities since 2008. Using a very methodical, selective approach, they have looked at hundreds of possible transactions, and made offers on 76 to acquire the 8 that they have. MR. JOHNSON stated that virtually all of them have been privately negotiated deals that were off

market, allowing them to create a customized, structured acquisition to meet the prescribed objectives.

MR. JOHNSON described the timber business and products to the Board, and discussed the markets for timber and its products and how they are affected by U.S. housing starts and international demand. MR. JOHNSON said that this portfolio was formed at an opportune time, and compared to the benchmark, they are at about 190 points on a gross basis, which they are pleased with. MR. JOHNSON said they see potential for a significant upside as the housing market recovers. They still have a little more capital to put to work, and they are looking for opportunities.

COMMISSIONER FISHER asked for a description of the benchmark, and whether certain attributes of the ARMB's property result in them being a little under. MR. JOHNSON explained that the benchmark is a property-level benchmark, which only values the property and does not include the impact of management fees or debt. Also, it is a composite of the managers that contribute to the index and their properties all over the country, but the ARMB portfolio does not have any holdings in the Pacific Northwest, where returns have risen because of exports to China. In the short term, MR. JOHNSON said, the lack of exposure in the Pacific Northwest may have hurt, but in the long term he believes the fund will be better positioned.

MR. ERLENDSON inquired about opportunities outside of the U.S., and MR. JOHNSON replied that they do exist, but when the portfolio and investment guidelines were established, there was a strict philosophical view that it should only be in the United States.

DR. JENNINGS asked if selling the higher and best-use properties out of an acquisition is part of the strategy. MR. MATHIS replied absolutely, part of the strategy is to go from wholesale to retail. They sold about \$5 million out of the portfolio last year, and probably will sell about \$10 million this year. There are a lot of opportunities to extract premiums for retail tracts.

CHAIR SCHUBERT recessed the meeting from 3:26 p.m. to 3:35 p.m.

After the recess, CHAIR SCHUBERT requested a motion to go into executive session for the purpose of discussing a matter related to the highest and best use of an investment.

MR. BRICE moved to go into executive session. MS. RYAN seconded the motion.

The ARM Board was in executive session from 3:36 p.m. until 4:33 p.m.

When the Board went back on record, MS. RYAN moved that the ARM Board authorizes staff to approve up to \$5 million for TIR to explore potential higher and better use opportunities within the timberland portfolio. MRS. HARBO seconded the motion.

With no objection, the motion passed unanimously.

13. INVESTMENT ACTIONS/PROCUREMENT

A. Absolute Return Guideline Revision

CIO GARY BADER explained that the proposed policy revision relates to the presentation by Crestline Investors. The resolution change would do two things: It allows the ARMB to either use an investment advisor or to engage a consultant and, with staff, assist in the investment process for direct fund and hedge fund investing.

MS. HARBO moved to adopt Resolution 2015-01, revising the Absolute Return Policies and Procedures. MR. PIHL seconded the motion.

With no objections, Resolution 2015-01 was adopted by unanimous consent.

B. Crestline Contract Modification

MR. BADER recommended that the ARM Board direct staff to negotiate an amendment to Crestline's contract to allow for direct investments and future opportunistic investments and to negotiate a commitment of up to \$50 million to Crestline Specialty Lending limited partnership.

MR. PIHL moved to modify the Crestline contract. MRS. HARBO seconded the motion.

The motion passed by unanimous consent.

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting at 4:38 p.m.

Friday, February 13, 2015

CALL BACK TO ORDER

CHAIR SCHUBERT reconvened the meeting at 9:00 a.m.

Trustees Trivette, Harbo, Erchinger, Pihl, Ryan, and Fisher were also present.

REPORTS (Continued)

14. CAPITAL MARKETS ASSUMPTIONS

MR. ERLENDSON began by saying that capital market projections are used to decide how to allocate capital for specific purposes. The ARMB uses 10-year projections. MR. ERLENDSON reminded the Board that MICHAEL O'LEARY had presented this information last year, and with a few modest exceptions, the projections are the same for the next ten years as they were a year ago. Therefore, if the risk tolerances and time horizon and objectives are the same, it appears there would be modest reason to make a change in asset allocation.

MR. ERLENDSON explained that these projections are the cornerstone of strategic planning, and it's helpful to remember a simple mathematical formula: The benefits paid plus the expenses accrued to pay those benefits have to equal contributions plus investment returns. Thus, with only four components in the equation, the investment returns and how the assets are positioned to generate them are critical to being able to meet benefit obligations. Callan's job is to develop assumptions that can be used to make the case for the strategy that the ARMB board has in place.

MR. ERLENDSON pointed out that he will be talking about assumptions from an investment policy perspective, but as MR. BADER discussed with his report on the GEMS model, the actuaries also have to come up with assumptions about the return on assets when they make their calculations. MR. ERLENDSON said that it used to be that the actuaries would just automatically use the same assumptions as the consultant, but the European financial crisis led to requirements that actuaries justify the assumptions that they are using, which in turn gave rise to the popularity of the GEMS model. Callan looks at a five- to ten-year horizon, but the actuaries are looking at a much longer period of 20 to 30 years. MR. ERLENDSON stated that one of Callan's guiding principles as a firm is to come up with a prudently determined plan and then stick with it, because typically when people make changes out of fear, they end up magnifying the problem rather than solving it.

MR. ERLENDSON explained that their model has three components: a median expected rate of return for each asset class; a standard deviation saying how wide around that median they think are the possible outcomes; and the correlation. The perfect solution changes over time, so investors need to pick a range of assets that will offset the risks of one another to reduce overall volatility, which is why diversification is important. Also, investors have to anticipate inflation and select assets that will appreciate more than the inflation rate. MR. ERLENDSON emphasized that investors need to differentiate asset allocation, like "How big are our exposures to broad asset

classes?" versus manager structure, which is "How do we use active and passive management within that asset class?"

MR. ERLENDSON noted that as other managers have said, when considering various investment options around the world, the U.S. has been and continues to be one of the best choices. As low as our bond yields are, they are higher than in many other countries, and the investment of foreign capital is keeping downward pressure on interest rates. Non-U.S. equity markets continue to lag, but many managers are making increasing allocations to emerging markets, wanting to purchase while things are cheap.

Looking ahead to where the ARMB will be positioned one year, three years, and five years from now, MR. ERLENDSON said that it looks like a rough road, and what happens will depend partly on interest rates, but the volatility of those outcomes is probably going to be greater than they have been recently. He showed the returns over the last six calendar years, and the rolling average returns over 5-, 10-, and 15-year periods ending December 31, 2014, and pointed out that the returns from the 15-year period are markedly lower, because that 15-year period includes the global financial crisis of 2008-2009 and the telecom bubble burst in 2000-2001. MR. ERLENDSON said that he thinks the 10-year return is a better example of "normal".

MR. ERLENDSON presented a history of calendar-year returns in the U.S. stock market, and pointed out that returns have now been positive for six years in a row. Looking at the history, there has never been a period when they were positive for seven years in a row, and not many periods of six or five or four consecutive years of positive returns. He commented that it would appear that the ice is getting thinner and thinner as time goes on.

MR. ERLENDSON said that Callan concurs with the IAC's view that the GEMS model is a powerful supplemental tool, but it is not a replacement for longer-term capital market expectations. He noted that its asset optimization module allows them to do what-if scenario analysis that can be very useful.

MR. ERLENDSON discussed current economic conditions in the U.S. and the world, and then led into Callan's 2015 to 2024 capital market assumptions. The only changes they've made from last year are those that are interest-rate-sensitive: fixed income and commodities. However, he said that the net effect will be so incrementally small that it's not worth changing the target.

MR. BADER noted that the fixed income portfolio has a sizable commitment to intermediate-term treasuries, but comparing the returns of short duration with cash, he asked MR. ERLENDSON to address the proposition that maybe they are better off in cash than in Treasury bonds. MR. ERLENDSON explained that although the short-duration bonds' average return has been over 7 percent since the 1950s, the yield curves show that those returns are very low. Any modest increase in yields is going to directly translate to a loss in capital, and managers have to make informed decisions about what they expect over the long term and short term.

COMMISSIONER FISHER asked him to talk about the mix decisions. MR. ERLENDSON discussed the difference between arithmetic and geometric returns, and how the math works in a

hypothetical mix. Making informed decisions about managers and finding ways to reduce costs can boost returns. MR. ERLENDSON remarked that the ARM Board historically has done very well in terms of allocating capital, and the steps that were authorized yesterday about changing some guidelines are designed to lower costs by using internal managers and to adjust the exposure to try to get above-average returns with less volatility.

MR. TRIVETTE commented that over time, he thought the ARMB's returns had averaged about 9½ percent. MR. BADER replied that that is true, but it isn't apples to apples, because interest rates and inflation rates were far higher over that long period, and investments were simpler 20 years ago. Now they have a lot more different kinds of investments, which are an attempt to modulate the volatility in the portfolio. MR. BADER added that it would be unwise to assume that the rate of return will be the same over the next 20 years.

MR. ERLENDSON concluded by saying that the inflation assumption that the actuary uses is connected to the nature of the system's liabilities, and there can be big differences, which is why it's important to focus on what the purpose of the plan is, what are the economic factors that drive it, and what is the right way to deploy capital to help offset the cost of contributions without taking undue risk. He commended the ARM Board for being very good at addressing that challenge over time.

UNFINISHED BUSINESS

1. Disclosure Reports

MS. HALL stated that the disclosure reports were included in the meeting packet, and there was nothing unusual to disclose.

2. Meeting Schedule

MS. HALL stated that the 2015 meeting schedule is included in the meeting packet. MS. HALL noted that she and MR. BADER have begun planning for the Education Conference, which has been in October in the past, but this year they are looking at early September, before the scheduled board meeting in Fairbanks.

CHAIR SCHUBERT welcomed COMMISSIONER HOFFBECK to the meeting.

3. Legal Report

MR. GOERING had nothing specific to report, but he commented that he is getting more comfortable with the staff and is finding the level of professionalism and quality of work extremely high. He expressed to the Board that he thinks they are in good hands with the staff that they have.

NEW BUSINESS

CHAIR SCHUBERT noted that the Board had discussed forming an Actuarial Committee to

provide input into the assumptions and work more closely with the actuary. CHAIR SCHUBERT pointed out that the Real Asset Committee deals with a lot of the same kinds of matters, so she proposed appointing those committee members to serve on the Actuarial Committee. COMMISSIONER FISHER and MR. TRIVETTE volunteered to serve along with Real Asset Committee members MS. ERCHINGER, MRS. HARBO, and MR. PIHL.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

None.

PUBLIC/MEMBER COMMENTS

LARRY SEMMENS, public member, retiree, and former ARMB Trustee, thanked the Board for the work that they do to fund the retirements of so many Alaskans.

INVESTMENT ADVISORY COUNCIL COMMENTS

MR. SHAW commented that a common theme runs through all of the presentations at this meeting of selecting strategies which reduce risk and protect on the downside. MR. SHAW noted that a lot of board members are somewhat nervous and are looking for differentiated strategies, and he thinks that uncorrelated strategies like timber, agriculture, and Crestline's specialty lending contribute to a portfolio that is well positioned to move forward.

TRUSTEE COMMENTS

MRS. HARBO thanked Trustee Erchinger for her work on the presentation before the Legislative Committee and the work she did on the House and Senate bills that passed last year.

MS. ERCHINGER reported on the discussion with the Legislative Committee. First she thanked the Legislature, who voted unanimously for the \$3 billion cash infusion recommended by Governor Parnell. MS. ERCHINGER stated that as a committee, after that legislation was passed, they had to consider the effects of the legislation as it was written, because they hadn't anticipated the changes in the amortization period and methodology. The Legislative Committee asked the actuaries to inform them of those impacts, as MS. ERCHINGER reported to the Board yesterday. She noted that the Board is extremely grateful, and the cash infusion couldn't have come at a better time; if it hadn't been done, the state would have had to cut the budget further this year. CHAIR SCHUBERT reiterated the ARM Board's thanks to the Legislature.

MR. TRIVETTE thanked MR. SEMMENS for his continued involvement, stating that he appreciates his helping educate his boss, Senator Micciche, and other legislators about what has been going on.

MR. TRIVETTE commended MR. BADER for developing a strong staff with extremely low turnover, noting that the past nine months have been hectic with the additional \$3 billion to invest. He added that managers from all over the country tell him how much they appreciate the superb job

that MR. BADER and staff do at the Education Conference. MR. TRIVETTE said that he is happy that the ARMB will be getting two new investment officers and doing more internally, since they have the skills and have been doing an excellent job.
FUTURE AGENDA ITEMS
None.
ADJOURNMENT
There being no objection and no further business to come before the board, the meeting was adjourned at 10:35 a.m. on February 13, 2015, on a motion made by MRS. HARBO and seconded by MR. TRIVETTE.
Chair of the Board of Trustees
Alaska Retirement Management Board
ATTEST:
Corporate Secretary

Alaska Retirement Management Board Buck Actuarial Contract Costs For the Fiscal Years 2006 - 2014

Year	Fixed Fee	Variable Fee	Total
FY 2006	325,000.00	170,305.00	495,305.00
FY 2007	300,000.00	369,560.68	669,560.68
FY 2008	250,000.00	306,845.00	556,845.00
FY 2009	322,000.00	274,735.82	596,735.82
FY 2010	373,000.00	204,403.98	577,403.98
FY 2011	348,000.00	352,947.00	700,947.00
FY 2012	277,797.00	518,452.71	796,249.71
FY 2013	377,000.00	369,413.00	746,413.00
FY 2014	436,000.00	319,543.86	755,543.86
TOTALS	3,008,797.00	2,886,207.05	5,895,004.05

DRB total	DOR Total	Total	
495,305.00	-	495,305.00	
669,560.68	-	669,560.68	
520,878.00	35,967.00	556,845.00	
502,165.00	94,570.82	596,735.82	
564,908.98	12,495.00	577,403.98	
679,362.00	21,585.00	700,947.00	
770,169.71	26,080.00	796,249.71	
631,024.00	115,389.00	746,413.00	
694,474.86	61,069.00	755,543.86	
5,527,848.23	367,155.82	5,895,004.05	

NOTE: Amounts only include those of the trusts, there are NO general fund amounts included.

DEPARTMENT OF ADMINISTRATION --- WHITE PAPER PERS and TRS Defined Contribution Plans – Health Reimbursement Arrangement Plan

Issue:

Health Reimbursement Arrangement Plan (HRA) and accounting impacts related to contributions by member, investment earnings / losses allocation annually, costs of administration, impact of funds in the Plans when a member leaves.

Background:

The State of Alaska Teachers' and Public Employees' Retiree Health Reimbursement Arrangement Plan is established for teachers who first become members of the defined contribution plan of the teachers' retirement system under AS 14.25.310 - 14.25.590 on or after July 1, 2006, and employees of the state, political subdivisions of the state, and public organizations of the state who first become members of the defined contribution plan of the public employees' retirement system under AS 39.35.700 - 39.35.990 on or after July 1, 2006.

The purpose of the plan is to allow medical care expenses to be reimbursed from individual savings accounts established for eligible persons. The plan becomes effective July 1, 2006, at which time contributions by employers begin.

Under AS 39.30.3540, the administrator shall establish a teachers' and public employees' retiree health reimbursement arrangement plan trust fund in which the assets of the plan shall be deposited and held. The retiree health reimbursement arrangement plan trust fund may be a sub-trust of the Alaska retiree health care trust established under AS 39.30.097(b).

Under AS 39.30.350, the fund established under AS 39.30.340 is an employer contribution fund. The value of the fund reflects employer contributions, expenses, and investment gains and losses. Employee contributions to the fund are not permitted.

Per AS 39.30.360, 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.

Per AS 39.30.370, for each member of the plan, an employer shall contribute to the PERS and TRS 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 PERS and TRS. The administrator shall maintain a record for each member to account for employer contributions on behalf of that member. The board shall establish by regulation the rate of interest to be applied annually to the amount in a member's individual account (see 15 AAC 112.810 - Health reimbursement plan rate computation).

For fiscal years 2007 - 2010, annual interest for each eligible member's individual account will post the lesser of (1) one percent of the member's individual account balance

as of June 30 of the fiscal year, or (2) earnings (losses) before transfers to the expense nd reimbursement reserve account on investments in the fund that is apportionable to the member's individual account balance as of June 30 of the fiscal year.

Per AS 39.30.380, a person who terminates employment before meeting the eligibility requirements of AS 14.25.470 or AS 39.35.870 loses any right to the contributions made on behalf of the person to the PERS and TRS retiree health reimbursement arrangement trust fund. If a person returns to employment with a participating employer by December 31 of the year in which the person reaches 65 years of age, the person's account balance shall be restored in the amount recorded on the date of termination from the trust, adjusted for inflation at the rate of the Consumer Price Index for Anchorage, Alaska. The earlier period of employment with a participating employer shall be credited toward eligibility for medical benefits.

Per AS 39.30.390, persons who meet the eligibility requirements of AS 14.25.470 and AS 39.35.870 are eligible for reimbursements from the individual account established for a member under the plan, except members do not have to retire directly from the system. A person who is the dependent child of an eligible member is eligible for reimbursements if the eligible member and surviving spouse have both died so long as the person meets the definition of dependent child.

Per AS 39.30.400, benefits payable from the individual account, (a) the administrator may deduct the cost of monthly premiums from the individual account for retiree major medical insurance on behalf of an eligible person who elected retiree major medical insurance under AS 14.25.480 or AS 39.35.880.

- (b) Upon application of an eligible person, the administrator shall reimburse to the eligible person the costs for medical care expenses as defined in 26 U.S.C. 213(d). Reimbursement is limited to the medical expenses of
- (1) an eligible member, the spouse of an eligible member, and the dependent children of an eligible member; or
- (2) a surviving spouse and the dependent children of an eligible member dependent on the surviving spouse.
- (c) When the member's individual account balance is exhausted, the insurance premium deductions under (a) of this section and the reimbursement of medical care expenses under (b) of this section end.
- (d) If all eligible persons die before exhausting the member's individual account, the account balance shall revert to the plan.

Retiree Medical Plan (RMP)

Sec. 14.25.470. Eligibility for retirement and medical benefits. (TRS) Sec. 39.35.870. Eligibility for retirement and medical benefits. (PERS)

- (a) In order to obtain medical benefits under AS 14.25.480 (TRS) [AS 39.35.880 (PERS)], a member must retire directly from the plan. A member is eligible to retire from the plan if the member has been an active member for at least 12 months before application for retirement and
- (1) (TRS) the member has at least 30 years of service; or (1) (PERS) the member has at least 25 years of membership service as a peace officer or firefighter or at least 30 years of membership service for all other employees; or
- (2) the member reaches the normal retirement age and has at least 10 years of service.
- (b) The normal retirement age is the age set for Medicare eligibility at the time the member retires.
- (c) A member's surviving spouse is eligible to elect medical benefits under AS 14.25.480 (TRS) [AS 39.35.880 (PERS)] if the member had retired, or was eligible for retirement and medical benefits at the time of the member's death.
- (d) A member shall apply for retirement and medical benefits on the forms and in the manner prescribed by the administrator.
- (e) Participation in the retiree major medical insurance plan is not required in order to participate in the health reimbursement arrangement.
- (f) A person eligible for retirement and medical benefits is not required to participate in the health reimbursement arrangement in order to elect participation in the retiree major medical insurance plan.
- (g) An eligible person shall make the irrevocable election to participate or not participate in the retiree major medical insurance plan by reaching 70 1/2 years of age, or upon application for retirement and medical benefits, whichever is later.

Medical Benefits Under RMP and HRA Sec. 14.25.480. Medical benefits. (TRS) Sec. 39.35.880. Medical benefits. (PERS)

- (a) The medical benefits available to eligible persons are access to the retiree major medical insurance plan and to the health reimbursement arrangement under AS 39.30.300. Access to the retiree major medical insurance plan means that an eligible person may not be denied insurance coverage except for failure to pay the required premium.
- (b) Retiree major medical insurance plan coverage elected by an eligible member under this section covers the eligible member, the spouse of the eligible member, and the dependent children of the eligible member.
- (c) Retiree major medical insurance plan coverage elected by a surviving spouse of an eligible member under this section covers the surviving spouse and the dependent children of the eligible member who are dependent on the surviving spouse.
- (d) Major medical insurance coverage takes effect on the first day of the month following the date of the administrator's approval of the election and stops when the person who elects coverage dies or fails to make a required premium payment.
 - (e) The coverage for persons 65 years of age or older is the same as that available for

persons under 65 years of age. The benefits payable to those persons 65 years of age or older supplement any benefits provided under the federal old age, survivors and disability insurance program.

- (f) The medical and optional insurance premiums owed by the person who elects coverage may be deducted from the health reimbursement arrangement. If the amount of the health reimbursement arrangement becomes insufficient to pay the premiums, the person who elects coverage under (a) of this section shall pay the premiums directly.
- (g) The cost of premiums for retiree major medical insurance coverage for an eligible member or surviving spouse who is
- (1) not eligible for Medicare is an amount equal to the full monthly group premiums for retiree major medical insurance coverage;
- (2) eligible for Medicare is the following percentage of the premium amounts established for retirees who are eligible for Medicare:
 - (A) 30 percent if the member had 10 or more, but less than 15, years of service;
 - (B) 25 percent if the member had 15 or more, but less than 20, years of service;
 - (C) 20 percent if the member had 20 or more, but less than 25, years of service;
 - (D) 15 percent if the member had 25 or more, but less than 30, years of service;
 - (E) 10 percent if the member had 30 or more years of service.
- (h) The eligibility for retiree major medical insurance coverage for an alternate payee under a qualified domestic relations order shall be determined based on the eligibility of the member to elect coverage. The alternate payee shall pay the full monthly premium for retiree major medical insurance coverage.
 - (i) A person who is entitled to retiree major medical insurance coverage shall
 - (1) be informed by the administrator in writing
- (A) that the health insurance coverage available to retired members may be different from the health insurance coverage provided to employees;
- (B) of time limits for selecting optional health insurance coverage and whether the election is irrevocable; and
- (2) indicate in writing on a form provided by the administrator that the person has received the information required by this subsection and whether the person has chosen to receive optional health insurance coverage.
- (j) The monthly group premiums for retiree major medical insurance coverage are established by the administrator in accordance with AS 39.30.095. Nothing in AS 14.25.310 14.25.590 (TRS) [AS 39.35.700 39.35.990 (PERS)] guarantees a person who elects coverage under (a) of this section a monthly group premium rate for retiree major medical insurance coverage other than the premium in effect for the month in which the premium is due for coverage for that month.
- (k) In this section, "health reimbursement arrangement" means the plan established in AS 39.30.300.

Summary:

- a. Individual accounts are currently maintained with the Combined Retirement System (CRS) by the Division.
- b. Individual member accounts have continued to be updated as contributions are made.
- c. Members who have left the PERS or TRS DC plans have their HRA balances on "hold" and are not available to them for withdrawal or any other use, unless the member returns to work prior to retirement and meets the eligibility requirements to use for medical purposes.
- d. Amounts left as a result of the member leaving the plan, and in the future, if left unused before exhausting the HRA, the balances revert to the HRA plan.
- e. Member notification of balances will occur in FY 2016.
- f. Notification on use of the HRA will occur once announcement of the RMP is approved for the DC Plan.

Factual Basis for Recommendation:

AS 39.30.300 -.495 – State of Alaska Teachers' and Public Employees' Retiree Health Reimbursement Arrangement Plan

15 AAC 112.810 – Health Reimbursement Plan Rate Computation

Prepared by: Kevin Worley, Chief Financial Officer

Phone: (907) 465-5703

Department: Administration / Division of Retirement & Benefits

Date: April 10, 2015

CHIEF INVESTMENT OFFICER REPORT

- Correspondence relating to UBS Trumbull Property Fund and the UBS response.
- Rebalanced Retirement Funds on March 10, 2015, March 11, 2015, March 13, 2015, April 1, 2015, and April 2, 2015.
- 3. Watch List
- Redeemed a total of \$18 million from Blue Glacier Fund on January 26,
 2015, February 10, 2015, and April 14, 2015.
- 5. Transferred \$2,497,278 into Blue Glacier Fund -Class B.
- 6. Sold \$50 million from Russell 1000 Growth and transferred funds to the Cash Account.
- 7. Committed \$50 million to Lexington Capital Partners VIII under CIO delegated authority.
- 8. Established branded international equity fund for the defined contribution plans on March 27, 2015.
- 9. Increased allocation to Advisory Research and Tortoise MLP's by \$50 million each from cash.
- 10. Transferred \$50 million from Cash to US Treasury (TIP's) Pool.

- 11. Transferred \$300 million from Cash to US (Intermediate) Treasury Pool.
- 12. Transferred \$200 million from Cash account to fund QMA Market Participation Strategy (MPS).
- 13.Sold \$100 million each of Russell 1000 Growth and Value and invested proceeds into MSCI ACWI Ex-US.
- 14. Transferred \$290 million from Intermediate term bond account to Cash.
- 15. Transferred \$575,000.00 to Polar Bear Fund Class B.
- 16. Transferred \$365,000.00 to Polar Bear Fund Class B.

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Bader, Gary M (DOR)

From:

Hall, Judith A (DOR)

Sent:

Monday, March 23, 2015 10:57 AM

To:

Bader, Gary M (DOR); Sikes, Stephen R (DOR); Hackenmueller, Paul J (DOR)

Subject:

FW: UBS Trumbull Property Fund: Potential Discrepancies in Valuation?

From: Michael Pineschi [mailto:info@uniteheremailing.org]

Sent: Monday, March 23, 2015 10:52 AM

To: Hall, Judith A (DOR)

Subject: UBS Trumbull Property Fund: Potential Discrepancies in Valuation?

Dear Judy,

As you know, Alaska Retirement Management Board is an investor with UBS Realty.

A new report by UNITE HERE focuses on the examination of 3 UBS Trumbull Property Fund holdings and reveals a potential discrepancy in valuations.

An analysis of some recent filings from UBS-owned properties with county tax assessors reveals disparities with valuation figures provided to investors. These appeals appear to reveal a contradictory situation – on the one hand UBS told investors their investments had a certain valuation, while on the other hand the tax assessments were challenged as being too high.

In one example investors were told the property was worth 62% more than the initial assessed value.

- What procedure does UBS have to adjust fees charged if overvaluations are discovered?
- Are LPs offered a refund on fees if the disposition of a property shows a price much lower than the valuation they were charged fees on?
- Given substantially different valuations stated for the same properties, how can investors be confident which figure accurately reflects a property's worth?
- What potential conflicts of interest between LPs and the GP could arise from UBS's valuation process?

 $Read \ the \ full \ report \ here: \ \underline{http://www.pecloserlook.org/wp-content/uploads/UBSTrumbull-Potential-Valuation-Discrepancies-UNITEHERE-31415.pdf}$

Sincerely,

Michael Pineschi Research Analyst – Unite Here mpineschi@unitehere.org P. 916.390.0261



This communication is in response to a report by UNITE HERE dated March 2015 entitled "UBS Trumbull Property Fund: Examination of 3 Key Fund Holdings Reveal Potential Discrepancy in Valuations."

BACKGROUND

In January 2015, the UNITE HERE Local 11 ("Unite") union began sponsoring labor demonstrations at the Doubletree Los Angeles. This property is owned by investors in a commingled fund for which UBS Realty Investors ("UBS Realty") is the fiduciary and investment manager. As part of its organizing campaign, Unite has contacted many of our investors (most of whom have no financial interest in this property), and has sought to appear at many of our investors' public meetings. Unite has now published the report described above in an attempt to embarrass UBS Realty and to pressure us and our investors to take certain actions relating to the labor situation at the Doubletree.

The employees of the hotel are employed by the management company, The Rim Hospitality Corporation ("Rim"), and not UBS Realty or the fund that owns the hotel. Rim, a West Coast hotel management company, is subject to UBS Realty's Responsible Contractor policy, which seeks to ensure that contractors providing services at all of our properties are acting in a responsible manner and in compliance with all applicable laws, and paying its employees fair wages and fair benefits. All of our managers are reminded of their obligations in this regard annually. With regard to wages, covered employees at the Doubletree are and will continue to be compensated in compliance with the provisions of the minimum wage ordinance that went into effect in November 2014 covering all hotels in the City of Los Angeles.

We are aware that complaints alleging violations of rest and/or meal break requirements and, in some cases, overtime requirements, by several employees of Rim at the hotel were filed in late January with the California Labor Commissioner and the National Labor Relations Board. These complaints had not previously been addressed to hotel management or UBS Realty. Each of these complaints will follow the prescribed governmental process for review and action. We take any complaint regarding working conditions seriously. Although UBS Realty is not the employer and does not have any authority in regard to employment matters, we will continue to monitor the situation and expect Rim to honor its obligations under the management agreement.

We support the hotel employees' right to decide whether to participate in activities protected by federal labor laws and to decide the important question of whether to be represented by a union. We believe that Unite is conducting this public relations campaign against us in an effort to change our support of the established governmental process that preserves hotel employees' rights to make this decision by private vote. We believe our approach in regards to this situation is in accordance with our fiduciary obligations to our investors.

THE REPORT

The conclusions that Unite attempts to make in the report are completely without merit. Below we discuss various matters addressed in the Unite report.

UBS Realty Valuation Policy

Our valuation policy complies with industry best practices. Our valuation policy is disclosed in our fund documents and is communicated to all of our funds' investors.



The primary purpose of UBS Realty's valuation process is to obtain quarterly estimates of the fair market values of its funds' properties. These values are established by third-party appraisal firms. UBS Realty does not set values and does <u>not</u> override any valuations established by the third-party appraisers.

UBS Realty employs Altus Group U.S., Inc. (f/k/a PricewaterhouseCoopers LLP) as an independent valuation advisory consultant to provide valuation review advisory services and manage the funds' independent appraisal review process. These services include the evaluation of each valuation submitted by third-party appraisers. Each property is generally appraised quarterly and each appraisal is certified by an MAI (Member, Appraisal Institute) employed by an independent, reputable, appraisal firm. Appraisal assignments are generally rotated to different appraisal firms every three to five years.

UBS Realty's valuation policy follows the Real Estate Information Standards (REIS) guidelines as established by NCREIF (National Council of Real Estate Investment Fiduciaries) and PREA (Pension Real Estate Association). In addition, an independent "big four" auditing firm annually performs an examination of each fund's financial statements in accordance with US generally accepted auditing standards. Included within the scope of the audits is an examination of the appraisal documentation supporting the reported property values.

Property assessment reviews and challenges

Part of any professional active asset management practice is to regularly review, and when necessary, challenge, property tax assessments. In fact, these challenges are for the direct benefit of the investors in UBS Realty's funds and are part of the duties that an institutional real estate advisor is engaged to perform.

UBS Realty's asset managers work closely with independent third-party real estate tax consultants to review assessments at each of the properties owned by our funds. Working with the consultant, a determination is made as to the fairness, relative to similar properties in the tax district, and appropriateness of each assessment. Our asset managers then work with local tax appeal experts on appealing those tax assessments that are determined to be unfair or inappropriate. When successful, these appeals can lower operating costs at properties for both the owner and tenants and make properties more competitive in their marketplace, ultimately inuring to the benefit of the investors in the fund which owns the property.

The difference between assessments and appraisals

Unite's report displays either a lack of understanding of the tax assessment process or an intentional misrepresentation of that process. Values established for assessment purposes generally will be different than the estimates of fair market value provided by third-party appraisal firms, as any well-informed homeowner knows. Assessment and appraisal processes are required to use different methodologies and are intended for different purposes. An assessment is designed to provide an equitable framework for tax collection and does not necessarily represent the fair market value at which the asset could be sold at a given point of time.

An assessment is the value placed on a property by the local tax assessor's office for the purpose of determining the property tax that will be assessed for the property. The aim of a well-conducted, fair assessment process is to establish a framework of assessments that treat property owners in a particular tax district fairly in relation to each other (this is called "equalization"). In fact, many states mandate the use of an equal and uniform assessment methodology where comparable properties must be assessed similarly and therefore the actual fair market values of the properties are of little import.



Assessment cycles can also lead to a discrepancy between an appraiser's estimate of a property's market value and its assessed value for property tax purposes. Assessment cycles can range between one and nine years, so assessment values cannot be used or thought of as a direct proxy for fair market values. This is in contrast to the quarterly appraisal process used for estimating the values of the properties in our funds.

Investors are charged fees based on the Net Asset Value (NAV) of their investment. The NAV's are based on the independent quarterly valuations determined by independent third-party appraisers under a process managed by the industry leading valuation advisor, Altus. We strongly believe the rigorous arm's length valuation process used by UBS Realty is the most appropriate approach to calculate NAV and fees.

Employment lawsuit

The report also refers to an employment lawsuit that was commenced against UBS in 2008. The existence of this lawsuit and the allegations referred to therein were first communicated to our investors nearly seven years ago. The lawsuit makes certain employment discrimination and retaliation claims against UBS Realty. This lawsuit is still in litigation. We believe the claims are without merit and we are continuing to contest the lawsuit and seek dismissal of all claims.

If you have any questions or need additional information regarding this matter, please contact your Client Service Representative.

UBS REALTY INVESTORS LLC

March 2015

Short-term Fixed Income	Tactical Fixed Income Pool (AYIC)	Lazard Emerging Income (AYSM)	High Yield Pool (AYPK)	Mondrian Inv. Partners Inc (AY63)	US Treasury Fixed Income Pool (AY1A)	Taxable Municipal Bond Pool (AYZC)	Fixed income	Absolute Return Pool (AYTC)	Absolute Return	Public Infrastructure (AYMIX)	Private Infrastructure (AYZK)	MLP Pool (AYWK)	TIPS Internally Managed (AY6N)	Energy Pool (AYVC)	Timber Pool (AYUK)	Farmland Pool (AYTK)	REIT Holdings (AYPC)	JP Worgan Real Estate (AY7A)	Real Assets Real Estate Pool (AYVK)	Private Equity Private Equity Pool (AYSK)	Frontier Market Pool (AYMC)	Emerging Markets Pool (AYSC)	International Equity - Small Cap Pool (AYRK)	Global Equity Ex-US International Equity Pool (AYRC)	Alternative Equity Strategies Pool (AYYK)	Alternative Equity Strategies Advent Capital Convertible Bond (AY52)	Large Cap Pool (AYQK) Small Cap Pool (AYQC)		Rebalancing Trades (Final)	3/10
6 36 8 25	(212,314)	(286,703)	(1,074,910)	(688,306)	10,841,370	(405,322)		(2,066,336)		(447,141)	(172,485)	3,473,794	1,976,511	(163,722)	(642,873)	(1,353,833)	(612,839)	(3,447,869)	(294,553)	(3,221,172)	(158,254)	(1,100,057)	(543,838)	(8,222,311)	(930,557)	(349,126)	5,565,505 (1,851,010)	AYZ1 AYZ2	PERS	3/10/2015 Pension
(366,008,416)	1,709,982	2,309,120	8,586,347	5,299,414	37,755,411	3,264,482		16,385,958		3,545,807	1,367,798	12,602,632	4,401,179	1,298,289	5,097,941	10,735,848	4,859,787	3,598,093	13,494,606	25,543,755	1,255,427	8,726,741	4,314,262	65,227,511	7,379,272	2,768,553	99,555,294 14,924,907	AY23	T _C	
5.781.160	(33,402)	(45,105)	(167,954)	(104,324)	(200,954)	(63,767)		(320,924)		(69,446)	(26,789)	(70,840)	1,797	(25,422)	(99,845)	(210,269)	(95,181)	(150.224)	(226.817)	(500,283)	(24,586)	(170,905)	(84,491)	(1,277,417)	(144,525)	(54,221)	(1,323,787) (291,479)	AY24	ä	
2.513.915	(8,566)	(11,568)	(20,288)	51,636	(1,215,188)	(16,353)															(156)	(1,085)	(536)	(8,107)			(1,203,569) (80,135)	AYWZ	MI	
324 268 928	(1,460,220)	(1,971,847)	(7,343,120)	(4,562,906)	(36,619,227)	(2,787,667)		(14,032,008)		(3,036,427)	(1,171,306)	(12,422,064)	(4,583,865)	(1,111,783)	(4,365,585)	(9,193,572)	(4,161,646)	1,,	(13.685.444)	(21,874,225)	(1,075,003)	(7,472,567)	(3,694,233)	(55,853,253)	(6,319,191)	(2,370,836)	(90,358,556) (12,742,377)	2 AYW3	PERS	Health Care
2 977 102	50,199	67,788	249,749	147,610	(4,185,781)	95,833		472,674		102,283	39,456	(1,442,893)	(776,258)	37,451	147,056	309,689	140,187	-	1.113.667	736,842	36,230	251,845	124,504	1,882,395	212,865	79,863	(3,304,038) 438,687	3 AYW4	TRS.	
	(5,507)	(7,437)	(27,698)	(17,213)	(168,653)	(10,515)		(52,929)		(11,454)	(4,418)	(57,080)	(22,402)	(4,194)	(16,467)	(34,678)	(15,698)	1	(51.485)	(82,511)	(4,054)	(28,187)	(13,934)	(210,680)	(23,836)	(8,943)	(376,452) (48,063)	STATE OF THE PARTY	IRS	

Short-term Fixed Income State of AK Short Term Pool (AY70)	Fixed Income Taxable Municipal Bond Pool (AYZC) US Treasury Fixed Income Pool (AY1A) Mondrian Inv. Partners Inc (AY63) High Yield Pool (AYPK) Lazard Emerging Income (AY5M) Tactical Fixed Income Pool (AYIC)	Absolute Return Absolute Return Pool (AYTC)	Real Assets Real Estate Pool (AYVK) JP Morgan Real Estate (AY7A) REIT Holdings (AYPC) Farmland Pool (AYTK) Timber Pool (AYUK) Energy Pool (AYUK) Energy Pool (AYVC) TIPS Internally Managed (AY6N) MIP Pool (AYWK) Private Infrastructure (AYXK) Private Infrastructure (AYMK)	Global Equity Ex-US International Equity Pool (AYRC) International Equity - Small Cap Pool (AYRK) International Equity - Small Cap Pool (AYRK) Emerging Markets Pool (AYSC) Frontier Market Pool (AYMC) Private Equity Private Equity Pool (AYSK)	Alternative Equity Strategies Advent Capital Convertible Bond (AY52) Alternative Equity Strategies Pool (AYYK)	Broad Domestic Equity Large Cap Pool (AYQK) Small Cap Pool (AYQC)	3/10/2015 Rebalancing Trades (Final)
3,659,310	(4,818) (1,225,945) (7,972) (12,717) (3,408) (2,524)	(24,344)	(17,696) (7,220) (15,949) (7,573) (1,929) (202,652) (410,952) (2,032) (5,267)	(96,888) (6,409) (12,962) (1,865) (37,948)	(4,113) (10,963)	ATX2 (1,513,145) (22,019)	DC Medical PERS
.0 1,406,003	1,411) 15) (484,520) 15) (484,520) 17) (2,346) 17) (3,727) 18) (998)	н) (7,140)	96) (4,365) 20) (2,118) 49) (4,678) 73) (2,222) 29) (566) 52) (80,374) 52) (162,402) 57) (1,545)	88) (28,417) 09) (1,879) 62) (3,802) 65) (547) 48) (11,130)	(1,206) (3,216)	ATX3 (589,613) (19) (6,446)	TRS
12,619,422	(48,857) (3,244,115) (80,157) (128,751) (34,559) (25,592)) (246,123)	(226,866) (72,996) (161,256) (162,573) (19,501) (19,501) (1089,445) (1089,445) (1089,445) (1089,445)	7) (979,656) 3) (64,796) 1) (131,067) 7) (18,855)	5) (41,585) 5) (110,840)	ATTZ 3) (4,620,857) 5) (223,312)	DC Health Reimi
3,754,922	(14,958) (952,515) (24,541) (39,418) (10,581) (7,835)	(75,353)	(59,440) (22,348) (49,370) (23,444) (5,971) (151,225) (319,926) (6,290)	(299,930) (19,838) (40,127) (5,773)	(12,731) (33,934)	ATT3 (1,367,234) (68,368)	imburesement TRS
799,562	(3,588) (190,512) (5,883) (9,455) (2,538) (1,880)) (18,073)	(16,910) (5,360) (11,841) (1,623) (1,432) (1,432) (29,912) (64,017) (1,508) (3,911))) (71,938) 3) (4,758) 7) (9,625) 6) (1,384) 5) (28,174)	(3,053) (8,139)	A10G (283,646) (16,402)	OD&D
154,769	(1,234) (20,418) (2,020) (3,250) (873) (646)	(6,212)	(6,049) (1,842) (4,070) (1,933) (492) (2,734) (6,908) (519)	(24,726) (1,635) (3,308) (476) (9,683)	(1,049) (2,797)	(44,910) (5,641)	茂
385,484	(1,825) (88,953) (2,992) (4,808) (1,291) (956)	(9,190)	(8,643) (2,726) (6,021) (2,859) (728) (13,883) (29,899) (767) (1,989)	(36,583) (2,419) (4,894) (704) (14,328)	(1,553) (4,139)	(134,992) (8,342)	P&F

Alaska Retirement Management Board Manager Watch List - February 2015

Manager & Mandate	Reason for Watch	Board Approved	Actions Taken by Staff/Expected Final Disposition
Coventry Real Estate	Performance	Yes 4/23/2009	Formal Notification. Reviewed 6/22/12; Continue Monitoring
Everest Capital	Performance	Yes 2/12/2015	Format Notification
Lehman Real Estate	Performance	Yes 4/23/2009	Formal Notification. Reviewed 6/22/12; Continue Monitoring
McKinley Capital - large cap and Int'l	Performance	Yes 12/04/09	Formal Notification; reviewed 6/22/12; continue monitoring



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

April 9, 2015

David Mabry Managing Director Crestline Investors, Inc. 201 Main Street, Suite 1900 Fort Worth, Texas 76102

Dear David:

RE: Redemption from Blue Glacier Fund, L.P.

On Tuesday April 14, 2015, please redeem and wire transfer \$2,000,000.00 to the following account at State Street Bank:

State Street Bank

ABA Number: 011-000-028 Account Number: 00132191

Account Name: State of Alaska – AY9F Attn: Mary Ellen MacDonald, 617-664-9416

Sincerely,

Gary M. Bader

Chief Investment Officer

GMB/scv

cc: Scott Jones, Comptroller

Bob Mitchell, Investment Officer Zachary Hanna, Investment Officer Nancy Fong, Bank of New York Mary Ellen MacDonald, State Street Bank.



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

February 26, 2015

Mary Ellen MacDonald Client Service Officer State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Mary Ellen:

RE: Capital Contribution Blue Glacier Fund, L.P. - Class B

This letter is your authorization to transfer \$2,497,278.00 on Wednesday, March 4, 2015 from account AY70 to account AY9F using the currently applicable absolute return ratios and then wire transfer the full amount as soon as possible using the following instructions:

Bank Name: The Bank of New York Mellon

ABA Number: 021-000-018

Account Name: Blue Glacier Fund, L.P. (Class B)

Account Number: 890-1180-254

Reference: Investor - Capital Contribution - March 4, 2015

Reference Details: Alaska Retirement Management Board on behalf of the State of Alaska

Retirement and Benefits Plans Trust

This transfer is a new capital contribution under the subscription agreement dated October 22, 2004. Please provide the Fed Confirmation number for this transaction to Sarah Baulch of Bank of New York Mellon via e-mail at Sarah.Baulch@bnymellon.com.

Gary M. Bader

Sincerely

Chief Investment Officer

cc:

GMB 💞

Scott Jones, Comptroller

Bob Mitchell, Investment Officer Zachary Hanna, Investment Officer Sarah Baulch, Bank of New York Mellon Travis Keith, Crestline Investors, Inc.



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

February 10, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Thursday, February 19, 2015. Please process the following cash transfer using the applicable sending pool ratios:

SSgA Russell 1000 Growth (AY4L) Short Term Pool (AY70)

<\$50,000,000 > \$50,000,000

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

Sincerely,

Gary M. Bader

Chief Investment Officer

cc: Gail Schubert, ARMB Chair

any M. Back

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Shane Carson, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/smh



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

Memo

To: Gail Schubert, Chair, Alaska Retirement Management Board

From: Gary M. Bader, Chief Investment Officer

Date: February 23, 2015

Re: Summary Investment Memo and notice of intent to commit up to \$50 million to a

direct private equity partnership investment in Lexington Capital Partners VIII, L.P.

Lexington Capital (Lexington, the firm) is a well-respected and established firm focused on secondary private equity investments. The firm is currently raising Lexington Capital Partners VIII (the fund). Staff has concluded that an investment in the fund is an opportunity to increase expected returns and to add diversification to both the private equity portfolio and the overall pension fund. In accordance with authority delegated to the CIO, I intend to commit up to \$50 million to Lexington Capital Partners VIII, L.P. effective February 27, 2015.

Compelling aspects of Lexington Capital Partners VIII:

- Lexington is the largest independent secondary manager with \$25 billion in committed capital across 360 transactions into 1,200 funds. Lexington has information, sourcing, and execution advantages at the large end of the secondary market and specializes in providing solutions to sellers disposing of large secondary private equity portfolios.
- The firm has a global platform with 90 people located in the major private investment centers.
- Lexington's 22 partners have significant experience and have worked together for 12 years on average.

Strong investment returns with attractive distribution characteristics

- The ARMB is an investor in Lexington's prior fund and the performance has been good. The prior three funds are in the first quartile overall with strong returns on an absolute basis and relative to public and private markets.
- Lexington has negotiated an average discount at the time of purchase in the mid-twenty-percent range.
- Lexington's investments are made mid-way into the lifecycle of a private equity investment and have a lower expected risk level with early and regular cash distributions.



Alaska Retirement Management Board

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 5, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Re: New DC Option - Allianz NFJ International - QD62

Dear Ms. MacDonald:

This letter is to confirm that the Allianz NFJ International option (QD62) will be available to Alaska participants on March 27, 2015 as a component of the Alaska International white label fund.

You are authorized to use a starting price of \$10.00 for the Allianz NFJ International component. Furthermore, you are authorized to accept direction from Empower Retirement (formerly Great West) as to the daily shareholder activity for Allianz NFJ International. This activity will be used to purchase or redeem shares of the new Allianz NFJ International fund that has been selected for this option.

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

Sincerely,

Gary M. Bader

Chief Investment Officer

Cc:

Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Shane Carson, State Investment Officer

GMB/smh



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 5, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Tuesday, March 10, 2015. Please process the following cash transfer as soon as possible on that day:

Cash (AY70) < \$100,000,000 > Advisory Research, Inc. (AY1P) \$ 50,000,000 \$ 50,000,000

This transaction applies to the ARMB Defined Benefit Pension Plans AY21-AY23, <u>but not AY24</u>; the ARMB Retirement Health Funds AYW2-AYW4; and the ARMB Defined Contribution Plans AY6G-AY6I, AYX2-AYX3, AYY2-AYY3. Please use a pro-rata split based on ownership in AY70 pertaining to the referenced Pension Plans, Retirement Health Funds and Defined Contribution Plans. If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely,

Gary M. Bader

Chief Investment Officer

any M. Bades

cc: Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer Zachary Hanna, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/scv /



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 6, 2015

Mary Ellen MacDonald State Street Global Services **IIS Public Funds** 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Tuesday, March 10, 2015. Please process the following cash transfer as soon as possible on that day:

Cash (AY70) US Treasury Pool (AY6N) < \$50,000,000 > \$50,000,000

This transaction applies to the ARMB Defined Benefit Pension Plans AY21-23, but not AY24; the ARMB Retirement Health Funds AYW2-AYW4; and the ARMB Defined Contribution Plans AY6G, AY6H and AY6I, AYX2-AYX3, AYY2-AYY3. Please use a pro-rata split based on ownership in AY70 pertaining to the referenced Pension Plans, Retirement Health Funds and Defined Contribution Plans.

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

Sincerely,

Gary M. Bader

Chief Investment Officer

cc:

Gail Schubert, ARMB Chair

any M. Bach

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/bm



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 6, 2015

Mary Ellen MacDonald State Street Global Services **IIS Public Funds** 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Tuesday, March 10, 2015. Please process the following cash transfer using the applicable sending pool ratios:

Cash (AY70) US Treasury Pool (AY1A) < \$300,000,000 > \$300,000,000

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

Sincerely,

Gary M. Bader

Chief Investment Officer

cc:

Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

lang M. Bad.

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/bm



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 9, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Wednesday, March 11, 2015. Please process the following cash transfer using the applicable sending pool ratios:

Short Term Pool (AY70) QMA MPS (AYRX)

< \$200,000,000 > \$200,000,000

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

Sincerety

An Gary M. Bader

Chief Investment Officer

cc: Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Shane Carson, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/smh



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465.2389

March 24, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC2 Quincy, MA 02169

Dear Ms. MacDonald,

The Alaska Retirement Management Board (ARMB) requests the following changes to be made on Tuesday, March 31, 2015. Please process the following cash transfer using the applicable sending pool ratios:

SSgA Russell 1000 Growth (AY4L) SSgA Russell 1000 Value (AY4M) SSgA MSCI ACWI Ex-US IMI (AY68)

<\$100,000,000 > <\$100,000,000 > \$200,000,000

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

Sincerely,

Gary M. Bader

Chief Investment Officer

Cc: Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer Shane Carson, State Investment Officer

GMB/smh



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405

Main: 907.465.3749 Fax: 907.465.2389

READER'S FILE

March 31, 2015

Mary Ellen MacDonald State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC2 Quincy, MA 02169

Dear Ms. MacDonald:

The Alaska Retirement Management Board (ARMB) requests to have the following cash transfers made as soon as possible on April 1, 2015

Short-term Fixed Income (AY1A)

<\$290,000,000>

Short-term Fixed Income (AY70)

\$290,000,000

This transaction applies to the ARMB Defined Benefit Pension Plans AY21-AY24; the ARMB Retirement Health Funds AYW2-AYW4; and the ARMB Defined Contribution Plans AY6G-AY6I, AYX2-AYX3, AYY2-AYY3. Please use a pro-rata split based on ownership in AY1A pertaining to the referenced Pension Plans, Retirement Health Funds and Defined Contribution Plans. If you have any questions, please do not hesitate to contact me at (907) 465-4399.

Sincerely.

Gary M. Bader

Chief Investment Officer

cc:

Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, Manager of Fixed Income Investments

Emily Howard, State Investment Officer Alyson Campbell, State Investment Officer

Liam Dundon, NRS

Diane Murphy, NRS

GMB/bm



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749

Fax: 907.465.2389

April 8, 2015

Mary Ellen MacDonald Client Service Officer State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Mary Ellen:

RE: Additional Funding Polar Bear Fund LP - Class B

This letter is your authorization to transfer \$575,000.00 on Friday April 17, 2015 from account AY70 to account AY8N using the currently applicable absolute return ratios and then wire transfer the full amount as soon as possible using the following instructions:

The Bank of New York Mellon 1 Wall Street, New York ABA Number: 021-000-018 Account Number: 8901234524

Account Name: Polar Bear Fund LP - Class B

Reference Details: Alaska Retirement Management Board on behalf of the State of Alaska

Retirement and Benefits Plans Trust

Please provide the Fed Confirmation number for this transaction to Sarah Baulch of Bank of New York Mellon via e-mail at sarah.baulch@bnymellon.com

Sincerely,

For Gary M. Bader

Chief Investment Officer

GMB/scv//

cc: Gail Schubert, ARMB Chair

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Sarah Baulch, Bank of New York

Fran Conroy, KKR Prisma Capital Partners



ALASKA RETIREMENT MANAGEMENT BOARD

333 Willoughby Avenue, 11th Floor PO Box 110405 Juneau, Alaska 99811-0405 Main: 907.465.3749 Fax: 907.465,2389

April 9, 2015

Mary Ellen MacDonald Client Service Officer State Street Global Services IIS Public Funds 1200 Crown Colony Drive, CC5 Quincy, MA 02169

Dear Mary Ellen:

RE: Additional Funding Polar Bear Fund LP - Class B

This letter is your authorization to transfer \$365,000.00 on Monday April 20, 2015 from account AY70 to account AY8N using the currently applicable absolute return ratios and then wire transfer the full amount as soon as possible using the following instructions:

The Bank of New York Mellon 1 Wall Street, New York ABA Number: 021-000-018 Account Number: 8901234524

Account Name: Polar Bear Fund LP - Class B

Reference Details: Alaska Retirement Management Board on behalf of the State of Alaska

Retirement and Benefits Plans Trust

Please provide the Fed Confirmation number for this transaction to Sarah Baulch of Bank of New York Mellon via e-mail at sarah.baulch@bnymellon.com

Sincerely.

Gary M. Bader

Chief Investment Officer

GMB/scv

Gail Schubert, ARMB Chair cc:

Randall Hoffbeck, Commissioner

Pamela Leary, Director

Scott Jones, State Comptroller

James McKnight, Senior Investment Compliance Officer

Bob Mitchell, State Investment Officer

Sarah Baulch, Bank of New York

Fran Conroy, KKR Prisma Capital Partners

ALASKA RETIREMENT MANAGEMENT BOARD FINANCIAL REPORT

As of February 28, 2015

ALASKA RETIREMENT MANAGEMENT BOARD

Schedule of Investment Income and Changes in Invested Assets by Fund For the Eight Months Ending February 28, 2015

	Tor the E	ight Months Ending Pebre	lary 20, 2013			
	Beginning Invested Assets	Investment Income ⁽¹⁾	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
Public Employees' Retirement System (PERS)	-				-	
Defined Benefit Plans:						
Retirement Trust	\$ 7,720,341,308	\$ 201,564,787 \$	401,937,770 \$	8,323,843,865	7.82%	2.54%
Retirement Health Care Trust	6,948,399,164	166,847,982	(107,220,142)	7,008,027,004	0.86%	2.42%
Total Defined Benefit Plans	14,668,740,472	368,412,769	294,717,628	15,331,870,869	4.52%	2.49%
Defined Contribution Plans:				_		
Participant Directed Retirement	491,615,700	20,070,090	66,354,279	578,040,069	17.58%	3.82%
Health Reimbursement Arrangement	155,432,460	4,378,173	19,940,717	179,751,350	15.65%	2.65%
Retiree Medical Plan	28,293,975	952,547	9,017,248	38,263,770	35.24%	2.90%
Defined Benefit Occupational Death and Disability:						
Public Employees	10,850,124	291,973	977,030	12,119,127	11.70%	2.58%
Police and Firefighters	5,165,027	145,035	662,889	5,972,951	15.64%	2.64%
Total Defined Contribution Plans	691,357,285	25,837,818	96,952,163	814,147,267	17.76%	3.49%
Total PERS	15,360,097,757	394,250,587	391,669,791	16,146,018,136	5.12%	2.53%
Teachers' Retirement System (TRS)						
Defined Benefit Plans:						
Retirement Trust	3,770,919,368	114,862,184	862,452,501	4,748,234,053	25.92%	2.73%
Retirement Health Care Trust	2,264,530,724	59,336,456	166,832,989	2,490,700,169	9.99%	2.53%
Total Defined Benefit Plans	6,035,450,092	174,198,640	1,029,285,490	7,238,934,222	19.94%	2.66%
Defined Contribution Plans:		·				
Participant Directed Retirement	215,005,412	8,269,438	18,305,979	241,580,829	12.36%	3.69%
Health Reimbursement Arrangement	49,102,919	1,331,622	4,473,929	54,908,470	11.82%	2.59%
Retiree Medical Plan	11,565,438	363,503	2,722,913	14,651,854	26.69%	2.81%
Defined Benefit Occupational Death and Disability	3,074,708	75,076	(6,396)	3,143,388	2.23%	2.44%
Total Defined Contribution Plans	278,748,477	10,039,639	25,496,425	314,284,541	12.75%	3.44%
Total TRS	6,314,198,569	184,238,279	1,054,781,915	7,553,218,763	19.62%	2.69%
Judicial Retirement System (JRS)						
Defined Benefit Plan Retirement Trust	139,434,530	3,558,105	1,577,981	144,570,616	3.68%	2.54%
Defined Benefit Retirement Health Care Trust	26,405,394	645,386	(40,040)	27,010,740	2.29%	2.45%
Total JRS	165,839,924	4,203,491	1,537,941	171,581,356	3.46%	2.52%
National Guard/Naval Militia Retirement System (MRS)						
Defined Benefit Plan Retirement Trust	37,555,947	662,398	(677,117)	37,541,228	-0.04%	1.78%
Other Participant Directed Plans		·		, ,		
Supplemental Annuity Plan	3,312,097,202	119,329,585	(3,879,982)	3,427,546,805	3.49%	3.60%
Deferred Compensation Plan	785,486,812	31,956,423	(3,910,731)	813,532,504	3.57%	4.08%
Total All Funds	25,975,276,211	734,640,763	1,439,521,817	28,149,438,792		
Total Non-Participant Directed	21,171,071,086	555,015,227	1,362,652,272	23,088,738,585	9.06%	2.54%
Total Participant Directed	4,804,205,125	179,625,536	76,869,545	5,060,700,207	5.34%	3.71%
Total All Funds	\$ 25,975,276,211	\$ 734,640,763 \$	1,439,521,817 \$	28,149,438,792	8.37%	2.75%

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: <a href="http://www.revenue.state.ak.us/treasury/programs/orpgrams/

ALASKA RETIREMENT MANAGEMENT BOARD

Schedule of Investment Income and Changes in Invested Assets by Fund For the Month Ended February 28, 2015

	ror u	ic Month Ended Pebruary	20, 2013		% Change due to	
	Beginning Invested Assets	Investment Income ⁽¹⁾	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	Investment Income ⁽²⁾
Public Employees' Retirement System (PERS)	110000	III Comence Income	(***inara***ais)	110000	Invested Assets	Income
Defined Benefit Plans:						
Retirement Trust	\$ 8,081,155,776	\$ 272,630,545 \$	(29,942,456) \$	8,323,843,865	3.00%	3.38%
Retirement Health Care Trust	6,791,794,417	227,624,981	(11,392,394)	7,008,027,004	3.18%	3.35%
Total Defined Benefit Plans	14,872,950,193	500,255,526	(41,334,850)	15,331,870,869	3.09%	3.37%
Defined Contribution Plans:						
Participant Directed Retirement	545,465,670	23,387,428	9,186,971	578,040,069	1.63%	1.04%
Health Reimbursement Arrangement	170,871,905	5,715,951	3,163,494	179,751,350	1.58%	0.69%
Retiree Medical Plan	35,567,032	1,188,529	1,508,209	38,263,770	7.58%	3.27%
Defined Benefit Occupational Death and Disability:						
Public Employees	11,559,634	387,208	172,285	12,119,127	4.84%	3.32%
Police and Firefighters	5,703,796	190,146	79,009	5,972,951	4.72%	3.31%
Total Defined Contribution Plans	769,168,037	30,869,262	14,109,968	814,147,267	5.85%	3.98%
Total PERS	15,642,118,230	531,124,788	(27,224,882)	16,146,018,136	3.22%	3.40%
Teachers' Retirement System (TRS)						
Defined Benefit Plans:						
Retirement Trust	4,622,455,132	155,963,990	(30,185,069)	4,748,234,053	2.72%	3.39%
Retirement Health Care Trust	2,416,683,662	80,974,057	(6,957,550)	2,490,700,169	3.06%	3.36%
Total Defined Benefit Plans	7,039,138,794	236,938,047	(37,142,619)	7,238,934,222	2.84%	3.37%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	229,004,886	9,808,176	2,767,767	241,580,829	5.49%	4.26%
Health Reimbursement Arrangement	52,442,572	1,749,521	716,377	54,908,470	4.70%	3.31%
Retiree Medical Plan	13,730,149	455,558	466,147	14,651,854	6.71%	3.26%
Defined Benefit Occupational Death and Disability	3,044,637	101,922	(3,171)	3,143,388	3.24%	3.35%
Total Defined Contribution Plans	298,222,244	12,115,177	3,947,120	314,284,541	5.39%	4.04%
Total TRS	7,337,361,038	249,053,224	(33,195,499)	7,553,218,763	2.94%	3.40%
Judicial Retirement System (JRS)						
Defined Benefit Plan Retirement Trust	140,331,750	4,729,286	(490,420)	144,570,616	3.02%	3.38%
Defined Benefit Retirement Health Care Trust	26,156,412	876,102	(21,774)	27,010,740	3.27%	3.35%
Total JRS	166,488,162	5,605,388	(512,194)	171,581,356	3.06%	3.37%
National Guard/Naval Militia Retirement System (MRS)						
Defined Benefit Plan Retirement Trust	36,775,482	948,788	(183,042)	37,541,228	2.08%	2.59%
Other Participant Directed Plans						
Supplemental Annuity Plan	3,336,920,551	88,696,584	1,929,670	3,427,546,805	2.72%	2.66%
Deferred Compensation Plan	788,180,860	25,491,868	(140,224)	813,532,504	3.22%	3.23%
Total All Funds	27,307,844,323	900,920,640	(59,326,171)	28,149,438,792		
Total Non-Participant Directed	22,408,272,356	753,536,584	(73,070,355)	23,088,738,585	3.04%	3.37%
Total Participant Directed	4,899,571,967	147,384,056	7,720,707	5,060,700,207	3.17%	3.01%
-	\$ 27,307,844,323		(65,349,648) \$	28,149,438,792	3.06%	3.30%
		· 				

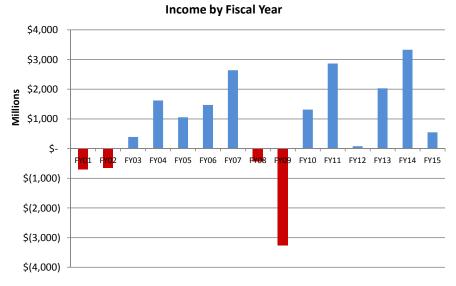
Notes:

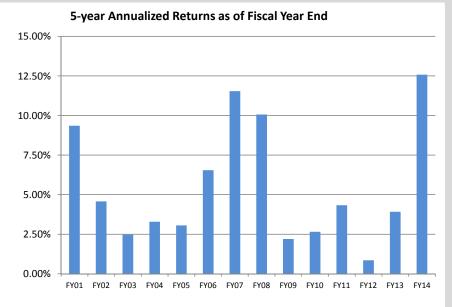
⁽¹⁾ Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

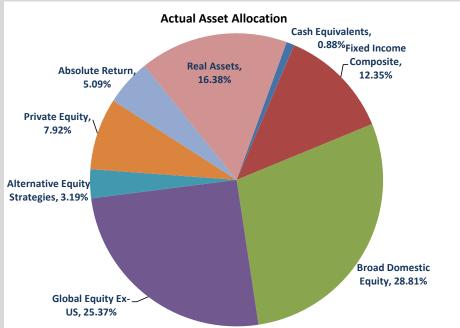
⁽²⁾ Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: <a href="http://www.revenue.state.ak.us/treasury/programs/orpgrams/

Total Defined Benefit Assets As of February 28, 2015



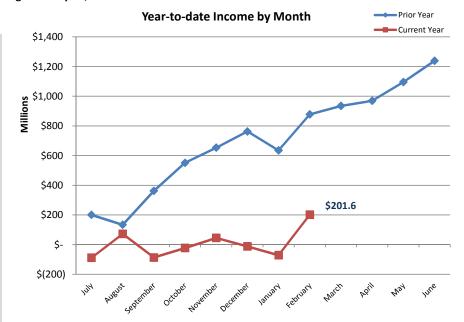


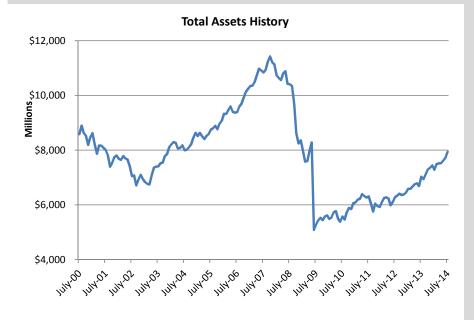


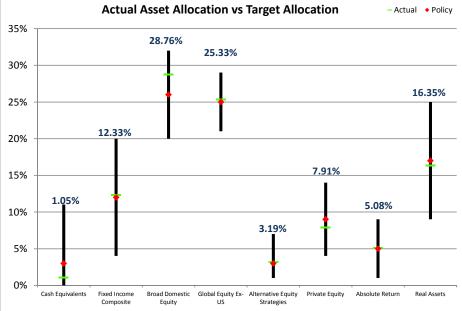


Public Employees' Retirement Pension Trust Fund

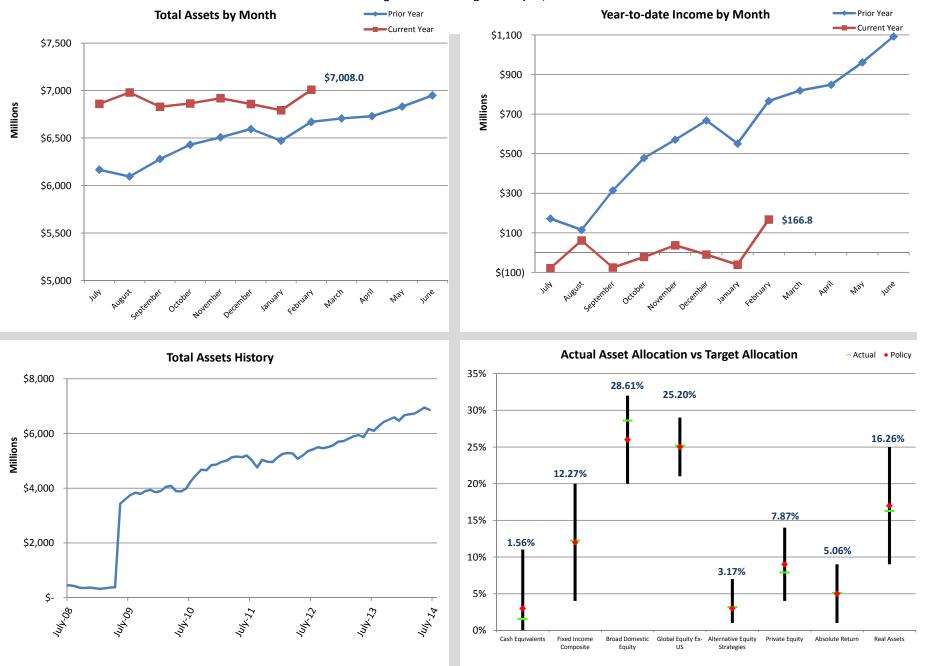




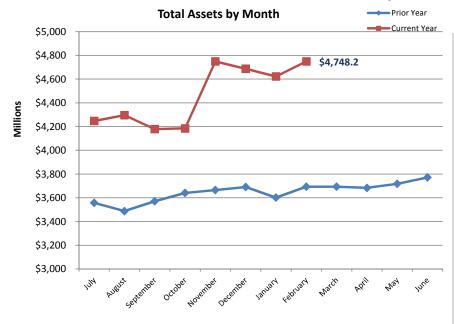


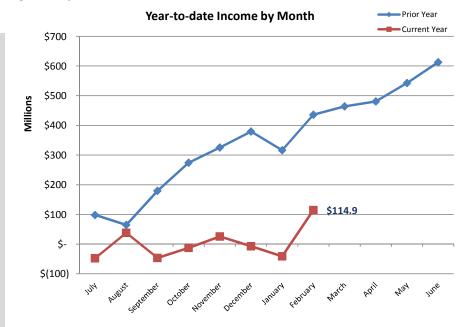


Public Employees' Retirement Health Care Trust Fund

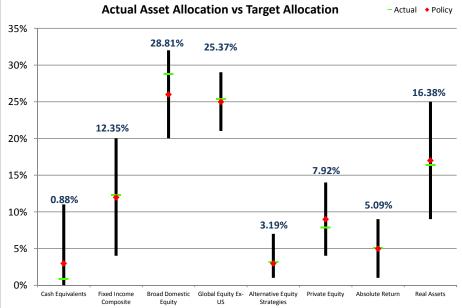


Teachers' Retirement Pension Trust Fund

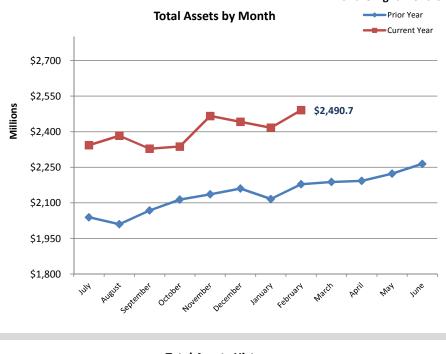


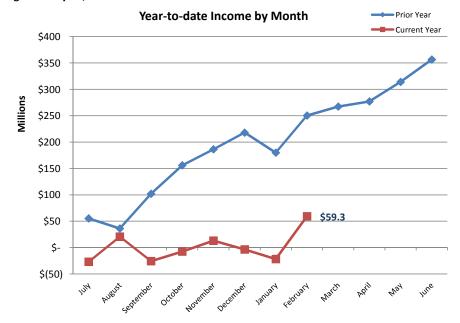




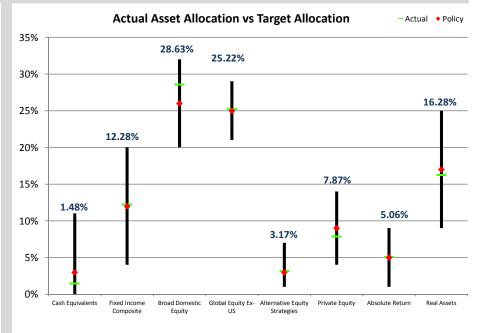


Teachers' Retirement Health Care Trust Fund

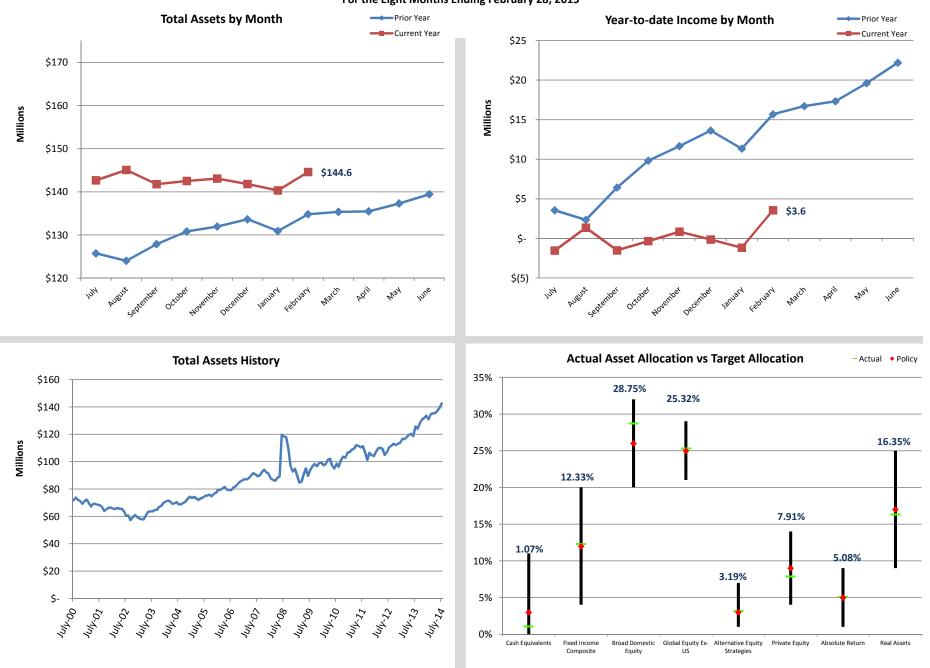




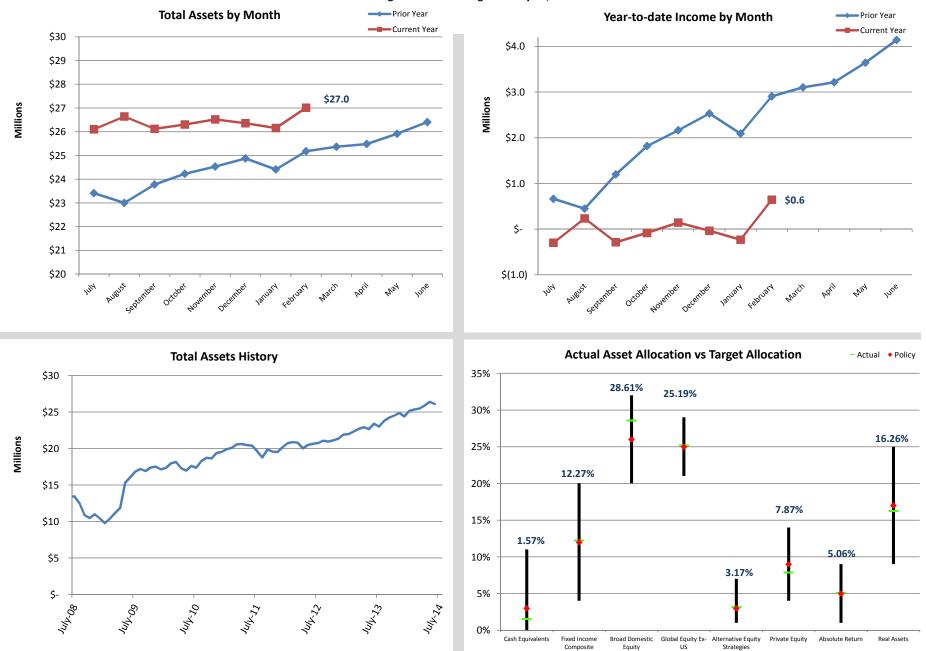




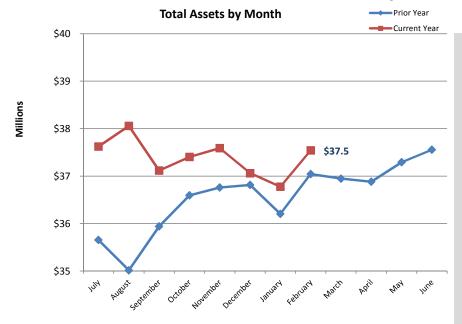
Judicial Retirement Pension Trust Fund For the Eight Months Ending February 28, 2015

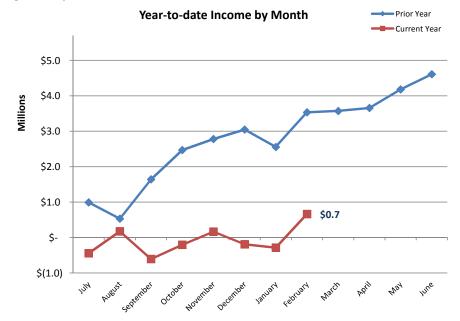


Judicial Retirement Health Care Trust Fund

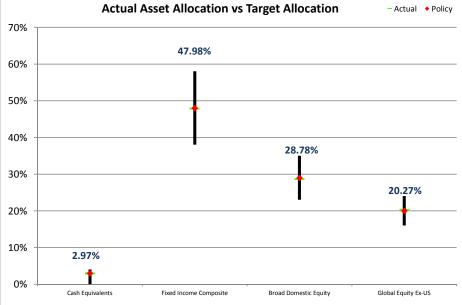


Military Retirement Trust Fund









ALASKA RETIREMENT MANAGEMENT BOARD

Reporting of Funds by Manager

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 28, 2015

	Beginning Invested Assets	Investment Income	Net Contributions and (Withdrawals)	Ending Invested Assets	% increase (decrease)
Cash Short-Term Fixed Income Pool Total Cash	\$ 309,860,232	\$ 71,737	\$ (23,233,096)	\$ 286,698,873	-7.47%
Total Cash	309,860,232	71,737	(23,233,096)	286,698,873	-7.47%
Fixed Income					
US Treasury Fixed Income	1,329,785,286	(11,592,462)		1,318,192,824	-0.87%
Taxable Municipal Bond Pool					
Western Asset Management	124,019,247	(3,013,877)	-	121,005,370	-2.43%
Guggenheim Partners	119,654,282	(2,550,483)	-	117,103,799	-2.13%
	243,673,529	(5,564,360)	-	238,109,169	-2.28%
Tactical Fixed Income Pool					
Pyramis Global Advisors	122,819,149	337,106	-	123,156,255	0.27%
International Fixed Income Pool	200 240 000	(5.040.461)		202 201 427	1.070/
Mondrian Investment Partners	398,249,898	(5,048,461)		393,201,437	-1.27%
High Yield Pool					
MacKay Shields, LLC	602,710,162	15,343,632		618,053,794	2.55%
Emerging Debt Pool					
Lazard Emerging Income	166,711,097	(1,894,341)	<u>-</u>	164,816,756	-1.14%
Total Fixed Income	2,863,949,121	(8,418,886)		2,855,530,235	-0.29%

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 28, 2015

Domestic Equities		•			
Small Cap Pool					
Passively Managed					
SSgA Russell 2000 Growth	17,884,677	1,295,007	-	19,179,684	7.24%
SSgA Russell 2000 Value	62,228,422	2,875,390	-	65,103,812	4.62%
Total Passive	80,113,099	4,170,397	-	84,283,496	5.21%
Actively Managed					
Barrow, Haney, Mewhinney & Strauss	106,553,725	7,559,698	-	114,113,423	7.09%
DePrince, Race & Zollo Inc Micro Cap	95,233,774	4,441,957	-	99,675,731	4.66%
Frontier Capital Mgmt. Co.	101,374,349	5,752,983	-	107,127,332	5.67%
Jennison Associates, LLC	101,608,243	8,246,737	-	109,854,980	8.12%
Lord Abbet Small Cap Growth Fund	102,572,896	8,102,219	-	110,675,115	7.90%
Lord Abbett & Co Micro Cap	113,620,932	8,188,389	-	121,809,321	7.21%
Luther King Capital Management	98,532,247	6,433,122	-	104,965,369	6.53%
SSgA Futures Small Cap	11,114,439	656,179	-	11,770,618	5.90%
Transition Account	-	-	-	-	-
Victory Capital Management	108,031,018	5,760,185	-	113,791,203	5.33%
SSgA Volatility-Russell 2000	96,827,788	2,239,943	-	99,067,731	2.31%
Total Active	935,469,411	57,381,412	-	992,850,823	6.13%
Total Small Cap	1,015,582,510	61,551,809	-	1,077,134,319	6.06%
Large Cap Pool					
Passively Managed					
SSgA Russell 1000 Growth	1,352,854,912	89,372,387	(50,000,000)	1,392,227,299	2.91%
SSgA Russell 1000 Value	1,284,825,732	62,272,279	- -	1,347,098,011	4.85%
SSgA Russell 200	747,888,216	44,002,239	-	791,890,455	5.88%
Total Passive	3,385,568,860	195,646,905	(50,000,000)	3,531,215,765	4.30%
Actively Managed					
Allianz Global Investors	369,239,840	25,911,024	-	395,150,864	7.02%
Barrow, Haney, Mewhinney & Strauss	330,441,886	22,875,408	-	353,317,294	6.92%
Lazard Freres	388,525,843	26,999,539	-	415,525,382	6.95%
McKinley Capital Mgmt.	368,801,527	24,121,135	-	392,922,662	6.54%
Quantitative Management Assoc.	328,456,202	18,565,779	-	347,021,981	5.65%
SSgA Futures large cap	13,600,844	888,398	-	14,489,242	6.53%
Transition Account	· · · · · · · · · · · · · · · · · · ·	- -	-	- -	-
SSgA Volatility-Russell 1000	98,888,785	1,921,357	-	100,810,142	1.94%
Total Active	1,897,954,927	121,282,640	-	2,019,237,567	6.39%
Total Large Cap	5,283,523,787	316,929,545	(50,000,000)	5,550,453,332	5.05%
Total Domestic Equity	6,299,106,297	378,481,354	(50,000,000)	6,627,587,651	5.21%

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 28, 2015

Alternative Equity Strategies					
Alternative Equity Strategy Pool					
Relational Investors, LLC	111,899,695	4,766,252	(5,980,788)	110,685,159	-1.09%
Analytic Buy Write Account	273,238,791	7,108,850	-	280,347,641	2.60%
Allianz Global Investors Buy-Write Account	-	-	-	-	-
ARMB Equity Yield Strategy	136,355,349	7,273,810		143,629,159	5.33%
Total Alternative Equity Strategy Pool	521,493,835	19,148,912	(5,980,788)	534,661,959	2.53%
Convertible Bond Pool					
Advent Capital	194,727,220	3,942,109	-	198,669,329	2.02%
Total Alternative Equity Strategies	716,221,055	23,091,021	(5,980,788)	733,331,288	2.39%
Global Equities Ex US					
Small Cap Pool					
Mondrian Investment Partners	146,002,702	7,184,194	-	153,186,896	4.92%
Schroder Investment Management	151,216,730	10,624,266	-	161,840,996	7.03%
Total Small Cap	297,219,432	17,808,460	<u> </u>	315,027,892	5.99%
Large Cap Pool					
Blackrock ACWI Ex-US IMI	519,486,171	27,909,572	-	547,395,743	5.37%
Brandes Investment Partners	1,007,571,477	83,894,917	-	1,091,466,394	8.33%
Cap Guardian Trust Co	759,337,362	46,001,588	-	805,338,950	6.06%
Lazard Freres	403,331,050	24,124,118	-	427,455,168	5.98%
McKinley Capital Management	491,840,304	22,214,392	-	514,054,696	4.52%
SSgA Futures International	-	-	-	-	-
Allianz Global Investors	247,912,303	11,097,339	-	259,009,642	4.48%
Arrow Street Capital	201,077,703	11,529,228	-	212,606,931	5.73%
Baillie Gifford Overseas Limited	259,379,044	16,079,454	-	275,458,498	6.20%
State Street Global Advisors	612,895,397	32,910,438	-	645,805,835	5.37%
Total Large Cap	4,502,830,811	275,761,046		4,778,591,857	6.12%
Emerging Markets Equity Pool					
Lazard Asset Management	378,511,550	8,637,771	-	387,149,321	2.28%
Eaton Vance	253,004,698	8,560,994	-	261,565,692	3.38%
Total Emerging Markets Pool	631,516,248	17,198,765		648,715,013	2.72%
Frontier Market Pool					
Everest Capital Frontier Markets Equity	89,393,700	3,202,300	- -	92,596,000	3.58%
Total Global Equities	5,520,960,191	313,970,571	<u> </u>	5,834,930,762	5.69%

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 28, 2015

Private Equity Pool					
Abbott Capital	766,035,814	19,850,587	(10,129,294)	775,757,107	1.27%
Angelo, Gordon & Co.	7,609,759	(85,307)	-	7,524,452	-1.12%
Blum Capital Partners-Strategic	6,697,273	1,606,883	(1,010,317)	7,293,839	8.91%
Lexington Partners	48,114,996	11	(1,229,690)	46,885,317	-2.56%
Merit Capital Partners	16,883,634	-	=	16,883,634	-
NB SOF III	11,421,105	-	=	11,421,105	-
Resolute Fund III	2,668,367	-	=	2,668,367	-
Glendon Opportunities	16,093,989	-	1,888,003	17,981,992	11.73%
New Mountain Partners IV	3,939,807	-	(515,345)	3,424,462	-13.08%
KKR Lending Partners II	38,405,798	-	=	38,405,798	-
NGP XI	-	-	1,162,252	1,162,252	100.00%
Onex Partnership III	22,317,605	-	=	22,317,605	-
Pathway Capital Management LLC	831,749,548	491,615	(8,670,581)	823,570,582	-0.98%
Warburg Pincus Prvt Eqty XI	18,716,368	(5)	840,000	19,556,363	4.49%
Warburg Pincus X	24,449,302	5	(138,804)	24,310,503	-0.57%
Total Private Equity	1,815,103,365	21,863,789	(17,803,776)	1,819,163,378	0.22%
Absolute Return Pool					
Global Asset Management (USA) Inc.	363,842,547	(2,606,595)	-	361,235,952	-0.72%
Prisma Capital Partners	413,209,767	2,026,307	-	415,236,074	0.49%
Crestline Investors, Inc.	200,366,112	(12)	(9,300,000)	191,066,100	-4.64%
Allianz Global Investors	200,000,000	1,964,930	<u> </u>	201,964,930	0.98%
Total Absolute Return Investments	1,177,418,426	1,384,630	(9,300,000)	1,169,503,056	-0.67%

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 28, 2015

Real Assets					
Farmland Pool					
UBS Agrivest, LLC	504,431,052	7,437,515	10,801,450	522,670,017	3.62%
Hancock Agricultural Investment Group	221,053,111	1,554,886	22,600,000	245,207,997	10.93%
Total Farmland Pool	725,484,163	8,992,401	33,401,450	767,878,014	5.84%
Timber Pool					
Timberland Invt Resource LLC	263,023,794	4,921,303	-	267,945,097	1.87%
Hancock Natural Resource Group	96,683,228	· · ·	_	96,683,228	-
Total Timber Pool	359,707,022	4,921,303	-	364,628,325	1.37%
Energy Pool					
EIG Energy Fund XV	35,988,391	(3,146,924)	(815,104)	32,026,363	-11.01%
EIG Energy Fund XD	7,061,097	(10,073)	· -	7,051,024	-0.14%
EIG Energy Fund XIV-A	48,358,755	104,939	(656,376)	47,807,318	-1.14%
EIG Energy Fund XVI	5,068,623	(62,343)	(31,141)	4,975,139	-1.84%
Total Energy Pool	96,476,866	(3,114,401)	(1,502,621)	91,859,844	-4.79%
REIT Pool					
REIT Trans Account	-	-	_	-	-
REIT Holdings	368,276,300	(10,973,313)	_	357,302,987	-2.98%
Total REIT Pool	368,276,300	(10,973,313)	-	357,302,987	-2.98%
Treasury Inflation Proof Securities					
TIPS Internally Managed Account	86,011,910	(1,028,853)	<u> </u>	84,983,057	-1.20%
Master Limited Partnerships					
Advisory Research MLP	204,895,976	10,823,424	-	215,719,400	5.28%
Tortoise Capital Advisors	228,566,843	9,108,948	-	237,675,791	3.99%
Total Master Limited Partnerships	433,462,819	19,932,372	-	453,395,191	4.60%
Infrastructure Private Pool					
IFM Global Infrastructuer Fund-Private	-	-	-	-	-
JP Morgan Infrastructure Fund-Private	97,831,401	-	-	97,831,401	-
Total Infrastructure Private Pool	97,831,401	-	-	97,831,401	-
Infrastructure Public Pool					
Brookfield Investment MgmtPublic	128,980,185	356,263	-	129,336,448	0.28%
Lazard Asset MgmtPublic	127,333,664	3,193,027	-	130,526,691	2.51%
Total Infrastructure Public Pool	256,313,849	3,549,290	-	259,863,139	1.38%

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 28, 2015

Real Estate Core Commingled Accounts 1,050,533 214,018,662 0.49% JP Morgan 212,968,129 **UBS Trumbull Property Fund** (236,862)-0.27% 88,585,377 88,348,515 Total Core Commingled 301,553,506 813,671 302,367,177 0.27% Core Separate Accounts Cornerstone Real Estate Advisers Inc. 122,708,279 122,708,279 LaSalle Investment Management 13 (410,935)-0.26% 155,268,999 154,858,077 Sentinel Separate Account (27)(795,021)156,261,393 -0.51% 157,056,441 **UBS** Realty 309,591,441 (107)(612,123)308,979,211 -0.20% **Total Core Separate** 744,625,160 (121)(1,818,079)742,806,960 -0.24% Non-Core Commingled Accounts Almanac Realty Securities IV 2,241,014 2,241,014 Almanac Realty Securities V 16,890,484 16,890,484 BlackRock Diamond Property Fund 21,717,090 21,717,090 Colony Investors VIII, L.P. 17,874,033 15 (607,806)17,266,242 -3.40% Cornerstone Apartment Venture III 402,290 402,290 Coventry 12,561,058 12,561,058 ING Clarion Development Ventures II 1.064.178 1.064,178 ING Clarion Development Ventures III 9 17,441,562 (8,883)17,432,688 -0.05% KKR Real Estate Partners Americas LP. 28,529,840 (5) 3,783,244 32,313,079 13.26% LaSalle Medical Office Fund II 3,026,998 3,026,998 Lowe Hospitality Partners 2,481,835 2,481,835 Silverpeak Legacy Pension Partners II, L.P. 66,396,319 66,396,319 Silverpeak Legacy Pension Partners III, L.P. 7,846,939 7,846,939 Tishman Speyer Real Estate Venture VI 32,835,669 32,835,669 Tishman Speyer Real Estate Venture VII 4,601,364 4,601,364

235,910,673

1,282,089,339

3,705,653,669

22,408,272,356

\$

Total Non-Core Commingled

Total Real Estate

Total Assets

Total Real Assets

19

\$

813,569

23,092,368

753,536,584

3,166,555

1,348,476

33,247,305

(73,070,355)

239,077,247

1,284,251,384

3,761,993,342

23,088,738,585

1.34%

0.17%

1.52%

3.04%

ALASKA RETIREMENT MANAGEMENT BOARD

Reporting of Funds by Manager

All Non-Participant Directed Plans

Supplemental Annuity Plan Schedule of Investment Income and Changes in Invested Assets for the Month Ended February 28, 2015

Interim Transit Account	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
Treasury Division (1)							(_)
Cash and Cash Equivalents	\$ 6,757,677 \$	1,184 \$	897,015 \$	- \$	7,655,876	13.29%	0.02%
Participant Options	ΨΨ	1,101	σ, τ, σ13 φ	Ψ	7,033,070	13.2770	0.0270
T. Rowe Price							
Stable Value Fund	340,772,924	599,257	(830,356)	4,745,100	345,286,925	1.32%	0.17%
Small Cap Stock Fund	124,381,507	6,997,101	81,403	(384,163)	131,075,848	5.38%	5.63%
Alaska Balanced Trust	1,182,321,811	19,008,053	(2,092,598)	(746,717)	1,198,490,549	1.37%	1.61%
Long Term Balanced Fund	529,618,948	16,806,212	840,563	(1,543,439)	545,722,284	3.04%	3.18%
AK Target Date 2010 Trust	7,943,910	192,562	8,886	72,429	8,217,787	3.45%	2.41%
AK Target Date 2015 Trust	98,502,439	2,932,314	(144,182)	(517,939)	100,772,632	2.30%	2.99%
AK Target Date 2020 Trust	64,528,553	2,283,537	300,043	(516,878)	66,595,255	3.20%	3.54%
AK Target Date 2025 Trust	40,064,068	1,624,161	421,147	557,884	42,667,260	6.50%	4.00%
AK Target Date 2030 Trust	29,961,050	1,327,556	323,074	297,344	31,909,024	6.50%	4.39%
AK Target Date 2035 Trust	25,152,189	1,201,469	236,051	42,265	26,631,974	5.88%	4.75%
AK Target Date 2040 Trust	25,348,828	1,284,949	293,072	(30,077)	26,896,772	6.11%	5.04%
AK Target Date 2045 Trust	27,925,473	1,409,693	444,460	115,905	29,895,531	7.05%	5.00%
AK Target Date 2050 Trust	29,449,461	1,494,088	499,682	44,009	31,487,240	6.92%	5.03%
AK Target Date 2055 Trust	20,798,620	1,059,718	278,360	668,056	22,804,754	9.65%	4.98%
Total Investments with T. Rowe Price	2,546,769,781	58,220,670	659,605	2,803,779	2,608,453,835		
State Street Global Advisors							
State Street Treasury Money Market Fund - Inst.	37,303,607	1	(246,851)	(132,416)	36,924,341	-1.02%	0.00%
S&P 500 Stock Index Fund Series A	336,945,921	19,272,996	(232,616)	(3,582,670)	352,403,631	4.59%	5.75%
Russell 3000 Index	60,070,215	3,477,838	176,632	949,974	64,674,659	7.67%	5.74%
US Real Estate Investment Trust Index	45,139,795	(1,549,697)	92,349	(3,681,294)	40,001,153	-11.38%	-3.58%
World Equity Ex-US Index	23,897,059	1,389,833	100,064	672,415	26,059,371	9.05%	5.72%
Long US Treasury Bond Index	19,854,855	(1,111,080)	26,667	(16,360)	18,754,082	-5.54%	-5.59%
US Treasury Inflation Protected Securities Index	16,182,876	(196,923)	16,286	663	16,002,902	-1.11%	-1.22%
World Government Bond Ex-US Index	10,006,879	(97,055)	(11,173)	77,122	9,975,773	-0.31%	-0.97%
Global Balanced Fund	57,246,565	1,757,485	232,365	664,722	59,901,137	4.64%	3.05%
Total Investments with SSGA	606,647,772	22,943,398	153,723	(5,047,844)	624,697,049		
BlackRock							
Government/Credit Bond Fund	49,731,598	(615,708)	(74,753)	737,603	49,778,740	0.09%	-1.23%
Intermediate Bond Fund	11,824,589	(105,553)	(16,236)	24,718	11,727,518	-0.82%	-0.89%
Total Investments with Barclays Global Investors	61,556,187	(721,261)	(90,989)	762,321	61,506,258		
Brandes Institutional							
International Equity Fund Fee	74,633,148	6,350,828	257,835	2,158,951	83,400,762	11.75%	8.37%
RCM							
Sustainable Core Opportunities Fund	40,555,987	1,901,765	52,481	(677,207)	41,833,026	3.15%	4.73%
Total All Funds	\$ 3,336,920,551 \$	88,696,584 \$	1,929,670 \$	- \$	3,427,546,805	2.72%	2.66%

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

⁽²⁾ Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Supplemental Annuity Plan

Schedule of Invested Assets with

Schedule of Investment Income and Changes in Invested Assets

By Month Through the Month Ended

February 28, 2015

\$ (Thousands)

<u>Invested Assets</u> (at fair value)		July	August	September	October	November	December	January	February
Investments with Treasury Division	· <u> </u>								
Cash and cash equivalents	\$	6,952 \$	7,920 \$	1,330 \$	6,559 \$	6,477 \$	1,970 \$	6,758 \$	7,656
Investments with T. Rowe Price									
Stable Value Fund		337,468	339,982	337,085	340,454	339,260	344,978	340,773	345,287
Small Cap Stock Fund		127,861	130,619	123,646	129,482	129,927	130,931	124,382	131,076
Alaska Balanced Trust		1,184,014	1,197,476	1,179,514	1,185,979	1,195,762	1,187,821	1,182,322	1,198,491
Long Term Balanced Fund		521,457	532,786	523,919	527,755	536,905	533,366	529,619	545,722
AK Target Date 2010 Trust		8,310	7,697	7,802	7,398	7,355	7,809	7,944	8,218
AK Target Date 2015 Trust		101,864	103,561	101,884	102,903	103,540	101,819	98,502	100,773
AK Target Date 2020 Trust		62,538	64,289	63,809	63,901	65,220	64,453	64,529	66,595
AK Target Date 2025 Trust		37,641	39,154	38,733	39,378	39,891	39,305	40,064	42,667
AK Target Date 2030 Trust		26,962	28,128	28,485	29,474	29,871	29,647	29,961	31,909
AK Target Date 2035 Trust		22,625	24,006	23,961	24,371	25,386	25,536	25,152	26,632
AK Target Date 2040 Trust		23,071	24,213	24,449	25,136	25,811	25,584	25,349	26,897
AK Target Date 2045 Trust		24,583	25,805	25,878	26,364	27,450	27,720	27,925	29,896
AK Target Date 2050 Trust		25,776	27,100	27,322	27,986	29,039	29,689	29,449	31,487
AK Target Date 2055 Trust		17,055	18,519	18,959	19,280	20,301	20,806	20,799	22,805
State Street Global Advisors									
State Street Treasury Money Market Fund - Inst.		36,580	37,327	36,833	37,325	36,329	38,300	37,304	36,924
S&P 500 Stock Index Fund Series A		324,031	336,062	334,995	343,815	353,303	347,788	336,946	352,404
Russell 3000 Index		54,512	57,336	57,408	59,041	60,891	61,240	60,070	64,675
US Real Estate Investment Trust Index		30,398	30,728	28,839	31,767	33,517	35,800	45,140	40,001
World Equity Ex-US Index		26,093	26,226	24,840	24,068	24,286	23,807	23,897	26,059
Long US Treasury Bond Index		10,679	11,483	11,489	14,450	13,287	15,937	19,855	18,754
US Treasury Inflation Protected Securities Index		16,554	16,416	15,840	15,663	15,675	15,589	16,183	16,003
World Government Bond Ex-US Index		10,147	10,223	9,738	9,716	9,931	9,870	10,007	9,976
Global Balanced Fund		56,301	57,430	55,787	56,520	57,680	57,375	57,247	59,901
Investments with BlackRock									
Government/Credit Bond Fund		45,303	45,547	45,334	46,274	46,475	48,221	49,732	49,779
Intermediate Bond Fund		12,508	12,599	12,594	12,732	12,857	11,959	11,825	11,728
Investments with Brandes Institutional		12,300	12,377	12,371	12,732	12,037	11,555	11,023	11,720
International Equity Fund Fee		84,623	84,803	81,042	78,780	79,414	75,589	74,633	83,401
Investments with RCM		0.,025	0.,000	01,0.2	70,700	72,121	75,505	, ,,,,,,	05,.01
Sustainable Core Opportunities Fund		38,809	41,386	40,505	40,857	42,365	42,226	40,556	41,833
Total Invested Assets	\$	3,274,713 \$	3,338,819 \$	3,282,020 \$	3,327,429 \$	3,368,205 \$	3,355,137 \$	3,336,921 \$	3,427,547
	· 								
Change in Invested Assets									
Beginning Assets	\$	3,312,097 \$	3,274,713 \$	3,338,819 \$	3,282,020 \$	3,327,429 \$	3,368,205 \$	3,355,137 \$	3,336,921
Investment Earnings		(36,071)	65,542	(55,393)	46,399	38,891	(14,856)	(13,880)	88,697
Net Contributions (Withdrawals)		(1,313)	(1,436)	(1,406)	(990)	1,885	1,788	(4,337)	1,930
Ending Invested Assets	\$	3,274,713 \$	3,338,819 \$	3,282,020 \$	3,327,429 \$	3,368,205 \$	3,355,137 \$	3,336,921 \$	3,427,547

Deferred Compensation Plan Schedule of Invested Assets and Changes in Invested Assets for the Month Ended February 28, 2015

	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (1)
Participant Options							
T. Rowe Price							
Interest Income Fund	\$ 177,795,672 \$	347,802 \$	(160,122) \$	2,790,767 \$	180,774,119	1.68%	0.19%
Small Cap Stock Fund	92,851,812	5,215,525	(69,424)	(1,035,691)	96,962,222	4.43%	5.65%
Alaska Balanced Trust	15,121,120	243,827	71,741	228,907	15,665,595	3.60%	1.60%
Long Term Balanced Fund	51,165,365	1,632,609	327,248	(386,850)	52,738,372	3.07%	3.19%
AK Target Date 2010 Trust	3,325,706	80,653	(6,566)	121,345	3,521,138	5.88%	2.38%
AK Target Date 2015 Trust	10,168,242	305,255	90,020	(33,385)	10,530,132	3.56%	2.99%
AK Target Date 2020 Trust	14,770,437	526,760	159,756	(165,804)	15,291,149	3.53%	3.57%
AK Target Date 2025 Trust	7,408,271	300,351	72,578	87,653	7,868,853	6.22%	4.01%
AK Target Date 2030 Trust	5,217,598	232,807	76,189	99,271	5,625,865	7.82%	4.39%
AK Target Date 2035 Trust	3,112,666	150,287	53,716	(17,764)	3,298,905	5.98%	4.80%
AK Target Date 2040 Trust	3,104,850	157,226	61,220	(52,656)	3,270,640	5.34%	5.06%
AK Target Date 2045 Trust	1,907,929	96,752	56,739	98,664	2,160,084	13.22%	4.87%
AK Target Date 2050 Trust	1,905,551	95,916	22,291	(66,504)	1,957,254	2.71%	5.09%
AK Target Date 2055 Trust	2,252,449	122,493	28,030	387,560	2,790,532	23.89%	4.98%
Total Investments with T. Rowe Price	390,107,668	9,508,263	783,416	2,055,513	402,454,860		
State Street Global Advisors							
State Street Treasury Money Market Fund - Inst.	11,643,822	2	(48,763)	491,891	12,086,952	3.81%	0.00%
Russell 3000 Index	21,675,580	1,252,847	133,476	34,347	23,096,250	6.55%	5.76%
US Real Estate Investment Trust Index	16,651,789	(591,499)	70,940	(1,023,040)	15,108,190	-9.27%	-3.66%
World Equity Ex-US Index	8,413,066	483,807	57,699	97,886	9,052,458	7.60%	5.70%
Long US Treasury Bond Index	6,488,793	(353,690)	(23,741)	(719,623)	5,391,739	-16.91%	-5.78%
US Treasury Inflation Protected Securities Index	7,590,073	(92,648)	(23,030)	(93,644)	7,380,751	-2.76%	-1.23%
World Government Bond Ex-US Index	3,606,635	(35,227)	10,392	28,428	3,610,228	0.10%	-0.97%
Global Balanced Fund	39,949,838	1,217,760	(20,112)	31,850	41,179,336	3.08%	3.05%
Total Investments with SSGA	116,019,596	1,881,352	156,861	(1,151,905)	116,905,904		
BlackRock							
S&P 500 Index Fund	177,250,706	10,141,123	(1,127,446)	(1,180,690)	185,083,693	4.42%	5.76%
Government/Credit Bond Fund	30,305,867	(370,650)	(25,100)	84,145	29,994,262	-1.03%	-1.22%
Intermediate Bond Fund	14,452,442	(124,793)	1,408	(103,376)	14,225,681	-1.57%	-0.87%
Total Investments with Barclays Global Investors	222,009,015	9,645,680	(1,151,138)	(1,199,921)	229,303,636		
Brandes Institutional							
International Equity Fund Fee	43,396,574	3,672,469	(31,770)	345,671	47,382,944	9.19%	8.43%
RCM							
Sustainable Core Opportunities Fund	16,648,007	784,104	102,407	(49,358)	17,485,160	5.03%	4.70%
Total All Funds	\$ 788,180,860 \$	25,491,868	(140,224) \$	- \$	813,532,504	3.22%	3.23%

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

⁽¹⁾ Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

Deferred Compensation Plan

Schedule of Invested Assets with

Schedule of Investment Income and Changes in Invested Assets

By Month Through the Month Ended

February 28, 2015 \$ (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	\$	6,053 \$	9,325 \$	8,447 \$	9,067 \$	10,927 \$	9,815 \$	5,095 \$	7,783
Synthetic Investment Contracts		174,149	170,933	171,144	172,210	171,367	172,203	172,701	172,991
Small Cap Stock Fund		91,564	94,865	90,111	94,714	95,102	97,183	92,852	96,962
Long Term Balanced Fund		14,384	15,119	14,509	14,315	15,140	15,168	15,121	15,666
Alaska Balanced Trust		51,030	51,987	50,662	50,895	52,237	51,569	51,165	52,738
AK Target Date 2010 Trust		3,023	3,053	3,074	3,109	3,232	3,359	3,326	3,521
AK Target Date 2015 Trust		9,771	9,945	10,263	10,426	10,030	10,387	10,168	10,530
AK Target Date 2020 Trust		13,775	14,430	14,543	14,458	15,243	15,026	14,770	15,291
AK Target Date 2025 Trust		6,875	7,139	7,042	7,443	7,687	7,467	7,408	7,869
AK Target Date 2030 Trust		4,534	4,464	4,607	4,730	4,873	5,065	5,218	5,626
AK Target Date 2035 Trust		3,136	3,096	3,023	3,069	3,154	3,120	3,113	3,299
AK Target Date 2040 Trust		2,896	3,050	3,015	3,008	3,099	3,220	3,105	3,271
AK Target Date 2045 Trust		1,611	1,681	1,698	1,753	1,883	1,858	1,908	2,160
AK Target Date 2050 Trust		1,250	1,334	1,340	1,376	1,430	1,467	1,906	1,957
AK Target Date 2055 Trust		1,909	2,051	2,054	2,241	2,108	2,218	2,252	2,791
State Street Global Advisors									
State Street Treasury Money Market Fund - Inst.		12,052	12,178	12,207	12,744	11,731	12,757	11,644	12,087
Russell 3000 Index		19,311	20,245	20,133	20,780	21,546	22,001	21,676	23,096
US Real Estate Investment Trust Index		11,351	10,968	10,187	11,543	12,040	12,835	16,652	15,108
World Equity Ex-US Index		8,973	9,177	8,627	8,562	8,575	8,247	8,413	9,052
Long US Treasury Bond Index		3,393	3,656	3,688	4,389	4,663	5,342	6,489	5,392
US Treasury Inflation Protected Securities Index		7,832	7,700	7,638	7,622	7,348	7,313	7,590	7,381
World Government Bond Ex-US Index		3,869	3,918	3,578	3,568	3,553	3,640	3,607	3,610
Global Balanced Fund		40,960	41,605	40,332	40,269	40,701	40,179	39,950	41,179
Investments with BlackRock									
S&P 500 Index Fund		171,771	176,659	175,469	179,072	184,228	182,350	177,251	185,084
Government/Credit Bond Fund		29,050	29,191	28,879	29,088	29,135	29,682	30,306	29,994
Intermediate Bond Fund		14,475	14,377	14,244	14,317	14,389	14,225	14,452	14,226
Investments with Brandes Institutional									
International Equity Fund Fee		49,285	49,171	47,081	45,820	46,219	43,864	43,397	47,383
Investments with RCM									
Sustainable Opportunities Fund		15,784	16,987	16,680	16,770	17,190	17,163	16,648	17,485
Total Invested Assets	\$	774,066 \$	788,302 \$	774,275 \$	787,358 \$	798,830 \$	798,722 \$	788,181 \$	813,533
Change in Invested Assets									
Beginning Assets	\$	785,487 \$	774,066 \$	788,302 \$	774,275 \$	787,358 \$	798,830 \$	798,722 \$	788,181
Investment Earnings		(11,707)	17,483	(14,335)	13,345	9,906	(1,107)	(7,120)	25,492
Net Contributions (Withdrawals)		287	(3,247)	308	(262)	1,566	1,000	(3,422)	(140)
Ending Invested Assets	\$	774,066 \$	788,302 \$	774,275 \$	787,358 \$	798,830 \$	798,722 \$	788,181 \$	813,533

Defined Contribution Retirement - Participant Directed PERS Schedule of Investment Income and Changes in Invested Assets for the Month Ended February 28, 2015

Interim Transit Account	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
	Assets	Investment income	(Withdrawals)	(Out)	Assets	Assets	micome (2)
Treasury Division (1)	ф 19.77 <i>с</i> 4 <i>с</i> 2 ф	1266 A	2 171 102 0	Φ.	20.052.020	11.500/	0.020/
Cash and Cash Equivalents	\$ 18,776,462 \$	4,366 \$	2,171,192 \$	\$	20,952,020	11.59%	0.02%
Participant Options							
T. Rowe Price	4 172 270	22	(121 100)	24.056	4.075.259	-2.33%	0.00%
Alaska Money Market	4,172,370 50,641,112	32 2,851,313	(121,100) 353,760	24,056	4,075,358 52,927,650	-2.33% 4.52%	5.66%
Small Cap Stock Fund Alaska Balanced Trust	1,774,315	2,831,313 27,919	(98,361)	(918,535) (47,504)	1,656,369	-6.65%	1.64%
Long Term Balanced Fund	23,816,974	758,994	129,692	319,640	25,025,300	-0.03% 5.07%	3.16%
AK Target Date 2010 Trust	1,755,706	42,548	15,761	(2,974)	1,811,041	3.15%	2.41%
AK Target Date 2010 Trust AK Target Date 2015 Trust	7,516,808	225,876	140,207	(12,218)	7,870,673	4.71%	2.98%
AK Target Date 2013 Trust AK Target Date 2020 Trust	15,556,257	554,455	369,512	(65,486)	16,414,738	5.52%	3.53%
AK Target Date 2020 Trust AK Target Date 2025 Trust	22,117,197	893,416	467,130	(23,191)	23,454,552	6.05%	4.00%
AK Target Date 2023 Trust AK Target Date 2030 Trust	22,734,862	1,010,790	527,453	66,733	24,339,838	7.06%	4.39%
AK Target Date 2030 Trust AK Target Date 2035 Trust	26,017,016	1,248,048	683,824	(30,337)	27,918,551	7.31%	4.74%
AK Target Date 2003 Trust AK Target Date 2040 Trust	32,374,958	1,640,386	547,974	(194,133)	34,369,185	6.16%	5.04%
AK Target Date 2040 Trust AK Target Date 2045 Trust	39,424,352	2,001,968	797,673	10,112	42,234,105	7.13%	5.03%
AK Target Date 2050 Trust AK Target Date 2050 Trust	45,959,489	2,330,429	1,077,735	(214,494)	49,153,159	6.95%	5.02%
AK Target Date 2055 Trust AK Target Date 2055 Trust	24,660,187	1,254,457	780,739	56,832	26,752,215	8.48%	5.00%
Total Investments with T. Rowe Price	318,521,603	14,840,631	5,671,999	(1,031,499)	338,002,734	0.4070	3.0070
State Street Global Advisors		11,010,001	5,071,555	(1,001,199)	220,002,72		
Money Market	1,411,603		(2,418)	57,965	1,467,150	3.94%	0.00%
S&P 500 Stock Index Fund Series A	33,278,821	1,907,843	274,723	(313,510)	35,147,877	5.62%	5.74%
Russell 3000 Index	36,260,109	2,093,054	218,521	(363,057)	38,208,627	5.37%	5.78%
US Real Estate Investment Trust Index	8,483,302	(301,967)	56,658	(142,731)	8,095,262	-4.57%	-3.58%
World Equity Ex-US Index	23,436,306	1,355,726	149,388	141,520	25,082,940	7.03%	5.75%
Long US Treasury Bond Index	842,424	(49,124)	2,368	(110,501)	685,167	-18.67%	-6.23%
US Treasury Inflation Protected Securities Index	3,517,155	(42,118)	16,814	155,306	3,647,157	3.70%	-1.17%
World Government Bond Ex-US Index	6,380,400	(63,632)	28,087	517,623	6,862,478	7.56%	-0.96%
Global Balanced Fund	17,085,782	538,452	109,236	1,708,359	19,441,829	13.79%	2.99%
Total Investments with SSGA	130,695,902	5,438,234	853,377	1,650,974	138,638,487	13.79/0	2.99/0
BlackRock					,,		
Government/Credit Bond Fund	32,865,379	(398,719)	143,337	1,705,134	34,315,131	4.41%	-1.18%
Intermediate Bond Fund	525,491	(4,352)	9,456	(52,605)	477,990	-9.04%	-0.86%
Total Investments with Barclays Global Investors	33,390,870	(403,070)	152,793	1,652,529	34,793,121	-2.0470	-0.0070
·	33,370,870	(403,070)	132,773	1,032,327	34,773,121		
Brandes Institutional							
International Equity Fund Fee	39,428,289	3,290,159	285,894	(2,082,470)	40,921,872	3.79%	8.54%
RCM Systematical Core Opportunities Fund	A 650 5AA	217 100	51 716	(190 524)	4 721 925	1.700/	4.740/
Sustainable Core Opportunities Fund	4,652,544	217,109	51,716	(189,534)	4,731,835	1.70%	4.74%
Total All Funds	\$ 545,465,670 \$	23,387,428 \$	9,186,971 \$	- \$	578,040,069	5.97%	4.25%

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

⁽²⁾ Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

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 28, 2015 \$ (Thousands)

<u>Invested Assets</u> (at fair value)		July	August	September	October	November	December	January	February
Investments with Treasury Division									
Cash and cash equivalents	\$	7,897 \$	5,808 \$	5,373	\$ 5,236 \$	5,382 \$	5,218 \$	18,776 \$	20,952
Investments with T. Rowe Price									
Alaska Money Market		3,930	4,288	4,086	4,278	4,288	4,295	4,172	4,075
Small Cap Stock Fund		48,943	49,624	47,625	51,757	52,420	53,652	50,641	52,928
Alaska Balanced Trust		1,689	1,637	1,630	1,692	1,742	1,737	1,774	1,656
Long Term Balanced Fund		22,623	23,171	22,704	22,883	23,137	23,077	23,817	25,025
AK Target Date 2010 Trust		1,599	1,662	1,664	1,734	1,754	1,756	1,756	1,811
AK Target Date 2015 Trust		6,655	6,911	6,917	7,097	7,347	7,490	7,517	7,871
AK Target Date 2020 Trust		13,660	14,223	14,193	14,694	15,078	15,463	15,556	16,415
AK Target Date 2025 Trust		19,184	20,117	20,135	20,892	21,584	22,005	22,117	23,455
AK Target Date 2030 Trust		19,606	20,623	20,620	21,502	22,202	22,683	22,735	24,340
AK Target Date 2035 Trust		22,377	23,489	23,492	24,593	25,642	26,082	26,017	27,919
AK Target Date 2040 Trust		28,517	30,017	29,672	31,001	32,147	32,673	32,375	34,369
AK Target Date 2045 Trust		34,393	36,233	35,974	37,617	39,025	39,677	39,424	42,234
AK Target Date 2050 Trust		39,991	42,129	41,842	43,655	45,262	46,078	45,959	49,153
AK Target Date 2055 Trust		19,592	21,055	21,323	22,606	23,711	24,430	24,660	26,752
State Street Global Advisors									
Money Market		1,093	1,230	1,254	1,334	1,250	1,403	1,412	1,467
S&P 500 Stock Index Fund Series A		35,743	37,537	36,317	35,940	35,515	34,657	33,279	35,148
Russell 3000 Index		34,232	36,919	36,677	37,664	38,462	38,089	36,260	38,209
US Real Estate Investment Trust Index		6,980	7,262	6,882	7,638	7,845	7,918	8,483	8,095
World Equity Ex-US Index		26,247	25,389	23,409	23,258	23,489	23,123	23,436	25,083
Long US Treasury Bond Index		508	605	567	526	588	641	842	685
US Treasury Inflation Protected Securities Index		3,085	3,096	2,998	2,993	3,034	3,136	3,517	3,647
World Government Bond Ex-US Index		5,694	5,730	5,540	5,551	5,692	5,919	6,380	6,862
Global Balanced Fund		11,522	11,724	11,729	12,632	13,992	15,341	17,086	19,442
Investments with BlackRock									
Government/Credit Bond Fund		28,182	28,517	28,231	28,414	29,203	30,151	32,865	34,315
Intermediate Bond Fund		412	425	412	448	456	560	525	478
Investments with Brandes Institutional									
International Equity Fund Fee		39,596	41,627	40,971	41,319	42,617	40,892	39,428	40,922
Investments with RCM									
Sustainable Opportunities Fund		4,705	4,840	4,776	4,971	5,129	5,036	4,653	4,732
Total Invested Assets	\$	488,654 \$	505,891 \$	497,013		527,991 \$	533,184 \$	545,466 \$	578,040
Change in Invested Assets									
Beginning Assets	\$	491,616 \$	488,654 \$	505,891	\$ 497,013 \$	513,927 \$	527,991 \$	533,184 \$	545,466
Investment Earnings	•	(9,423)	13,087	(13,911)	9,197	7,393	(4,088)	(5,571)	23,387
Net Contributions (Withdrawals)		6,462	4,149	5,034	7,717	6,672	9,280	17,853	9,187
Ending Invested Assets	\$	488,654 \$	505,891 \$	497,013	\$ 513,927 \$	527,991 \$	533,184 \$	545,466 \$	578,040

Defined Contribution Retirement - Participant Directed TRS Schedule of Investment Income and Changes in Invested Assets for the Month Ended February 28, 2015

Interim Transit Account	Beginning Invested Assets	Investment Income	Net Contributions (Withdrawals)	Transfers In (Out)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
	Assets	Investment income	(Withurawais)	(Out)	Assets	Assets	mcome (2)
Treasury Division (1)	ф (200 cc2 ф	1.207 ((44.202) A	Φ.	6.057.666	0.600/	0.020/
Cash and Cash Equivalents	\$ 6,300,663 \$	1,385 \$	(44,382) \$	\$	6,257,666	-0.68%	0.02%
Participant Options							
T. Rowe Price	1 722 562	1.4	20.540	(0.556)	1 742 560	0.640/	0.000/
Alaska Money Market	1,732,562	14	20,549	(9,556)	1,743,569	0.64%	0.00%
Small Cap Stock Fund	20,578,380	1,155,774	126,068	(368,588)	21,491,634	4.44%	5.65%
Alaska Balanced Trust	424,360	6,975	10,139	12,444	453,918	6.97%	1.60%
Long Term Balanced Fund	11,946,065	380,441	71,776	(5,483)	12,392,799	3.74%	3.18%
AK Target Date 2010 Trust	468,354	11,395	6,986	-	486,735	3.92%	2.41%
AK Target Date 2015 Trust	2,197,961	66,201	(3,275)	-	2,260,887	2.86%	3.01%
AK Target Date 2020 Trust	4,761,960	169,614	98,857	-	5,030,431	5.64%	3.53%
AK Target Date 2025 Trust	7,007,962	283,307	145,819	-	7,437,088	6.12%	4.00%
AK Target Date 2030 Trust	7,526,230	334,825	171,062	-	8,032,117	6.72%	4.40%
AK Target Date 2035 Trust	11,620,419	554,493	170,237	- (640)	12,345,149	6.24%	4.74%
AK Target Date 2040 Trust	12,325,952	625,477	278,628	(649)	13,229,408	7.33%	5.02%
AK Target Date 2045 Trust	20,995,094	1,062,937	364,631	(10.171)	22,422,662	6.80%	5.02%
AK Target Date 2050 Trust	28,659,946	1,452,975	501,780	(19,171)	30,595,530	6.75%	5.03%
AK Target Date 2055 Trust	6,349,648	324,938	301,615	(201,002)	6,976,201	9.87%	5.00%
Total Investments with T. Rowe Price	136,594,893	6,429,366	2,264,872	(391,003)	144,898,128		
State Street Global Advisors							
Money Market	168,296	-	2,093	42,522	212,911	26.51%	0.00%
S&P 500 Stock Index Fund Series A	11,196,090	643,904	86,438	43,104	11,969,536	6.91%	5.72%
Russell 3000 Index	15,563,031	896,511	93,554	(300,392)	16,252,704	4.43%	5.80%
US Real Estate Investment Trust Index	2,709,536	(94,268)	18,462	(143,393)	2,490,337	-8.09%	-3.56%
World Equity Ex-US Index	9,007,865	520,579	56,388	89,623	9,674,455	7.40%	5.73%
Long US Treasury Bond Index	153,217	(8,137)	2,213	4,556	151,849	-0.89%	-5.20%
US Treasury Inflation Protected Securities Index	1,410,668	(16,704)	9,099	68,271	1,471,334	4.30%	-1.15%
World Government Bond Ex-US Index	3,141,334	(31,139)	20,007	178,791	3,308,993	5.34%	-0.96%
Global Balanced Fund	9,580,834	298,795	58,564	626,511	10,564,704	10.27%	3.01%
Total Investments with SSGA	52,930,871	2,209,542	346,818	609,593	56,096,823		
BlackRock							
Government/Credit Bond Fund	16,171,088	(197,151)	90,812	644,520	16,709,269	3.33%	-1.19%
Intermediate Bond Fund	105,131	(905)	1,474	044,320	105,700	0.54%	-0.85%
Total Investments with Barclays Global Investors	16,276,219	(198,056)	92,286	644,520	16,814,969	0.5470	-0.0370
Total investments with Baretays Global investors	10,270,217	(170,030)	72,200	044,320	10,014,707		
Brandes Institutional							
International Equity Fund Fee	15,737,491	1,311,224	95,911	(850,437)	16,294,189	3.54%	8.54%
RCM							
Sustainable Core Opportunities Fund	1,164,749	54,716	12,262	(12,673)	1,219,054	4.66%	4.70%
Total All Funds	\$ 229,004,886 \$	9,808,176 \$	2,767,767 \$	- \$	241,580,829	5.49%	4.26%

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

⁽²⁾ Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.

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 28, 2015 \$ (Thousands)

Invested Assets (at fair value)		July	August	September	October	November	December	January	February
Investments with Treasury Division									
Cash and cash equivalents	\$	1,936 \$	1,915 \$	2,028 \$	1,923 \$	2,068 \$	1,860 \$	6,301 \$	6,258
Investments with T. Rowe Price									
Alaska Money Market		1,594	1,601	1,563	1,561	1,577	1,760	1,733	1,744
Small Cap Stock Fund		19,566	19,689	18,940	20,961	21,448	21,879	20,578	21,492
Alaska Balanced Trust		263	254	248	258	280	292	424	454
Long Term Balanced Fund		11,630	11,937	11,707	11,748	11,830	11,806	11,946	12,393
AK Target Date 2010 Trust		511	522	459	453	456	463	468	487
AK Target Date 2015 Trust		2,064	2,100	2,087	2,163	2,191	2,228	2,198	2,261
AK Target Date 2020 Trust		4,680	4,696	4,409	4,591	4,751	4,837	4,762	5,030
AK Target Date 2025 Trust		6,313	6,480	6,302	6,536	6,787	6,889	7,008	7,437
AK Target Date 2030 Trust		6,884	7,093	6,801	7,068	7,352	7,499	7,526	8,032
AK Target Date 2035 Trust		10,355	10,627	10,441	10,926	11,348	11,563	11,620	12,345
AK Target Date 2040 Trust		11,347	11,585	11,310	11,750	12,137	12,308	12,326	13,229
AK Target Date 2045 Trust		19,671	20,021	19,519	20,241	20,967	21,135	20,995	22,423
AK Target Date 2050 Trust		26,464	27,072	26,380	27,492	28,443	28,773	28,660	30,596
AK Target Date 2055 Trust		5,114	5,251	5,229	5,618	5,923	6,224	6,350	6,976
State Street Global Advisors									
Money Market		111	159	167	158	111	136	168	213
S&P 500 Stock Index Fund Series A		12,900	13,305	12,635	12,283	11,902	11,571	11,196	11,970
Russell 3000 Index		15,430	16,563	16,273	16,570	16,766	16,393	15,563	16,253
US Real Estate Investment Trust Index		2,538	2,519	2,380	2,621	2,719	2,694	2,710	2,490
World Equity Ex-US Index		11,016	10,507	9,538	9,293	9,220	8,917	9,008	9,674
Long US Treasury Bond Index		99	101	100	104	121	133	153	152
US Treasury Inflation Protected Securities Index		1,233	1,248	1,228	1,240	1,251	1,257	1,411	1,471
World Government Bond Ex-US Index		2,779	2,836	2,742	2,772	2,834	2,945	3,141	3,309
Global Balanced Fund		6,824	6,802	6,880	7,512	8,172	8,818	9,581	10,565
Investments with BlackRock									
Government/Credit Bond Fund		13,781	13,989	13,929	13,925	14,306	14,839	16,171	16,709
Intermediate Bond Fund		89	94	94	92	102	104	105	106
Investments with Brandes Institutional		**							
International Equity Fund Fee		15,356	16,041	15,854	16,311	17,060	16,372	15,737	16,294
Investments with RCM		,	,	,	,	,	,		,
Sustainable Opportunities Fund		1,186	1,183	1,150	1,228	1,265	1,233	1,165	1,219
Total Invested Assets	\$	211,734 \$	216,191 \$	210,392 \$	217,397 \$	223,389 \$	224,928 \$	229,005 \$	241,581
Change in Invested Assets									
Beginning Assets	\$	215,005 \$	211,734 \$	216,191 \$	210,392 \$	217,397 \$	223,389 \$	224,928 \$	229,005
Investment Earnings	7	(4,029)	5,608	(5,871)	3,802	3,085	(1,783)	(2,351)	9,808
Net Contributions (Withdrawals)		757	(1,151)	72	3,202	2,908	3,322	6,428	2,768
Ending Invested Assets	\$	211,734 \$	216,191 \$	210,392 \$	217,397 \$	223,389 \$	224,928 \$	229,005 \$	241,581

Notes for the DRB Supplement to the Treasury Report February 2015

This report is the DRB supplement to the Financial Report presented by the Treasury Division, and expands their "Net Contributions (Withdrawals)" column into contributions and expenditures. It shows contributions received from both employers and employees, contributions from the State of Alaska, and other non-investment income. It also breaks out expenditures into benefits, refunds, and administrative & investment expenditures. The net amount of total contributions and total expenditures, presented as "Net Contributions (Withdrawals)", agrees to the same column in Treasury's report. Page one shows the year-to-date totals for the first eight months of Fiscal Year 2015, while page two shows only the month of February 2015.

Highlights: On page one, for the eight months ending February 28, 2015:

- Looking at the contributions column: during the first eight months of the fiscal year we have received in excess of \$684 million in contributions from employees and employers. The TRS Occupational Death and Disability fund shows a negative \$9 in contributions despite a zero contribution rate because we continue to accept late adjustment records from employers for FY12.
- State of Alaska: the second of three install payments was received in November from the State of Alaska towards the \$3 billion in employer on-behalf funding for FY2015. The third and final installment was received in March.
- Other income is showing a total of \$40.2 million. This includes \$9.3 million in Medicare Retiree Drug Subsidies, \$6.0 million in Aetna prescription drug rebates, \$5.0 million in HealthSmart Envision prescription drug rebates, and \$19.4 million in operating cash transferred in from Empower money market accounts.
- Of the expenditures: roughly \$1.043 billion has paid out in benefits during the first eight months of FY2015, 70% for pension payments to retirees in the PERS, TRS, or JRS plans, while 30% was spent to provide medical care for those retirees, survivors, and/or their dependents.
- Refunds: we processed \$8.3 million in defined benefit refunds. We also processed \$172 million in disbursements from the 4 participant directed plans, which is the intended benefit of these plans. 84% of this was paid from the Supplemental Annuity and Deferred Compensation plans, both of which are fully mature plans (total disbursements are equivalent to about 101% of contributions).
- Total administrative and investment expenses so far this year were just over \$66 million. About 10% of this was used to pay staff within DRB and Treasury, while most of the rest was for investment managers, third-party administrators, and record-keepers.

On page two, we see activity for the month of February only.

If you have any questions or comments, please let me know.

ALASKA RETIREMENT MANAGEMENT BOARD

FINANCIAL REPORT
(Supplement to the Treasury Division Report)

As of February 28, 2015

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 28, 2015

Contributions Total Administrative Total	
	Contributions/
EE and ER State of Alaska Other Contributions Benefits Refunds & Investment Expenditures	(Withdrawals)
Public Employees' Retirement System (PERS)	
Defined Benefit Plans:	
Retirement Trust \$ 222,465,494 \$ 666,666,666 \$ 9,362 \$ 889,141,522 \$ (451,367,270) \$ (6,606,761) \$ (29,229,721) \$ (487,203,752)	\$ 401,937,770
Retirement Health Care Trust 119,967,329 - 15,668,130 135,635,459 (233,016,211) - (9,839,390) (242,855,601)	(107,220,142)
Total Defined Benefit Plans 342,432,823 666,666,666 15,677,492 1,024,776,981 (684,383,481) (6,606,761) (39,069,111) (730,059,353)	294,717,628
Defined Contribution Plans:	
Participant Directed Retirement 76,636,901 - 13,429,334 90,066,235 - (20,972,697) (2,739,259) (23,711,956)	66,354,279
Health Reimbursement Arrangement (a) 19,940,723 19,940,723 (6) (6)	19,940,717
Retiree Medical Plan ^(a) 9,027,902 9,027,902 (10,654) (10,654)	9,017,248
Occupational Death and Disability: (a)	- , , -
Public Employees 1,117,283 1,117,283 (134,658) - (5,595) (140,253)	977.030
Police and Firefighters 740,924 740,924 (72,440) - (5,595) (78,035)	662,889
Total Defined Contribution Plans 107,463,733 - 13,429,334 120,893,067 (207,098) (20,972,697) (2,761,109) (23,940,904)	96,952,163
Total PERS 449,896,556 666,666,666 29,106,826 1,145,670,048 (684,590,579) (27,579,458) (41,830,220) (754,000,257)	391,669,791
Teachers' Retirement System (TRS)	
Defined Benefit Plans:	
Retirement Trust 43,772,561 1,108,466,667 5,224 1,152,244,452 (276,134,283) (1,675,417) (11,982,251) (289,791,951)	862,452,501
Retirement Health Care Trust 14,687,981 224,866,667 5,079,225 244,633,873 (74,216,587) - (3,584,297) (77,800,884)	166,832,989
Total Defined Benefit Plans 58,460,542 1.333,333.334 5.084,449 1.396,878.25 (350,350,870) (1.675,417) (15.566,548) (367,5592,835)	1,029,285,490
Defined Contribution Plans:	
Participant Directed Retirement 21,970,002 - 4,451,345 26,421,347 - (7,252,429) (862,938) (8,115,367)	18,305,980
Health Reimbursement Arrangement (a) 4,473,929 4,473,929	4,473,929
Retiree Medical Plan ^(a) 2,733,962 2,733,962 (11,049) (11,049)	2,722,913
Occupational Death and Disability (a) (9) (6,387) (6,387)	(6,396)
Total Defined Contribution Plans 29,177,884 - 4,451,345 33,629,229 - (7,252,429) (880,374) (8,132,803)	25,496,426
Total TRS 87,638,426 1,333,333,334 9,535,794 1,430,507,554 (350,350,870) (8,927,846) (16,446,922) (375,725,638)	1,054,781,916
Judicial Retirement System (JRS)	
Defined Benefit Plan Retirement Trust 3,722,853 5,241,619 - 8,964,472 (7,065,214) - (321,277) (7,386,491)	1,577,981
Defined Benefit Retirement Health Care Trust 359,023 - 49,301 408,324 (397,244) - (51,120) (448,364)	(40,040)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,537,941
	<i>p p</i>
National Guard/Naval Militia Retirement System (NGNMRS)	
Defined Benefit Plan Retirement Trust (a) 627,300 627,300 (1,085,281) - (219,136) (1,304,417)	(677,117)
Od an Prostation of Physical P	
Other Participant Directed Plans Supplemental Annuity Plan 114,251,489 - 1,500,034 115,751,523 - (112,926,465) (6,705,040) (119,631,505)	(2.970.092)
Supplemental Annuity Plan 114,251,489 - 1,500,034 115,751,523 - (112,926,465) (6,705,040) (119,631,505)	(3,879,982)
Deferred Compensation Plan 27,706,997 27,706,997 - (30,810,304) (807,424) (31,617,728)	(3,910,731)
Total All Funds 684,202,644 2,005,241,619 40,191,955 2,729,636,218 (1,043,489,188) (180,244,073) (66,381,139) (1,290,114,400)	1,439,521,818
Total Non-Participant Directed 443,637,255 2,005,241,619 20,811,242 2,469,690,116 (1,043,489,188) (8,282,178) (55,266,478) (1,107,037,844)	1,362,652,272
Total Participant Directed 240,565,389 - 19,380,713 259,946,102 - (171,961,895) (11,114,661) (183,076,556)	76,869,546
Total All Funds \$ 684,202,644 \$ 2,005,241,619 \$ 40,191,955 \$ 2,729,636,218 \$ (1,043,489,188) \$ (180,244,073) \$ (66,381,139) \$ (1,290,114,400)	\$ 1,439,521,818

⁽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 28, 2015

		Contributio	ons				Expendit	ures		Net
	Contributions			Total			•	Administrative	Total	Contributions/
	EE and ER	State of Alaska	Other	Contributions		Benefits	Refunds	& Investment	Expenditures	(Withdrawals)
Public Employees' Retirement System (PERS)										
Defined Benefit Plans:						· · · · · · · · · · · · · · · · · · ·	(400 = 40)		(***********	
Retirement Trust	\$ 33,369,474	\$ - \$	1,299 \$		\$	(54,246,991) \$	(628,743)		(63,313,229)	\$ (29,942,456)
Retirement Health Care Trust Total Defined Benefit Plans	17,610,479 50,979,953		210 1,509	17,610,689 50,981,462		(28,586,652) (82,833,643)	(628,743)	(416,431) (8,853,926)	(29,003,083) (92,316,312)	(11,392,394) (41,334,850)
Total Defined Benefit Flans	30,979,933	-	1,309	30,961,402		(02,033,043)	(020,743)	(0,033,920)	(92,310,312)	(41,334,630)
Defined Contribution Plans:										
Participant Directed Retirement	12,344,865	_	_	12,344,865		_	(2,625,793)	(532,101)	(3,157,894)	9,186,971
Health Reimbursement Arrangement (a)	3,163,494		_	3,163,494			_			3,163,494
Retiree Medical Plan (a)	1,511,543			1,511,543				(3,334)	(3,334)	1,508,209
	1,311,343	-	-	1,511,545		-	-	(3,334)	(5,554)	1,306,209
Occupational Death and Disability: (a)	101.020			101.020		(5.420)		(2.224)	(0.754)	172 205
Public Employees Police and Firefighters	181,039 97,263	-	-	181,039		(5,420)	-	(3,334)	(8,754)	172,285 79,009
Total Defined Contribution Plans	17,298,204		-	97,263 17,298,204		(14,920) (20,340)	(2,625,793)	(542,103)	(3,188,236)	14,109,968
Total PERS	68,278,157	-	1,509	68,279,666		(82,853,983)	(3,254,536)	(9,396,029)	(95,504,548)	(27,224,882)
Tour Line	00,270,127		1,505	00,277,000		(02,023,703)	(3,234,330)	(3,330,023)	(75,504,540)	(27,224,002)
Teachers' Retirement System (TRS)										
Defined Benefit Plans:										
Retirement Trust	6,792,912	_	414	6,793,326		(33,339,616)	(130,314)	(3,508,465)	(36,978,395)	(30,185,069)
Retirement Health Care Trust	2,395,241	-	-	2,395,241		(9,193,394)	-	(159,397)	(9,352,791)	(6,957,550)
Total Defined Benefit Plans	9,188,153	-	414	9,188,567		(42,533,010)	(130,314)	(3,667,862)	(46,331,186)	(37,142,619)
Defined Contribution Plans:										
Participant Directed Retirement	3,554,430	-	-	3,554,430		-	(644,775)	(141,887)	(786,662)	2,767,768
Health Reimbursement Arrangement (a)	716,377	-	-	716,377		-	-	-	-	716,377
Retiree Medical Plan (a)	469,318	-	-	469,318		-	-	(3,171)	(3,171)	466,147
Occupational Death and Disability (a)	_	_	_	_			_	(3,171)	(3,171)	(3,171)
Total Defined Contribution Plans	4,740,125	-	-	4,740,125		-	(644,775)	(148,229)	(793,004)	3,947,121
Total TRS	13,928,278	-	414	13,928,692		(42,533,010)	(775,089)	(3,816,091)	(47,124,190)	(33,195,498)
Judicial Retirement System (JRS)										
Defined Benefit Plan Retirement Trust	476,470	-	-	476,470		(858,667)	-	(108,223)	(966,890)	(490,420)
Defined Benefit Retirement Health Care Trust	31,595	-	-	31,595		(41,432)	-	(11,937)	(53,369)	(21,774)
Total JRS	508,065	•	-	508,065		(900,099)	-	(120,160)	(1,020,259)	(512,194)
National Guard/Naval Militia Retirement System (NGNMRS)										
Defined Benefit Plan Retirement Trust (a)		-	-	-		(140,672)	-	(42,370)	(183,042)	(183,042)
Other Participant Directed Plans										
Supplemental Annuity Plan	14,048,424	-	250,002	14,298,426	-	-	(10,933,221)	(1,435,535)	(12,368,756)	1,929,670
D.C. LO N	2.022.606			2.022.606			(2.00<.20<)	(77.704)	(4.052.010)	(140.224)
Deferred Compensation Plan	3,923,686	-	-	3,923,686		-	(3,986,206)	(77,704)	(4,063,910)	(140,224)
TO A LAND TO T	100 (0) (10		251 025	100 020 525		(10 < 40 = = < 4)	(10.040.053)	(1.4.00 = 0.00)	(160.264.505)	(50.226.150)
Total All Funds	100,686,610	-	251,925	100,938,535		(126,427,764)	(18,949,052)	(14,887,889)	(160,264,705)	(59,326,170)
Total Non-Participant Directed	66,815,205		1,923	66,817,128		(126,427,764)	(759,057)	(12,700,662)	(139,887,483)	(73,070,355)
Total Participant Directed Total Participant Directed	33,871,405	-	1,923 250,002	34,121,407		(120,427,704)	(18,189,995)	(2,187,227)	(20,377,222)	13,744,185
Total Participant Directed Total All Funds	\$ 100,686,610	\$ - \$	251,925 \$		\$	(126,427,764) \$	(18,949,052)			\$ (59,326,170)
Total All Pullus	Ψ 100,000,010	- ф	<i>2</i> 01,720 ₽	100,730,333	φ	(140,741,104) Þ	(10,747,034)	, (17,007,007) Þ	(100,404,703)	ψ (59,520,170)

⁽a) Employer only contributions.

Notes for the DRB Supplement to the Treasury Report December 2014

This report is the DRB supplement to the Financial Report presented by the Treasury Division, and expands their "Net Contributions (Withdrawals)" column into contributions and expenditures. It shows contributions received from both employers and employees, contributions from the State of Alaska, and other non-investment income. It also breaks out expenditures into benefits, refunds, and administrative & investment expenditures. The net amount of total contributions and total expenditures, presented as "Net Contributions (Withdrawals)", agrees to the same column in Treasury's report. Page one shows the year-to-date totals for the first six months of Fiscal Year 2015, while page two shows only the month of December 2014.

Highlights: On page one, for the six months ending December 31, 2014:

- Looking at the contributions column: during the first half of the year we have received in excess of \$509 million in contributions from
 employees and employers. This includes the annual payment for the National Guard fund. The TRS Occupational Death and Disability
 fund shows a negative \$9 in contributions despite a zero contribution rate because we continue to accept late adjustment records
 from employers for FY12.
- State of Alaska: the second of three install payments has been received from the State of Alaska towards the \$3 billion in employer on-behalf funding for FY2015. As you can see, the PERS portion is allocated only to the DB Pension fund, while the TRS portion is divided between the DB Pension and DB Health Care funds. Also, \$5.2 million in State funding for the JRS Pension fund was received.
- Other income is showing a total of \$15.3 million. This is primarily \$9.3 million in preliminary Medicare Retired Drug Subsidies for calendar year 2014, plus \$6.0 million in Aetna prescription drug rebates.
- Of the expenditures: roughly \$781 million has been paid out in benefits during the first six months of FY2015, 71% for pension payments to retirees in the PERS, TRS, or JRS plans, while 29% was spent to provide medical care for those retirees, survivors, and/or their dependents.
- Refunds: we processed \$6.7 million in defined benefit refunds. We also processed \$127 million in disbursements from the 4 participant directed plans, which is the intended benefit of these plans. 83% of this was paid from the Supplemental Annuity and Deferred Compensation plans, both of which are fully mature plans (total disbursements are equivalent to about 99% of contributions).
- Total administrative and investment expenses so far this year were just over \$44 million. About 11% of this was used to pay staff within DRB and Treasury, while most of the rest was for investment managers, third-party administrators, and record-keepers.

On page two, we see activity for the month of December only.



ALASKA RETIREMENT MANAGEMENT BOARD

Private Equity 2015 Tactical Plan

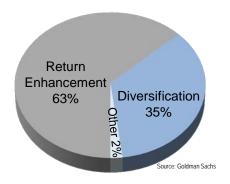
Staff Summary and Overview

ARMB Private Equity Program

- Private Equity Overview
- Market Review
- ARMB Portfolio
- Diversification
- 2014 Commitments
- 2015 Outlook & Tactical Plan

Overview – Private Equity Investment

- Private equity unregistered investments in operating companies.
- Why do fund sponsors invest in private equity?



Private equity is expected to deliver long-term returns in excess of the public markets.

Private Equity Returns through September 30, 2014

Investment Type	5 Years	10 Years	20 Years
Venture Capital & Growth Equity	15.0%	11.2%	22.0%
Buyouts	15.5%	14.0%	13.4%
All Private Equity	14.9%	13.0%	14.6%
Russell 3000	15.8%	8.4%	9.8%

NOTES:

Source: Thompson Reuters/Cambridge Associates - The private equity returns are pooled IRRs across all regions and do not represent top quartile returns. All Private Equity includes buyout, venture capital, growth equity, mezzanine, distressed and energy funds. Russell 3000 returns are time-weighted and not directly comparable to IRR's.

Overview – Unique Characteristics

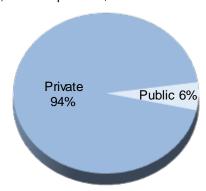
Positive Characteristics:

- 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

Other Characteristics:

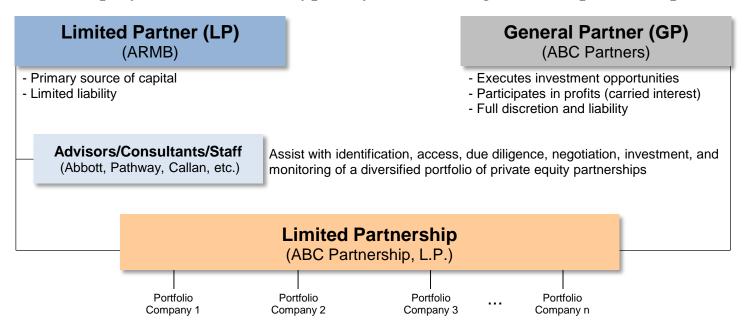
- Illiquid, long-term investments
- High fees and J-curve
- Potential for high leverage
- Portfolio transparency and valuation issues
- Incomplete data and benchmarks

Public and Private Companies: Hoovers 2012 57,428 Companies \$25+ million in Revenue

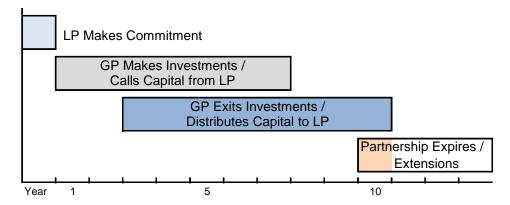


Overview – Structure

Private equity investments are typically made through limited partnerships:



Private equity liquidity and cash flow characteristics:



Overview – Primary Strategies

Private equity partnerships are classified into three primary groups:

Venture Capital Investments in companies developing new products and services. Value

creation focuses on managing entrepreneurial companies through high growth.

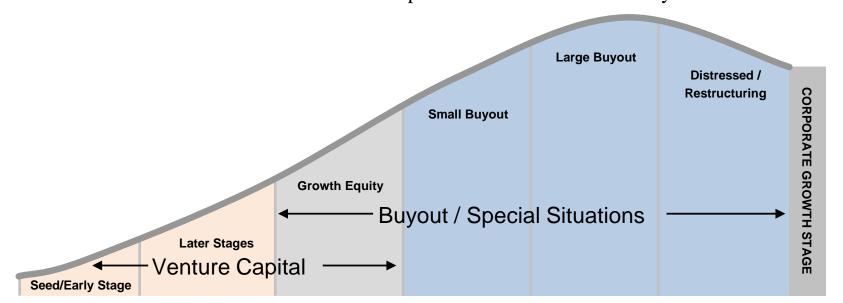
Buyout Control investments in more mature operating companies. Value creation

generally focuses on driving operational and capital structure efficiency.

Special Situations Generally buyout style investments with a specialty focus; including groups

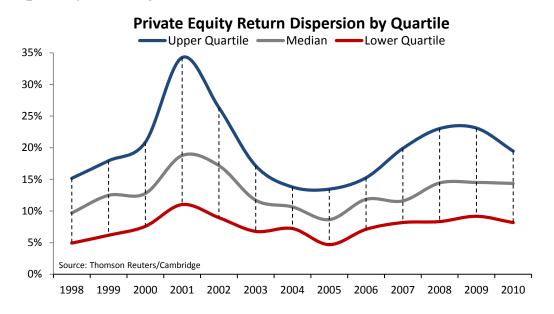
that have a specific industry, investment style, or capital structure focus.

Value creation focuses on specialized skills and efficiency.

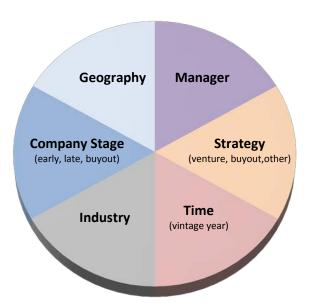


Private Equity Program Implementation

• Manager access, selection, and diligence are important. Investing consistently with high quality managers is critical.



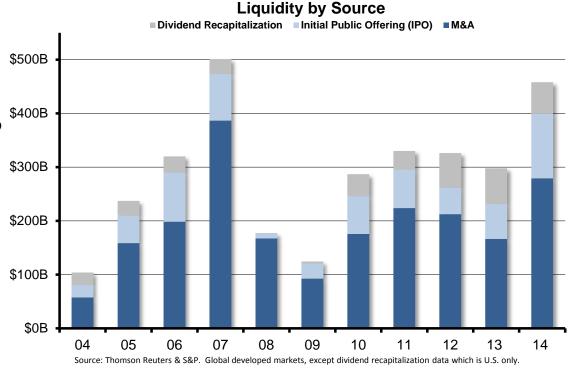
- Long-term diversification is important.
- The goal is to build a portfolio of quality partnerships diversified by strategy, industry, geography, investment stage, manager, and time.



Market – Exit Opportunities

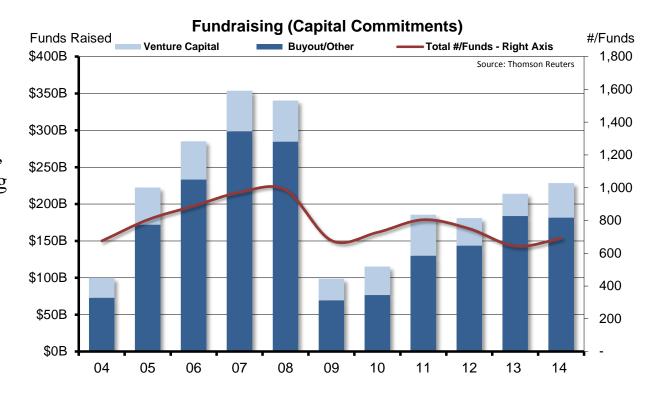
Private equity exit activity increased in 2014 and has been strong for five years.

- Merger and acquisition activity increased to \$278 billion.
- Public market exits increased to \$122 billion.
- The credit markets remain at high levels. Dividend recapitalizations were \$55 billion.



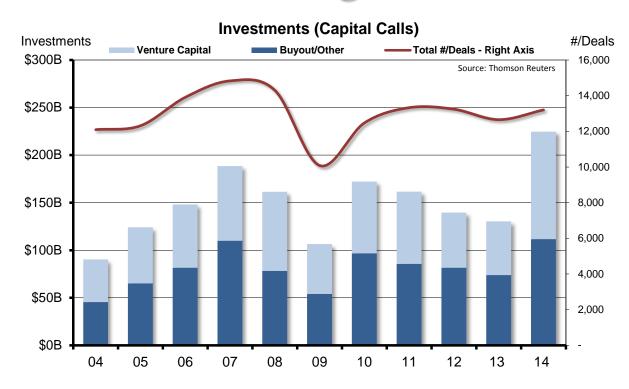
Market - Fundraising

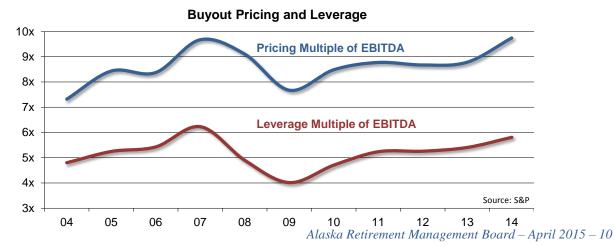
- Fundraising was stable, with a modest increase.
- Terms are still limited partner friendly and fund sizes are generally smaller, but the pace of fund raising has increased. Access to top managers is more challenging.
- There will be a continued reduction in poor performing general partnerships.



Market - Investing

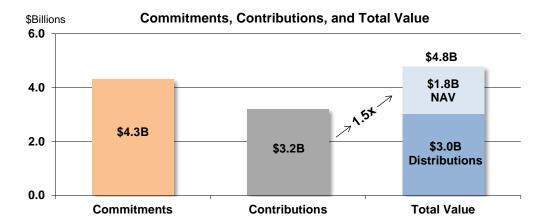
- Investment activity increased dramatically as credit markets were accommodative and market participants were willing to transact at high prices.
- Investment activity was roughly equal to fundraising levels dry powder remained the same overall, but increased for buyout and decreased for venture capital.
- Deal pricing and leverage are at or near historical highs, which is a concern.





ARMB Portfolio Performance

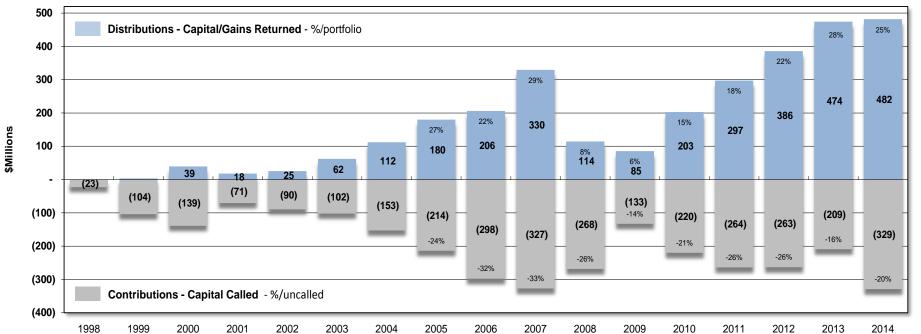
- The ARMB directly invests in private equity and uses gatekeepers, Abbott Capital Management (1998) and Pathway Capital Management (2001). The allocation has increased from 3% to 9% and is expected to rise to 10% over the next ten years.
- Private equity has been volatile since the ARMB first invested in 1998. Technology and venture capital excesses 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 market 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 twelve vintage years through 2009 two were top quartile and 10 were second quartile. Overall the program is in the middle of the second quartile.
- Portfolio performance has been strong. The internal rate of return through 2014 is 11.1% versus a public market equivalent of 6.4% for the S&P 500 and 6.9% for the Russell 3000. The calendar year 2014 return for the portfolio was 18.1%.
- Since inception, the ARMB's private equity program has generated \$800 million in additional fund value compared to investing in the public equity markets.



Portfolio Cash Flows

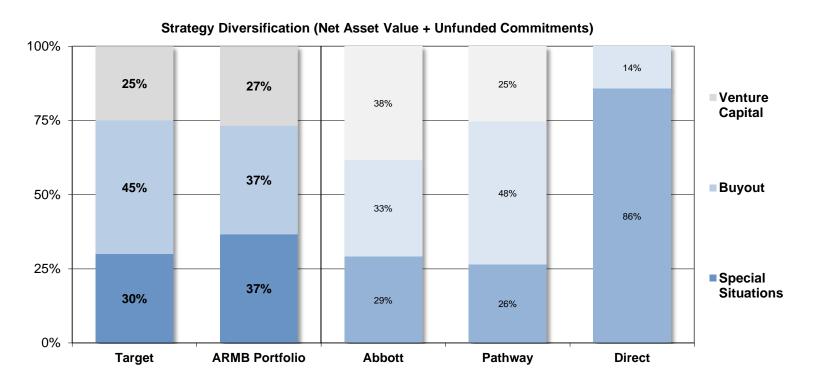
- Distributions increased slightly to \$482 million.
- Contributions increased 57% to \$329 million.
- Net cash flows were \$153 million, 9% of beginning assets.

ARMB Private Equity Cashflows



Diversification by Strategy

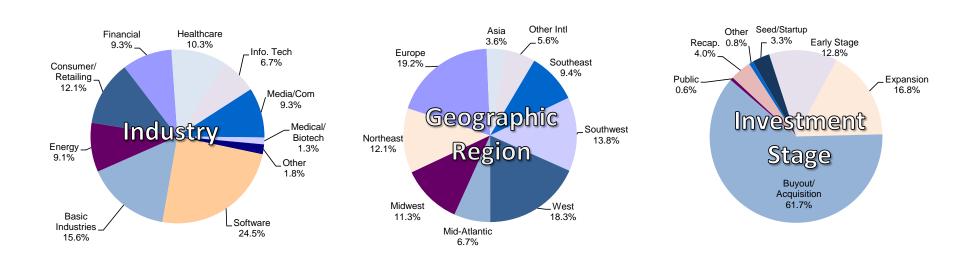
- The portfolio is well diversified by private equity strategy across buyout, special situations, and venture capital partnerships.
- Strategy exposure is well within policy bands.
- The direct partnership portfolio is weighted towards well diversified special situations investments.



Diversification by Portfolio Company

The portfolio is well diversified and composed of over 2,000 underlying companies:

- Industry The portfolio is well diversified by industry, with no sector making up more than 24.5% of the portfolio.
- Geographic Region The portfolio is well diversified geographically. International is 28.4% of the portfolio.
- Investment Stage By investment stage, buyout/acquisition is the highest at 61.7% due to the relatively high levels of activity by buyout and special situations funds.



2014 Commitments

- The commitment target for 2014 was \$450 million.
- \$593.8 million was committed during the year.
- \$176.7 million by Abbott, \$182.1 million by Pathway, and \$235.0 million directly.
- Commitments were well diversified by investment strategy.

Commitments for 2014 (\$millions)

	Target	Actual	Number of Investments	Investment Strategy						
Manager				Venture	%	Buyout	%	Special Situations	%	
Abbott	\$175.0	\$176.7	11	\$105.2	60%	\$31.5	18%	\$40.0	23%	
Pathway	\$175.0	\$182.1	15	\$14.0	8%	\$82.0	45%	\$86.1	47%	
Direct	\$100.0	\$235.0	5	\$0.0	0%	\$45.0	19%	\$190.0	81%	
Total	\$450.0	\$593.8	31	\$119.2	20%	\$158.5	27%	\$316.1	53%	

2015 Outlook

- Strong exit environment. The exit environment for private equity is expected to be strong. Mergers and acquisitions should continue due to high levels of corporate cash, supportive stock market valuations, and more modest internal growth prospects. The credit markets are accommodative due to yield-driven investors and the public equity market should also continue to be supportive.
- Continued fundraising recovery. Fundraising should continue to recover for tenured groups with strong track records since allocation issues for limited partners have lessened as private equity sponsors return capital. Getting access to the highest quality partnerships will continue to be challenging.
- **Brisk investment pace.** Absent a capital market pullback, the investment pace should remain at a high level since credit markets are accommodative and buyers are willing to transact at high prices. High deal pricing and high leverage are a concern and will likely be a headwind for returns on investments made during this period.

2015 Tactical Plan

- Staff is recommending a 2015 commitment target of \$499 million. \$187 million for Abbott and Pathway and \$125 million in direct partnership investments with a measured increase in commitment pacing over the planning horizon designed to reach a 10% asset allocation over the next ten years.
- Private equity is currently below its 9% asset allocation. The allocation will fluctuate over time, but is expected to stay well within the \pm 5% band.

Private Equity Funding Schedule	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning Fund Assets(\$MM)	20,153,280	22,624,986	24,777,933	25,756,796	26,688,752	27,584,655	28,444,934	29,257,613	30,014,873	30,713,379	31,347,991
Fund Net Growth Rate	12.3%	9.5%	4.0%	3.6%	3.4%	3.1%	2.9%	2.6%	2.3%	2.1%	2.9%
Additions from Net Fund Growth	2,471,706	2,152,947	978,863	931,956	895,903	860,280	812,679	757,261	698,506	634,612	585,981
Ending Fund Assets	22,624,986	24,777,933	25,756,796	26,688,752	27,584,655	28,444,934	29,257,613	30,014,873	30,713,379	31,347,991	31,933,972
Target Private Equity %	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Private Equity Asset Value Target	2,036,249	2,230,014	2,318,112	2,401,988	2,482,619	2,560,044	2,925,761	3,001,487	3,071,338	3,134,799	3,193,397
Asset Value by Manager (\$MM)											
Abbott	761,499	774,265	796,566	831,302	872,894	920,741	956,428	992,559	1,023,574	1,046,763	1,033,850
Pathway	818,794	833,019	858,154	896,590	948,525	1,008,001	1,074,749	1,135,851	1,183,635	1,220,216	1,248,251
Direct Investments	177,244	273,512	382,477	502,789	611,204	708,443	797,355	860,778	891,698	910,320	917,547
Total Projected Asset Value	1,757,536	1,880,797	2,037,197	2,230,682	2,432,623	2,637,185	2,828,531	2,989,189	3,098,907	3,177,299	3,199,647
Private Equity % of Fund	7.8%	7.6%	7.9%	8.4%	8.8%	9.3%	9.7%	10.0%	10.1%	10.1%	10.0%
Annual Commitments (\$MM)											
Abbott	176,700	187,000	188,000	190,000	192,000	194,000	196,000	198,000	200,000	202,000	204,000
Pathway	182,064	187,000	188,000	190,000	192,000	194,000	196,000	198,000	200,000	202,000	204,000
Direct Investments	235,000	125,000	126,000	127,000	128,000	129,000	130,000	131,000	132,000	133,000	134,000
Total Commitments by Year	593,764	499,000	502,000	507,000	512,000	517,000	522,000	527,000	532,000	537,000	542,000

ALASKA RETIREMENT MANAGEMENT BOARD

Annual Tactical Plan for Private Equity	ACTION:	X
Resolution 2015-02	-	
April 23, 2015	INFORMATION:	
	Resolution 2015-02	Resolution 2015-02

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. 2014 Investment Activity
- II. Funding Position
- III. Diversification
- IV. Market Conditions
- V. 2015 Tactical Plan

RECOMMENDATION:

That the Alaska Retirement Management Board adopt Resolution 2015-02 approving the 2015 Annual Tactical Plan.

Attachment: ARMB 2015 Annual Tactical Plan for Private Equity

State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD

Relating to Private Equity Annual Tactical Plan Resolution 2015-02

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 2015 Annual Tactical Plan for Private Equity which is attached hereto and made a part hereof.

DATED at Anchorage, Alaska	a this day of April, 2015.
ATTEST:	Chair
Secretary	

DATED at Anchorage Alaska this

ALASKA RETIREMENT MANAGEMENT BOARD

2015 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. 2014 Investment Activity
- II. Funding Position
- III. Diversification
- IV. Market Conditions
- V. 2015 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, or 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 3.0% of the Fund. In 2001, the allocation to private equity was increased to 6.0% 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 7.0%. 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 8.0% in 2011 and 9% in 2013. The plan is to target 10% as the longer term allocation.

The ARMB and its advisors have discretion to carefully select and invest in high quality partnerships while preserving diversification across strategy, industry, geography, and investment stage. Through 2014, the Alaska Retirement Systems have committed \$4.1 billion to private equity partnerships. This capital is typically drawn down over 5-7 year periods and 74% has been drawn through 2014. The invested value at the end of calendar year 2014 was \$1.8 billion, or 7.8% of the Fund's 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 capital markets slowed private equity activity and lowered returns. The market rebound in 2009 and 2010 benefited private equity portfolios, but has also reduced the buying opportunity that usually accompanies a recession. The last several years through 2014 have marked the return of high distributions and gains and also, unfortunately, high prices and leverage.

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 Cambridge private equity universe. For the twelve vintage years from 1998 through 2009, the ARMB portfolio was in the top quartile for two years and the second quartile for ten years. Overall the program is in the middle of the second quartile.

The internal rate of return (IRR) for the portfolio was 11.1% from inception through 2014. 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 11.1% IRR for the ARMB private equity portfolio compares well with public market equivalent returns of 6.4% for the S&P 500 and 6.9% for the Russell 3000. The ARMB's long term benchmark for private equity is the Russell 3000 public market index plus 350 basis points and the actual outperformance has been 420 basis points. The time-weighted return for the ARMB's private equity portfolio for calendar year 2014 was 18.1%. Since inception, the ARMB's private equity program has generated \$800 million in additional fund value compared to investing in the public equity markets.

Private equity has recovered meaningfully from the turmoil of 2008. Over the past several years, receptive capital markets have provided significant liquidity to private equity investors. The fundraising pace has also picked up as limited partners receive increased distributions and general partners finish investing capital from 2005-2007 funds and come back to the market.

For 2015, staff is recommending an allocation of \$499 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 achieve its recommended long term allocation of 10% over the ten year planning horizon.

I. 2014 INVESTMENT ACTIVITY

A. COMMITMENTS

The commitment target for 2014 was \$450 million and the ARMB closed on a combined total of \$593.8 million in new primary and secondary commitments.

Commitments for 2014 (\$millions)

			Number of			Investmen	t Strateg	y	
Manager	Target	Actual	Investments	Venture	%	Buyout	%	Special Situations	%
Abbott	\$175.0	\$176.7	11	\$105.2	60%	\$31.5	18%	\$40.0	23%
Pathway	\$175.0	\$182.1	15	\$14.0	8%	\$82.0	45%	\$86.1	47%
Direct	\$100.0	\$235.0	5	\$0.0	0%	\$45.0	19%	\$190.0	81%
Total	\$450.0	\$593.8	31	\$119.2	20%	\$158.5	27%	\$316.1	53%

The ARMB made 31 investments across 23 partnership groups. Abbott and Pathway both invested with Canaan, Hellman & Friedman, JMI, and Spectrum. During the year, Pathway and the direct portfolio invested in the Resolute Fund and with Glendon Capital. Abbott invested in the Resolute Fund in 2013. The direct commitments were materially over target due to the ARMB's \$100 million investment in KKR Lending Partners II.

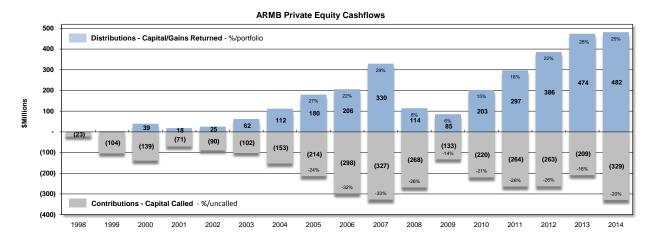
The following table summarizes all the commitments made during 2014.

	Partnership Fund	Description	Amount	% Total	Date	Advisor
	Canaan X	Primarily early-stage venture capital investments in technology and healthcare companies operating in the U.S.	\$20.5	3.5%	10/15/14	Abbott
	Canaan X	Primarily early-stage venture capital investments in technology and healthcare companies operating in the U.S.	\$14.0	2.4%	10/15/14	Pathway
	JMI VIII	Invests in software and technology-enabled services companies with a focus on growth buyouts and recaps.	\$20.1	3.4%	7/18/14	Abbott
	Lightspeed Venture Partners Select	Primarily later-stage investments in enterprise IT and consumer Internet companies.	\$3.3	0.6%	3/10/14	Abbott
Venture Capital	Lightspeed Venture Partners X	Primarily early-stage investments in enterprise IT and consumer Internet companies.	\$3.3	0.6%	3/10/14	Abbott
	Oak HC/FT Partners	Focus is on growth in healthcare companies and early-stage in financial technology companies.	\$25.0	4.2%	6/6/14	Abbott
	Sofinnova Ventures Partners IX	Invests in later stage biotechnology. Bias is for proven de-risked spin- out assets from big pharma.	\$8.0	1.3%	7/18/14	Abbott
	Spectrum Equity Investors VII	Pursues growth equity/control investments in technology-enabled information services, digital/traditional media and communications.	\$25.0	4.2%	6/6/14	Abbott
	Venture Capital Subtotals		\$119.2	20.1%		
	ABRY Partners VIII	Invests in control buyouts of media, communications, business and healthcare information systems companies.	\$10.5	1.8%	8/8/14	Abbott
	Charlesbank VIII	Invests in value-oriented buyouts of U.S. based middle-market companies across a variety of industries.	\$9.0	1.5%	6/30/14	Pathway
	H&F VIII	Invests for control and significant non-control, equity-related investments in high-quality businesses across variety of industries.	\$21.0	3.5%	9/24/14	Abbott
	H&F VIII	Invests for control and significant non-control, equity-related investments in high-quality businesses across variety of industries.	\$20.0	3.4%	9/24/14	Pathway
Buyouts	New Mountain Partners IV	Growth-oriented buyout firm focusing on management buyouts, growth equity transactions, build-ups, restructuring and leveraged acquisitions.	\$25.0	4.2%	9/15/14	Direct
	Permira V	Invests in leveraged buyouts primarily in European businesses with strong domestic/international growth potential.	\$16.1	2.7%	3/10/14	Pathway
	The Resolute Fund III	Invests in middle-market control investments in companies operating across a broad range of industries.	\$20.0	3.4%	6/15/14	Direct
The Resol	The Resolute Fund III	Invests in middle-market control investments in companies operating across a broad range of industries.	\$19.1	3.2%	4/30/14	Pathway
	Thoma Bravo XI	Pursues buy and build investments in middle-market companies operating in software and services.	\$14.6	2.5%	5/1/14	Pathway
	Trident VI (Stone Point)	Targets control-oriented investments in the financial services sector.	\$3.2	0.5%	2/4/14	Pathway
	Buyout Subtotals		\$158.5	26.7%		
	Alchemy SOF III	Invests in debt-related investments in restructuring/special situations, with a focus on mid-sized companies in Europe.	\$8.6	1.4%	3/28/14	Pathway
	Centerbridge Capital III	Invests for influence or control in companies during times of economic expansion, distress, slowdowns or periods of instability.	\$19.6	3.3%	10/24/14	Pathway
	EnCap Flatrock Midstream III	Invests in control-oriented equity investments in midstream oil and gas assets in North America.	\$4.8	0.8%	4/9/14	Pathway
	EnCap VIII Co-Investors	Invests in the independent sector of the oil and gas industry primarily in the U.S. and Canada.	\$0.3	0.1%	3/28/14	Pathway
	Energy Spectrum Partners VII	Pursues control investments in midstream assets in North America.	\$15.0	2.5%	11/1/14	Abbott
	Glendon Opportunities Fund	Debt-related investments across geographic regions, industries, and capital-structure positions in distress/dislocated markets.	\$40.0	6.7%	9/8/14	Direct
Special Situations	Glendon Opportunities Fund	Debt-related investments across geographic regions, industries, and capital-structure positions in distressed/dislocated markets.	\$15.0	2.5%	9/8/14	Pathway
	Insight Co-Investment III	Invests in late-stage and growth-stage companies in application software, infrastructure software, Internet, and computer services.	\$7.8	1.3%	5/6/14	Pathway
	JMI VIII	Invests in software and technology-enabled services companies. Primarily focused on growth buyouts and recaps.	\$15.0	2.5%	7/18/14	Pathway
	KKR Lending Partners II	Direct lending to middle-market companies at the larger end of the middle-market.	\$100.0	16.8%	12/15/14	Direct
	NGP XI	Focuses on equity investments in the traditional North American energy sector.	\$50.0	8.4%	12/15/14	Direct
	Spectrum VII	Pursues growth equity/control investments in technology-enabled information services, digital/traditional media and communications.	\$15.0	2.5%	6/18/04	Pathway
	Warburg Pincus Energy	Invests in E&P, midstream service and power generation globally.	\$25.0	4.2%	5/30/14	Abbott
	Special Situations Subtotals		\$316.1	53.2%		
	_					
Abbott Sub			\$176.7	29.8%		
Abbott Sul Pathway S Direct Sub	ubtotal		\$176.7 \$182.1 \$235.0	30.7% 39.6%		

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 2014 by the ARMB's private equity groups totaled \$328.8 million, a significant increase from the level of 2013 investments. Capital calls were 20% of uncalled capital, close to the long term average. Capital calls by strategy were 44% buyout, 33% special situations, and 23% venture capital.

The ARMB received \$481.7 million in distributions from private equity partnerships in 2014, a slight increase from 2013 and the highest level of distributions since the program's inception for the second year in a row. Distributions have increased steadily since 2009 as the exit environment has improved. Adjusted for the size of the portfolio, distributions were 25% of the portfolio for 2014. The distributions were split 55%, 40% and 5% between the Abbott, Pathway and Direct portfolios respectively.



C. STOCK DISTRIBUTIONS

During 2014, Abbott and Pathway sold \$33.3 million in stock distributed in-kind to the ARMB. The ARMB experienced an 8.4% loss on the \$16.2 million sold by Abbott and a 4.2% loss on the \$17.1 million sold by Pathway. Losses of 5% or more are not uncommon due to the potential for significant selling pressure when a general partner distributes large stock holdings to limited partners. The ARMB has processes in place to avoid some of the selling pressure, but the portfolio can experience volatility none-the-less. Staff reviewed the 2014 sales and is satisfied with the process that was used to liquidate the in-kind distributions.

II. FUNDING POSITION

A. FUNDING POSITION AS OF DECEMBER 31, 2014

The net asset value of the ARMB's private equity portfolio was \$1.8 billion as of 12/31/14, an increase of \$127.8 million from 2013. The private equity portfolio represented 7.8% of total assets, below the target of 9%.

Total Fund Market Value 12/31/14 (\$MM)	\$22,625.0
Target Percent for Private Equity	9.0%
Target Private Equity Allocation	\$2,036.2
Abbott Net Asset Value	\$761.5
Pathway Net Asset Value	818.8
Direct Net Asset Value	177.2
Total Private Equity Portfolio Value	\$1,757.5
Fund Percent 12/31/14	7.8%

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. As a result, private equity has a wide 5% band above and below the ARMB's allocation.

B. PROJECTED FUNDING POSITION 2019 - BASED ON FUNDING MODEL IN APPENDIX I

Projected Fund Market Value Year End 2019 (\$MM): \$28,444.9 Projected Private Equity Asset Value: \$2,637.2 Percent of Total Fund: 9.3%

The current recommended long term allocation to private equity is 10% and with the suggested commitment pacing, the ARMB is expected to reach this target within 10 years. The allocation is likely to remain below the long term target in short term due to lower commitment pacing from 2009 through 2012.

C. FUNDING BY STRATEGY

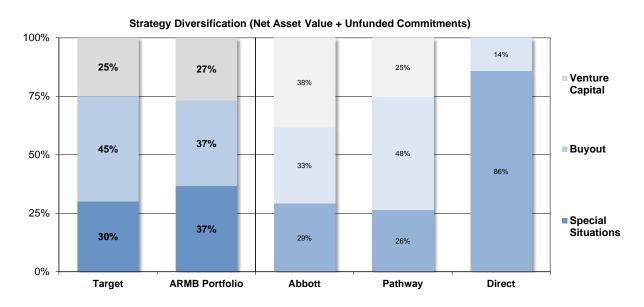
The private equity portfolio has long-term strategy diversification targets with a broad range between minimum and maximum exposure. The portfolio is close to the targets and well within acceptable strategy ranges for 2014.

Strategy	Target	Min	Max	Commitments	Capital Called	Unfunded + Capital Called
Venture Capital	25%	15%	40%	25.5%	27.3%	25.0%
Buyouts	45%	30%	60%	38.8%	40.1%	38.9%
Special Situations/Other	30%	20%	40%	35.7%	32.6%	36.1%
Total	100%			100.0%	100.0%	100.0%

III. DIVERSIFICATION

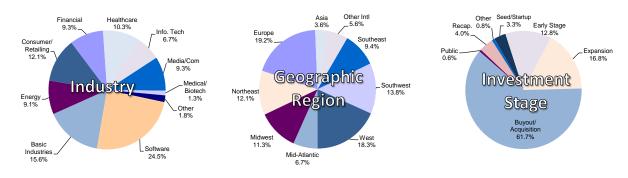
A. INVESTMENT STRATEGY BY PARTNERSHIP AS OF 12/31/2014

As of 12/31/14, the net asset value of the ARMB's private equity portfolio was \$1.8 billion, with Abbott representing 43.3%, Pathway 46.6%, and direct investments 10.1%. 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 9/30/2014

The portfolio is well diversified by industry, with no more than 24.5% 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 28.4% of the portfolio. By investment stage, buyout/acquisition is the highest at 61.7% due to the high level of activity by buyout and special situations funds.



IV. MARKET CONDITIONS

A. 2014 SUMMARY

FUNDRAISING

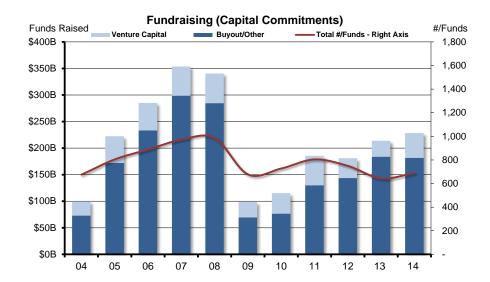
- Fundraising has stabilized, with a modest increase in 2014.
- Terms are still limited partner friendly and fund sizes are generally smaller, but the pace of fund raising has increased, especially for in-demand managers.
- There will be a continued reduction in poor performing general partnerships.

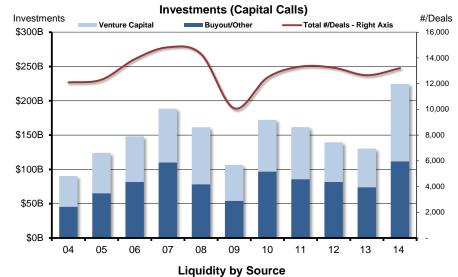
INVESTMENT ACTIVITY

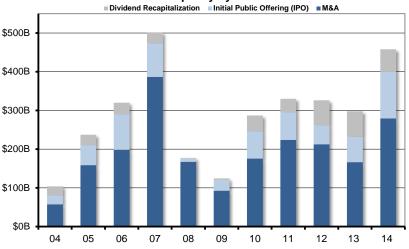
- Investment activity increased dramatically for both buyout and venture funds as credit markets were accommodative and market participants were willing to transact at high prices.
- Investment activity was roughly equal to fundraising levels – dry powder remained the same overall, but increased for buyout and decreased for venture capital.
- Deal pricing and leverage are at or near historical highs, which is a concern.

EXIT OPPORTUNITIES

- Private equity exit activity increased in 2014, and has been strong and consistent for five years.
- Merger and acquisition activity increased to \$278 billion.
- Public market exits increased to \$122 billion.
- The credit markets remained near record levels, although dividend recapitalizations declined slightly to \$55 billion.







Source: Thomson Reuters & S&P. Global developed markets, except dividend recapitalization data which is U.S. only.

B. FORWARD OUTLOOK FOR 2015

- Strong exit environment. The exit environment for private equity is expected to be strong. Mergers and acquisitions should continue due to high levels of corporate cash, supportive stock market valuations, and more modest internal growth prospects. The credit markets are accommodative due to yield-driven investors and the public equity market should also continue to be supportive.
- *Continued fundraising recovery.* Fundraising should continue to recover for tenured groups with strong track records since allocation issues for limited partners have lessened as private equity sponsors return capital. Getting access to the highest quality partnerships will continue to be challenging.
- **Brisk investment pace.** Absent a capital market pullback, the investment pace should remain at a high level since credit markets are accommodative and buyers are willing to transact at high prices. High deal pricing and high leverage are a concern and will likely be a headwind for returns on investments made during this period.

V. 2015 TACTICAL PLAN

Staff recommends a commitment target of \$499 million for 2015 with an increase in commitment pacing over the next ten years as detailed in Appendix I.

A. TARGET COMMITMENTS FOR 2015

Manager	Target Commitments	Number	Size per Fund	Strategies
Abbott	\$187 million	8-14	\$10-\$30M	Venture conited hygiest
Pathway	\$187 million	8-14	\$10-\$30M	Venture capital, buyout, special situations, other
Direct Investments	\$125 million	2-4	\$10-\$50M	special situations, other
Total	\$499 million	18-32	\$10-\$50M	

Abbott and Pathway have the ability to commit up to 50% beyond their target allocation with CIO approval to access additional opportunities. The chief investment officer also has the delegated authority to commit up to \$100 million in addition to the targeted amount for direct partnership investments.

B. TARGET STRATEGIES FOR 2015

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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Beginning Fund Assets(\$MM)	20,153,280	22,624,986	24,777,933	25,756,796	26,688,752	27,584,655	28,444,934	29,257,613	30,014,873	30,713,379	31,347,991
Fund Net Growth Rate	12.3%	9.5%	4.0%	3.6%	3.4%	3.1%	2.9%	2.6%	2.3%	2.1%	2.9%
Additions from Net Fund Growth	2,471,706	2,152,947	978,863	931,956	895,903	860,280	812,679	757,261	698,506	634,612	585,981
Ending Fund Assets	22,624,986	24,777,933	25,756,796	26,688,752	27,584,655	28,444,934	29,257,613	30,014,873	30,713,379	31,347,991	31,933,972
Target Private Equity %	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Private Equity Asset Value Target	2,036,249	2,230,014	2,318,112	2,401,988	2,482,619	2,560,044	2,925,761	3,001,487	3,071,338	3,134,799	3,193,397
Asset Value by Manager (\$MM)											
Abbott	761,499	774,265	796,566	831,302	872,894	920,741	956,428	992,559	1,023,574	1,046,763	1,033,850
Pathway	818,794	833,019	858,154	896,590	948,525	1,008,001	1,074,749	1,135,851	1,183,635	1,220,216	1,248,251
Direct Investments	177,244	273,512	382,477	502,789	611,204	708,443	797,355	860,778	891,698	910,320	917,547
Total Projected Asset Value	1,757,536	1,880,797	2,037,197	2,230,682	2,432,623	2,637,185	2,828,531	2,989,189	3,098,907	3,177,299	3,199,647
Private Equity % of Fund	7.8%	7.6%	7.9%	8.4%	8.8%	9.3%	9.7%	10.0%	10.1%	10.1%	10.0%
Annual Commitments (\$MM)											
Abbott	176,700	187,000	188,000	190,000	192,000	194,000	196,000	198,000	200,000	202,000	204,000
Pathway	182,064	187,000	188,000	190,000	192,000	194,000	196,000	198,000	200,000	202,000	204,000
Direct Investments	235,000	125,000	126,000	127,000	128,000	129,000	130,000	131,000	132,000	133,000	134,000
Total Commitments by Year	593,764	499,000	502,000	507,000	512,000	517,000	522,000	527,000	532,000	537,000	542,000

NOTES ON FUNDING PROJECTION MODEL

- The Fund's projected net growth rates are based on actuarial projections adjusted for actual 12/31/14 Fund values.
- Investment commitment drawdowns are modeled over a nine-year period with the majority of the drawdowns occurring over the first four years.
- Returns of capital and gains are modeled over a twelve-year period, with less than 10% of the distributions occurring during the first three years of a partnership.
- Unrealized gains are based on the ARMB's private equity benchmark (Russell 3000 + 350 basis points). Gains are harvested after four years and are adjusted to actual portfolio values.
- Commitments are scheduled at a pace to achieve the ARMB's long term private equity allocation and preserve vintage year time diversification.

APPENDIX II - ABBOTT TACTICAL PLAN

Abbott Capital Management Annual Tactical Plan

A. 2014 Fund Commitments

On behalf of ARMB, Abbott committed \$176.7 million to 11 primary commitments and one secondary opportunity in 2014 versus a target of \$175 million.

1. Primary Activity

In 2014, Abbott closed on 11 primary commitments totaling \$176.7 million on ARMB's behalf as listed below:

Primary Fund Commitments: 2014						
Fund	Strategy	Commit	nent			
Lightspeed Venture Partners X	VC – Early Stage	\$3.3	million			
Lightspeed Venture Partners Select	VC – Later Stage	3.3	million			
Warburg Pincus Energy	Special Situations – Industry Focus	25.0	million			
Oak HC/FT	Growth Equity	25.0	million			
Spectrum Equity Investors VII	Growth Equity	25.0	million			
Sofinnova Venture Partners IX	VC – Later Stage	8.0	million			
JMI Equity Fund VIII	Growth Equity	20.1	million			
ABRY Partners VIII	Medium Buyout	10.5	million			
Hellman & Friedman VIII	Large Buyout	21.0	million			
Canaan X	VC – Early Stage	20.5	million			
Energy Spectrum VII	Special Situations – Industry Focus	15.0	million			
		\$176.7	million			

^{*}Abbott committed \$12.5 million on behalf of ARMB to Insight Venture Partners IX in December 2014. The commitment closed in January 2015.

2. <u>Secondary Activity</u>

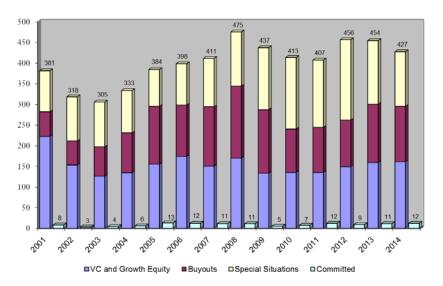
In 2014, Abbott committed to one secondary opportunity on behalf of ARMB, **Austin Ventures VIII**, an early stage venture capital fund, for \$21,945 maximum cash outlay.¹

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¹ Maximum cash outlay equals the purchase price plus the unfunded commitments at the time of purchase.

B. Deal Flow

Abbott reviewed 427 primary fund opportunities across all categories of private equity in 2014, slightly below the number of primary fund opportunities reviewed in 2013. Abbott committed to 11 of these funds on behalf of ARMB.



II. ARMB PORTFOLIO REVIEW

A. Review and Analysis of ARMB's Program Activity

From the inception of ARMB's private equity program in 1998 through December 31, 2014, Abbott has committed \$2.06 billion to 173 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 \$11.9 million. Abbott has been notified that three of these partnerships—Alta Communications VIII, Cinven Second Fund, and GTCR Fund VIIA—were fully liquidated in 2014. ARMB has also purchased 19 secondary interests in 17 funds totaling \$21.1 million in maximum cash outlay. As of December 31, 2014, ARMB has cumulatively made 192 partnership investments representing \$2.08 billion in primary commitments and secondary maximum cash outlay.

Based on information available to Abbott as of the report date, ARMB's portfolio should be able to achieve the year-end 2019 Net Asset Value Target of \$920.7 million through continued deployment of capital over the next five tactical plan periods. At December 31, 2014, the active portfolio was valued at \$762.9 million, including a pooled partnership net asset value of \$761.2 million and \$1.7 million of publicly-traded stock held by ARMB as of December 31, 2014.² Note that ARMB's partnership holdings were valued at the September 30, 2014 fair value adjusted solely for partnership cash flows through year-end. Actual values as of December 31, 2014 will differ from those reported above. The year-end 2014 Net Asset Value (including distributed stock pending sale or settlement) of \$762.9 million is approximately \$158 million below ARMB's stated 2019 target. As evidenced in prior years, investment/distribution 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 suggest that the Net Asset Value will remain near its targeted level as the portfolio matures.

² The pooled portfolio value for the ARMB account included herein is based on the aggregate portfolio fund values as of September 30, 2014, adjusted by all cash flows through December 31, 2014, plus the value of distributed stock not yet sold as of December 31, 2014. Pursuant to the request of ARMB, ARMB receives an expedited statement on the last business day of each month, and therefore, the pooled portfolio value reported by ARMB elsewhere in this report reflects an estimated year-end pooled portfolio value based on portfolio fund values as of September 30, 2014, adjusted solely for cash flows through December 31, 2014 and the value of distributed stock not yet sold as of December 31, 2014.

B. Portfolio Performance

The ARMB cumulative Net IRR since inception, net of investment management fees paid by ARMB to Abbott, was 9.6% as of September 30, 2014, a 40 basis point improvement over last year.³ Although private equity is an asset class that should be measured over the long term, ARMB's one-year return on the portfolio, gross of investment management fees paid by ARMB to Abbott, was 27.0% as of September 30, 2014.

ARMB's long-term performance as of September 30, 2014 is also favorable when compared to various public indices in a public market equivalent ("PME") calculation. Through September 30, 2014, the long-term performance of the ARMB program outperformed the S&P 500 and Russell 3000 by 460 and 390 basis points, respectively, according to Abbott's public market equivalent analysis.

As of September 30, 2014	Performance	Outperformance
ARMB Net IRR (net of Abbott fees)	9.6%	N/A
PME Benchmark (S&P 500)	5.0%	4.6%
PME Benchmark (Russell 3000)	5.7%	3.9%

III. GENERAL MARKET OVERVIEW

A. Venture Capital and Growth Equity

Venture capital and growth equity investors continued to benefit from a robust IPO market. Signature offerings such as Alibaba, Lending Club, Hortonworks, and New Relic jumped 40% or more on their first day of trading. A strong exit environment, likely resulting in a high level of distributions to investors, significantly bolstered fundraising and investing activities compared to 2013. In addition, low interest rates and high levels of consumer confidence drove increases in spending, serving to spur revenue and growth rates of many venture-backed companies, which was, in part, used to justify some stratospheric valuations. This year represented the highest number of venture-backed IPOs since 2000, with life sciences companies, particularly biotech, experiencing a banner year. As innovative companies continue to show positive clinical results, this trend should continue. M&A investing, led primarily by Facebook's \$19.5 billion acquisition of WhatsApp, also witnessed significant growth as tech companies deployed their heavy cash piles into disruptive businesses. While M&A activity lagged the public markets by volume, 2014 appears to signal what could become a sustained increase in M&A activity over the next 12 months. On the flip side, the continued increase in company valuations, particularly in the technology sector, could temper investor appetite. Such a dynamic may cause companies to stay in the private markets longer, potentially slowing VC exits and distributions.

Propelled by strong exit markets and boosted by distributions, U.S. venture capital and growth equity fundraising activity had its strongest year since 2007. According to Thomson Reuters and the NVCA, U.S. venture capitalists raised \$29.8 billion in 2014, a 69% increase from the 2013 total. The total number of funds raised in 2014 increased 23% compared to 2013, also representing the largest number since 2001.

U.S. venture capital and growth equity investments totaled \$48.3 billion in 2014, a whopping 61% increase from 2013, and the most invested since 2000. Software investments continued to command outsized attention, comprising 41% of the total, while Internet-related companies accounted for nearly \$12 billion, or 25% of total venture dollars. This represents a 68% increase over 2013, and also the highest level of investment since 2000. Bridging the software and Internet sectors, the software-as-a-service (SaaS) business model continued to garner investor interest, as did companies that enable cloud-based services, such as infrastructure, storage and applications. Despite high valuations, investor confidence was bolstered by a favorable macro environment in 2014. Companies that recently raised significant amounts of capital, particularly in later investment rounds, such as Uber and AirBnB, boasted strong fundamentals, with high growth rates and impressive revenue levels, tempering some worries that the market is experiencing a bubble.

³ This return is calculated net of Abbott's investment management fees, and was calculated using the fair value of ARMB's portfolio as of September 30, 2014 and monthly partnership cash flows since inception through September 30, 2014.

U.S. venture-backed exits, which includes both IPOs and M&A events, totaled \$61.3 billion in 2014, a staggering 119% higher than 2013. A significant portion of the increase was driven by Facebook's \$19.5 billion acquisition of WhatsApp; excluding this outlier, exits overall increased 51% compared to 2013, and still represented the strongest exit year since 2000. M&A value totaled \$26.5 billion (excluding WhatsApp), representing a 57% increase, year-over-year. The U.S. IPO market remained strong. In fact, fourth quarter 2014 represented the seventh consecutive quarter in which more than 20 offerings came to market. Venture capital listings raised \$15.3 billion in IPOs, a 38% increase compared to 2013. Biotechnology represented the most active sector of the year, contributing 59 offerings, or 51% of the total (115). This represents the strongest year for U.S.-listed venture-backed offerings since the 1990s. Although excluded from the U.S. data above, Alibaba represents the largest IPO of all time. In third quarter 2014, the company raised \$25 billion, providing an indication of the pervasive optimism within the public markets.

B. Buyouts and Special Situations

The seller's market continued in 2014 in the buyouts and special situations segments as sustained strength in the public markets and available, attractively-priced credit propelled private equity-backed exit volume to its highest level since 2007. As a result, private equity-backed distributions reached an all-time high, which in turn provided limited partners with capital to re-invest into the asset class. Correspondingly, fundraising remained relatively robust in 2014, evidenced by the high proportion of partnerships that reached or exceeded their fundraising caps. From a transaction perspective, leverage multiples rose consistently over the year, helping push average purchase price multiples to levels not seen since before the Global Financial Crisis. These rich valuations, in view of the roaring public equity markets and high use of leverage, have given some financial buyers pause, while strategic purchasers seem undeterred.

Fundraising for buyout and special situations firms was still strong in 2014. Globally, these firms raised \$274.1 billion, a slight increase from the \$269.0 billion raised in 2013, according to Thomson Reuters. U.S.-based firms raised 6% more capital compared to 2013, accumulating \$176.0 billion, while European-domiciled firms raised \$58.8 billion in 2014, down 8% in U.S. dollar terms from the \$64 billion raised in the prior year. After a 20% year-over-year decline in 2013, Asian fundraising increased 28% in 2014. Globally, funds seeking more than \$5 billion in committed capital raised \$41.4 billion, nearly 60% less than in 2013.

Global buyout investment activity continued to increase in 2014. Buyout and special situations firms globally invested \$109.2 billion in over 4,000 companies in 2014, representing increases of 50% and 12%, respectively, over 2013 totals. The share of U.S. investment declined year-over-year to 52% of total capital invested globally compared to 77% in 2013, totaling \$56.3 billion. European investing increased approximately 30%, to \$14.2 billion, after a steep drop in 2013. Asian investing also increased after a sharp decline in 2013, up 85% to \$40.6 billion, largely due to a \$17.5 billion third-quarter investment in a division of a state-owned Chinese oil company. Globally, add-on acquisitions reached a decade-high 60% of buyout transactions, the fourth year of steady increases.

Private equity funds distributed even more capital in 2014 than in all of record-breaking 2013, setting a new high of \$428 billion. Buyout-backed IPOs globally more than doubled year-over-year, totaling \$86.0 billion in 2014. Sales to strategic and financial buyers accounted for \$175 billion of exit activity in 448 transactions, up significantly from the prior year's record pace. Strategic buyers comprised 82% of volume and 89% of value. The total value of U.S. buyout-backed M&A activity was its highest since 2007, at \$161 billion, buoyed the greatest number of deals done on record in one year (672). On the other hand, European buyout-backed M&A deal volume was relatively flat year-over-year, but value increased 82%. Asia saw a 22% increase in transactions in 2014, while total value more than doubled compared to last year.

C. Secondary Activity

Secondary transaction volume increased over 50%, to \$42 billion in 2014, marking another record year of activity amid continued strength in secondary fundraising. As of year-end, an estimated \$84 billion of near-term capital is available for investment in secondary opportunities. In addition, overall pricing remained high given healthy public equity markets and sustained buy-side demand. Volume also grew due to an increasing number of large portfolio sales that were likely driven by limited partners' continuing efforts to manage and/or reposition their portfolios. In fact, transactions of \$1 billion or greater accounted for almost 40% of total volume, compared to only 19% of secondary volume in 2013.

In the second half of 2014, average pricing for secondary's increased across all strategies to 91% of NAV, from 87% in 2013, largely driven by buyout funds pricing at an average of 95% of NAV, while venture funds' pricing remained flat year-over-year, at 80%. The average price paid for buyout funds during the first half of the year was actually 100% of NAV, marking the first time since 2007 that the average price paid reached par.

IV. DIVERSIFICATION

Strategy	Estimated 12/31/14 NAV	Year-End 2019 Target	Difference
Venture Capital and Growth Equity	\$292,182,750	\$230,185,250	(61,997,500)
Early	70,126,018	46,037,050	(24,088,968)
Multi	151,787,860	92,074,100	(59,713,760)
Late	70,268,872	92,074,100	21,805,228
Buyouts	245,540,898	368,296,400	122,755,502
Restructuring	0	23,018,525	23,018,525
Special Situations	201,429,838	276,222,300	74,792,462
Subordinated Debt	10,921,772	23,018,525	12,096,753
Secondary Interests	11,093,189	N/A	N/A
Distributed Stock Currently Held	1,736,769	N/A	N/A
Total	\$762,905,215	\$920,741,000	N/A

A. Venture Capital and Growth Equity

ARMB has accumulated a well-diversified portfolio of 70 active venture and growth equity funds (not including 15 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.

B. Buyout and Special Situations

ARMB has a well-diversified portfolio of 85 active buyout and special situations partnerships (not including two secondary commitments). Similar to venture managers, Abbott will continue to seek 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 year in terms of buyout and special situations commitments given funds currently in the market raising capital as well as Abbott's projected pipeline of opportunities, which includes a number of existing ARMB managers as well as potential new relationships.

C. 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 2014, Abbott made no commitments to international partnerships on behalf of ARMB.

V. MONITORING

A. Specific situations being monitored

Abbott has made 192 commitments (primary and secondary) to 173 partnerships on behalf of ARMB, 156 of which were active as of December 31, 2014. 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 approximately half 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.

VI. EXITING

A. Pending Distributions or Liquidations

As detailed below, ARMB's portfolio experienced a decrease in distributions in 2014 compared to distribution activity in 2013 while capital call activity increased. Despite this dynamic, ARMB's portfolio was highly cash generative in 2014 as total distributions outpaced capital calls by a 1.6:1 ratio, compared to a 2.8:1 ratio in 2013. In the near term, liquidity is expected to remain strong given increased economic stability within many developed markets and the continued strength of the credit and equity markets. Over time, however, market dynamics will shift and the pace of capital calls relative to distributions will likely revert back to more normalized levels.

B. Any Other Relevant Considerations Relating to Exiting ARMB's Investments

In 2014, ARMB received cash distributions of \$177.4 million compared to \$190.7 million received in 2013. During 2014, ARMB also received securities valued at \$18.7 million with a cost basis of \$2.3 million. Distributed stock liquidated in 2014 (including distributed stock held as of December 31, 2013 pending settlement) was converted into net cash proceeds of \$16.2 million during 2014. In aggregate, ARMB ultimately received \$193.6 million in net cash proceeds resulting from 2014 transaction activity, representing an approximate \$22 million decrease over the net proceeds received in 2013.

VII. 2015 GOALS AND STRATEGY

Candidates Abbott is Aware of and/or Planning to Pursue

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 2015. 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 \$190 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.

Year-to-date, ARMB has committed and closed on a total of \$59.5 million to three funds: **New Enterprise Associates 15**, **EnCap Energy Capital Fund X**, and **Insight Venture Partners IX.** NEA, an existing relationship, primarily invests in early-stage IT, medical, and life sciences companies, while EnCap, also a current relationship, makes control-oriented investments in the onshore, North American E&P sector. Insight, a growth equity firm focused exclusively on the software sector, is a new relationship for Abbott.

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⁴ Net of related brokerage commissions, fees and expenses and any gain or loss realized upon the sale of distributed stock.

VIII. SUMMARY

The robust market conditions in 2014 helped facilitate a strong year for both distributions and investments across all segments of the private equity asset class. As a result, ARMB received total net cash proceeds of \$193.6 million, a 10% decrease from the prior year, while capital calls increased 57%. The year's distribution activity and valuation increases helped generate a 37 basis point increase in ARMB's total estimated year-end 2014 pooled portfolio IRR, to 9.71%. Abbott ultimately closed on 11 primary fund commitments on ARMB's behalf during the year, totaling \$176.7 in commitments.

In 2015, 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. In addition, Abbott will continue to remain active in the secondary market with the goal of boosting returns and increasing vintage year diversification. As always, Abbott will maintain its rigorous selection criteria with the goal of building a high-performing, diversified portfolio across venture capital and 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, 2014, Pathway committed \$1.7 billion to 129 private equity partnerships across 57 managers on behalf of the Alaska Retirement Management Board (ARMB). As of year-end 2014, \$1.3 billion, or 80% of total commitments, had been drawn and \$1.2 billion in distributions had been received. The portfolio has produced a total value of \$2.0 billion, which represents 153% of cumulative contributions, and has generated a since-inception net IRR of 13.6%.¹

The portfolio performed well in 2014, generating a gain of \$85.3 million and a return of 11.0% for the 1-year period ended December 31, 2014. Notably, all four of the portfolio's core strategies and all 13 active vintage years posted positive 1-year returns. The portfolio has generated positive returns in 21 of the past 23 quarters, which has resulted in \$611.9 million in gains and a 510-basis-point improvement in the portfolio's since-inception net IRR since the first quarter of 2009.

Both contribution and distribution activity increased during 2014. ARMB contributed \$154.3 million during the year, which represents the second-highest annual total since the program's inception and a 50% increase over the \$102.6 million contributed in 2013. Driven by robust M&A exit and IPO activity, a record \$246.6 million in distributions was received during 2014—a 10% increase from the prior record total of \$225.1 million in 2013. Distribution activity was strong throughout the year: distributions exceeded \$60 million in all four quarters of 2014. Notably, distributions outpaced contributions by \$92.3 million during 2014 and marked the fourth-consecutive year that the program has generated positive net cash flow.

2014 Review

Commitments

A summary of 2014 commitment activity by investment strategy compared with the 2014 Tactical Plan allocation targets is provided in table 1. Pathway continued to maintain its rigorous due diligence process and strict partnership selection criteria during 2014, reviewing 474 partnership opportunities before ultimately selecting 15 for inclusion in the ARMB portfolio. As shown in the table, Pathway committed \$182.1 million on behalf of ARMB in 2014 and was within the target ranges for the buyouts, venture capital, and restructuring investment strategies but outside the target range for the special situations strategy and the overall target range for the year. Pathway, in consultation with ARMB investment staff, elected to exceed both the special situation and overall target ranges in 2014 in order to support five existing special situation managers that returned to market and to establish one new special situation relationship that is viewed as highly complementary to the portfolio.

^{1.} Performance is based on September 30, 2014, market values adjusted for cash flows through December 31, 2014. Returns do not include any appreciation or depreciation in market value that occurred during the fourth quarter of 2014. As of September 30, 2014, the program had a since-inception net IRR of 14.0%.

Table 1. ARMB's 2014 Private Equity Activity vs. 2014 Annual Tactical Plan

	2014	Plan	2014 Actual		
Investment Strategies	No. of Partnerships	Total Commitments	No. of Partnerships	Total Commitments	
Buyouts	Up to 10	Up to \$125 mi ll ion	6	\$82.0 mi ll ion	
Venture Capital	Up to 10	Up to \$100 mi ll ion	1	\$14.0 mi ll ion	
Special Situations	Up to 5	Up to \$45 million	6	\$62.5 million ^a	
Restructuring	Up to 5	Up to \$45 million	2	\$23.6 mi ll ion	
Subordinated Debt	_	_	0	_	
Total	Up to 20	Up to \$175 million	15	\$182.1 million	

Note: Amounts may not foot due to rounding.

During 2014, ARMB committed the largest portion of its capital to buyout-focused partnerships: \$82.0 million was committed to six managers, of which one—Trident VI (Stone Point)—represents a new relationship for ARMB. In terms of geographic segmentation, five of these buyout funds will focus on U.S. opportunities and one will focus on opportunities in Europe.

Commitments to special situation partnerships accounted for the second-largest portion of 2014 commitment activity at \$62.5 million, which was committed to five existing managers in the portfolio and one new relationship (EnCap Flatrock Midstream III). Also during the year, ARMB committed \$23.6 million to two restructuring/distressed partnerships—\$8.6 million to Alchemy SOF III and \$15.0 million to Glendon Opportunities Fund—which both represent new manager relationships. Further, ARMB also committed \$14.0 million to one venture capital fund in 2014, Canaan X, an existing manager.

Performance

For the 1-year period ended December 31, 2014, the ARMB portfolio generated a net gain of \$85.3 million and a return of 11.0%. The gains for the year were relatively broad-based, coming from all strategies, multiple vintages, and numerous partnerships. In total, 79 of the portfolio's 124 active partnerships generated gains during the 1-year period ended December 31, 2014, of which 38 generated gains in excess of \$1.0 million.

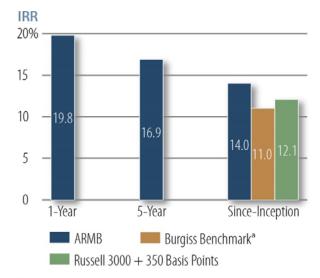
The portfolio's venture capital partnerships accounted for the majority of gains by strategy, collectively increasing in value by \$39.4 million and generating a return of 16.5% during the year ended December 31, 2014. The portfolio's buyout partnerships also performed well in 2014, generating a 1-year gain of \$30.9 million and a 1-year return of 8.8%. In addition, the portfolio's two other core strategies, special situations and restructuring, posted positive 1-year returns of 8.0% and 7.9%, respectively. Notably, 2014 marked the fifth-consecutive year in which all four of the portfolio's core strategies contributed to the portfolio's positive return.

alnoludes a \$0.3 million follow-on investment in Encap VIII Co-Invest. The initial commitment to this partnership was made in 2011.

ARMB's private equity portfolio continues to post strong long-term performance relative to public and private equity benchmarks. As shown in figure 1, the ARMB portfolio's since-inception performance exceeds the portfolio's public benchmark (Russell 3000 plus 350 basis points) on a dollar-weighted basis by nearly 200 basis points. In addition, the portfolio outperforms the Burgiss pooled horizon returns for 2001- through 2014-vintage private equity funds by more than 300 basis points. At the partnership level, the portfolio's mature vintages (2001–2009) continue to perform well: all nine generations rank in the top half among private equity funds in their vintage years, as of September 30, 2014.

Figure 1. ARMB Performance vs. Private and Public Market Benchmarks

At September 30, 2014

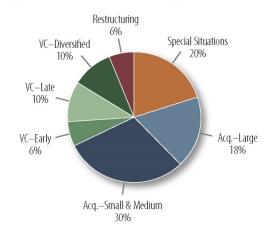


^aBurgiss Private iQ global all private equity pooled horizon return for 2001- through 2014-vintage funds, as of September 30, 2014 (the most-recent data available), as produced using Burgiss data.

Diversification

One of Pathway's objectives in constructing the ARMB private equity portfolio is to reduce risk by ensuring that the portfolio is well diversified by various metrics, including time, investment industry, geographic region, strategy, investment manager. Pathway believes ARMB's portfolio is currently well diversified: the portfolio consists of 129 partnerships across 15 vintage years and 57 managers and contains more than 2,000 underlying portfolio companies, as of December 31, 2014. 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, 2014.

Figure 2. Investment Strategy Diversification



Note: Based on partnership market values and unfunded partnership commitments through December 31, 2014.

Buyouts & Special Situations

As intended, buyout partnerships compose the largest portion of the ARMB portfolio, representing 48% of total exposure (partnership market value plus unfunded commitments). This exposure falls within the recommended target range of 30%–60%. The buyouts strategy is diversified by industry and regional focus, as well as by transaction type and size. The portfolio currently consists of commitments to 57 buyout partnerships: 35 partnerships that target small- and mid-cap companies and 22 partnerships that target large-cap companies (i.e., having enterprise values over \$1.0 billion). Nineteen of the portfolio's buyout partnerships focus primarily on investments in various countries in Western Europe. Pathway committed \$82.0 million to six buyout funds during the year: five funds from existing manager relationships (Charlesbank VIII, H&F VIII, Permira V, Resolute III, and Thoma Bravo XI) and one fund from a new manager relationship (Trident VI [Stone Point]).

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 27 partnerships of varying sizes and with different areas of focus: 14 that utilize industry-focused approaches, 11 that implement multiple investment strategies, and two that specialize in turnaround opportunities. During the year, Pathway committed to five special situation partnerships: Centerbridge Capital III, EnCap Flatrock Midstream III, Insight Coinvestment III, JMI VIII, and Spectrum VII. Additionally, Pathway made a small follow-on commitment of \$0.3 million to an existing special situation fund, EnCap VIII Co-Invest, which brought the portfolio's total commitment to the fund to \$5.0 million.

The portfolio's buyout and special situation partnerships generated a combined return of 8.6% during the year ended December 31, 2014, and collectively accounted for \$42.5 million in gains, which represents 50% of the portfolio's total gains for the year. These partnerships also showed an increase in distribution activity during 2014, returning \$125.2 million and \$41.9 million, respectively, which represents an 18% increase and a 14% increase, respectively, from their 2013 distribution levels. Notably, in 2014, the portfolio's buyout and special situation partnerships distributed their highest annual totals 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 14.5% and a since-inception return of 12.8%.

Venture Capital

As of December 31, 2014, the ARMB portfolio included 30 venture capital partnerships that utilize a variety of early-, late-, and multistage investment strategies. These partnerships represented 26% of the portfolio's total exposure, which was near the midpoint of Pathway's recommended target range of 15%–40%. Pathway committed \$14.0 million to one venture capital fund from an existing manager relationship during the year (Canaan X).

ARMB's venture capital partnerships posted the strongest 1-year performance (both on a returns basis and on a gains basis) of any of the investment strategies in the portfolio during 2014, generating a return of 16.5% and gains of \$39.4 million. Although performance across the strategy was broadly based—14 of the portfolio's 30 venture capital partnerships generated annual gains in excess of \$1.0 million—Menlo X generated particularly strong performance during the year, posting \$5.7 million in gains. Distribution activity was also strong during the year: a record \$64.4 million was received, which represents a 5% increase from the strategy's previous record amount of \$61.4 million in 2013. The venture capital strategy continues to demonstrate solid long-term performance: the strategy's 5-year and since-inception returns were 18.8% and 14.4%, respectively.

Restructuring

The ARMB portfolio currently comprises 15 distressed debt partnerships, which employ trading and control-oriented strategies and which account for 6% of the total portfolio—a percentage unchanged from 2013. These partnerships target debt or other securities of distressed or troubled companies and are generally less correlated to traditional buyout and venture capital investments. During 2014, Pathway committed \$23.6 million to two restructuring partnerships, both of which represent new manager relationships: \$8.6 million to Alchemy SOF III and \$15.0 million to Glendon Opportunities Fund.

The portfolio's distressed debt partnerships generated a 1-year return of 7.9% and \$3.4 million in gains during 2014. Additionally, these partnerships distributed \$15.0 million—a 27% decline from the prior year but still a relatively high annual distribution total. The restructuring strategy continues to deliver strong long-term performance: as of December 31, 2014, the strategy generated a 5-year return of 13.1% and a since-inception return of 21.0%.

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, 2014, the ARMB international portfolio comprised 22 partnerships: 19 buyout partnerships, one special situation partnership, one venture capital partnership, and one restructuring/distressed partnership across 12 managers focused on Europe. The portfolio's international exposure represented 14% of total exposure at December 31, 2014, and was within its long-term target range of 0%−35%. Pathway made commitments to two international partnerships during 2014: £5.2 million (\$8.6 million) to Alchemy SOF III, a new manager relationship, and €1.6 million (\$16.1 million) to Permira V, an existing manager relationship.

Due primarily to currency depreciation during 2014 (the euro and pound depreciated by approximately 12% and 6%, respectively, against the U.S. dollar during the year), the portfolio's international partnerships were flat, collectively generating a –0.3% return for the 1-year period ended December 31, 2014. Over the longer-term, ARMB's international partnerships have collectively generated a 5-year return of 11.2% and a since-inception return of 9.6%.

2015 Investment Plan

In 2015, Pathway will continue to expand and diversify ARMB's portfolio, adding commitments to both existing managers and new managers that meet Pathway's strict selection criteria and that complement the current portfolio. Pathway's objective is to target commitments of \$187 million in up to 20 partnerships, subject to the availability of high-quality investment opportunities. Pathway expects to commit between \$10 million and \$25 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 2015 Tactical Plan is summarized in table 2.

Table 2. ARMB's 2015 Annual Tactical Plan

By Strategy

No. of Partnerships	Total Commitments
Up to 10	Up to \$125 mi ll ion
Up to 10	Up to \$100 mi ll ion
Up to 8	Up to \$75 million
Up to 6	Up to \$50 million
-	-
Up to 20	Up to \$187 million
	Up to 10 Up to 10 Up to 8 Up to 6 —

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 a high-quality partnership. Because Pathway seeks only high-quality investment opportunities, 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.

2015 Plan to Date

Through March 31, 2015, Pathway has committed \$62.3 million on behalf of ARMB, or 33% of the 2015 Tactical Plan allocation target, to five partnerships and three secondary transactions. In January, ARMB committed \$12.4 million to three secondary transactions, which included 10 underlying partnership interests; all three transactions represented new manager relationships (Bain, Baring Asia, and Battery). Additionally, €7.0 million (\$8.1 million) was committed to Holtzbrinck Ventures VI, an early-stage venture capital fund focused primarily on companies in German-speaking countries. In February, ARMB committed \$8.0 million to Insight IX, a special situation fund focused on growth-oriented software and software-related companies, and \$4.3 million to Baring Asia PE VI, a buyout fund that targets mid-market companies across the pan-Asia region. In March, ARMB committed \$20.0 million to NEA 15, a venture capital fund that will make venture capital investments in information technology and healthcare companies primarily in the United States, and \$9.5 million to Fortissimo IV, a special situation fund that will acquire significant stakes in product-centric technology and technology-enabled industrial companies primarily in Israel. In addition to the three new manager relationships established through the secondary partnership interests, Fortissimo IV also represents a new manager relationship for ARMB. Pathway anticipates that the flow of new opportunities will be robust for the remainder of 2015 and has identified a number of potential partnerships for the ARMB portfolio, including 11 partnerships being raised by existing manager relationships and several partnerships being raised by managers not yet in the portfolio. It is too early, however, to determine whether these partnerships will be included in ARMB's portfolio in 2015; some may not meet Pathway's rigorous investment criteria and others may postpone fundraising until the following year, depending on market conditions and the general partners' 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 2015, Pathway will continue to fulfill its role as an active investor by maintaining

active dialogue with general partners, attending regular meetings, and representing ARMB on advisory boards. During 2014, Pathway participated in 186 advisory board/monitoring meetings, attended 48 annual meetings, and reviewed 25 amendments related to the ARMB portfolio. 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 2014 as a result of general partners taking advantage of strong exit markets. Notably, total distributions reached a new record level for the fourth-consecutive year. This activity was consistent throughout 2014: more than \$60 million was distributed in each quarter. Further, the portfolio's buyouts, venture capital, and special situations strategies each established new record annual distribution totals during the year. In aggregate, the portfolio's partnerships distributed \$246.6 million in 2014, which represents a 10% increase from the prior record total of \$225.1 million in 2013. Overall, 67 of the portfolio's 124 active partnerships as of December 31, 2014, made distributions in excess of \$1.0 million in 2014.

Summary

Over the past 13 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 2015 Tactical Plan:

- Target commitments of \$187 million during the 2015 calendar year, subject to the availability of high-quality investment opportunities.
- Invest up to \$25 million per partnership in up to 20 partnerships during 2015, in opportunities from both existing manager relationships and new manager relationships. Investments will typically range from between \$10 million and \$25 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 to 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%²) 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.

2. Includes restructuring and distressed debt partnerships.

Pathway Capital Management

Mandate: Private Equity

Hired: 2002

Firm Information	Investment Approach	Total ARMB Mandate
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,	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. Final investment decisions are made by the Investment Committee comprised of four senior managing directors and four managing directors.	Assets Under Management: (12/31/14) Commitments: \$1,673 million Market Value: \$858 million CY 14 Management Fees: \$2.3 million
government entities, and financial institutions around the globe. The firm manages assets of \$30.4 billion.	Pathway is extremely selective in choosing private equity investment funds. Every partnership must met rigid standards regarding the overall quality of the investment	
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	 opportunity, such as: 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. 	
wholly owned UK subsidiary is regulated in the UK by the Financial Services Authority.	Benchmark: Russell 3000 +350 basis points and the Cambridge vintage year peer comparison.	
Key Executives: Jim Chambliss, Managing Director Canyon Lew, Director		

Concerns: None

Performance

The since inception internal rate of return (IRR) for Pathway's ARMB portfolio is 14.1% through 12/31/2014, which compares favorably with the public market equivalent return for the Russell 3000 of 8.8%.

In Callan's vintage year comparison of the Pathway portfolio and the Cambridge database from 2001 through 2009, the Pathway portfolio is in the top quartile for 2 years and in the second quartile for 8 years.

Presentation Prepared For

Alaska Retirement Management Board

April 23, 2015







- Pathway Update
- Private Equity Environment
- Portfolio Update
- Appendix



Pathway Update



Pathway Overview

- Global Private Equity Specialist—Pathway creates and manages private equity programs comprising primaries, secondaries, and co-investments for institutional investors worldwide.
- Established 1991
- Assets Under Management—\$30.4 billion¹
- Global Investor Base—Institutions across North America, Europe, and Asia
 - Corporate Pension Funds
- Financial Institutions
- Public Pension Funds and Trusts

- Foundations and Endowments
- Sovereign Wealth Entities
- Ownership—Independent, 100% partner owned
- Personnel 118 partners and employees, including 40 investment professionals, supported by a deep team of legal, accounting, client services, information technology, and administrative personnel
- Locations—California Rhode Island London Hong Kong Tokyo²
 - SEC-Registered FCA-Regulated SFC-Regulated³

^{1.} Represents roll-forward market value plus undrawn capital at December 31, 2014.

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

^{3.} Pathway is an SEC-registered investment adviser. Pathway's wholly owned subsidiary, Pathway Capital Management (UK) Limited, is authorized and regulated by the Financial Conduct Authority, and Pathway's wholly owned subsidiary, Pathway Capital Management (HK) Limited, is licensed in Hong Kong by the Securities and Futures Commission to engage in certain marketing activities. 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 documentation. Any representation to the contrary is unlawful.



Organizational Chart

Partners

	Managing Director Senior Manag	J. Jakobi Alex M. C ing Director & Clo Managing Jason C. Jenkins, CFA Director	Director Managing Director Lew Director	Director Managing Director Matthew M. Lugar* Derrek I.	Thomas W. Laders* Managing Director Ransford, CFA Valerie A. I Director Direct		•	
Paul J. de Groot, CFA Sr. Vice President Stefan Goettl† Associate Alice M. Investmen	t Analyst Investme		Joseph C. Tie Vice Presider Jeffrey L. Bure Sr. Investment Ai att H. Geiger stment Analyst	nt Sr. Associate ess* Sean J. Castill	Sr. Associat o Jeremy N. Eb:	te Sr. stein Justi	J. Siemsen, CFA Associate n C. Maney stment Analyst Brett W. Richard: Investment Analy Tax	
Christine P. Cornejo, CPA (inactiv Sr. Vice President—Corporate Finance Lori L. Espinosa Accounting Manager Eric A. Thomson, CPA Sr. Staff Accountant Mitzi Ledesma Payroll/HR Administrator		Sr. Vice President—Finance Patrick Y. Kim, CPA Sr. Accountant Kristen G. Halford Accountant Katherine M. Dabu Operations Specialist Lauren C. Lopez Cash Accountant	atie Doan, CPA (inactive) Sr. Controller Melanie Z. McKinley Sr. Accountant ason Jung Sup Lee, CPA Accountant Uyen T. Hoang Operations Specialist Raymond Nguyen Cash Accountant	Won C. Chung, CPA (inactive) Kontroller Sam Alherech, CPA Accountant Gracielle V. Samson Accountant Helen Luna Benitez Operations Specialist Lynn D. Tran Cash Accountant	Controller Jana J. Beaupre, CPA K. Accountant Carolyne P. Truong Accountant Carolyne T. Phan Operations Specialist	Mark V. Alviz, CPA Sr. Accountant (ristine N. Guevara, CPA Accountant Heidi T. Jauregui ash & Operations Manager Rochele L. Porpora Operations Specialist	Dustin T. Hankins, JD, CPA Sr. Tax Manager Rose L. Carter, CPA Sr. Tax Manager Michael W. Davis Tax Accountant Erik Gonzalez Tax Accountant Tony Hwang Tax Accountant Allison M. Altman Tax Administrator	Stefanie A. Karp Sr. Associate Isabel M. Rosser Compliance Coordinator
Ashok K. Tripathi, Esq. Sr. VP & General Counsel Editorial & Prod	Camille L. Pedigo, Esq. VP & Asst. General Counsel	Charles H. Caliman II, Esq. Sr. Counsel	Mgr.—Legal Adminis		Linda S. Chaffin Vice President Human Resource	Matthew J. Coyne* Sr. Associate	Jessica C. Campbell Associate Administrati	Martin J. Wing Associate
Christopher M. Lopez Jea	i nine M. Julian Graphic Designer Sys S	Brian M. Leyran tems Administration Mgr. Heino F. Luttich r. Systems Administrator Albert C. Baloiu Systems Administrator	Michael C. L Mgr.–Software Dev Sherif Mous Software Deve	ong Rodney D. Kent velopment Sr. Software Developer tafa Dat T. Nguyen sloper Software Developer	Laurie N. Kiley Vice President of HR	Reeny A. Higu Office Mgr. Monica A. Burg Mia N. Chimei Meri K. Eato Megan M. Ort Carly B. Taylo	chi Michelle M. Loel Mgr.—Investment Admir gos [†] Kelly N. Charlshe to Sandra A. Clay n Kathleen G. Kling ega Monica Rodriguez	Natalie S. Alvarez Candice J. Benson Elinor Cheung [†] Terri A. D'Amore Jennifer A. Leddy*



Private Equity Environment



Overview

- The private equity industry continues to perform well, particularly in the U.S. and Europe.
- M&A and IPO exit markets for private equity—backed companies remain strong; exit activity in 2014 reached a record high.
- Non-investment-grade credit markets remain accommodative; however, volatility and credit spreads have increased recently.
- Buyout investment activity is increasing at a moderate pace; capital structures remain conservative, although purchase-price multiples are increasing.
- Default rates and distress ratios remain at historically low levels, but prospective opportunity is growing.
- Global macroeconomic outlook is improving, though at an uneven pace across regions; overall private equity market sentiment is cautiously positive.



Source: Thomson Reuters.

M&A and IPO Exit Markets

Strong M&A and IPO markets are driving high levels of exit activity and distributions.



	Top 4Q14 PE-Backed M&A Exits	S
Company	Acquirer	Value (bn)
WhatsApp	Facebook	\$19.0
Alliance Boots	Walgreen's	\$15.3
Biomet	Zimmer Holdings	\$13.4



	Top 4Q14 PE-Backed IPOs	
Company	Exchange	Value (bn)
Alibaba	NYSE	\$25.0
NN Group	EuronextAM	\$2.4
WH Group	Hong Kong	\$2.4

- M&A exit activity for PE-backed companies totaled \$489bn in 2014, an increase of 80% over the prior year and surpassing the prior record set in 2007.
 - Notably, during 1Q14, Sequoia-backed WhatsApp was acquired by Facebook for \$19.0bn; the acquisition represents the largest VC-backed M&A transaction in history and exceeds 2013's total VC-backed M&A transaction value (\$16.9bn).
- Robust activity has been driven by strategic acquirers with record-high cash balances seeking growth and product diversification.

- Global PE-backed IPO issuance reached a record high of \$144 billion in 2014.
 - During 2014, 194 PE-backed companies completed their IPOs on U.S. exchanges, raising \$67.5bn—this surpasses the highest annual total on record by value.
 - \$25.0 billion IPO of Alibaba in 3Q14 was the largest IPO (PE-backed or non-PE-backed) in history.
 - European PE-backed IPO issuance totaled €20.1bn during 2014, the highest annual total on record.



Buyout Markets

Buyout investment activity is increasing at a moderate pace.



SOURCE: Thomson Reuters and S&P Capital IQ. ^aAverage PPM (as a multiple of EBITDA) of all LBOs.

	Top 4Q14 U.S. PE Investments
Company	Value (bn)
Safeway	\$9.2
PetSmart	\$8.3
Gates Corporation	\$5.4



SOURCE: CMBOR, Ernst & Young, Equistone Partners Europe, and S&P Capital IQ. ^aAverage PPM (as a multiple of EBITDA) of LBOs with EV of €500 million or more.

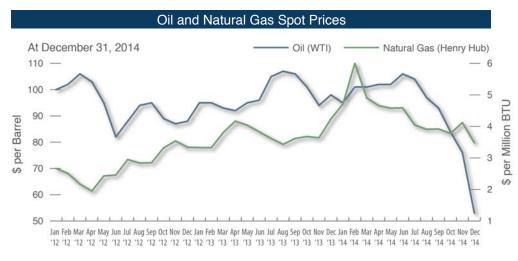
	Top 4Q14 European PE Investments
Company	Value (bn)
Visma	€2.5
Nets	€2.3
Scout24	€2.0

- U.S. buyout investment activity has been supported by the country's relatively benign economic outlook, strong IPO and M&A exit activity, and accommodative credit markets.
 - During 2014, buyout firms announced \$251bn in investments in U.S.-based companies—a 17% increase from 2013.
 - Notable investment trends include corporate carveouts, publicto-private buyouts, and energy- and technology-focused investments.
- Average purchase price multiples in both the U.S. and Europe have increased since 2009.
 - In the U.S., the average purchase-price multiple was 9.7x in 2014, matching the average for 2007; in Europe, the average purchase-price multiple was 10.2x in 2014, compared with 10.3x in 2007.
- Buyout capital structures remain relatively conservative.
 - The 2014 average EBITDA-to-cash interest coverage ratio of 3.3x and average equity contribution rate of 37.3% remain significantly above 2007 levels.
- 2014 European buyout activity totaled €67.3bn, an increase of 15% over 2013.



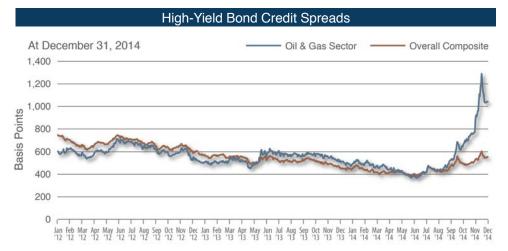
Energy Private Equity

Decline in Energy Prices Expected to Drive Increased PE Activity in the Sector



- Energy-focused private equity funds accounted for 9% of global PE fundraising over the past 5 years.
 - Many generalist PE firms have also invested in the energy sector.
 - Impact on valuations is varied by exposure to specific energy sectors, oil/gas exposure mix, basin exposure, among others.
 - Oil field services and heavily leveraged E&P companies are the most vulnerable in the current environment. Wellcapitalized E&P companies with modest debt and strong exposure to the most-economic basins will weather the downturn.

SOURCE: U.S. Energy Information Administration.



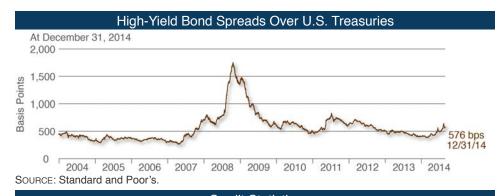
SOURCE: Standard & Poors Ratings Direct.

- Many PE firms are preparing to capitalize on a prolonged downturn in energy commodity prices.
- Capital markets are currently closed for most noninvestment-grade oil and gas companies.
 - Opportunities to j/v with capital-constrained producers or acquire attractive assets from distressed sellers.
 - Credit spreads for energy high-yield companies increased significantly in December 2014 and remain elevated.

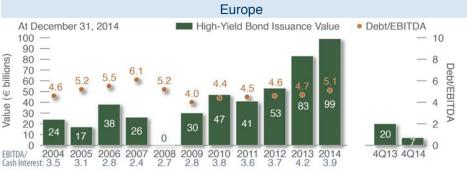


Non-Investment-Grade Credit Markets

Leveraged credit markets have recently tightened but remain accommodative overall.







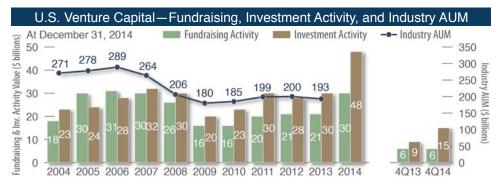
Cash Interest: 3.5 3.1 2.8 2.4 2.7 2 SOURCE: UBS LCM and S&P Capital IQ.

- High-yield and leveraged loan credit spreads increased during 4Q14 to their highest levels of the year.
 - Spreads for U.S. high-yield bonds averaged 576 bps at the end of 2014, up from 432 bps at the end of 2013.
 - Average secondary spread for B-rated leveraged loan increased to 473 bps at year-end 2014 from 406 bps at the start of the year.
- Non-investment grade debt issuance in both the U.S. and Europe remained strong during 2014, following a recordsetting year in 2013.
 - High-yield bond issuance in the U.S. totaled \$311bn in 2014, compared with an all-time high of \$336bn in 2013.
 - High-yield bond issuance in Europe reached €98.7bn in 2014, surpassing the highest annual total on record (€82.5bn in 2013).
- U.S. regulators are increasing their efforts to ensure the banking industry's compliance with new leveraged lending guidelines.
 - Total debt-to-EBITDA multiples of greater than 6.0x would raise concerns for most companies.
 - May lead to opportunities for new alternative non-bank lenders willing to lend at higher multiples.



U.S. Venture Capital

Technological advancements are driving opportunities in venture capital.



	Top 4Q14 VC Investments	
Company	Stage	Value (mm)
Uber (2Q14)	Expansion	\$1,200
Uber (4Q14)	Expansion	\$1,200
Magic Leap	Early-Stage	\$542

SOURCE: PricewaterhouseCoopers/National Venture Capital Association MoneyTreeTM Report, based on data from Thomson Reuters.



	Top 4Q14 VC-Backed IPOs	
Company	Exchange	Value (mm)
JD.com	NASDAQ	\$2,000
Mobileye	NYSE	\$1,023
LendingClub	NASDAQ	\$1,001

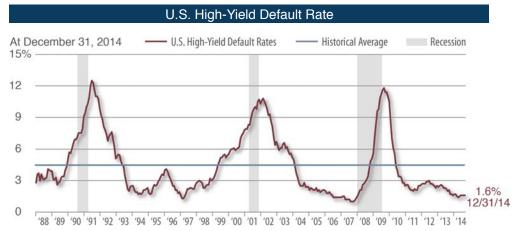
Source: Bloomberg and Thomson Reuters.

- Rapid pace of innovation and adoption across multiple disciplines is driving returns and opportunities in venture capital.
 - Areas of opportunity and interest are constantly shifting in response to technological advancements and adoption rates.
 - More than 80 privately held venture-backed companies have achieved valuations of \$1.0bn or greater.
- M&A and IPO exit markets for venture-backed companies have been strong.
 - 125 venture-backed companies priced their IPOs on U.S. exchanges in 2014—the most in a single year since 2000 (270).
 - Established technology and life sciences companies have been actively acquiring VC-backed companies to drive growth and expand their product 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 2006.

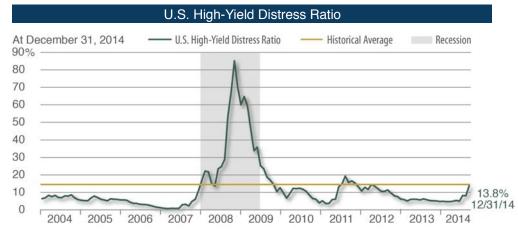


Distressed Debt Markets

Distressed debt investment activity remains at low levels, but prospective opportunity is growing.



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



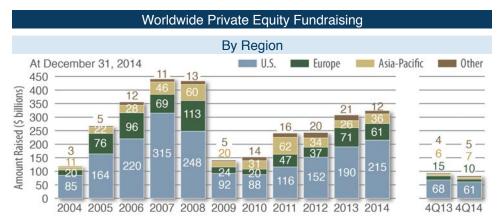
Source: S&P Ratings Direct.

- Traditional distressed debt opportunity set (e.g., corporate bonds, bank loans) is a fraction of what it was in 2009.
 - U.S. high-yield default rate was 1.6% as of December 2014,
 vs. prior cycle peak of 11.5% in November 2009.
 - Dollar value of U.S. defaulted debt was \$73bn in 2013 vs. \$516bn in 2009.
 - Companies have exhibited stable operating performance and have benefited from relatively strong credit markets in the U.S.
- High-yield distress ratio has increased to its highest levels since 2012, driven by price declines in energy high-yield debt.
 - Distress ratio (percentage of bonds with spreads of 1,000 bps or higher over U.S. Treasuries) was 13.8% as of December 2014.
- European distressed debt-related investment activity is increasing.
 - €91bn in non-core loan asset sales by European banks in 2014, up from €64bn in 2013, according to PwC.
 - Total value of non-core assets held by European banks is estimated to be greater than €2tn.



Private Equity Fundraising Activity

• Fundraising activity is increasing, though the market remains highly selective.



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.



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 buyout-, venture capital-, distressed debt-, or energy-focused.

- Global PE fundraising activity has improved since 2009 as a result of attractive performance industry wide and an increase in distributions and investment activity; however, the fundraising market remains challenging for many GPs.
 - PE firms worldwide raised \$323bn in 2014—a 5% increase over 2013.
 - The increase was largely attributable to an uptick in both U.S.focused and Asia-Pacific-focused fundraising, which was partially offset by a decline in Europe-focused fundraising.
- Venture capital–focused funds experienced an upsurge in fundraising during 2014, raising \$45.1bn—a 33% increase from 2013.
- Following 2 consecutive years of declines, emerging market focused private equity fundraising activity rebounded in 2014.
 - Asia-Pacific-focused and Latin America—focused funds raised \$36.7bn and \$5.7bn, respectively—their highest annual fundraising totals since 2011.



Portfolio Update



Recent Highlights

- During the 12-month period ended April 15, 2015, Pathway committed \$231.5 million to 19 partnerships on ARMB's behalf.
- Cumulative contribution and distribution activity increased to \$1,376.5 million and \$1,278.4 million, respectively, as of March 31, 2015.
- The portfolio generated \$123.5 million in gains and a 1-year net return of 15.8% in 2014.
- The underlying portfolio grew to include 2,075 active holdings and is well diversified by strategy, industry, and geographic region, as of September 30, 2014.
- IPO and M&A exit markets for private equity—backed companies remain strong.
- Pathway's monitoring efforts during the past 12 months included the following:
 - Attending 48 annual meetings
 - Conducting 67 one-on-one meetings with general partners
 - Participating in 186 advisory board/monitoring meetings



2015 Tactical Plan Review and Progress

At April 15, 2015

	2015 Plan	Actual to Date
Commitments	\$187 million	\$82.3 million
Number of Partnerships	Up to 20 partnerships	6 primary partnerships, 3 secondary transactions
Size of Investments	\$10-\$25 million	\$11.7 million avg. commitment ^a
Investment Strategies	Buyouts, Venture Capital, Special Situations, and Restructuring	Buyouts (3), Venture Capital (3), Special Situations (3)

^aExcludes secondary transactions.

	2	2015 Plan	Commitments to Date			
Strategy	No. of Psps.	Targeted Commitments (MM)	No. of Psps.	Commitments (MM)		
Buyouts	Up to 10	Up to \$125	3	\$11.8		
Venture Capital	Up to 10	Up to \$100	3	\$33.1		
Special Situations	Up to 8	Up to \$75	3	\$37.5		
Restructuring	Up to 6	Up to \$50	_	_		
Total	Up to 20	Up to \$187	9	\$82.3		



Portfolio Overview

At April 15, 2015 (\$ in millions)

Inception	2002
Total Commitments ^a	\$1,748.5
No. of Commitments	138
No. of Managers	61
% Contributed	79%
Weighted Avg. Age (Years)	5.6
Current Companies ^b	2,075
S-I Net IRR ^c	14.1%
DPI	0.93x

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

^bAs of September 30, 2014.

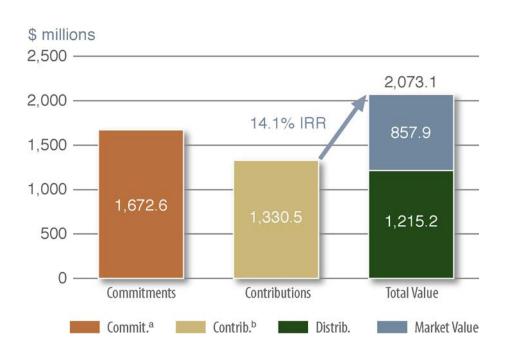
^cBased on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data.



Performance Summary

At December 31, 2014

Financial Summary



Since-Inception IRR and Cumulative Gain/Loss Progression



NOTE: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, 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.

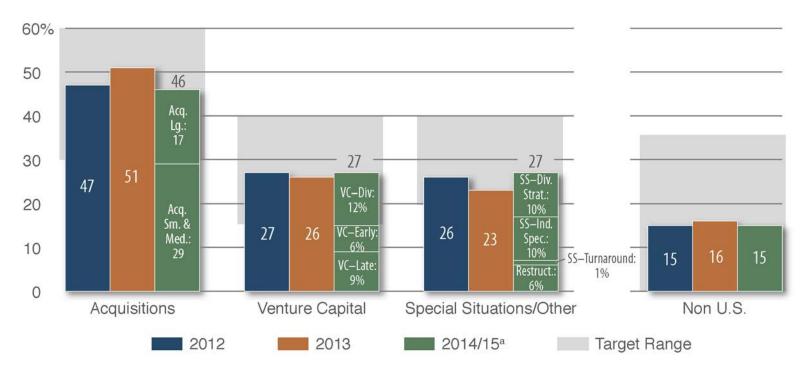
^bIncludes capital contributed for management fees called outside the total commitment.



Investment Strategy Diversification

Partnership Market Value plus Unfunded Commitments

At April 15, 2015



NOTE: Based on partnership market values and unfunded partnership commitments at December 31 for each year shown.

Each investment strategy is within its long-term allocation target range, as of April 15, 2015.

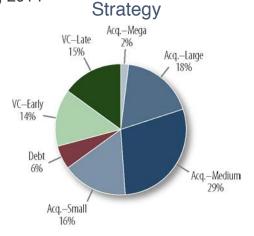
^aBased on preliminary partnership market values and unfunded partnership commitments at December 31, 2014, plus new commitments made through April 15, 2015. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data.



Portfolio Diversification

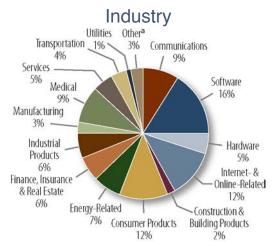
Company Market Value—2,075 Investments

At September 30, 2014

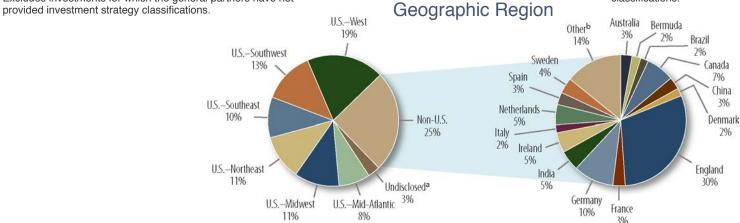


NOTES: Acquisition substrategies are based on the following ranges of total enterprise values: Mega >\$10 billion, Large \$1-\$10 billion, Medium \$200 million-\$1 billion, and Small <\$200 million.

>\$10 billion, Large \$1-\$10 billion, Medium \$200 million-\$1 billion, and S Excludes investments for which the general partners have not



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



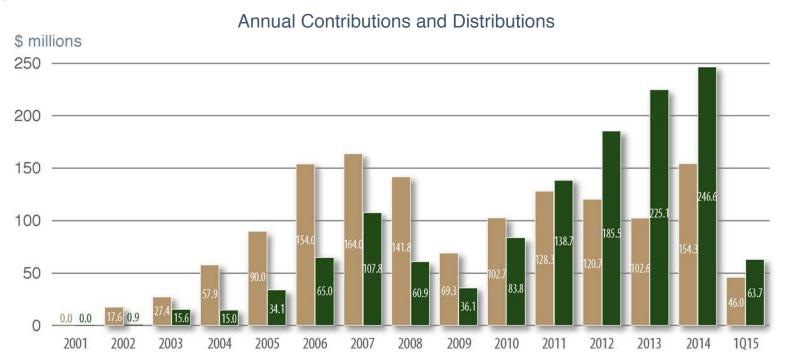
^aComprises investments for which the general partners have not provided geographic classifications.

^bComprises regions that each account for less than 2% of the portfolio's non-U.S. market value: Argentina, Austria, Belgium, British Virgin Islands, Colombia, Czech Republic, Denmark, Finland, Greece, Hong Kong, Hungary, Israel, Japan, Kenya, Lithuania, Luxembourg, Mauritius, New Zealand, Norway, Philippines, Poland, Portugal, Russian Federation, Scotland, Singapore, Slovenia, South Korea, Switzerland, Taiwan, Turkey, and Ukraine.



Contribution and Distribution Activity

At March 31, 2015



- Contributions increased by 50% in 2014 to \$154 million.
- The \$247 million distributed by ARMB's partnerships in 2014 represents the largest annual distribution total since the portfolio's inception, surpassing the prior record annual total by more than \$21 million.

Distributions

• Distributions outpaced contributions by \$92 million in 2014, marking the fourth-consecutive year in which the portfolio has generated positive net cash flow.

Contributions

 Distribution activity remains robust: distributions totaled \$64 million in 1Q15—the fifth-consecutive quarter of distributions in excess of \$60 million.



Portfolio Performance

At December 31, 2014 (\$ in millions)

	No. of Partnerships	Commitmentsa	Contributions ^b	Distributions	Market Value	Total Value	Gain/ Loss	Since-Incep. Net IRR
Dec 31, 2014	129	\$1,627.6	\$1,330.5	\$1,215.2	\$857.9	\$2,073.1	\$742.5	14.1%
Dec 31, 2013	115	1,499.2	1,176.3	986.6	826.7	\$1,795.3	619.1	13.9%
YOY Change	14	\$173.5	\$154.3	\$246.6	\$31.1	\$277.7	\$123.5	0.2%

NOTES: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data.

Amounts may not foot due to rounding.

- During the 1-year period ended December 31, 2014, ARMB's portfolio generated a gain of \$123.5 million and a net return of 15.8%.
 - The portfolio posted positive performance in all 4 quarters of the 1-year period.
 - 12 of the portfolio's 13 vintages older than 1 year generated double-digit 1-year returns.
 - 83 of the portfolio's 108 partnerships active for more than 1 year generated a positive 1-year net return; 55 of these partnerships generated a double-digit 1-year return.

^aCommitments to non-USD-denominated partnerships are accounted for by multiplying the 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.

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

1-Year



Performance by Investment Strategy

At December 31, 2014 (\$ in millions)

									Performance
	No. of Psps.	Commit. ^a	Contrib.b	Distrib.	Market Value	Total Vaue	Since-Incep. G/L	Since- Incep. IRR	G/L IRR
Buyouts	57	\$850.9	\$658.0	\$675.4	\$368.0	\$1,043.4	\$385.4	14.8%	\$44.8 12.8%
Venture Capital	30	349.4	293.7	215.9	283.5	499.5	205.8	15.6%	61.7 25.7%
Special Situations (excl. Restructuring)	27	334.4	270.2	204.8	159.0	363.8	93.6	8.9%	14.3 9.8%
Restructuring	15	138.0	108.6	119.1	47.3	166.4	57.8	20.9%	2.8 6.4%
Total	129	\$1,672.6	\$1,330.5	\$1,215.2	\$857.9	\$2,073.1	\$742.5	14.1%	\$123.5 15.8%

NOTES: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data.

Amounts may not foot due to rounding.

- Performance remains strong across the portfolio: all 4 of the portfolio's core strategies are contributing to the portfolio's attractive since-inception return.
- Over the past year, the venture capital strategy generated particularly strong performance having generated a return of 25.7% and a gain of \$61.7 million.

^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.



Recent Significant Events within the ARMB Portfolio













Notable IPO Pricings























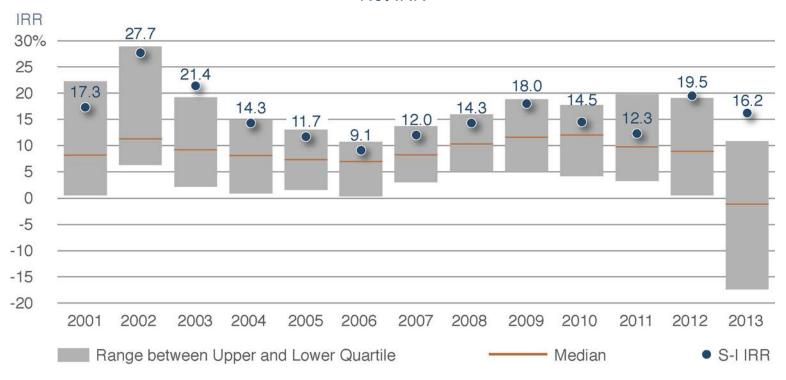




Vintage Year Performance vs. Industry Benchmarks

At December 31, 2014





NOTES: Upper and lower quartile range and median based on Burgiss Private iQ global all private equity return benchmarks, as of September 30, 2014, as produced using Burgiss data.

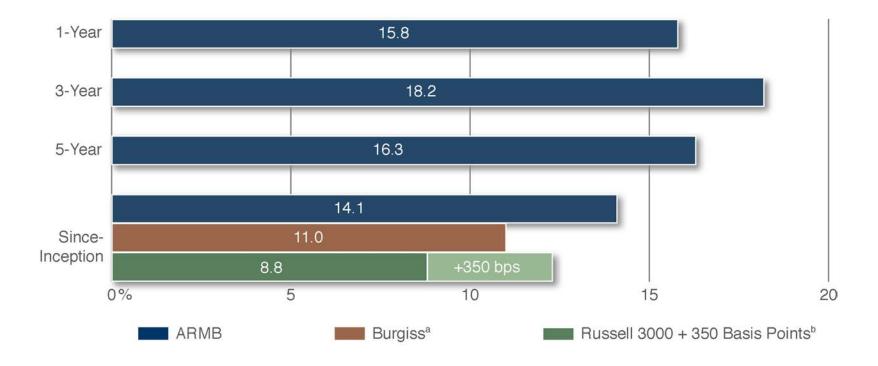
Since-inception IRR based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data.

• All 13 vintage years older than 1 year rank in the top half of performers for their vintages.



Net Performance vs. Public and Private Market Indices

At December 31, 2014



NOTES: Performance is based on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data. Performance is preliminary and subject to change.

^aBurgiss Private iQ global all private equity pooled horizon return for 2001- through 2014-vintage funds, as of September 30, 2014, as produced using Burgiss data.

^bPerformance was derived by applying ARMB's cash inflows and outflows to the index's daily returns.



Historical Since-Inception Net Gain

At December 31, 2014



^aBased on the most-recent information provided by the general partners, adjusted for cash flows through December 31, 2014. As of the printing of this presentation, 99 of the portfolio's 129 active partnerships, representing 79% of the portfolio's market value, had provided December 31, 2014, data. ^bEquals the dollar-weighted Russell 3000.

• The portfolio's outperformance of the Russell 3000 has resulted in nearly \$375 million of incremental gains above the index since the program's inception.



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 Director

Mr. Lew joined Pathway in 2004 and is a director in the California office. Mr. Lew is responsible for investment analysis and due diligence, negotiating and reviewing investment vehicle documents, and client servicing. Additionally, Mr. Lew serves on the advisory boards of several private equity partnerships.

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.



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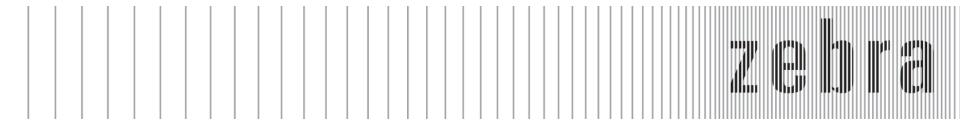
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No representation is being made that a prospective investor will or is likely to have access to funds such as the funds referenced herein. The reference to such funds was made with the benefit of hindsight based on historical rates of return of such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



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Fax: 203.878.1113 www.zebracapital.com



Zebra U.S. Micro Cap Strategy

Alaska Retirement Management Board

April 23, 2015

Roger G. Ibbotson

Chairman and CIO

John Holmgren

President

Peter Schaffer

COO

Outline: Zebra U.S. Micro Cap Strategy

Zebra Capital Management, LLC

Liquidity as an Investment Style

- Economic Rationale
- Micro Cap Rationale: Size vs. Liquidity

Zebra U.S. Micro Cap Strategy

- Construction
- Performance
- Characteristics

Zebra Capital Management, LLC

- Zebra Capital Management is a fundamentally based systematic equity manager specializing in the liquidity / popularity investment style
- Founded by Roger Ibbotson, Zebra combines leading-edge academic research and analytical methods with decades of direct trading, risk management, and operational experience
- Zebra manages strategies in active global equities, absolute return, and rules based indexing



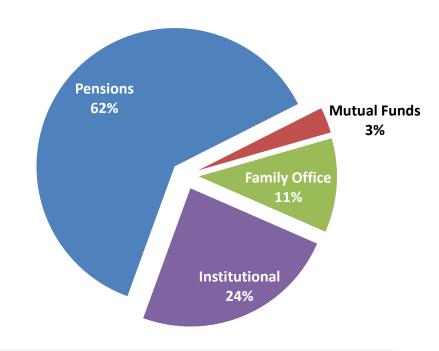
Zebra Asset & Investor Breakdown

As of March 31st, 2015

\$872 million of Regulatory AUM



Strategy Breakdown



Investor Breakdown



Ibbotson[®] SBBI[®] Stocks, Bonds, Bills, and Inflation 1926–2014



[•]Past performance is no guarantee of future results. Hypothetical value of \$1 invested at the beginning of 1926. Assumes reinvestment of income and no transaction costs or taxes. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. ©2015 Morningstar. All Rights Reserved.

Zebra's Research: Publicity and Awards







20–21 February 2014











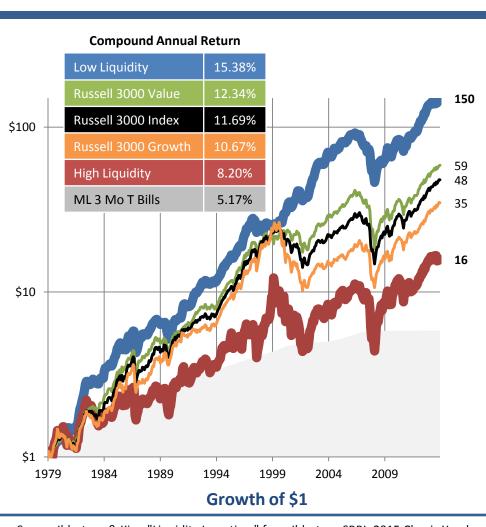






The Liquidity Premium

1980 - 2014



Stocks, Bonds, Bills and Inflation

- First highlighted traditional market premiums
- Equity, value, size and liquidity premiums

What is the Liquidity Premium?

- More liquid assets are priced at a premium
- Less liquid assets are priced at a discount, thus having higher expected returns

Foundation in Academic Literature

- Thirty years of literature supporting higher returns
 - Ibbotson, Chen, Kim & Hu, 2013
 - Idzorek, Xiong, & Ibbotson, 2012
 - Pastor & Stambaugh, 2003
 - Datar, Naik & Radcliffe, 1998
 - Amihud & Mendelson, 1991
 - Ibbotson, Siegel & Diermeier, 1984
- Impetus for investments in venture capital, private equity, and other alternative investments
- Source Ibbotson & Kim, "Liquidity Investing," from Ibbotson SBBI: 2015 Classic Yearbook, Morningstar, Inc.
- See Appendix "Performance Disclosures & Notes"

Popularity vs. Size

1972 – 2014, U.S. Top 3,500 Universe, annualized returns

		Popularity						
		Low			High			
Size	Micro	16.2%	16.5%	10.4%	0.7%			
	Small	15.7%	14.6%	12.4%	6.2%			
	Mid	14.1%	14.0%	13.0%	8.5%			
	Large	11.6%	12.3%	12.0%	9.2%			

Popularity Premium (Low-High)
+15.5%
+9.5%
+5.6%
+2.4%

Smallest Cap Quartile

Turnover is an especially potent predictor within the smallest quartile of a broad universe.

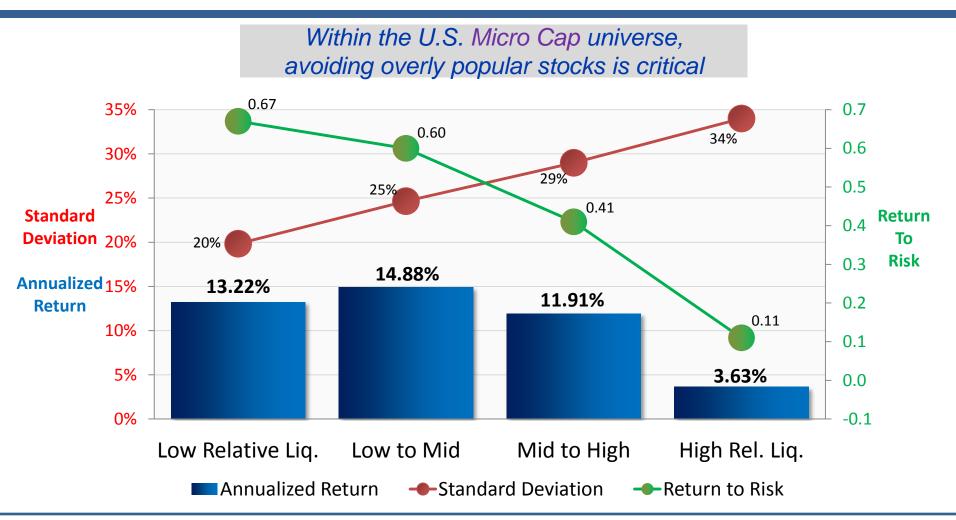
If we repeat the "Liquidity as an Investment Style" analysis on a micro cap universe, do the main results still stand?

Size Premium (Micro – Large) +4.6% +4.3% -1.6% -8.5%

[•] Source: Ibbotson, Chen, Kim & Hu, "Liquidity as an Investment Style" Financial Analysts Journal, May/June 2013. 2015 data update Zebra Capital.

Popularity Quartile Portfolios

1984 – 2014, U.S. Micro Cap Universe



[•] Source: Zebra Capital Management proprietary research.



Popularity vs. Fundamentals

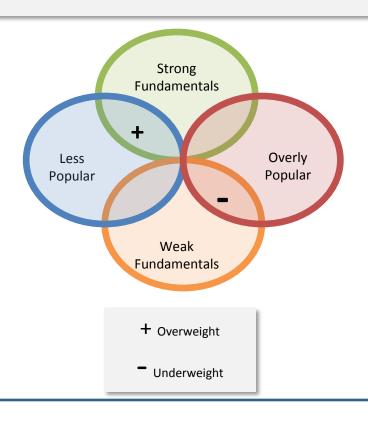
1984 – 2014, U.S. Micro Cap Universe, annualized returns

			Popu	larity			Popularity Premium	
		Low			High		(Low-High)	
	High E/P	16.6%	18.1%	14.2%	8.4%		+8.2%	Both popularity and
E/P		13.3%	15.6%	13.0%	8.2%		+5.1%	earnings yield are strong predictors of microcap returns.
L/1		9.1%	12.8%	8.8%	2.1%		+7.1%	The selection criteria includes turnover and
	Low E/P	9.7%	11.3%	9.8%	-1.4%		+11.1%	earnings yield.
Euro de	una a unta l					Ī		
	mental nium	+6.9%	+6.9%	+4.4%	+9.7%			

[•] Source: Zebra Capital Management proprietary research.

Zebra Investment Philosophy

Fundamentally strong, less popular stocks tend to outperform fundamentally weak, more popular stocks.



- ➤ Popularity is how much a stock is liked. It is measured by the level of interest in the marketplace.
- Fundamentals are the real phenomena which contribute to the valuation of a stock. It is observed through the income and balance sheets of a company.
- ➤ Combinations are contrarian, overweighting the overlooked and fundamentally strong while underweighting the popular but fundamentally weak companies.

Zebra U.S. Micro Cap Strategy

Objective

 Generate consistent excess returns with similar or lower beta and volatility than the Russell U.S. Micro cap Index.

Strategy Overview

- Return objective: 2% annualized excess return relative to the benchmark index over a market cycle
- Volatility objective: Similar or less than the benchmark index
- Beta Target: Similar or less than the benchmark index
- Typical Leverage: none
- Avg. Expected Turnover: ~ 70 % per annum
- Focus: Russell U.S. Microcap Index Constituents
- Fees: 62.5 bps per annum for \$75 Million

Strategy Characteristics

- The Zebra strategy is the implementation of academic and proprietary research
- Systematic use of proprietary behavioral and fundamental metrics
- The portfolio construction process maximizes intended relative characteristics while controlling risk
- The unique nature of Zebra's strategy leads to portfolios that tend to be relatively noncorrelated with other investment strategies.

Zebra U.S. Micro Cap Parameters

Selection Universe

Russell Microcap Index constituents

Selection Criteria

- Exclude highly traded securities
- Exclude securities with the largest trading price impact
- Require attractive earnings yield (including forward earnings if available)
- Require strong long-term profitability and quality

Portfolio Construction

- Control sector relative capitalization
- Individual stock weightings proportional to trailing fundamentals

[•] Source: Zebra Capital Management proprietary research.

Zebra U.S. Micro Cap: Performance Back test

January 2008 – March 2015

Zebra = **Zebra U.S. Micro Cap**

R-Squared

Active Premium

Information Ratio

Annualized Tracking Error

BM1 = Russell Microcap Index (DRI)

Historical Performance	Zebra	Russell Microcap	+/-	Measures of Risk	Zebra	Russell Microcap	+/-
Compound ROR	12.14%	7.36%	4.78%	Standard Deviation	22.14%	22.78%	(0.64)%
Cumulative Return	129%	67%	62%	Sharpe Ratio (0%)	0.63	0.43	0.20
Cumulative VAMI	2,294	1,673	621	Sortino Ratio (0%)	0.78	0.44	0.34
Largest Month Gain	18.95%	15.99%	2.96%	Downside-Deviation (below 0%)	14.73%	16.05%	(1.32)%
Largest Month Loss	(18.82)%	(20.49)%	1.67%	Maximum Drawdown	(50.00)%	(53.18)%	3.18%
% Positive Months	66%	60%	6%	Months In Maximum Drawdown	14	14	-
				Months To Recover	20	24	(4)
Benchmark Analysis	All Markets	Up Markets	Down Markets	Annualized Over / Under			+/-
Alpha (Monthly)	0.39%	0.06%	0.25%	YTD (Cumulative)			0.44%
Annualized Alpha	4.84%	0.77%	3.07%	Trailing 1 Year			10.27%
Beta	0.95	1.01	0.92	Trailing 2 Year			3.75%
Correlation	0.97	0.93	0.93	Trailing 3 Year			3.59%

0.87

6.41%

4.74%

0.74

Trailing 5 Year

0.95

5.32%

4.78%

0.90

0.86

4.50%

1.99%

0.44

5.12%

[•] Source: Zebra Capital Management proprietary research. See Appendix "Performance Disclosures and Notes".



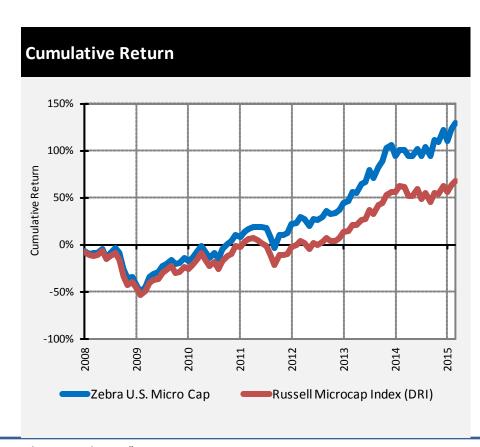
Zebra U.S. Micro Cap: Performance Back test

January 2008 – March 2015

Zebra = Zebra U.S. Micro Cap

BM1 = Russell Microcap Index (DRI)

Annual Returns	Zebra	Russell Microcap	+/-
2015	3.59%	3.14%	0.44%
2014	7.69%	3.65%	4.04%
2013	49.89%	45.62%	4.28%
2012	22.26%	19.75%	2.51%
2011	2.04%	(9.27)%	11.31%
2010	27.93%	28.89%	(0.96)%
2009	30.27%	27.48%	2.79%
2008	(34.00)%	(39.78)%	5.78%



 $[\]bullet \ \, \text{Source: Zebra Capital Management proprietary research. See Appendix "Performance Disclosures and Notes"}. \\$



Zebra U.S. Micro Cap: Portfolio Metrics

January 2008 – March 2015

2008-2015 Medians	ZCM Micro Cap Portfolio	Russell Microcap Index
# of stocks	254	1,560
Market cap (\$ millions)	305	345
Turnover, trailing 12M	82.67%	140.68%
E/P, trailing 12M	6.57%	-1.91%
E/P, forward 12M	7.10%	2.68%
Gross Profit / Assets	10.17%	6.44%
MDV (\$ millions), 30 day	1.00	2.05
Bid-Ask Spread	0.60%	0.65%
Active Share	76.58%	-

[•] Source: Zebra Capital Management proprietary research. MDV=Median Daily Volume. "Turnover" is stock-level share turnover (shares traded over shares outstanding.)

[•] All figures in the table are medians of annual cap-weighted averages.

Zebra U.S. Micro Cap Strategy

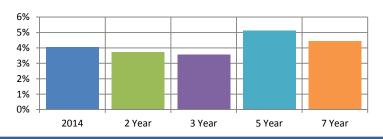


Unique Behavioral Finance Strategy



Combines top academic research with practical experience

Trailing Period Annualized Back Tested Excess Returns

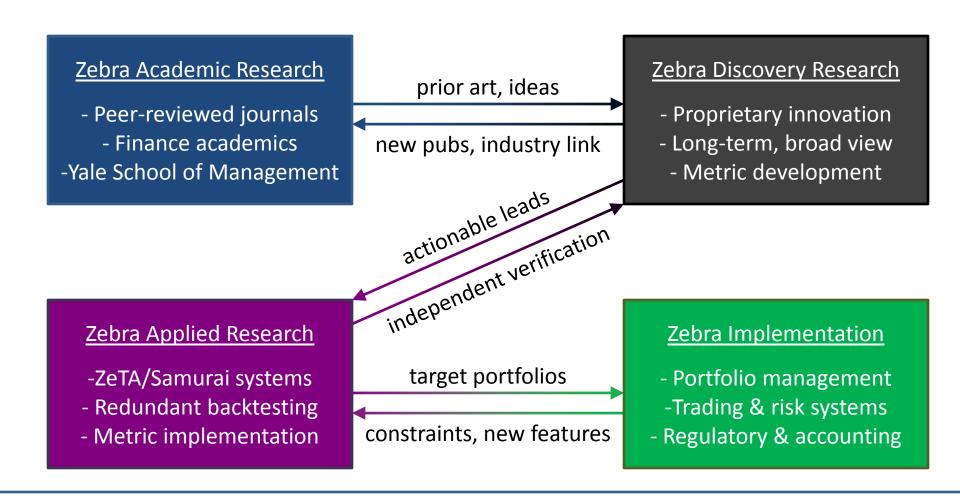


Consistent Excess Returns

[•] Source: Zebra Capital Management proprietary research. See Appendix "Performance Disclosures and Notes".

Appendix

Research & Development at Zebra Capital





Liquidity Regressions on Factors

1984 – 2014, U.S. Micro Cap Universe

Liquidity can be expressed as a long/short or a long only factor.

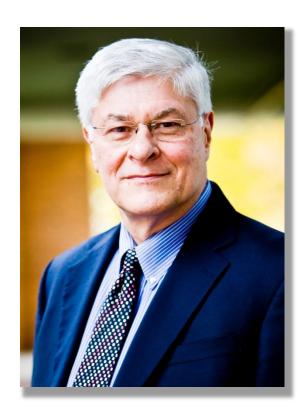
	Annualized Alpha	Market M-RF	Size SMB	Value VMG	Momentum HML	R ²
Long/Short Liquidity Factor	+7.13%*	-0.57	-0.82	+0.46	+0.33	73.6%
Low Liquidity Long Portfolio (R-RF)	+3.30%*	+0.59	+0.52	+0.39	-0.01	74.5%

^{*}t-stats = 3.69 and 2.80 (both statistically significant at 5% level.)

[•] Source: Zebra Capital Management, using methodology from Ibbotson & Kim, "Liquidity as an Investment Style: 2015 Update," available at research.zebracapital.com Fama-French factor data was obtained at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data library.html

Roger G. Ibbotson, Ph.D.

Chairman & Chief Investment Officer



Roger Ibbotson is Chairman & Chief Investment Officer of Zebra Capital. He is a member of the Zebra Capital portfolio management team having served in this role since the firm was founded in 2001. He is also Professor in the Practice Emeritus of Finance at Yale School of Management. Professor Ibbotson is Founder, Advisor and former Chairman of Ibbotson Associates, now a Morningstar Company with in excess of \$100 billion under advisement. He has written numerous books and articles including *Stocks, Bonds, Bills, and Inflation* with Rex Sinquefield (updated annually) which serves as a standard reference for information on capital market returns.

Professor Ibbotson conducts research on a broad range of financial topics, including investment returns, mutual funds, international markets, portfolio management, and valuation. He has published *The Equity Risk Premium* with William Goetzmann and *Lifetime Financial Advice* with Milevsky, Chen, and Zhu. He has also co-authored two books with Gary Brinson, *Global Investing* and *Investment Markets*. In addition, he has co-authored a textbook with Jack Clark Francis, *Investments: A Global Approach*. He is a regular contributor and editorial board member to both trade and academic journals. He is the recipient of many awards including the Graham and Dodd Scrolls in 1979, 1982, 1984, 2001, 2004, 2007, 2011, 2012, and best FAJ article of 2013.

Professor Ibbotson serves on numerous boards including Dimensional Fund Advisors' funds. He frequently speaks at universities, conferences, and other forums. He received his Bachelor's degree in mathematics from Purdue University, his M.B.A. from Indiana University, and his Ph.D. from the University of Chicago where he taught for more than ten years and served as Executive Director of the Center for Research in Security Prices.

Senior Management Biographies

John J. Holmgren, Jr. – President

Mr. Holmgren joined Zebra Capital in 2011 as President and is responsible for the development, management and implementation of Zebra's business and strategies. Mr. Holmgren was formally President and CIO of HCM, a global investment management and research firm specializing in bottom up quantitative investment models from 2007 until 2011. From 1999 through 2007 Mr. Holmgren was Chief Investment Officer and Chief Executive Officer of DSI International Management a wholly owned subsidiary of UBS AG. He was responsible for managing the investment programs for DSI and integrating DSI within the UBS business organization. Mr. Holmgren was a UBS Managing Director and Regional Head where he sat on various UBS Global AM and O'Connor Investment, Risk and Management Committees. Mr. Holmgren joined DSI International Management an investment advisor focusing on global quantitative risk controlled and long/short equity products, as Chief Operating Officer in 1997 from DSC Data Services, an quantitative investment research firm he founded in 1988. In 1987 he was one of the original founders of DSI International Management. From 1988 to 1997, he was the founder and President of DSC Data Services, Inc., an independent, quantitative research firm. Mr. Holmgren has a B.A. in Economics from Providence College and is a member of the NYSSA and CFAI.

Peter Schaffer – CFA, FRM - Chief Operating Officer

Mr. Schaffer joined Zebra in 2008 and is responsible for overseeing the daily operations of the firm, including investments, trading, research, risk management, information technology, accounting, compliance and human resources. Prior to joining Zebra Capital, from 2005 to 2007 he worked at Avenue Capital, a multi-billion dollar, global multi-strategy hedge fund, as Chief Risk Officer and Head of firm-wide Information Systems. During Mr. Schaffer's tenure, Avenue's assets increased from \$6 Billion to \$21 Billion. Prior to that, he was a Managing Director at U.S. Trust (1996 – 2005), where he was Director of Investment Risk & Analytics. His was responsible for firm-wide portfolio oversight, risk control and solutions to operational issues related to the investment process. Prior to these roles, Mr. Schaffer was C.O.O. of U.S. Trust's international equity group, client portfolio manager and co-manager of institutional accounts and mutual funds. Peter received an M.B.A. in Finance from the University of Connecticut and received his B.S. in Management Information Systems from the University of Dayton. He is a member of the CFA institute, GARP and NYSSA.

Biographies

Daniel Kim, Ph.D., M.B.A. – Director of Research

Daniel Kim joined Zebra Capital Management in early 2012. His duties include quantitative analysis of global equity markets, investment idea generation, analytical infrastructure design, and co-authorship of the firm's contributions to the academic finance literature. Daniel holds A.B. magna cum laude, A.M., and Ph.D. degrees in Physics from Harvard University, and an M.B.A. from Yale University. Throughout his decade at Harvard, he was designated as a Harvard National Scholar, a distinction offered to the top 5-10% of the class. Dr. Kim has 20 years of multisectoral experience in data analysis, statistics, knowledge discovery, and practical innovation. His research career began at the Harvard University High-Energy Physics Laboratory, where he designed computer software, firmware, and hardware for statistical data analysis. Prior to joining Zebra, Daniel was a medical school professor and informatics director at SUNY Syracuse, where he invented an award-winning data integrity system for patient safety. Daniel also performed over 700 concerts professionally with the Syracuse Symphony Orchestra as both a full-time first violinist and principal keyboardist.

Eric Stokes – Portfolio Manager

Eric Stokes joined Zebra Capital as Portfolio Manager in February 2011. He is responsible for overseeing the various portfolios managed by Zebra, ongoing research efforts, and product management. Prior to joining Zebra Eric was a Principal and Chief Investment Officer in a long/short equity hedge fund, Reed-Stokes Capital Partners. He also served as a portfolio manager for Graham Capital Management where he managed a discretionary fund. In the area of equity research he served as President of ValuEngine, Inc., a research firm founded by Yale finance professor Zhiwu Chen. He was the President of DTN Financial Services, a provider of market data and analysis. Eric is the author of Market Neutral Investing (2004) and has an MBA from Columbia University, as well as a Series 65 license.

Michael Reed, Ph.D. - Portfolio Manager

Michael Reed joined Zebra Capital in June 2014 as a Portfolio Manager, overseeing the development and implementation of Zebra's Global Statistical Arbitrage strategies. From 1994 until 2010, Michael Reed was a researcher and senior portfolio manager at Process Driven Trading (PDT), then a proprietary trading unit of Morgan Stanley. While at PDT, Michael Reed developed and implemented statistical arbitrage and market microstructure based models. Beginning in 1994, Michael Reed designed and developed the PDT execution engine which is used by all of PDT's global statistical arbitrage and quantitative models for electronic trading. From 1991 until 1994 he was a research scientist at Western Geophysical specializing in the statistical image processing of geological formations. Michael Reed received his Bachelors of Science degree in Electrical Engineering in 1987 from Rice University and a Ph.D. in Electrical Engineering from Princeton University in 1991.

Lorenzo Goldberg - Managing Director

Mr. Lorenzo Goldberg joined Zebra Capital in 2013 and is responsible for business development in Europe and Latin America. Prior to joining Zebra, from 2009 to 2013, he was Chief Executive Officer of The Corporate Finance Boutique (TheCFB) a Fund Raising Firm specialized in Growth Projects. In conjunction with his role at the TheCFB, Lorenzo was a Partner at AlphaOne Partners an UHNWI advisory firm. From 2000 to 2008, he was Managing Director at Russell Investments, in charge of Partnerships and Institutional Investors having worked in Paris, Madrid and at the London EMEA headquarters. During this period, he contributed to Russell's exponential growth. Prior to his role at Russell, Lorenzo was Managing Director at Banco Santander in charge of Proprietary Trading and Asset Liability Management. Lorenzo studied the combined BBA and MBA program at ESADE in Barcelona.

Performance Disclosures and Notes

Backtested Gross Performance Results:

Backtested performance information presented represents gross backtested results for the dates indicated. The performance was derived by backtesting, not from actual accounts. Backtesting of performance is prepared using computer models. Backtested performance does not represent actual account performance and should not be interpreted as an indication of such performance. This past performance does not represent the impact that material economic and market factors might have on an investment adviser's decision making process if the adviser were actually managing clients' money. The backtesting of performance also differs from actual account performance because the investment strategy may be adjusted at any time, for any reason and can continue to be changed until desired or better performance results are achieved. Performance returns include cash and cash equivalents and reflect the reinvestment of dividends, estimated trading costs, interest and other earnings. Performance is calculated on a trade date basis and is presented gross of management fees and other expenses as applicable.

The Russell Microcap® Index measures the performance of the microcap segment of the U.S. equity market. Microcap stocks make up less than 3% of the U.S. equity market (by market cap) and consist of the smallest 1,000 securities in the small-cap Russell 2000® Index, plus the next 1,000 smallest eligible securities by market cap. The Russell Microcap Index is constructed to provide a comprehensive and unbiased barometer for the microcap segment trading on national exchanges. The Index is completely reconstituted annually to ensure new and growing equities are reflected and companies continue to reflect appropriate capitalization and value characteristics.

The Index presented is unmanaged and include the reinvestment of dividends and earnings. Investors cannot invest directly in these indices. All other indices are presented for informational purposes.

For more information on the Russell Indices, please refer to http://www.russell.com/indexes/data/default.asp

As with any investment strategy, there is potential for profit as well as the possibility of loss.

Relevant Mandates: Bond Trust¹ Hired: 2008

Firm Information	Investment Approach	Total ARMB Mandate
T. Rowe Price Group, Inc. is an independent, publicly traded company with significant employee ownership. T. Rowe Price Group, Inc.'s shares are traded on the NASDAQ Stock Market (symbol: TROW), and are included in the S&P 500 Stock Index. T. Rowe Price Group, Inc. is the direct or indirect owner of multiple subsidiaries. As of 12/31/14, the firm's total assets	 Primarily focus on investment-grade U.S. fixed income securities represented in the Barclays U.S. Intermediate Aggregate Index, Barclays U.S. Dollar Floating Rate Note Index, Barclays U.S. Long Treasury Index, and Barclays U.S. Treasury TIPS 1-5 Year Index. Integrate proprietary credit and capital market research to identify market inefficiencies. Seek to add value at the margin by coupling limited active management techniques with the risk-controlled aspects of passive management. Emphasize individual security selection and modest strategic and tactical deviations versus the benchmark. 	Assets Under Management: 12/31/14 \$1,117,302,918
under management were \$746.8 billion.		
Key Executives:		
Charles Shriver, Vice President, Portfolio Manager	Benchmark ² : - 70% Barclays U.S. Intermediate Aggregate Index	
John D. Plowright, Vice President- Institutional Client Service, North America	 - 15% Barclays U.S. Dollar Floating Rate Note Index - 10% Barclays U.S. Treasury TIPS 1-5 Year Index - 5% Barclays U.S. Long Treasury Index 	

02/28/2015 Performance						
	3 Months	1 Year	3 Years Annualized	5 Years Annualized		
Bond Trust (net)	0.71%	3.81%	2.42%	4.03%		
Custom Fixed Income Index ²	0.74%	3.93%	2.39%	4.07%		

¹ In June 2014 the Alaska Aggregate Bond Trust was renamed the Alaska Bond Trust consistent with enhancements to the Trust's investment profile.

² Custom Fixed-Income Index consisted of 100% Barclays Capital U.S. Aggregate Index from inception to 5/31/2014. Since 6/1/2014, the Custom Fixed-Income Index consists of 70% Barclays U.S. Aggregate Intermediate Bond Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. 1-5 Year Treasury TIPS Index and 5% Barclays U.S. Long Treasury Bond Index.

Relevant Mandates: U.S. Equity Market Trust Hired: 2008

Firm Information	Investment Approach	Total ARMB Mandate
T. Rowe Price Group, Inc. is an independent, publicly traded company with significant employee ownership. T. Rowe Price Group, Inc.'s shares are traded on the NASDAQ Stock Market (symbol: TROW), and are included in the S&P 500 Stock Index. T. Rowe Price Group, Inc. is the direct or indirect owner of multiple subsidiaries. As of 12/31/14, the firm's total assets under management were \$746.8 billion.	 Seeks to match the performance of the U.S. equity market, as represented by the Russell 3000 Index. Index reflects the performance of the largest 3,000 U.S. companies; large-cap stocks represent the majority of the index's market cap weighted value. Attempts to accomplish its objective by investing in a sample of stocks that are representative of the index. 	Assets Under Management: 12/31/14 \$975,434,710
Key Executives:		
Charles Shriver, Vice President, Portfolio Manager	*In 2008, the T. Rowe Large Cap and Small Cap Trusts were consolidated into the U.S. Equity Market Trust which is currently one of four building blocks used as components	
John D. Plowright, Vice President- Institutional Client Service, North America	in participant directed investment options. Summaries for the Money Market Trust, Bond Trust, and International Equity Trust are available upon request. Benchmark: Russell 3000 Index	

02/28/2015 Performance							
	3 Months	1 Year	3 Years Annualized	5 Years Annualized			
U.S. Equity Market Trust (net)	2.87%	14.26%	18.13%	16.40%			
Russell 3000 Index	2.84%	14.12%	18.02%	16.36%			

Relevant Mandates: Money Market Trust Hired: 1992

Firm Information	Investment Approach	Total ARMB Mandate
T. Rowe Price Group, Inc. is an independent, publicly traded company with significant employee ownership. T. Rowe Price Group, Inc.'s shares are traded on the NASDAQ Stock Market (symbol: TROW), and are included in the S&P 500 Stock Index. T. Rowe Price Group, Inc. is the direct or indirect owner of multiple subsidiaries. As of 12/31/14, the firm's total assets	 Seeks to preserve capital, liquidity, and consistent with these goals, the highest possible current income yield. The portfolio is managed to maintain a stable unit price of \$1.00. Investment decisions are based on the objectives of quality, liquidity, diversification and yield. Minimal price volatility is sought through maturity management and security selection. Managed to the same industry standards as the T. Rowe Price money market mutual funds. Invests in high-quality, U.S. dollar-denominated securities that have been determined to present minimal credit risk. 	Assets Under Management: 12/31/14 \$114,417,362
under management were \$746.8 billion.		
Key Executives:		
Charles Shriver, Vice President, Portfolio Manager		
John D. Plowright, Vice President- Institutional Client Service, North America	Benchmark: Citigroup 3-Month T Bill	

Money Market Trust (net) 0.01% 0.02% 0.05% 0.12% Citigroup 3-Month T Bill 0.00% 0.03% 0.05% 0.07%	02/28/2015 Performance							
		3 Months	1 Year					
Citigroup 3-Month T Bill 0.00% 0.03% 0.05% 0.07%	Money Market Trust (net)	0.01%	0.02%	0.05%	0.12%			
	Citigroup 3-Month T Bill	0.00%	0.03%	0.05%	0.07%			

Relevant Mandates: International Equity Trust Hired: 1996

Firm Information	Investment Approach	Total ARMB Mandate
T. Rowe Price Group, Inc. is an independent, publicly traded company with significant employee ownership. T. Rowe Price Group, Inc.'s shares are traded on the NASDAQ Stock Market (symbol: TROW), and are included in the S&P 500 Stock Index. T. Rowe Price Group, Inc. is the direct or indirect owner of multiple subsidiaries. As of 12/31/14, the firm's total assets under management were \$746.8 billion.	 Seeks to match the performance of the MSCI AC World Ex-U.S. index, an equity market index based on the free float adjusted market capitalization in about 45 developed and emerging market countries excluding the U.S. Attempts to accomplish its objective by investing in stocks that are representative of the index. 	Assets Under Management: 12/31/14 \$414,648,562
Key Executives:		
Charles Shriver, Vice President, Portfolio Manager		
John D. Plowright, Vice President- Institutional Client Service, North America	Benchmark¹: MSCI All Country World Index Ex-U.S.	

02/28/2015 Performance						
	3 Months	1 Year	3 Years Annualized	5 Years Annualized		
International Equity Trust (net)	1.39%	-0.06%	9.50%	7.93%		
Custom International Equity Index ¹	1.46%	0.26%	9.85%	8.24%		

¹ Custom International Equity Index consisted of 100% MSCI EAFE Index from inception to 5/31/2014. Since 6/1/2014, the Custom International Equity Index consists of 100% MSCI All Country World Index ex U.S.

Alaska Retirement Management Board Portfolio Review

April 2015



T. Rowe Price — Presenters



Institutional Sales

Christopher W. Dyer

Vice President — Institutional Sales Executive

- 31 years of experience in institutional investment management sales;
- 27 years with T. Rowe Price.



Client Service

John D. Plowright, CFA

Vice President — Institutional Client Service, North America

- 23 years of investment experience;
- 10 years with T. Rowe Price.



Portfolio Management

Charles M. Shriver, CFA

Vice President — Portfolio Manager

- 15 years of investment experience;
- 23 years with T. Rowe Price.



Portfolio Management

Toby M. Thompson, CFA, CAIA

Vice President — Portfolio Manager

- 21 years of investment experience;
- 7 years with T. Rowe Price.

Table of Contents

- 1 Alaska Retirement Portfolios
- 2 Overview of Investment Options
- 3 Building Block Level Common Trusts Strategy Highlights
- 4 Appendix

Account Management

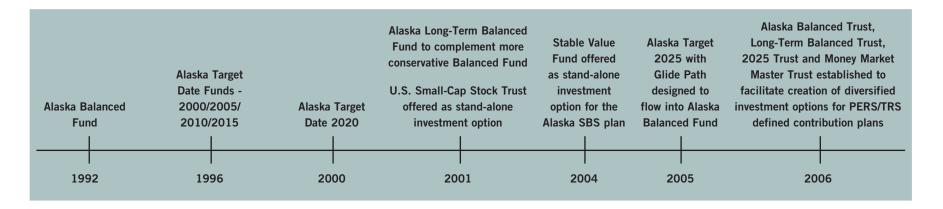
Alaska Retirement Management Board

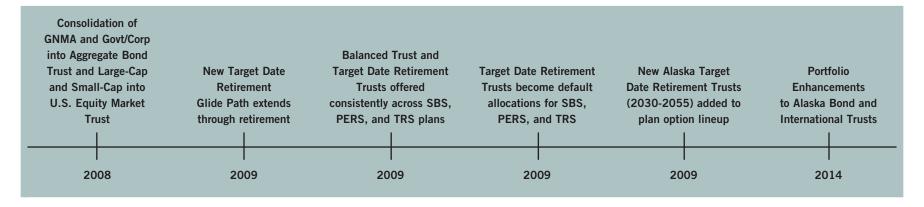
PRIMARY RELATIONSHIP MANAGER Christopher W. Dyer 1-410-345-6688 **Overall Account** Management Responsible for plan promotion and oversight. PRIMARY INVESTMENT MANAGERS Charles M. Shriver Toby M. Thompson Richard T. Whitney ADDITIONAL INVESTMENT MANAGERS Investment Fixed Income Equity Management Tony Luna Neil Smith Joe Lynagh Fred Bair Robert Larkins Ken Uematsu Greg McCrickard Responsible for investment management for all State of Alaska assets at T. Rowe Price. **CLIENT SERVICE** John Plowright 1-415-772-1117 **Client Service and Investment Reviews** Responsible for coordination of client information, investment reviews, and coordination of the relationship with Great West.

Alaska Retirement Portfolios

Relationship Milestones

Working Together to Improve Investment Options





Key Attributes of the Alaska Retirement Plans

• Custom suite of portfolios designed specifically for Alaska featuring on-going enhancements

- Balanced portfolio offered in 1992 tailored to custom, conservative growth risk profile
- Target Date portfolios introduced in 1996

• Breadth of investment offerings

- Target Date Retirement Trusts from 2010-2055 in five year intervals as default investment option
- Balanced and Long-Term Balanced Trusts for investors seeking target risk profiles

• Intelligently designed

- Target Date Retirement Trusts built on principles and rigor of T. Rowe Price's Retirement Glide Path
- Balanced Trust has offered conservative growth through volatile markets since 1992
- Balanced Trust captured 77% of the S&P 500 Index return since 1992 with 40% of the volatility¹

Broad diversification

- Core U.S. stocks and investment grade bonds with diversification in small-cap and non-US stocks

• Risk aware

- Investment management and reporting consistent with Alaska's specific risk parameters

Cost competitive

Weighted average investment management fee of 10 basis points

Structure of Investment Options

Investment Options (Trusts and Daily Valued Separate Accounts)

Alaska Balanced Trust Alaska Long Term Balanced Trust

Alaska Target Retirement Trusts 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055

Alaska Money Market Master Trust

Alaska Stable Value U.S. Small-Cap Stock Trust

Alaska Interest Income

Building Block Level: Common Trusts

Alaska Money Market Trust Alaska Bond Trust¹ Alaska U.S. Equity Market Trust Alaska International Trust

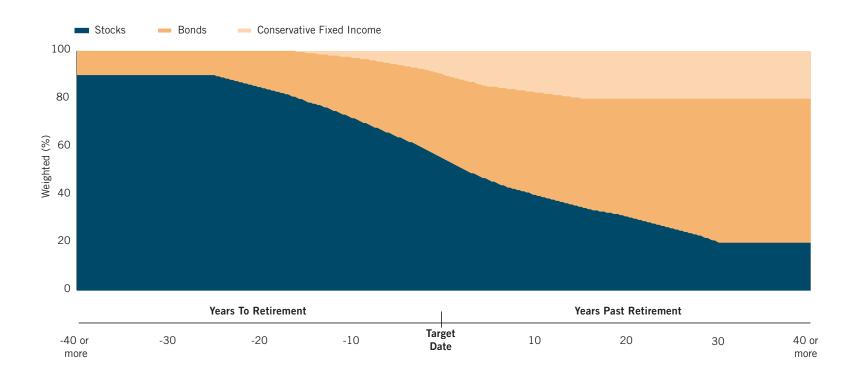
- Building Block Level Common Trust Funds
- SBS, PERS, TRS, and Deferred Compensation Plan (Building Block Level Common Trusts)
- SBS Only (Separate Account)
- PERS/TRS Only (Common Trust Fund)
- Deferred Compensation Plan Only (Separate Account)

The Alaska Balanced Trust, Alaska Long-Term Balanced Trust, Alaska Money Market Master Trust, Alaska Target Retirement 2010-2055 Trusts,
The U.S. Small-Cap Stock Trust, Alaska Money Market Trust, Alaska Bond Trust, Alaska U.S. Equity Market Trust, and the Alaska International Trust are not
mutual funds. They are common trust funds established by T. Rowe Price Trust Company under Maryland banking law, and their units are exempt from
registration under the Securities Act of 1933. Investments in the trusts are not deposits or obligations of, or guaranteed by, the U.S. government or its agencies or
T. Rowe Price Trust Company and are subject to investment risks, including possible loss of principal.



¹ Name was changed to "Alaska Bond Trust" from "Alaska Aggregate Bond Trust". Orange outline denotes where changes occured.

Glide Path Through Retirement



The Alaska Target Retirement Trusts and the proprietary T. Rowe Price Retirement Date Products use the same glide path, based upon proprietary research and extensive quantitative modeling.

Sector Diversification Among Underlying Portfolios

Stocks

- U.S. Equity Market Trust
 - Large-Cap
 - Mid-Cap
 - Small-Cap
- International Trust
 - Emerging Markets
 - Developed International Stocks

Bonds

- Bond Trust¹
 - Government
 - Nominal Treasuries
 - Short-Term TIPS
 - Floating Rate Notes
 - Long-Term Treasuries
 - Corporate
 - Mortgages
 - Asset-Backed Securities
 - Commercial Mortgage-Backed Securities

Money Market Trust

- U.S. and International Money Market Securities

T.RowePrice

Objective of Recent Strategic Portfolio Enhancements

- Reduce the sensitivity of the Trusts to rising interest rates
- Increase the inflation sensitivity of the Trusts
- More fully benefit from global investment opportunities

Implementation of New Investment Profile Occurred June 2014.

Alaska Bond Trust Recent Enhancements

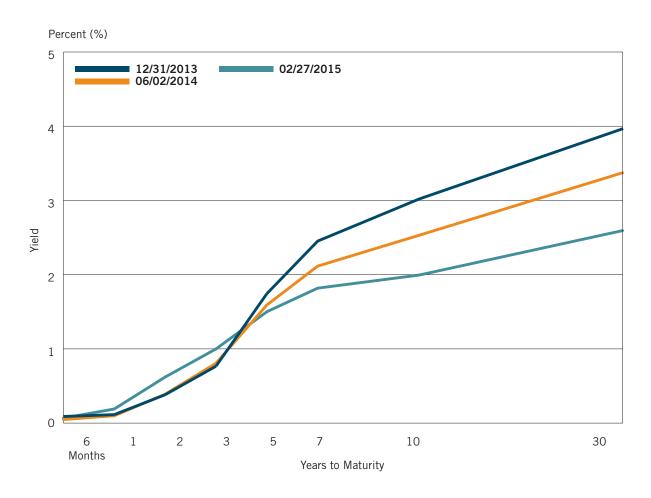
Alaska Bond Trust Current Profile

	Current Profile
Barclays U.S. Intermediate Aggregate Index	70%
Barclays U.S. Floating Rate Notes Index	15
Barclays U.S. Treasury TIPS 1-5 Year Index	10
Barclays U.S. Long Treasury Index	5

- Adjusted the profile of the Aggregate Bond Trust to shorten its duration exposure.
 - This was done primarily by switching from the Barclays U.S. Aggregate Bond Index with a duration of 5.4 years to the Barclays U.S. Intermediate Aggregate Index with a duration of 3.8 years.
- Included a 15% allocation to floating rate note securities (FRN) to provide protection from rising interest rates.
 - FRN securities earn a short term interest rate (LIBOR) plus a spread the spread being related to the credit risk of the security.
 - As short term rates go up, LIBOR will rise as well which will benefit FRNs as they will earn a higher rate.
 - The Barclays FRN Index has a duration of 0.1 years.
- Included a 10% allocation to short-term treasury inflation protection securities (TIPS) to protect against rising inflation.
 - Short-term TIPS allocation will have a comparable profile to the Barclays 1-5 Year TIPS Index, with a current duration of 1.8 years.
- Included a **5% allocation to long-term treasury securities** (greater than 10 year maturities).
 - The exposure to long-term treasuries will benefit the portfolio in a "bear-flattening" yield curve scenario, which is when short-term rates increase more than long-term rates.
 - Long-term treasuries also have a yield advantage that will benefit the portfolio in steep yield curve environments.
 - Additionally, long treasuries are a good hedge to equity volatility and also would perform well in a recessionary scare environment.

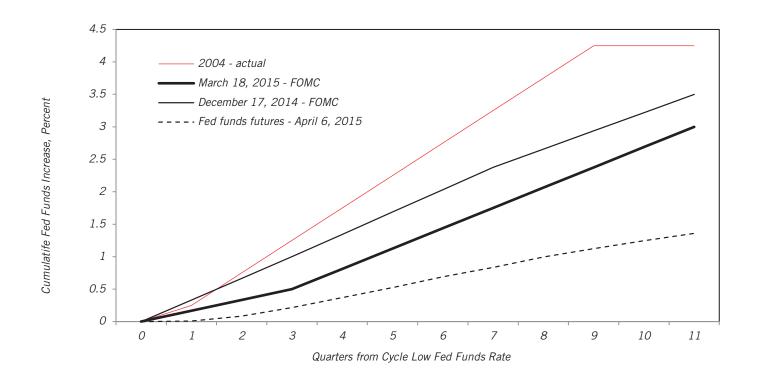
Reduce sensitivity to rising rates and increase sensitivity to inflation.

U.S. Yield Curve



- Implementation of new investment profile occurred at relatively attractive interest rates
- Long duration Treasury position has proved important as long rates have moved lower
- Important to remember positioning is meant for longer-term horizon

Fed's Tightening Path Likely to be Gradual



FOMC and bond market projecting a very gradual rise and lower terminal Fed Funds rate.

Alaska International Trust Recent Enhancements

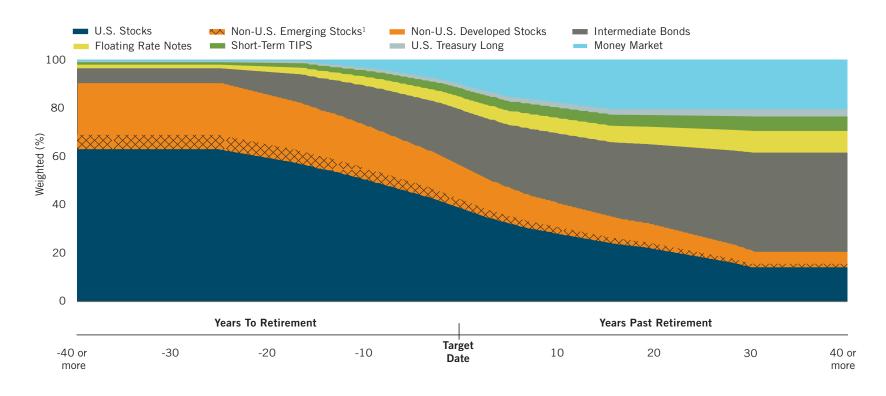
Increased international equity to 30% of equities from 20%

• Rationale:

- To more fully represent the expanded investment opportunity set
- Developed and emerging international equity markets have increased their share of the total global equity market in recent years
 - International equity markets represent over 52% of the world equity market's capitalization today
 - The role of international markets has also increased in terms of its contribution to global GDP and earnings growth:
 - International contribution to global GDP is 77%
 - Emerging Markets represents 40% of global GDP and 11% of global market capitalization
 - Emerging Markets offer diversification and access to higher growth markets
- Introduce Emerging Markets within the Alaska International Trust by changing from the MSCI EAFE Index, a fully developed market index, to the MSCI ACWI ex-U.S. Index, which includes both developed and emerging markets.
 - Emerging Markets represent 21% of the All-Country World ex-U.S. Index

Target Retirement Trusts — Glide Path Through Retirement

Current:

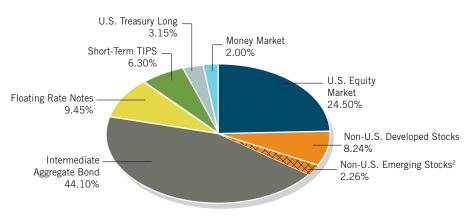


¹ Emerging Market Equity exposure is represented by the Emerging Market weight in the MSCI All Country World Ex-U.S. Index, 21.54% as of February 28, 2015. The Emerging Market weight in the MSCI All Country World Ex-U.S. Index is subject to change.

Balanced Trusts — Sector Breakdown¹

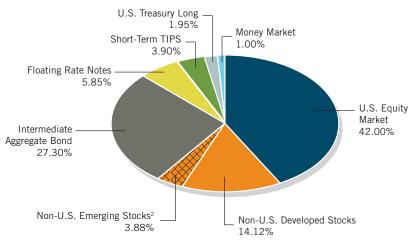
As of February 28, 2015

Balanced Trust:



StocksBondsNeutral Weight35.0%65.0%

Long-Term Balanced Trust:



	Stocks	Bonds
Neutral Weight	60.0%	40.0%

² Emerging Market Equity exposure is represented by the Emerging Market weight in the MSCI All Country World Ex-U.S. Index, 21.54% as of February 28, 2015. The Emerging Market weight in the MSCI All Country World Ex-U.S. Index is subject to change.



¹Represents neutral allocation with the exception of Non-U.S. Emerging Stocks.

Recent Portfolio Enhancements Adhere to Key Attributes

• Intelligently Designed Custom Portfolios

- Glide path and asset class profile is consistent with T. Rowe Price Retirement Funds

Broad Diversification and Risk Awareness

- Additional sub-asset classes provide increased diversification
- More fully benefiting from international opportunities
- More broadly diversified investment opportunities to offset risk of rising inflation and interest rates

• Enhancements seek to improve return profile under various risk scenarios

- Reduced duration exposure decreases interest rate sensitivity
- Addition of TIPS and Floating Rate Notes provides protection from rising inflation and interest rates
- Increased international exposure provides protection from falling U.S. dollar

Competitive Cost and Customized Structure

- Balance benefits of diversification, custom portfolio management and cost considerations

Overview of Investment Options

Investment Options — Asset Breakdown

As of February 28, 2015

T. Rowe Price Portfolio Managers	Investment Strategy	Assets (in Millions)	Inception Date ¹
Charles Shriver Toby Thompson	Balanced Trust	\$1216.3	3/31/92
	Long-Term Balanced Trust	635.9	6/30/01
	Target Retirement 2010 Trust	14.0	4/2/09
	Target Retirement 2015 Trust	121.4	2/1/96
	Target Retirement 2020 Trust	103.3	11/2/00
	Target Retirement 2025 Trust	81.4	11/2/05
	Target Retirement 2030 Trust	69.5	4/6/09
	Target Retirement 2035 Trust	70.2	4/15/09
	Target Retirement 2040 Trust	77.8	4/2/09
	Target Retirement 2045 Trust	96.7	8/4/09
	Target Retirement 2050 Trust	113.2	8/5/09
	Target Retirement 2055 Trust	59.3	8/5/09
Joseph Lynagh	Money Market Master Trust	11.0	8/11/06
Gregory McCrickard	U.S. Small-Cap Stock Trust	303.3	12/10/01
Antonio Luna Robert Larkins	Alaska Supplemental Annuity Plan Stable Value Fund	357.0	10/31/04
	State of Alaska Deferred Compensation Plan Interest Income Fund	187.9	3/31/94
	Total	\$3,518.4	

• 16 Options

• Total Assets: \$3,518,352,767

¹ Inception dates for the Balanced, Long-Term Balanced, and Target Retirement 2010-2020 Trusts are for predecessor products managed substantially in the same style. All other inception dates are as stated.



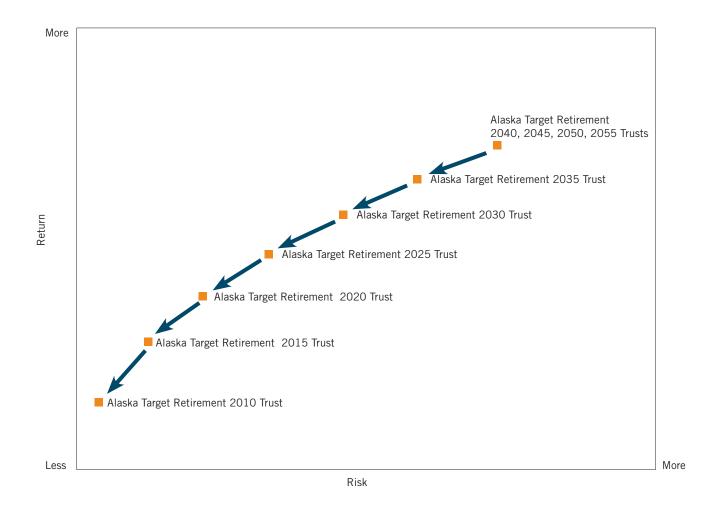
Investment Options

Risk/Return Profiles



Investment Options — Target Retirement Trusts

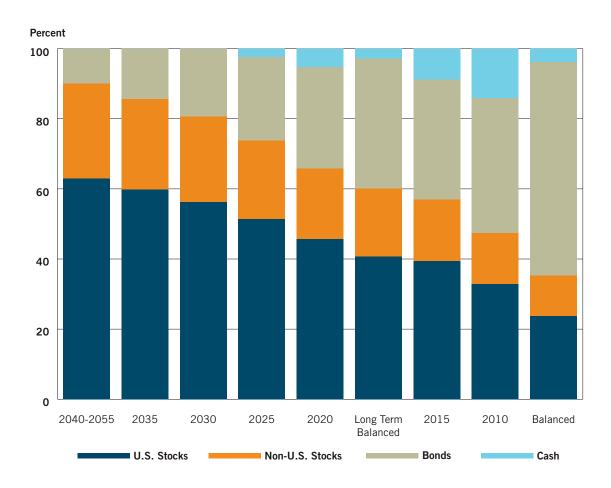
Risk/Return Profiles





Investment Options — Target Allocations

Allocation to Stocks, Bonds, and Cash for Target Retirement and Balanced Trusts
As of February 28, 2015

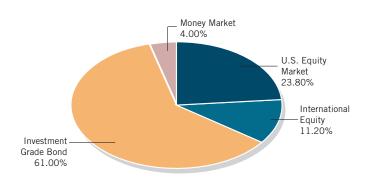


The Target Retirement Trusts and the two Balanced Trusts offer investors a broad range of risk and return options.

Balanced Trusts — Target Allocations

As of February 28, 2015

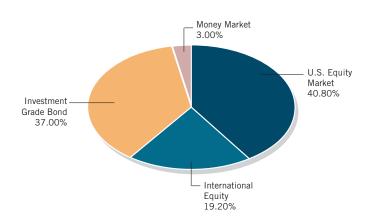
Balanced Trust:



	Stocks	Bonds
Target Weight	35.0%	65.0%
Neutral Weight	35.0	65.0
Difference	0.0	0.0

	International Equity
Target Weight	11.2%
Neutral Weight	10.5
Difference	0.7

Long-Term Balanced Trust:



	Stocks	Bonds
Target Weight	60.0%	40.0%
Neutral Weight	60.0	40.0
Difference	0.0	0.0

	International Equity
Target Weight	19.2%
Neutral Weight	18.0
Difference	1.2

Performance

Alaska Balanced Trust

Periods Ended February 28, 2015

			_	Annualized					
Trust Performance is Net of All Fees and Expenses	Three Months	Year-to- Date	One Year	Three Years	Five Years	Trust Inception 6/23/06 ²	Ten Years	Portfolio Inception 3/31/92 ²	
Balanced Trust ¹	1.38%	1.90%	5.84%	7.22%	7.92%	6.40%	5.98%	7.46%	
Custom Index ³	1.38	1.84	5.97	7.03	7.78	6.28	5.89	7.45	
Value Added	0.00	0.06	-0.13	0.19	0.14	0.12	0.09	0.01	

¹ Performance reflects the deduction of all applicable fees and expenses. For a breakdown, please refer to page 27.

Alaska Long-Term Balanced Trust

Periods Ended February 28, 2015

						Annualized		
Trust Performance is Net of All Fees and Expenses	Three Months	Year-to- Date	One Year	Three Years	Five Years	Trust Inception 6/23/06 ²	Ten Years	Portfolio Inception 6/30/01 ²
Long-Term Balanced Trust ¹	1.79%	2.59%	7.35%	10.57%	10.52%	6.95%	6.66%	5.98%
Custom Index ³	1.82	2.53	7.50	10.43	10.44	6.89	6.62	5.98
Value Added	-0.03	0.06	-0.15	0.14	0.08	0.06	0.04	0.00

¹ Performance reflects the deduction of all applicable fees and expenses. For a breakdown, please refer to page 27.

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² The beginning date for the Balanced Trust is for a respective predecessor product managed substantially in the same style, and performance for the respective predecessor product has been used for periods prior to the Trust's inception. For all trusts, performance has been calculated beginning with the first full month of operations.

³ "Custom Index" refers to the component benchmarks weighted according to the strategic allocation for each option. Prior to October 29, 2008, the weighted benchmark components consisted of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Government/Credit Index, Barclays U.S. GNMA Index, S&P 500 Index, Russell 2500 Index, and MSCI EAFE Index. As of October 29, 2008, the weighted benchmark components consist of Citigroup 3-Month Treasury Bill Index, the Barclays U.S. Aggregate Index, the Russell 3000 Index, and the MSCI EAFE Index.

² The beginning date for the Long-Term Balanced Trust is for a respective predecessor product managed substantially in the same style, and performance for the respective predecessor product has been used for periods prior to the Trust's inception. For all trusts, performance has been calculated beginning with the first full month of operations.

³ "Custom Index" refers to the component benchmarks weighted according to the strategic allocation for each option. Prior to October 29, 2008, the weighted benchmark components consisted of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Government/Credit Index, Barclays U.S. GNMA Index, S&P 500 Index, Russell 2500 Index, and MSCI EAFE Index. As of October 29, 2008, the weighted benchmark components consist of Citigroup 3-Month Treasury Bill Index, the Barclays U.S. Aggregate Index, the Russell 3000 Index, and the MSCI EAFE Index.

Performance

Alaska Target Retirement Trusts and Money Market Master Trust

Periods Ended February 28, 2015

				Annualized				
Trust Performance is Net of All Fees and Expenses	Three Months	Year-to- Date	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date ²
Target Retirement 2010 Trust ¹	1.48%	2.10%	6.14%	8.70%	9.00%	_	11.06%	4/2/09
Custom Index ³	1.49	2.06	6.25	8.71	9.01	_	10.97	
Value Added	-0.01	0.04	-0.11	-0.01	-0.01	_	0.09	
Target Retirement 2015 Trust ¹	1.66	2.41	7.01	10.20	10.14	7.18%	7.59	2/1/96
Custom Index ³	1.69	2.36	7.02	10.17	10.12	7.05	7.64	
Value Added	-0.03	0.05	-0.01	0.03	0.02	0.13	-0.05	
Target Retirement 2020 Trust ¹	1.85	2.71	7.68	11.40	11.14	6.82	5.37	11/2/00
Custom Index ³	1.87	2.63	7.69	11.41	11.18	6.77	5.25	
Value Added	-0.02	0.08	-0.01	-0.01	-0.04	0.05	0.12	
Target Retirement 2025 Trust ¹	2.01	2.93	8.23	12.50	12.01	_	6.43	11/2/05
Custom Index ³	2.02	2.87	8.27	12.52	12.08	_	6.44	
Value Added	-0.01	0.06	-0.04	-0.02	-0.07	_	-0.01	
Target Retirement 2030 Trust ¹	2.12	3.17	8.70	13.45	12.69	_	15.34	4/6/09
Custom Index ³	2.14	3.05	8.72	13.45	12.74	_	15.38	
Value Added	-0.02	0.12	-0.02	0.00	-0.05	_	-0.04	
Target Retirement 2035 Trust ¹	2.26	3.34	9.05	14.15	13.21	-	15.97	4/15/09
Custom Index ³	2.23	3.20	9.06	14.15	13.25	_	15.97	
Value Added	0.03	0.14	-0.01	0.00	-0.04	_	0.00	

¹ Performance reflects the deduction of all applicable fees and expenses. For a breakdown, please refer to page 27.

² Inception dates for the Target Retirement 2010, Target Retirement 2030, Target Retirement 2035, Target Retirement 2040, Target Retirement 2045, Target Retirement 2055 and Money Market Trusts are as stated. For all other trusts, the inception date is for a respective predecessor product managed substantially in the same style, and performance for the respective predecessor product has been used for periods prior to the current product's inception. For all trusts, performance has been calculated beginning with the first full month of operations.

³ "Custom Index" refers to the component benchmarks weighted according to the strategic allocation for each option. The weighted benchmark components consist of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Aggregate Index, Russell 3000 Index, and MSCI EAFE Index. Prior to October 29, 2008, the weighted benchmark components consisted of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Government/Credit Index, Barclays U.S. GNMA Index, S&P 500 Index, Russell 2500 Index, and MSCI EAFE Index.

Performance

Alaska Target Retirement Trusts and Money Market Master Trust

Periods Ended February 28, 2015

				Annualized			_	
Trust Performance is Net of All Fees and Expenses	Three Months	Year-to- Date	One Year	Three Years	Five Years	Ten Years	Since Inception	Inception Date ²
Target Retirement 2040 Trust ¹	2.32%	3.46%	9.32%	14.54%	13.47%	_	16.14%	4/2/09
Custom Index ³	2.30	3.31	9.29	14.54	13.49	_	16.18	
Value Added	0.02	0.15	0.03	0.00	-0.02	_	-0.04	
Target Retirement 2045 Trust ¹	2.33	3.47	9.34	14.56	13.45	_	13.69	8/4/09
Custom Index ³	2.30	3.31	9.29	14.54	13.49	_	13.72	
Value Added	0.03	0.16	0.05	0.02	-0.04	_	-0.03	
Target Retirement Target 2050 Trust ¹	2.33	3.45	9.31	14.55	13.47	_	13.70	8/5/09
Custom Index ³	2.30	3.31	9.29	14.54	13.49	_	13.72	
Value Added	0.03	0.14	0.02	0.01	-0.02	_	-0.02	
Target Retirement 2055 Trust ¹	2.34	3.47	9.30	14.55	13.47	_	13.69	8/5/09
Custom Index ³	2.30	3.31	9.29	14.54	13.49	_	13.72	
Value Added	0.04	0.16	0.01	0.01	-0.02	_	-0.03	
Manay Maylot Master Trusta	0.00%	0.009/	0.019/	0.059/	0.120/	1 700/	1 200/	9/11/06
Money Market Master Trust ⁴	0.00%	0.00%	0.01%	0.05%	0.12%	1.70%	1.32%	8/11/06
Citigroup 3-Month Treasury Bill Index Value Added	0.00 0.00	0.00	0.03 -0.02	0.05 0.00	0.07 0.05	1.43 0.27	1.02 0.30	



¹ Trust performance reflects the deduction of all applicable fees and expenses. For a breakdown, please refer to page 28.

² Inception dates for the Target Retirement 2010, Target Retirement 2030, Target Retirement 2035, Target Retirement 2040, Target Retirement 2045, Target Retirement 2050, Target Retirement 2055 and Money Market Trusts are as stated. For all other trusts, the inception date is for a respective predecessor product managed substantially in the same style, and performance for the respective predecessor product has been used for periods prior to the current product's inception. For all trusts, performance has been calculated beginning with the first full month of operations.

³ "Custom Index" refers to the component benchmarks weighted according to the strategic allocation for each option. The weighted benchmark components consist of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Aggregate Index, Russell 3000 Index, and MSCI EAFE Index. Prior to October 29, 2008, the weighted benchmark components consisted of Citigroup 3-Month Treasury Bill Index, Barclays U.S. Government/Credit Index, Barclays U.S. GNMA Index, S&P 500 Index, Russell 2500 Index, and MSCI EAFE Index.

⁴ Performance figures reflect the deduction of 17 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Performance Attribution

One Year Ended February 28, 2015

	Balanced	Long-Term Balanced	Target Retirement 2010 Trust	Target Retirement 2015 Trust	Target Retirement 2020 Trust	Target Retirement 2025 Trust	Target Retirement 2030 Trust	Target Retirement 2035 Trust
In Percents:								
Portfolio Return (Net of All Fees and Expense)	5.84%	7.35%	6.14%	7.01%	7.68%	8.23%	8.70%	9.05%
Benchmark Return	5.97	7.50	6.25	7.02	7.69	8.27	8.72	9.06
Difference	-0.13	-0.15	-0.11	-0.01	-0.01	-0.04	-0.02	-0.01
In Basis Points:								
Selection Effect (Performance Before Fees)	4	10	9	10	11	13	14	15
Allocation Effect	-6	-11	5	3	3	3	2	2
Cash Flow & Rebalancing	0	-1	-5	-1	-1	-5	-2	-2
All Fees & Expenses ¹	-11	-13	-20	-13	-14	-15	-16	-16
Investment Management Fees	-9	-11	-10	-10	-11	-11	-12	-12
Custody and Accounting - Fixed	-1	-1	-8	-1	-2	-2	-2	-2
Custody and Accounting - Variable	-1	-1	-2	-2	-2	-2	-2	-2
Attribution Total	-13 bps	-15 bps	-11 bps	-1 bps	-1 bps	-4 bps	-2 bps	-1 bps

¹ Reflects fees for portfolio management, custody, and accounting charges associated with the portfolio. Numbers may not total due to rounding.

Performance Attribution

One Year Ended February 28, 2015

	Target Retirement 2040 Trust	Target Retirement 2045 Trust	Target Retirement 2050 Trust	Target Retirement 2055 Trust
In Percents:				
Portfolio Return (Net of All Fees and Expense)	9.32%	9.34%	9.31%	9.30%
Benchmark Return	9.29	9.29	9.29	9.29
Difference	0.03	0.05	0.02	0.01
In Basis Points:				
Selection Effect (Performance Before Fees)	16	16	16	16
Allocation Effect	3	3	3	3
Cash Flow & Rebalancing	0	2	-1	-1
All Fees & Expenses ¹	-16	-16	-16	-17
Investment Management Fees	-12	-12	-12	-12
Custody and Accounting - Fixed	-2	-2	-2	-3
Custody and Accounting - Variable	-2	-2	-2	-2
Attribution Total	3 bps	5 bps	2 bps	1 bps



¹ Reflects fees for portfolio management, custody, and accounting charges associated with the portfolio. Numbers may not total due to rounding.

Performance — Building Block Trusts

Periods Ended February 28, 2015

						Annu	alized		
Trust Performance is Net of All Fees and Expenses	Three Months	Year-to- Date	One Year	Three Years	Five Years	Ten Years	Since 10/31/08	Since 2/29/96	Portfolio Inception 3/31/92
Money Market Trust ^{1,4}	0.01%	0.00%	0.02%	0.05%	0.12%	1.70%	0.25%	2.67%	2.96%
Citigroup 3-Month Treasury Bill Index	0.00	0.00	0.03	0.05	0.07	1.43	0.10	2.52	2.81
Value Added	0.01	0.00	-0.01	0.00	0.05	0.27	0.15	0.15	0.15
Bond Trust ^{1,5}	0.71	0.85	3.81	2.42	4.03	_	5.70	_	_
Custom Fixed Income Index ²	0.74	0.87	3.93	2.39	4.07	_	5.59	_	_
Value Added	-0.03	-0.02	-0.12	0.03	-0.04	_	0.11	_	_
U.S. Equity Market Trust ^{1,6}	2.87	2.87	14.26	18.13	16.40	_	16.13	-	_
Russell 3000 Index	2.84	2.85	14.12	18.02	16.36	_	16.02	_	_
Value Added	0.03	0.02	0.14	0.11	0.04	_	0.11	_	_
International Trust ^{1,7}	1.39	5.65	-0.06	9.50	7.93	4.59	9.92	6.22	_
Custom International Equity Index ³	1.46	5.22	0.26	9.85	8.24	5.31	10.44	5.41	_
Value Added	-0.07	0.43	-0.32	-0.35	-0.31	-0.72	-0.52	0.81	_



¹ Inception date for the Bond Trust and the U.S. Equity Market Trust is October 29, 2008. For all other trusts, the inception date is for a respective predecessor product managed substantially in the same style, and performance for the respective predecessor product has been used for periods prior to the trust's inception. For all trusts, performance has been calculated beginning with the first full month of operations.

² Custom Fixed-Income Index consisted of 100% Barclays Capital U.S. Aggregate Index from inception to 5/31/2014. Since 6/1/2014, the Custom Fixed-Income Index consists of 70% Barclays U.S. Aggregate Intermediate Bond Index, 15% Barclays U.S. Floating Rate Notes Index, 10% Barclays U.S. 1-5 Year Treasury TIPS Index and 5% Barclays U.S. Long Treasury Bond Index.

³ Custom International Equity Index consisted of 100% MSCI EAFE Index from inception to 5/31/2014. Since 6/1/2014, the Custom International Equity Index consists of 100% MSCI All Country World Index ex USA.

⁴ Performance figures reflect the deduction of 13 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

⁵ Performance figures reflect the deduction of 8 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

⁶ Performance figures reflect the deduction of 14 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

⁷ Performance figures reflect the deduction of 20 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Building Block Level Common Trusts Strategy Highlights

Alaska U.S. Equity Market Trust

Total Net Assets: \$975,434,710

Investment Approach

- Seeks to match the performance of the U.S. equity market, as represented by the Russell 3000 Index.
- Index reflects the performance of the largest 3,000 U.S. companies; large-cap stocks represent the majority of the index's market cap weighted value
- Attempts to accomplish its objective by investing in a sample of stocks that are representative of the index.

Portfolio Construction

- 900-1000 stock portfolio
- Issuer concentration generally +/- 0.40% relative to the benchmark weight
- Sector weight generally +/- 1.00% relative to the benchmark weight
- Expected tracking error 25-50 basis points

Benchmark

Russell 3000 Index

Portfolio Management Team¹

E. Frederick Bair, CFA, CPA

18 years of investment experience; 16 years with T. Rowe Price.

BS, Pennsylvania State University

Ken D. Uematsu, CFA

16 years of investment experience; 17 years with T. Rowe Price.

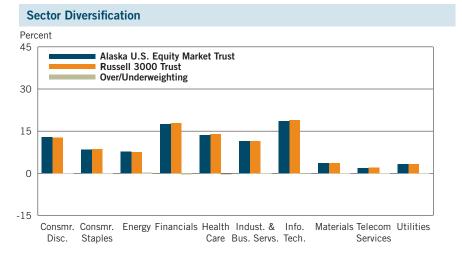
- BS, University of Maryland, College Park
- MBA, University of Maryland, College Park

1 As of December 31, 2014

T.Rowe Price

Alaska U.S. Equity Market Trust

Top 10 Holdings	
Company	% of Trust
Apple	2.8%
Exxon Mobil Corporation	1.7
Microsoft	1.7
Google	1.4
Johnson & Johnson	1.3
Berkshire Hathaway	1.2
GE	1.1
Wells Fargo	1.1
J.P. Morgan Chase & Co.	1.1
Procter & Gamble	1.0
Total	14.4%



Portfolio Characteristics

	Alaska U.S. Equity Market Trust	Russell 3000 Index
Projected Earnings Growth Rate ^{1,2}	10.2%	10.2%
Price to Earnings (12 Months Forward) ^{1,2}	17.6X	17.5X
Return on Equity (Last 12 Months)	17.1%	17.2%
Price to Book	3.5X	3.5X
Unweighted Median Market Capitalization (Millions)	\$7,299	\$1,529
Investment Weighted Median Market Capitalization (Millions)	\$50,455	\$50,455
Investment Weighted Average Market Capitalization (Millions)	\$108,818	\$109,023
Number of Holdings	985	3,000

¹ Source: IBES.

²These statistics are based on the companies in the trust's portfolio and are not a projection of future trust performance. Statistics are investment-weighted median unless otherwise noted.

T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on February 28, 2014. T. Rowe Price will adhere to all future updates to GICS for prospective reporting. The information shown does not reflect any exchange-traded funds that may be held in the trust.

Numbers may not total due to rounding.

Alaska U.S. Equity Market Trust

Performance

			Annualized		
	Three Months	One Year	Three Years	Five Years	Since Inception 10/29/08
Alaska U.S. Equity Market Trust ¹	5.24%	12.70%	20.61%	15.67%	16.81%
Russell 3000 Index	5.24	12.56	20.51	15.63	16.82
Difference	0.00	0.14	0.10	0.04	-0.01

¹ Performance figures reflect the deduction of 14 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Total Net Assets: \$414,648,562

Investment Approach

• Seeks to match the performance of the MSCI AC World Ex-U.S. index, an equity market index based on the free float adjusted market capitalization in about 45 developed and emerging market countries excluding the U.S.

Portfolio Construction

- 1,100-1,400 stock portfolio
- Issuer concentration generally +/- 1.00% relative to the benchmark weight
- Sector weight generally +/- 2.00% relative to the benchmark weight
- Country weight generally +/- 2.00% relative to the benchmark weight
- Expected tracking error 90-250 basis points

Benchmark

• MSCI All Country World Index Ex-U.S.

Portfolio Management Team¹

E. Frederick Bair, CFA, CPA

18 years of investment experience; 16 years with T. Rowe Price.

• BS, Pennsylvania State University

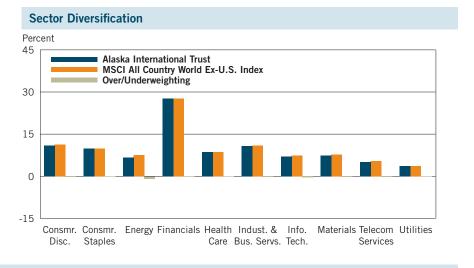
Neil Smith, CFA

20 years of investment experience; 20 years with T. Rowe Price.

- B.Sc, University of Essex
- MBA, University of London



Top 10 Holdings	
Company	% of Trust
Nestle	1.3%
Royal Dutch Shell	1.3
Novartis	1.2
Roche Holding	1.1
HSBC Holdings	1.0
Toyota Motor	1.0
Samsung Electronics	0.9
BP	0.7
Commonwealth Bank of Australia	0.6
Total	0.6
Total	10.6%



Portfolio Characteristics

	Alaska International Trust	MSCI All Country World Ex-U.S. Index
Projected Earnings Growth Rate ^{1,2}	8.5%	8.5%
Price to Earnings (Current Fiscal Year) ^{1,2}	15.02X	15.02X
Price to Earnings (Next Fiscal Year) ^{1,2}	13.94X	13.94X
Return on Equity (Current Fiscal Year) ²	12.78%	12.84%
Price to Book	1.92X	1.92X
Unweighted Median Market Capitalization (Millions)	\$9,211	\$7,233
Investment Weighted Median Market Capitalization (Millions)	\$32,700	\$32,491
Investment Weighted Average Market Capitalization (Millions)	\$57,706	\$57,326
Number of Holdings	1,313	1,812

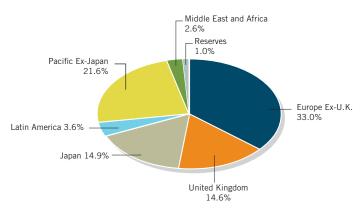
¹ Source: IBES.

² These statistics are based on the companies in the trust's portfolio and are not a projection of future trust performance. Statistics are investment-weighted median unless otherwise noted.

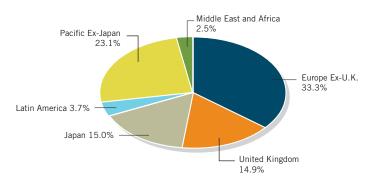
T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on February 28, 2014. T. Rowe Price will adhere to all future updates to GICS for prospective reporting. The information shown does not reflect any exchange-traded funds that may be held in the trust.

Numbers may not total due to rounding.

Region Exposure - Alaska International Trust



Region Exposure - MSCI All Country World Ex-U.S. Index



Top 20 Country Holdings

Country	% of Trust	% of MSCI All Country World Ex-U.S. Index
United Kingdom	14.9%	15.0%
Japan	14.6	14.9
Canada	7.2	7.5
France	6.7	6.8
Germany	6.6	6.5
Switzerland	6.6	6.6
Australia	5.2	5.3
China	4.5	4.7
South Korea	3.0	3.2
Spain	2.6	2.7
Taiwan	2.4	2.5
Brazil	2.2	2.2
Sweden	2.1	2.2
Hong Kong	1.9	1.9
Netherlands	1.9	1.9
Italy	1.8	1.7
South Africa	1.6	1.6
United States	1.5	0.0
Singapore	1.4	1.1
Denmark	1.1	1.1
Total	90.1%	89.4%

Performance

	Three Months	One Year	Three Years	Five Years	Ten Years
Alaska International Trust ¹	-3.97%	-4.21%	11.37%	5.63%	4.33%
Custom International Equity Index ²	-3.81	-3.43	11.97	6.04	5.03
Difference	-0.16	-0.78	-0.60	-0.41	-0.70

¹ Performance figures reflect the deduction of 20 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

² Details of the Custom International Equity Index can be found on page 29.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.

Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Alaska Bond Trust

Total Net Assets: \$1,117,302,918

Investment Approach

- Primarily focus on investment-grade U.S. fixed income securities represented in the Barclays U.S. Intermediate Aggregate Index, Barclays U.S. Dollar Floating Rate Note Index, Barclays U.S. Long Treasury Index, and Barclays U.S. Treasury TIPS 1-5 Year Index.
- Integrate proprietary credit and capital market research to identify market inefficiencies.
- Seek to add value at the margin by coupling limited active management techniques with the risk-controlled aspects of passive management.
- Emphasize individual security selection and modest strategic and tactical deviations versus the benchmark.

Portfolio Construction

- Major spread sector weights will vary +/- 5% relative to the Barclays U.S. Aggregate Index
- Duration is generally managed within +/- 0.25 years of the benchmark
- Issuer concentration is generally +/- 0.25% relative to the benchmark weight

Benchmark

- 70% Barclays U.S. Intermediate Aggregate Index
- 15% Barclays U.S. Dollar Floating Rate Note Index
- 10% Barclays U.S. Treasury TIPS 1-5 Year Index
- 5% Barclays U.S. Long Treasury Index

Portfolio Management Team¹

Robert M. Larkins, CFA

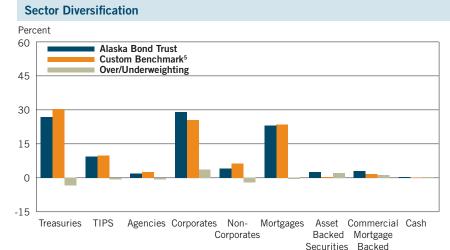
- 11 years of investment experience;
- 11 years with T. Rowe Price.
- BS, Brigham Young University
- MBA, University of Pennsylvania



Securities

Alaska Bond Trust

Top 15 Issuers ⁴	
Company	% of Trust
J. P. Morgan Chase & Co.	1.0%
Bank of America	0.9
Goldman Sachs	0.9
Verizon	0.6
Morgan Stanley	0.6
Wells Fargo	0.5
GE	0.5
PepsiCo	0.5
MetLife Global Funding	0.4
Westpac Banking	0.4
Citigroup	0.4
Comcast	0.4
Ford Motor Credit	0.4
Svenska Handelsbanken	0.3
American Express	0.3
Total	8.0%



Portfolio Characteristics

	Alaska Bond Trust	Custom Benchmark ⁵	
Weighted Average Maturity ^{1,2}	5.26 Years	5.30 Years	
Effective Duration ^{1,2}	3.90 Years	3.82 Years ³	
Yield to Maturity	1.83%	1.74%	
Average Quality	AA1	AA1	
Number of Issues	812	7,554	
Average Coupon	2.70%	2.50%	

¹ Source: IBES.

Numbers may not total due to rounding.

² These statistics are based on the companies in the trust's portfolio and are not a projection of future trust performance.

Statistics are investment-weighted median unless otherwise noted.

T. Rowe Price uses the MSCI/S&P Global Industry Classification Standard (GICS) for sector and industry reporting. Each year, MSCI and S&P review the GICS structure. The last change occurred on February 28, 2014. T. Rowe Price will adhere to all future updates to GICS for prospective reporting. The information shown does not reflect any exchange-traded funds that may be held in the trust.

³ Statistics Universe.

⁴ Top 15 Issuers holdings excludes U.S. Treasuries, Securitized Products, and TRP Institutional Funds.

⁵70% Barclays U.S. Intermediate Aggregate Index, 15% Barclays U.S. Dollar Floating Rate Note Index, 10% Barclays U.S. Treasury TIPS 1-5 Year Index, and 5% Barclays U.S. Long Treasury Index.

Alaska Bond Trust

Performance

	Three Months	One Year	Three Years	Five Years	Since Inception 10/29/08
Alaska Bond Trust ¹	1.08%	5.09%	2.39%	4.24%	5.65%
Custom Fixed Income Index ²	1.08	5.11	2.38	4.28	5.55
Difference	0.00	-0.02	0.01	-0.04	0.10

¹ Performance figures reflect the deduction of 8 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

² Details of the Custom Fixed Income Index can be found on page 29.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results.

Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Alaska Money Market Trust

Total Net Assets: \$114,417,362

Investment Approach

- Seeks to preserve capital, liquidity and, consistent with these goals, the highest possible current income yield. The portfolio is managed to maintain a stable unit price of \$1.00.1
- Investment decisions are based on the objectives of quality, liquidity, diversification and yield.

 Minimal price volatility is sought through maturity management and security selection.
- Managed to the same industry standards as the T. Rowe Price money market mutual funds.
- Invests in high-quality, U.S. dollar-denominated securities that have been determined to present minimal credit risk.

Portfolio Construction

- Diversified portfolio with 50-100 securities
- Maximum 5% per issuer, subject to the following internal credit evaluation:
 - T. Rowe Price Short-Term Rating of 1: 0%-5% for an issuer
 - T. Rowe Price Short-Term Rating of 2: 0%-3.75% for an issuer
 - T. Rowe Price Short-Term Rating of 3+: 0%-2% for an issuer
- Weighted average maturity will generally not exceed 60 days
- · Invests in securities with maturities of less than one year

Benchmark

- Citigroup 3-Month Treasury Bill Index
 - ¹ An investment in money market trusts is not insured or guaranteed by the FDIC or any other government agency. Although the trust seeks to preserve the value of your investment at \$1.00 per unit, it is possible to lose money by investing in the trust.

Portfolio Management Team¹

Joseph K. Lynagh, CFA

20 years of investment experience; 24 years with T. Rowe Price.

- BS, Loyola University
- MSF, Loyola University



Strategy Highlights

As of December 31, 2014

Alaska Money Market Trust

Top 10 Holdings		
Company	% of Trust	S&P Rating
US Treasury N/B	1.9%	NR
US Treasury N/B	1.8	AA+
Federal Home Loan	1.7	A-1+
Federal National	1.5	NR
So Ute Indian T	1.4	A-1+
US Treasury N/B	1.3	AA+
Federal Home Loan	1.2	A-1+
Federal National	1.2	NR
WI HSG & Econ T	1.2	A-1
In St Hosp Rev	1.1	A-1
Total	14.3%	

Maturity and Credit Quality Ranges				
Maturity	% of Trust	% of Index	Difference	
0 - 30 days	43.3%	0.0%	43.3%	
31 - 60 days	26.7	0.0	26.7	
61 - 90 days	12.8	100.0	-87.2	
91 - 120 days	8.6	0.0	8.6	
120 - 180 days	3.9	0.0	3.9	
181 - 365 days	4.7	0.0	4.7	
Credit Quality				
A-1	88.3%	100.0%	-11.7%	
AA	9.9	0.0	9.9	
A	1.8	0.0	1.8	
BAA	0.0	0.0	0.0	

Portfolio Characteristics

	Alaska Money Market Trust	Citigroup 3-Month Treasury Bill Index	Peer Group	Difference ¹
Weighted Average Maturity (Days)	47.89	90.00	49.00 ²	-1.11
Weighted Average Effective Duration (Years)	0.13	N/A		N/A
Weighted Average Quality	AAA	AAA		
Current Yield	0.17%	N/A		N/A

¹ Weighted Average Maturity difference is between the Portfolio and its Peer Group.

² As of December 31, 2014.

Alaska Money Market Trust

Performance

			Annualized			
	Three Months	One Year	Three Years	Five Years	Ten Years	
Alaska Money Market Trust ¹	0.01%	0.02%	0.05%	0.13%	1.73%	
Citigroup 3-Month Treasury Bill Index	0.00	0.03	0.05	0.07	1.46	
Difference	0.01	-0.01	0.00	0.06	0.27	

¹ Performance figures reflect the deduction of 13 basis points, which includes normal operating expenses of the trust, including custodial, accounting, and investment management fees.

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. Unit price, principal value, and return will vary, and you may have a gain or loss when you sell your Units.

Appendix

Fixed Income Benchmark Definitions

- Barclays U.S. Dollar Floating Rate Note (FRN) Index provides a measure of the U.S. dollar denominated floating rate note market. The index measures the performance of floating rate notes across sector, credit quality, maturity, and asset class sectors.
- The index includes both corporate and non-corporate sectors. The corporate sectors are Industrial, Utility, and Financial Institutions. The Financial Institution sectors are Banking, Brokerage, Finance Companies, Insurance, and REITs.

 Non-corporates include sovereigns (such as Mexico and Chile). All securities must be investment grade credits.
- Barclays Long U.S. Treasury Index is the long component of the broad U.S. Treasury index, representing public obligations of the U.S. Treasury, and includes maturities of ten-years or more.
- Barclays U.S. Treasury Inflation Protection Securities (TIPS) 1-5 Year Index consists of Inflation-Protection securities issued by the U.S. Treasury with maturities between one and five-years.

Biographical Backgrounds

T. Rowe Price — Presenters

Christopher W. Dyer

Chris Dyer is a U.S. institutional sales executive for the Global Investment Services division of T. Rowe Price, the organization responsible for the firm's institutional business worldwide. Mr. Dyer is a vice president of T. Rowe Price Group, Inc., and T. Rowe Price Associates, Inc.

Mr. Dyer has 30 years of investment experience in institutional investment management sales, 26 of which have been with T. Rowe Price. Prior to his current position, Mr. Dyer was responsible for defined contribution plan sales and client service for public and nonprofit organizations for T. Rowe Price Retirement Plan Services, the firm's defined contribution plan subsidiary. Prior to joining the firm in 1987, he was a pension supervisor with The Calvert Group.

Mr. Dyer earned a B.A. in political science from the University of Maryland. He is a Series 7, 63, and 65 registered representative.

John D. Plowright, CFA

John Plowright is a North America client service executive for Global Investment Services, the organization responsible for the firm's institutional business worldwide. He is a vice president of T. Rowe Price Group, Inc., and T. Rowe Price Associates, Inc.

Mr. Plowright has 22 years of investment experience, nine of which have been at T. Rowe Price. Before joining T. Rowe Price in 2004, he was a director of client services with RCM Capital Management, and prior to that, he was a director and fixed income specialist with RCM Capital Management.

Mr. Plowright earned a B.A. in religion from Earlham College, cum laude, and a master's degree in international management from American Graduate School of International Management. Mr. Plowright has earned the Chartered Financial Analyst designation and is a Series 7 and 63 registered representative.

Biographical Backgrounds

T. Rowe Price — Presenters

Charles M. Shriver, CFA

Charles M. Shriver is a portfolio manager for several asset allocation portfolios within the Asset Allocation Group. He is the lead portfolio manager for the Balanced and Target Risk Strategies. Mr. Shriver is a vice president of T. Rowe Price Group, Inc.

Mr. Shriver has 14 years of investment experience, all of which have been with T. Rowe Price. He has been with the firm since 1991.

Mr. Shriver earned a B.A. in economics and rhetoric/communications studies from the University of Virginia, an M.S.F. in finance from Loyola University Maryland, and a graduate diploma in public economics from Stockholm University. He is also a Series 6, 7, and 63 registered representative and has earned the Chartered Financial Analyst designation.

Toby M. Thompson, CFA, CAIA

Toby Thompson is a vice president of T. Rowe Price Group, Inc., and T. Rowe Price Associates, Inc., and is an investment analyst and portfolio manager within the Asset Allocation Group.

Mr. Thompson has 20 years of industry experience, six of which have been with T. Rowe Price. Prior to joining the firm in 2007, he served as director of investments of the I.A.M. National Pension Fund. Before joining the I.A.M. National Pension Fund, Mr. Thompson was a principal with Brown Investment Advisory, where he worked in fixed income research, served as director of open architecture and asset allocation, and was a member of the firm's Strategic Investment Committee.

Mr. Thompson earned a B.S. in business and economics from Towson University and an M.B.A. in finance from Loyola University Maryland. He has earned his Chartered Financial Analyst (CFA) and Chartered Alternative Investment Analyst (CAIA) designations and is a Series 7 and 63 registered representative.

State Street Global Advisors

Mandate: SSGA Russell 1000 Managed Volatility Strategy

Hired: 2014

Firm Information	mation Investment Approach				
State Street Global Advisors ("SSGA") is a division of State Street Bank and Trust Company, a wholly owned subsidiary of State Street Corporation. SSGA is the investment management division of State Street Bank and Trust Company. As of 12/31/2014, the firm's total assets under management were \$2.45 trillion. Key Executives:	Investment research is conducted by portfolio managers and their investment research team embedded in the Global Equity Beta Solutions Team. SSGA's Russell 1000 Managed Volatility Strategy seeks to provide competitive returns, while maintaining low volatility, compared to the benchmark over the long term by constructing a portfolio of stocks with low expected volatility relative to the benchmark. It focuses on managing total risk of portfolio, not benchmark relative	Assets Under Management: 3/31/2015 \$101,077,531			
Emiliano Rabinovich, Portfolio Manager	risk. The Strategy seeks to be fully invested, while also focusing on trade cost minimization and effectiveness.				
Rosalind Jacobsen, Client Service Contact	Benchmark: Russell 1000 Index and Russell 1000 Low Volatility Index				

Concerns: None

SSgA Russell 1000 Managed Volatility Strategy (net) 3 Months 1 Year 3 Years Annualized Annualized N/A N/A N/A
SSgA Russell 1000 Managed Volatility Strategy (net) 2.22% N/A N/A N/A
Russell 1000 Index 1.59%
Russell 1000 Low Volatility Index -0.13%

State Street Global Advisors

Mandate: SSGA Russell 2000 Managed Volatility Strategy

Hired: 2014

Firm Information	Investment Approach	Total ARMB Mandate
State Street Global Advisors ("SSGA") is a division of State Street Bank and Trust Company, a wholly owned subsidiary of State Street Corporation. SSGA is the investment management division of State Street Bank and Trust Company.	Investment research is conducted by portfolio managers and their investment research team embedded in the Global Equity Beta Solutions Team.	Assets Under Management: 3/31/2015 \$100,405,585
As of 12/31/2014, the firm's total assets under management were \$2.45 trillion.	SSGA's Russell 2000 Managed Volatility Strategy seeks to provide competitive returns, while maintaining low volatility, compared to the benchmark over the long term by constructing a portfolio of stocks with	
Key Executives:	low expected volatility relative to the benchmark. It focuses on managing total risk of portfolio, not benchmark relative risk. The Strategy seeks to be fully invested, while also focusing on trade cost minimization and	
Emiliano Rabinovich, Portfolio Manager	effectiveness.	
Rosalind Jacobsen, Client Service Contact	Benchmark: Russell 2000 Index and Russell 2000 Low Volatility Index	

Concerns: None

3 Months I Year	Years 5 Years
	alized Annualize
SSgA Russell 2000 Managed Volatility Strategy (net) 2.01% N/A N/A	I/A N/A
Russell 2000 Index 4.32%	
Russell 2000 Low Volatility Index 2.62%	

State of Alaska

April 23, 2015

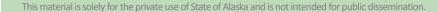






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The material contained in this presentation is current as of the presentation date, unless otherwise indicated.



State Street Global Advisors: Firm Overview



A Leading Provider of Financial Services to Institutional Investors



State Street Global Advisors partners with many of the world's largest, most sophisticated investors and financial intermediaries to help them reach their goals through a rigorous, researchdriven investment process spanning both indexing and active disciplines.

- The investment management arm of State Street Corporation, one of the world's leading providers of financial services to institutional investors, with a heritage dating back over two centuries
- Entrusted with over \$2.45 trillion* in assets worldwide
- Clients include governmental entities, corporations, endowments and foundations, third party asset gatherers, multi employer plans, pension funds and sovereign wealth funds
- ETF industry pioneer and leader since 1993 with \$465.9 billion* in global AUM

State Street Global Services

A global leader in asset servicing

STATE STREET GLOBAL ADVISORS.

A global leader in asset management

State Street Global Markets

A global leader in research and trading

State Street Global Exchange

A global leader in data utilization and management

As of December 31, 2014

^{*} This AUM includes the assets of the SPDR Gold Trust (approx. \$27.3 billion as of December 31, 2014), for which State Street Global Markets, LLC, an affiliate of State Street Global Advisors, serves as the marketing agent.



GLSTND-1776

Our Advantage

Continual investment in our asset management and client service platform results in a client-focused, solutions-driven orientation



As of December 31, 2014

^{*} This AUM includes the assets of the SPDR Gold Trust (approx. \$27.3 billion as of December 31, 2014), for which State Street Global Markets, LLC, an affiliate of State Street Global Advisors, serves as the marketing agent.



GLSTND-1776

Account Summary



State of Alaska (Preliminary)

Investment Summary

As of March 31, 2015

	Market Value
State of Alaska Defined Benefit Plans	\$5,028,627,069
State of Alaska Defined Contribution Plans	487,136,102
State of Alaska Non-Retirement Plans	1,479,175,758
Total	\$6,994,938,928

Statement of Asset Changes

The following changes took place in the State of Alaska Defined Benefit Plans account for the period of April 1, 2014 to March 31, 2015:

	Market Value 04/01/2014	Contributions	Withdrawals	Change in Market Value*	Market Value 03/31/2015
Russell 1000 Growth Index	\$1,272,944,340	\$150,000,000	\$(350,000,000)	\$202,798,805	\$1,275,743,145
Separately Managed Russell 1000 Value Index	1,307,217,084	460,000,170	(300,000,000)	116,535,564	1,583,752,818
Separately Managed Russell 2000 Growth Index	17,419,694	_	(57)	2,087,303	19,506,940
Russell 2000 Value Index	63,318,408	_	_	2,883,344	66,201,752
Russell Top 200 Index	558,911,662	200,000,000	(50,000,000)	68,501,536	777,413,198
S&P 500 Index Fund SMA	131,094,215	132,500,000	(23,008,115)	27,935,763	268,521,863
Separately Managed MSCI ACWI ex-US Investable Market Index	642,123,712	200,000,000	_	(6,119,476)	836,004,236
SSGA Russell 1000 Managed Volatility Strategy	_	100,369,923	_	707,608	101,077,531
SSGA Russell 2000 Managed Volatility Strategy	_	_	_	100,405,585	100,405,585
Total	\$3,993,029,115	\$1,242,870,093	\$(723,008,172)	\$515,736,033	\$5,028,627,069

Source: SSGA

^{*} Includes dividends, interest, and realized/unrealized gains and losses.



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State of Alaska (Preliminary)

Statement of Asset Changes

The following changes took place in the State of Alaska Defined Contribution Plans account for the period of April 1, 2014 to March 31, 2015:

	Market Value 04/01/2014	Contributions	Withdrawals	Change in Market Value*	Market Value 03/31/2015
Russell 3000 Index NL Series Fund Class A	\$110,381,637	\$46,482,212	\$(29,931,686)	\$14,914,015	\$141,846,178
REIT Indx NL SF CL A (CMX2)	41,357,345	55,963,798	(42,337,161)	11,393,492	66,377,474
SSGA US Long Treasury Index NL Series Fund Class A	11,398,392	45,315,265	(35,971,913)	3,090,570	23,832,314
SSGA US Inflation Protected Bond Index NL Series Fund Clas	27,785,488	17,099,127	(17,329,642)	869,631	28,424,604
SSGA Global Equity ex-US Index NL Series Fund Class A	82,938,917	20,823,881	(33,690,541)	(53,607)	70,018,650
SSGA World Government Bond ex-US Index NL Series Fund Clas	20,480,888	13,396,026	(7,232,944)	(2,348,055)	24,295,915
Global Balanced Investment Strategy	112,997,040	20,432,792	(5,961,476)	4,872,612	132,340,968
Global Equity Index NL SF CL A (CMER1)	68,112,599	_	_	11,283,747	79,396,346
World Govt Bond Ex-US Indx NL SF CL A (CMFH1)	11,203,352	_	_	1,929,931	13,133,283
US Bond Indx NL SF CL A (CMCZ1)	33,611,730	_	_	6,110,071	39,721,801
QD65 Cash Portfolio	69,358	20,432,792	(5,961,476)	(14,451,137)	89,537
Total	\$407,339,707	\$219,513,101	\$(172,455,363)	\$32,738,657	\$487,136,102

Statement of Asset Changes

The following changes took place in the State of Alaska Non-Retirement Plans account for the period of April 1, 2014 to March 31, 2015:

	Market Value 04/01/2014	Contributions	Withdrawals	Change in Market Value*	Market Value 03/31/2015
Russell 3000 Index Strategy	\$3,660,994,769	\$20,529,287	\$(3,067,848,288)	\$475,788,765	\$1,089,464,533
SSGA MSCI EAFE Index NL QP Strategy	1,640,223,869	110,062,973	(1,357,632,397)	(2,943,221)	389,711,224
Total	\$5,301,218,639	\$130,592,260	\$(4,425,480,685)	\$472,845,544	\$1,479,175,758

Source: SSGA

^{*} Includes dividends, interest, and realized/unrealized gains and losses.



USCTA-0357

US Managed Volatility Strategy and Process

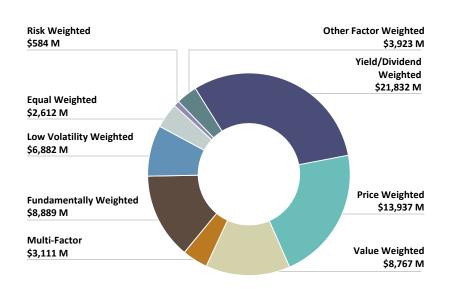
Investing involves risk including the risk of loss of principal



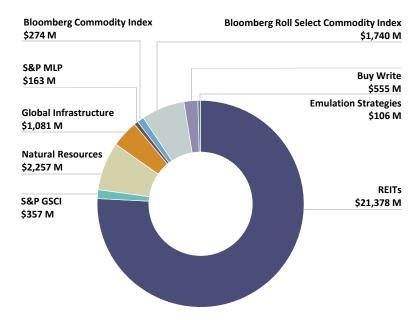
Advanced Betas and Alternative Asset Betas

Total Advanced Betas and Alternative Asset Betas AUM: \$98,448 Million (USD) as of December 31, 2014 Rules-Based and Factor-Tilting Strategies, Low-Volatility Equity, Commodities, REITs and Additional Alternative Asset Classes

Alternative Weightings and Low Volatility Equity Assets Under Management \$70,537 Million as of December 31, 2014



Alternatives Asset Class Betas Assets Under Management \$27,911 Million as of December 31, 2014



Source: SSGA as of December 31, 2014

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SSGA's Managed Volatility Equity Team

- Experienced portfolio management team
- Investment strategy in place since 2008
- \$3.4 billion under management as of December 31, 2014

Team Members

Portfolio Management	Years of Experience
Lynn Blake, CFA, Head of GEBS	27
David Arrighini, CFA	23
Juan Acevedo	15
Susan Darroch	29
Selim Dekali	9
Nobuya Endo, CFA	19
Richard Hannam, ASIP	27
Frédéric Jamet	25
Emiliano Rabinovich, CFA	10
Eric Viliott, CFA, CFP	19
Research	
Jennifer Bender, PhD, Director of Advanced Beta Research	19
Taie Wang, CFA, Deputy Head of Research	11
Chris Cheung, CFA	11

SSGA Toolkit
Portfolio Strategist Scott Conlon, CFA
Trading
Legal/Compliance
Operations

As of December 31, 2014



US Managed Volatility Strategy

Objective	 Seeks to provide competitive returns, while maintaining low volatility, compared to the benchmark over the long term by constructing a portfolio of stocks with low expected volatility relative to the benchmark
Benchmark	• Russell 3000® Index
Investment Universe	• Equity securities of Russell 3000® Index
Risk Management	Focus on managing total risk of portfolio, not benchmark-relative risk
Risk Parameters*	 Maximum security weight of 1.0% (grandfathering allowed up to 1.25%) Maximum sector weight of 25% Maximum industry weight of 10% Control for size
Expected Turnover	• 25% per annum (one way)**
Trading	 SSGA's global trading desks focus on cost minimization and trade effectiveness Seeks to be fully invested

^{**} The above targets are estimates based on certain assumptions and analysis made by SSGA. There is no guarantee that the estimates will be achieved.

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^{*} At time of trade

US Managed Volatility Strategy: Characteristics

Risk Management focused on absolute exposure, not benchmark-relative risk

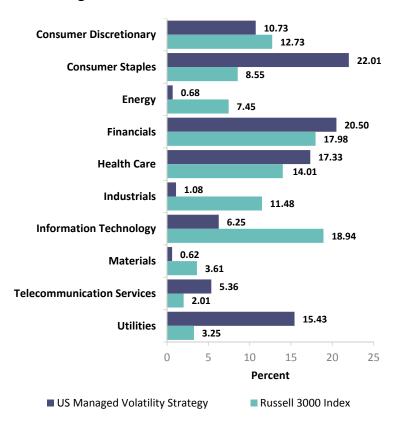
As of December 31, 2014

	US Managed Volatility	Russell 3000° Index
Predicted Total Risk (%)	8.6	12.4
Weighted Avg. Market Cap (\$B)	32.2	99.9
Total Number of Holdings	149	3,054
Beta (Trailing 36 Months)	0.7	1.0
Standard Deviation (%) (Ann'd 36 Mos.)	8.6	9.4
Price/Book (x)	2.2	2.7
Ann. Dividend Yield (Trailing 12 Mos.) (%)	3.3	1.9
Price/Earnings (x) (Forward 12 months)	16.9	17.8
Price/Cash Flow (x)	10.6	11.8
Return on Equity (%)	13.2	17.4
Estimated 3–5 Year EPS Growth (%)	7.6	11.9
Composite AUM (M)	\$10.2	_

Top 10 Holdings

	Portfolio	Russell 3000°
Stock	Weight	Weight
Bio-Reference Laboratories, Inc.	1.02%	0.00%
Carter's, Inc.	1.03	0.02
Northwest Bancshares, Inc.	1.01	0.01
Covanta Holding Corporation	1.01	0.01
Regal Entertainment Group Class A	1.01	0.01
Bio-Rad Laboratories, Inc. Class A	1.01	0.01
Vector Group Ltd.	1.00	0.01
ARMOUR Residential REIT, Inc.	1.00	0.01
CACI International Inc Class A	1.00	0.01
Capstead Mortgage Corporation	1.00	0.01

Sector Weights



Source: SSGA

The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. Past performance is not a guarantee of future results. Characteristics and weights presented are calculated using the month end market value of holdings, except for beta and standard deviation, if shown, which use month end return values. Averages reflect the market weight of securities in the portfolio. Market data, prices, and dividend estimates for characteristics calculations provided by FactSet Research Systems, Inc. All other portfolio data provided by SSGA. Characteristics and weights are as of the date indicated, are subject to change, and shouldnot be relied upon as current thereafter. Holdings and sectors shown are as of the date indicated and are subject to change. This information should not be considered a recommendation to invest in a particular sector or to buy or sell any security shown. It is not known whether the sectors or securities shown will be profitable in the future. The holdings are taken from the accounting records of SSGA which may differ from the official books and records of the custodian.

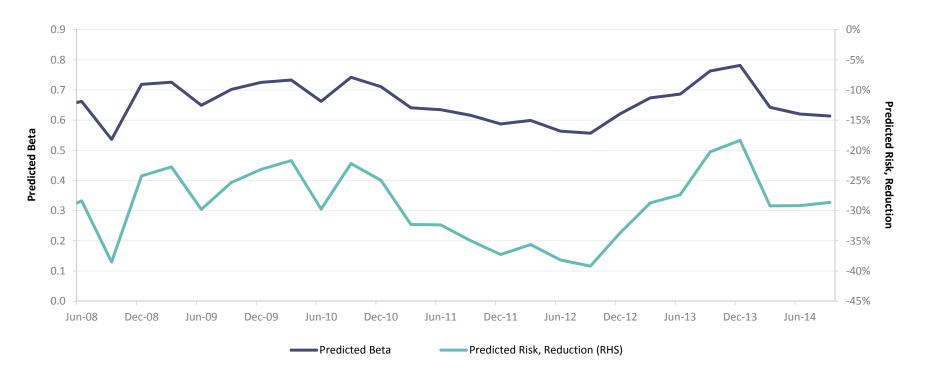


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US Managed Volatility Strategy: Risk Profile

Ex-Ante Beta and Reduction in Risk1



• Persistently low beta and material reduction in volatility

Source: SSGA, FactSet. As of September 30, 2014.

The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. Past performance is not a guarantee of future results.

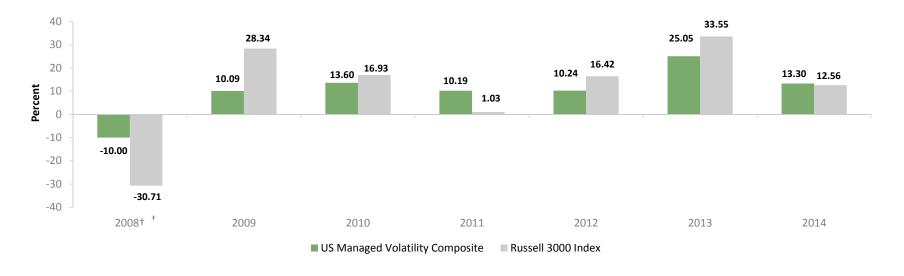


¹ Predicted Beta and Reduction in Predicted Risk measured versus the Russell 3000 Index

US Managed Volatility Strategy: Live Performance

Gross annualized composite returns for the period ending December 31, 2014 (USD)

	YTD	1 Year	3 Years	5 Years	Since Inception [†]	Standard Deviation*	Volatility Reduction	Sharpe Ratio
US Managed Volatility Composite	13.30%	13.30%	16.03%	14.35%	10.29%	11.88%	-32%	0.85
Russell 3000® Index	12.56	12.56	20.51	15.63	9.44	17.51		0.53
Difference**	0.74	0.74	-4.48	-1.28	0.85	-5.63		0.32



Source: SSGA

The performance shown is of a composite consisting of all discretionary accounts using this investment strategy. There is no minimum account size required for inclusion in the composite. New funds or accounts are added to the composite upon the first full month of operation and closed funds or accounts are removed from the composite upon the last full month of operation. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. Returns are expressed gross of management fees. Some members of the composite may accrue administration fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in USD. The index returns are unmanaged and do not reflect the deduction of any fees or expenses. The index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



[†] Inception: 4/2008; Partial year performance not annualized.

^{*} Annualized standard deviation of monthly returns since inception.

^{**} The value added returns may show rounding differences.

US Managed Volatility Strategy — Live Performance

Historical Drawdown

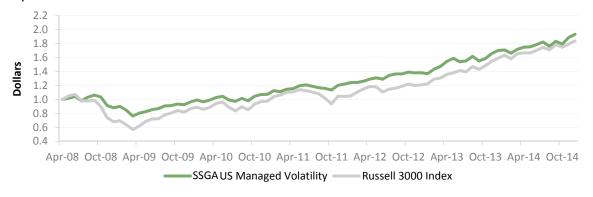
April 2008-December 2014



- Seeks to deliver downside protection, while also participating in rising markets
- Low exposure to higher volatile, higher beta (glamour) stocks
- By limiting downside in falling markets, the strategy seeks to benefit from compounding effects over the long term

Cumulative Growth of \$1

April 2008-December 2014



Source: SSGA.

The US Managed Volatility Strategy was incepted on April 1, 2008.

Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income. Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell 3000° is a trademark of Russell Investment Group. The performance shown is of a composite consisting of all discretionary accounts using this investment strategy. There is no minimum account size required for inclusion in the composite. New funds or accounts are added to the composite upon the first full month of operation and closed funds or accounts are removed from the composite upon the last full month of operation. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. Past performance is no guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a net of fees basis, reflecting the deduction of investment management fees. Some members of this composite may accrue administration fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

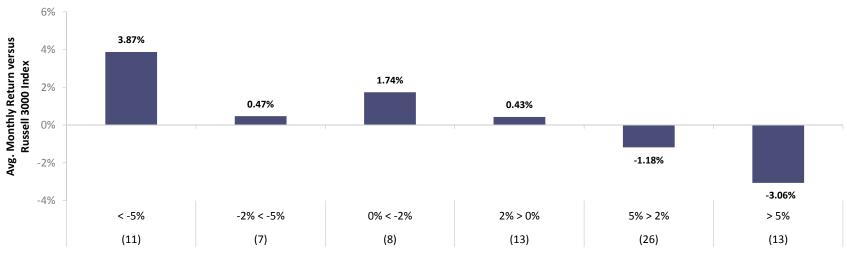


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Strategy Performance in Up and Down Markets

US Managed Volatility Strategy Performance in Up and Down Markets*



Russell 3000 Index — Monthly Return (# of months)

• Up capture: 0.62, Down capture: 0.58

Source: SSGA

^{*} The performance shown is based on preliminary data, which is subject to change upon finalization. Period: April 2008—September 2014. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request. Past performance is not a guarantee of future results. The index returns are unmanaged and do not reflect the deduction of any fees or expenses. The index returns effect all items of income, gain and loss and the reinvestment of dividends and other income. The performance figures contained herein are provided on a gross of fees basis only, but net of administrative costs. The performance figures do not reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.



Appendix A: Managed Volatility within Other Regions



Global Managed Volatility: Live Performance

Gross annualized composite returns for the period ending December 31, 2014 (USD)

	YTD	1 Year	3 Years	5 Years	Since Inception [†]	Standard Deviation*	Volatility Reduction	Sharpe Ratio
Global Managed Volatility Composite	15.79%	15.79%	15.82%	13.15%	9.68%	12.79%	-29%	0.75
MSCI World Index	4.94	4.94	15.47	10.20	8.37	17.97		0.46
Difference**	10.86	10.86	0.34	2.94	1.31	-5.18		0.29



Source: SSGA

The performance shown is of a composite consisting of all discretionary accounts using this investment strategy. There is no minimum account size required for inclusion in the composite. New funds or accounts are added to the composite upon the first full month of operation and closed funds or accounts are removed from the composite upon the last full month of operation. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request.

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. Returns are expressed gross of management fees. Some members of the composite may accrue administration fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in USD.

The index returns are unmanaged and do not reflect the deduction of any fees or expenses. The index returns reflect all items of income,

gain and loss and the reinvestment of dividends and other income.



[†] Inception: 10/1/2008; Partial year performance not annualized.

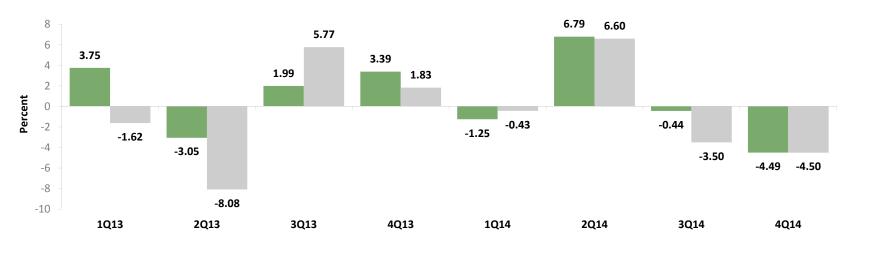
^{*} Annualized standard deviation of monthly returns since inception.

^{**} The value added returns may show rounding differences.

Emerging Markets Managed Volatility: Live Performance

Gross annualized returns for the period ending December 31, 2014 (USD)

	YTD	1 Year	Since Inception [†]	Standard Deviation*	Volatility Reduction	Sharpe Ratio
Emerging Markets Managed Volatility Composite	0.27%	0.27%	3.18%	10.54%	-15%	0.30
MSCI Emerging Markets Index	-2.19	-2.19	-2.40	12.45		-0.20
Difference**	2.46	2.46	5.58	-1.92		0.50



■ Emerging Markets Managed Volatility Composite
■ MSCI Emerging Markets Index

Source: SSGA

The performance shown is of a composite consisting of all discretionary accounts using this investment strategy. There is no minimum account size required for inclusion in the composite. New funds or accounts are added to the composite upon the first full month of operation and closed funds or accounts are removed from the composite upon the last full month of operation. The above information is considered supplemental to the GIPS presentation for this Composite, which can be found in the Appendix or was previously presented. A GIPS presentation is also available upon request.

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. Returns are expressed gross of management fees. Some members of the composite may accrue administration fees. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in USD.

The index returns are unmanaged and do not reflect the deduction of any fees or expenses. The index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



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[†] Inception: 1/2013; Partial year performance not annualized.

^{*} Annualized standard deviation of monthly returns since inception.

^{**} The value added returns may show rounding differences.

Appendix B: Additional Account Summary Information



Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Benefit Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Russell 1000 Growth Index							Mar/2014
Total Returns (Net)	-1.14%	3.80%	3.80%	16.05%	N/A	N/A	N/A
Russell 1000® Growth Index	-1.14	3.84	3.84	16.09	N/A	N/A	N/A
Difference [†]	0.00	-0.04	-0.04	-0.03	N/A	N/A	N/A
Total Returns (Gross)	-1.14	3.80	3.80	16.07	N/A	N/A	16.07%
Russell 1000®Growth Index	-1.14	3.84	3.84	16.09	N/A	N/A	16.09
Difference†	0.00	-0.03	-0.03	-0.02	N/A	N/A	-0.02
Separately Managed Russell 1000 Value Index							Mar/2014
Total Returns (Net)	-1.35	-0.66	-0.66	9.50	N/A	N/A	N/A
Russell 1000® Value Index	-1.36	-0.72	-0.72	9.33	N/A	N/A	N/A
Difference†	0.01	0.06	0.06	0.17	N/A	N/A	N/A
Total Returns (Gross)	-1.35	-0.66	-0.66	9.51	N/A	N/A	9.51
Russell 1000® Value Index	-1.36	-0.72	-0.72	9.33	N/A	N/A	9.33
Difference [†]	0.01	0.06	0.06	0.18	N/A	N/A	0.18
Separately Managed Russell 2000 Growth Index							Mar/2014
Total Returns (Net)	1.75	6.61	6.61	11.93	N/A	N/A	N/A
Russell 2000® Growth Index	1.80	6.63	6.63	12.06	N/A	N/A	N/A
Difference†	-0.05	-0.02	-0.02	-0.14	N/A	N/A	N/A
Total Returns (Gross)	1.75	6.62	6.62	11.98	N/A	N/A	11.98
Russell 2000® Growth Index	1.80	6.63	6.63	12.06	N/A	N/A	12.06
Difference†	-0.04	-0.01	-0.01	-0.08	N/A	N/A	-0.08

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Benefit Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Russell 2000 Value Index							Mar/2014
Total Returns (Net)	1.65%	1.96%	1.96%	4.50%	N/A	N/A	N/A
Russell 2000® Value Index	1.69	1.98	1.98	4.43	N/A	N/A	N/A
Difference [†]	-0.04	-0.02	-0.02	0.08	N/A	N/A	N/A
Total Returns (Gross)	1.65	1.97	1.97	4.55	N/A	N/A	4.55%
Russell 2000® Value Index	1.69	1.98	1.98	4.43	N/A	N/A	4.43
Difference†	-0.04	-0.01	-0.01	0.13	N/A	N/A	0.13
Russell Top 200 Index							Mar/2014
Total Returns (Net)	-1.83	0.55	0.55	12.28	N/A	N/A	N/A
Russell Top 200 Index	-1.84	0.54	0.54	12.30	N/A	N/A	N/A
Difference†	0.01	0.01	0.01	-0.01	N/A	N/A	N/A
Total Returns (Gross)	-1.83	0.56	0.56	12.29	N/A	N/A	12.29
Russell Top 200 Index	-1.84	0.54	0.54	12.30	N/A	N/A	12.30
Difference†	0.01	0.02	0.02	0.00	N/A	N/A	0.00
S&P 500 Index Fund SMA							Mar/2014
Total Returns (Net)	-1.58	0.95	0.95	12.71	N/A	N/A	N/A
S&P 500®	-1.58	0.95	0.95	12.73	N/A	N/A	N/A
Difference†	0.00	0.00	0.00	-0.02	N/A	N/A	N/A
Total Returns (Gross)	-1.58	0.95	0.95	12.73	N/A	N/A	12.73
S&P 500®	-1.58	0.95	0.95	12.73	N/A	N/A	12.73
Difference†	0.00	0.00	0.00	-0.01	N/A	N/A	-0.01

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Benefit Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Separately Managed MSCI ACWI ex-US Investable Market Ind	ex Strategy						Mar/2014
Total Returns (Net)	-1.53%	3.55%	3.55%	-1.01%	N/A	N/A	N/A
MSCI ACWI ex-USA IMI	-1.55	3.55	3.55	-1.34	N/A	N/A	N/A
Difference [†]	0.02	0.01	0.01	0.33	N/A	N/A	N/A
Total Returns (Gross)	-1.52	3.57	3.57	-0.95	N/A	N/A	-0.95%
MSCI ACWI ex-USA IMI	-1.55	3.55	3.55	-1.34	N/A	N/A	-1.34
Difference†	0.03	0.02	0.02	0.39	N/A	N/A	0.39
SSGA Russell 1000 Managed Volatility Strategy							Dec/2014
Total Returns (Net)	0.27	2.24	2.24	N/A	N/A	N/A	0.70
Russell 1000® Low Volatility Index	-1.12	-0.13	-0.13	N/A	N/A	N/A	-1.74
Difference†	1.38	2.37	2.37	N/A	N/A	N/A	2.44
Total Returns (Gross)	0.27	2.24	2.24	N/A	N/A	N/A	0.70
Russell 1000® Index	-1.25	1.59	1.59	N/A	N/A	N/A	0.11
Difference†	1.51	0.65	0.65	N/A	N/A	N/A	0.59
SSGA Russell 2000 Managed Volatility Strategy							Dec/2014
Total Returns (Net)	1.35	2.04	2.04	N/A	N/A	N/A	0.33
Russell 2000® Low Volatility Index	1.97	2.62	2.62	N/A	N/A	N/A	0.66
Difference†	-0.62	-0.58	-0.58	N/A	N/A	N/A	-0.34
Total Returns (Gross)	1.35	2.04	2.04	N/A	N/A	N/A	0.33
Russell 2000® Index	1.74	4.32	4.32	N/A	N/A	N/A	3.09
Difference†	-0.39	-2.28	-2.28	N/A	N/A	N/A	-2.77

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Contribution Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Russell 3000 Index NL Series Fund Class A							Mar/2014
Total Returns (Net)	-1.04%	1.79%	1.79%	12.42%	N/A	N/A	N/A
Russell 3000® Index	-1.02	1.80	1.80	12.37	N/A	N/A	N/A
Difference†	-0.02	-0.01	-0.01	0.06	N/A	N/A	N/A
Total Returns (Gross)	-1.03	1.79	1.79	12.46	N/A	N/A	12.46%
Russell 3000® Index	-1.02	1.80	1.80	12.37	N/A	N/A	12.37
Difference†	-0.02	-0.01	-0.01	0.09	N/A	N/A	0.09
REIT Index NL Series Fund Class A							Mar/2014
Total Returns (Net)	1.76	4.60	4.60	24.93	N/A	N/A	N/A
Dow Jones US Select REIT Index SM	1.79	4.71	4.71	25.26	N/A	N/A	N/A
Difference†	-0.04	-0.11	-0.11	-0.33	N/A	N/A	N/A
Total Returns (Gross)	1.77	4.65	4.65	25.15	N/A	N/A	25.15
Dow Jones US Select REIT Index SM	1.79	4.71	4.71	25.26	N/A	N/A	25.26
Difference†	-0.02	-0.07	-0.07	-0.11	N/A	N/A	-0.11
SSGA US Long Treasury Index NL Series Fund Class A							Mar/2014
Total Returns (Net)	1.20	3.97	3.97	21.35	N/A	N/A	N/A
Barclays US Long Treasury Bond Index	1.17	3.96	3.96	21.40	N/A	N/A	N/A
Difference†	0.03	0.02	0.02	-0.05	N/A	N/A	N/A
Total Returns (Gross)	1.21	3.99	3.99	21.44	N/A	N/A	21.44
Barclays US Long Treasury Bond Index	1.17	3.96	3.96	21.40	N/A	N/A	21.40
Difference†	0.04	0.03	0.03	0.04	N/A	N/A	0.04

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



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Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Contribution Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
SSGA US Inflation Protected Bond Index NL Series Fund Class A							Mar/2014
Total Returns (Net)	-0.48%	1.41%	1.41%	3.01%	N/A	N/A	N/A
Barclays US Treasury Inflation Protected Securities (TIPS) Index	-0.47	1.42	1.42	3.11	N/A	N/A	N/A
Difference†	-0.01	-0.02	-0.02	-0.10	N/A	N/A	N/A
Total Returns (Gross)	-0.47	1.43	1.43	3.10	N/A	N/A	3.10%
Barclays US Treasury Inflation Protected Securities (TIPS) Index	-0.47	1.42	1.42	3.11	N/A	N/A	3.11
Difference†	0.00	0.01	0.01	-0.01	N/A	N/A	-0.01
SSGA Global Equity ex-US Index NL Series Fund Class A							Mar/2014
Total Returns (Net)	-1.57	4.04	4.04	-1.00	N/A	N/A	N/A
MSCI ACWI ex-USA Index	-1.62	3.49	3.49	-1.01	N/A	N/A	N/A
Difference†	0.05	0.55	0.55	0.02	N/A	N/A	N/A
Total Returns (Gross)	-1.55	4.09	4.09	-0.83	N/A	N/A	-0.83
MSCI ACWI ex-USA Index	-1.62	3.49	3.49	-1.01	N/A	N/A	-1.01
Difference†	0.06	0.60	0.60	0.19	N/A	N/A	0.19
SSGA World Government Bond ex-US Index NL QIB Series Fund Class	Α						Mar/2014
Total Returns (Net)	-1.91	-4.38	-4.38	-9.95	N/A	N/A	N/A
Citigroup World Government Bond ex-US Index	-1.91	-4.36	-4.36	-9.82	N/A	N/A	N/A
Difference†	0.00	-0.03	-0.03	-0.14	N/A	N/A	N/A
Total Returns (Gross)	-1.90	-4.36	-4.36	-9.87	N/A	N/A	-9.87
Citigroup World Government Bond ex-US Index	-1.91	-4.36	-4.36	-9.82	N/A	N/A	-9.82
Difference†	0.00	-0.01	-0.01	-0.06	N/A	N/A	-0.06

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



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Summary of Performance

Following are the net and gross returns for the State of Alaska Defined Contribution Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Global Balanced Investment Strategy							Mar/2014
Total Returns (Net)	-0.97%	1.63%	1.63%	4.06%	N/A	N/A	N/A
Custom Blended Index	-0.99	1.43	1.43	3.93	N/A	N/A	N/A
Difference†	0.02	0.20	0.20	0.13	N/A	N/A	N/A
Total Returns (Gross)	-0.96	1.65	1.65	4.16	N/A	N/A	4.16%
Custom Blended Index	-0.99	1.43	1.43	3.93	N/A	N/A	3.93
Difference†	0.03	0.22	0.22	0.24	N/A	N/A	0.24
Global Equity Index NL SF CL A (CMER1)							Mar/2014
Total Returns (Gross)	-1.50	2.65	2.65	5.79	N/A	N/A	5.79
MSCI ACWI ex-USA Index	-1.55	2.31	2.31	5.42	N/A	N/A	5.42
Difference†	0.05	0.34	0.34	0.37	N/A	N/A	0.37
World Govt Bond Ex-US Indx NL SF CL A (CMFH1)							Mar/2014
Total Returns (Gross)	-1.90	-4.36	-4.36	-9.87	N/A	N/A	-9.87
Citigroup World Government Bond Ex-US Index	-1.91	-4.36	-4.36	-9.82	N/A	N/A	-9.82
Difference†	0.00	-0.01	-0.01	-0.06	N/A	N/A	-0.06
US Bond Indx NL SF CL A (CMCZ1)							Mar/2014
Total Returns (Gross)	0.48	1.64	1.64	5.78	N/A	N/A	5.78
Barclays US Aggregate Bond Index	0.46	1.61	1.61	5.72	N/A	N/A	5.72
Difference†	0.01	0.04	0.04	0.06	N/A	N/A	0.06
QD65 Cash Portfolio							Mar/2014
Total Returns (Gross)	0.00	0.00	0.00	0.00	N/A	N/A	0.00
Total Netarns (01033)	0.00	0.00	0.00	0.00	IN/A	N/A	0.00

Source: SSGA

[†]The calculation method for value added returns may show rounding differences. The performance shown is based on preliminary data, which is subject to change upon finalization. Past performance is not a guarantee of future results. Return periods of less than one year are not annualized. The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions. Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected. Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



Summary of Performance

Following are the net and gross returns for the State of Alaska Non-Retirement Plans portfolios versus the corresponding benchmarks as of March 31, 2015:

	One Month	Three Months	Year to Date	Last 12 Months	Three Years	Five Years	Since Inception
Russell 3000 Index Strategy							Mar/2014
Total Returns (Net)	-1.02%	1.81%	1.81%	12.43%	N/A	N/A	N/A
Russell 3000® Index	-1.02	1.80	1.80	12.37	N/A	N/A	N/A
Difference [†]	0.00	0.01	0.01	0.06	N/A	N/A	N/A
Total Returns (Gross)	-1.01	1.81	1.81	12.44	N/A	N/A	12.44%
Russell 3000® Index	-1.02	1.80	1.80	12.37	N/A	N/A	12.37
Difference [†]	0.00	0.01	0.01	0.07	N/A	N/A	0.07
SSGA MSCI EAFE Index NL QP Strategy							Mar/2014
Total Returns (Net)	-1.53	4.84	4.84	-1.01	N/A	N/A	N/A
MSCI EAFE® Index	-1.52	4.88	4.88	-0.92	N/A	N/A	N/A
Difference+	-0.01	-0.04	-0.04	-0.09	N/A	N/A	N/A
Total Returns (Gross)	-1.51	4.86	4.86	-0.95	N/A	N/A	-0.95
MSCI EAFE® Index	-1.52	4.88	4.88	-0.92	N/A	N/A	-0.92
Difference†	0.00	-0.02	-0.02	-0.03	N/A	N/A	-0.03

Source: SSGA

Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income, gain and loss and the reinvestment of dividends and other income.



[†] The calculation method for value added returns may show rounding differences.

The performance shown is based on preliminary data, which is subject to change upon finalization.

Past performance is not a guarantee of future results. Return periods of less than one year are not annualized.

The performance for State of Alaska shown above is reflected on a gross basis as of March 31, 2015. Due to SSGA FM's CTA status, beginning with the September 2012 month-end period going forward, net returns are reflected in addition to gross returns. Net returns are expressed net of actual management fees, actual brokerage fees and trading commissions.

Net returns are not expressed net of administration, custody and/or other fees that may be externally negotiated. If so, net returns would be lower than what is reflected.

Appendix C: Important Disclosures



CTA Disclosures

SSGA generally delegates commodities management for separately managed accounts to SSGA Funds Management, InI ("SSGA FM"), a wholly owned subsidiary of State Street and an affiliate of SSGA. SSGA FM is registered as a commodity trading advisor ("CTA") with the Commodity Futures Trading Commission and National Futures Association.



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Important Risk Disclosures

Risk associated with equity investing include stock values which may fluctuate in response to the activities of individual companies and general market and economic conditions.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

The views expressed in this material are the views of the Global Equity Beta Solutions Group through the period ended December 31, 2014 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Diversification does not ensure a profit or guarantee against loss.

Investing involves risk including the risk of loss of principal.

Derivative investments may involve risks such as potential illiquidity of the markets and additional risk of loss of principal.

Investing in futures is highly risky. Futures positions are considered highly leveraged because the initial margins are significantly smaller than the cash value of the contracts. The smaller the value of the margin in comparison to the cash value of the futures contract, the higher the leverage. There are a number of risks associated with futures investing including but not limited to counterparty credit risk, currency risk, derivatives risk, foreign issuer exposure risk, sector concentration risk, leveraging and liquidity risks.

Securities lending programs and the subsequent reinvestment of the posted collateral are subject to a number of risks, including the risk that the value of the investments held in the collateral may decline in value and may at any point be worth less than the original cost of that investment.

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Important Risk Disclosures

Investing in commodities entail significant risk and is not appropriate for all investors. Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.

Investments in small/mid sized companies may involve greater risks than in those of larger, better known companies.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on inflation-protected debt securities can be unpredictable.

Investing in REITs involves certain distinct risks in addition to those risks associated with investing in the real estate industry in general. Equity REITs may be affected by changes in the value of the underlying property owned by the REITs, while mortgage REITs may be affected by the quality of credit extended. REITs are subject to heavy cash flow dependency, default by borrowers and self-liquidation. REITs, especially mortgage REITs, are also subject to interest rate risk (i.e., as interest rates rise, the value of the REIT may decline).



Important Risk Disclosures (Continued)

Government bonds and corporate bonds generally have more moderate short-term price fluctuations than stocks, but provide lower potential long-term returns.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise, bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Companies with large market capitalizations go in and out of favor based on market and economic conditions. Larger companies tend to be less volatile than companies with smaller market capitalizations. In exchange for this potentially lower risk, the value of the security may not rise as much as companies with smaller market capitalizations.

This document provides summary information regarding the Strategy. This document should be read in conjunction with the Strategy's Disclosure Document, which is available from SSGA. The Strategy Disclosure document contains important information about the Strategy, including a description of a number of risks.

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Appendix D: GIPS® Presentations



GIPS® Report: US Managed Volatility Composite As of December 31, 2014

Returns	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception Apr 2008
	Quarter	טוז	rear	rears	rears	10 fears	Apr 2008
US Managed Volatility Composite	8.09	13.30	13.30	16.03	14.35	N/A	10.29
Russell 3000(R) Index	5.24	12.56	12.56	20.51	15.63	N/A	9.44

Year	US Managed Volatility Composite	Russell 3000(R) Index
2014	13.30	12.56
2013	25.05	33.55
2012	10.24	16.42
2011	10.19	1.03
2010	13.60	16.93
2009	10.09	28.34
(Apr-Dec) 2008	-10.00	-30.71

Year	No. of Portfolios	Composite Dispersion	3 Yr Annualized Standard Deviation - Composite	3 Yr Annualized Standard Deviation - Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2014	*	N/A	8.52	9.29	10,153,596	0.00	2,383,493
2013	*	N/A	8.25	12.53	9,648,195	0.00	2,279,237
2012	*	N/A	9.04	15.73	3,398,588	0.00	2,023,842
2011	*	N/A	12.24	19.35	3,082,834	0.00	1,768,142
2010	*	N/A	**	**	2,796,463	0.00	1,518,977
2009	*	N/A	**	**	2,462,570	0.00	1,360,125
(Apr-Dec) 2008	*	N/A	**	**	2,259,474	0.00	949,988

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* 5 portfolios or less. ** Less than 3 years. Quarterly and YTD returns are not annualized.

Investment Objective: The Strategy seeks to provide competitive returns and maintain low volatility, in each case, as compared to the specified benchmark index (the "Index"), over the long term by constructing a portfolio of stocks with low expected volatility relative to the Index.

Investment Strategy: The Strategy invests in the equity securities of companies in the Strategy's investable universe at the time of purchase, as described above. SSGA utilizes a proprietary quantitative investment process to select a portfolio of securities that it expects to exhibit lower volatility than the Index and that SSGA believes has the potential to provide competitive returns relative to the Index over the long term. In selecting securities for the Strategy, we seek to favor securities with low exposure to market risk factors, such as beta, and will also favor securities with low security-specific risk. Additionally, in order to seek to achieve appropriate levels of diversification, SSGA implements one or more risk constraints at the security, industry, sector or size exposure levels. These risk constraints are implemented on an absolute basis or a benchmark-relative basis. Through this quantitative process of security selection and portfolio diversification, we expect that the portfolio will be subject to a low level of absolute risk (as defined by standard deviation of returns) and thus should exhibit lower volatility relative to the Index over the long term. Due to the Strategy's 'rules-based' investment process, its portfolio of assets will differ from that of the Index and its returns will likely differ from the Index's return.

Footnotes

Firm Definition: For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of business units which are held out to the marketplace as distinct business entities - Fiduciary Advisory Solutions (formerly known as the Office of the Fiduciary Advisor [OFA]) and Charitable Asset Management (CAM), Prior to 1/1/2011, SSGA-Global also excluded its wrap fee business (Intermediary Business Group [IBG]) and assets accounted for on a book value basis (global cash and stable value assets). In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS® Compliant firm. On 1/1/2012 SSGA Ireland Limited assets were merged into SSGA-Global. Composite Description: The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below. Compliance Statement: SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 1, 2000. The period prior to January 1, 2000 is not in compliance, as not all actual fee-paying portfolios are in a composite, SSGA-Global has been independently verified for the periods January 1, 2000 through December 31. 2013. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global". List Available: A complete list of the firm's composites and their descriptions is available upon request. Creation Date: The composite was created on 1 Jan 09, Benchmark Description: The benchmark for the composite is the Russell 3000 Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss. Currency: Performance is presented in USD. Use of Subadvisors: None. Fees: Returns are expressed gross of management fees. Some members of this composite may accrue administration fees. Fee Schedule: Management fees are 0.200% of the first \$50,000,000; 0.180% of the next \$50,000,000; and 0.150% thereafter. The minimum annual management fee for commingled funds is \$10,000. The minimum annual management fee for separately managed accounts is \$50,000. Management fees may be adjusted based upon specific client requirements. Derivatives Use: SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage. Calculation Methodology: Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Annualized Returns: All returns for periods greater than one year have been annualized. Withholding Taxes Differences: None. Exchange Rates Differences Between Composite & Benchmark: None. Minimum Asset Level for Inclusion: 0. Dispersion: Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year. Significant Events: In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In June 2013, Theodore Gekas was appointed as CIO and Global Head of Quantitative Equities upon the departure of Alistair Lowe, Steve Meier, CIO of Cash, replaced Kevin Anderson, PhD as the CIO of Fixed Income, Currency and Cash. In May 2014, Keith Crawford was appointed Global Head of Strategy, in addition to his current responsibilities as Chief Financial Officer. Crawford succeeded Bernard Reilly, who left the firm. In July 2014, on the departure of Maria Dwyer, Matt Steinaway was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In October 2014, Michael Martel was named Head of Portfolio Management for the Americas for the Investment Solutions Group. Martel replaced Christopher Goolgasian, who left the firm. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinaway. Matt Steinaway resumed his position as Head of Global Cash Management. Past and Future Performance: Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially.



GIPS® Report: Global Managed Volatility Composite As of December 31, 2014

Returns							Since
			1	3	5	10	Inception
	Quarter	YTD	Year	Years	Years	Years	Oct 2008
Global Managed Volatility Composite	6.00	15.79	15.79	15.82	13.15	N/A	9.68
MSCI World Index	1.01	4.94	4.94	15.47	10.20	N/A	8.37

Year	Global Managed Volatility Composite	MSCI World Index
2014	15.79	4.94
2013	18.88	26.68
2012	12.85	15.83
2011	2.34	-5.54
2010	16.64	11.76
2009	14.60	29.99
(Oct-Dec) 2008	-16.15	-21.77

Year	No. of Portfolios	Composite Dispersion	3 Yr Annualized Standard Deviation - Composite	3 Yr Annualized Standard Deviation - Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2014	*	N/A	8.05	10.23	915,638,458	0.04	2,383,493
2013	*	N/A	8.79	13.54	682,650,194	0.03	2,279,237
2012	*	N/A	9.43	16.74	290,163,150	0.01	2,023,842
2011	*	N/A	13.29	20.15	62,129,023	0.00	1,768,142
2010	*	N/A	**	**	2,881,247	0.00	1,518,977
2009	*	N/A	**	**	2,334,501	0.00	1,360,125
(Oct-Dec) 2008	*	N/A	**	**	2,050,140	0.00	949,988

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Quarterly and YTD returns are not annualized

Investment Objective: The Strategy seeks to provide competitive returns and maintain low volatility, in each case, as compared to the specified benchmark index (the "Index"), over the long term by constructing a portfolio of stocks with low expected volatility relative to the Index.

Investment Strategy: The Strategy invests in the equity securities of companies in the Strategy's investable universe at the time of purchase, as described above. SSGA utilizes a proprietary quantitative investment process to select a portfolio of securities that it expects to exhibit lower volatility than the Index and that SSGA believes has the potential to provide competitive returns relative to the Index over the long term. In selecting securities for the Strategy, we seek to favor securities with low exposure to market risk factors, such as beta, and will also favor securities with low security-specific risk. Additionally, in order to seek to achieve appropriate levels of diversification, SSGA implements one or more risk constraints at the security, industry, country, sector or size exposure levels. These risk constraints are implemented on an absolute basis or a benchmark-relative basis. Through this quantitative process of security selection and portfolio diversification, we expect that the portfolio will be subject to a low level of absolute risk (as defined by standard deviation of returns) and thus should exhibit lower volatility relative to the Index over the long term. Due to the Strategy's 'rules-based' investment process, its portfolio of assets will differ from that of the Index over the long term. Due to the Index's return.

Footnotes

Firm Definition: For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of business units which are held out to the marketplace as distinct business entities – Fiduciary Advisory Solutions (formerly known as the Office of the Fiduciary Advisor [OFA]) and Charitable Asset Management (CAM). Prior to 1/1/2011, SSGA-Global also excluded its wrap fee business (Intermediary Business Group [IBG]) and assets accounted for on a book value basis (global cash and stable value assets). In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS® Compliant firm. On 1/1/2012 SSGA Ireland Limited assets were merged into SSGA-Global.

Composite Description: The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below.

Compliance Statement: SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 1, 2000. The period prior to January 1, 2000 is not in compliance, as not all actual fee-paying portfolios are in a composite. SSGA-Global has been independently verified for the periods January 1, 2000 through December 31, 2013. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global". List Available: A complete list of the firm's composites and their descriptions is available upon request.

Creation Date: The composite was created on 01/01/09.

Benchmark Description: The benchmark for the composite is the MSCI World Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss.

Currency: Performance is presented in USD.

Use of Subadvisors: None.

Fees: Returns are expressed gross of management fees. Some members of this composite may accrue administration fees. Fee Schedule: Management fees are 0.220% of the first \$50,000,000; 0.200% of the next \$50,000,000; and 0.180% thereafter. The minimum annual management fee for commingled funds is \$10,000. The minimum annual management fee for separately managed accounts is \$150,000. Management fees may be adjusted based upon specific client requirements.

Derivatives Use: SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage.

Calculation Methodology: Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request.

Annualized Returns: All returns for periods greater than one year have been annualized.

Withholding Taxes Differences: None.

Exchange Rates Differences Between Composite & Benchmark: None.

Minimum Asset Level for Inclusion: 0.

Dispersion: Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year.

Significant Events: In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In June 2013, Theodore Gekas was appointed as CIO and Global Head of Quantitative Equities upon the departure of Alistair Lowe. Steve Meier, CIO of Cash, replaced Kevin Anderson, PhD as the CIO of Fixed Income, Currency and Cash. In May 2014, Keith Crawford was appointed Global Head of Strategy, in addition to his current responsibilities as Chief Financial Officer. Crawford succeeded Bernard Reilly, who left the firm. In July 2014, on the departure of Maria Dwyer, Matt Steinaway was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In October 2014, Michael Martel was named Head of Portfolio Management for the Americas for the Investment Solutions Group. Martel replaced Christopher Goolgasian, who left the firm. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinaway. Matt Steinaway resumed his position as Head of Global Cash Management.

Past and Future Performance: Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially.



^{* 5} portfolios or less

^{**} Less than 3 years

GIPS® Report: Emerging Markets Managed Volatility Composite As of December 31, 2014

Returns	Quarter	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception Jan 2013
Emerging Markets Managed Volatility Composite	-4.49	0.27	0.27	N/A	N/A	N/A	3.18
MSCI Emerging Markets Index	-4.50	-2.19	-2.19	N/A	N/A	N/A	-2.39

Year	Emerging Markets Managed Volatility Composite	MSCI Emerging Markets Index
2014	0.27	-2.19
2013	6.17	-2.60

Year	No. of Portfolios	Composite Dispersion	3 Yr Annualized Standard Deviation - Composite	3 Yr Annualized Standard Deviation - Benchmark	Total Assets at End of Period (USD)	% of Firm's Assets	Total Firm Assets (USD mil)
2014	*	N/A	**	**	93,822,854	0.00	2,383,493
2013	*	N/A	**	**	74,083,023	0.00	2,279,237

gEMMVI

* 5 portfolios or less

** Less than 3 years

Quarterly and YTD returns are not annualized

Investment Objective: The Strategy seeks to provide competitive returns and maintain low volatility, in each case, as compared to the specified benchmark index (the "Index"), over the long term by constructing a portfolio of stocks with low expected volatility relative to the Index

Investment Strategy: The Strategy invests in the equity securities of companies in the Strategy's investable universe at the time of purchase, as described above. SSGA utilizes a proprietary quantitative investment process to select a portfolio of securities that it expects to exhibit lower volatility than the Index and that SSGA believes has the potential to provide competitive returns relative to the Index over the long term. In selecting securities for the Strategy, we seek to favor securities with low exposure to market risk factors, such as beta, and will also favor securities with low security-specific risk. Additionally, in order to seek to achieve appropriate levels of diversification, SSGA implements one or more risk constraints at the security, industry, country, sector or size exposure levels. These risk constraints are implemented on an absolute basis or a benchmark-relative basis. Through this quantitative process of security selection and portfolio diversification, we expect that the portfolio will be subject to a low level of absolute risk (as defined by standard deviation of returns) and thus should exhibit lower volatility relative to the Index over the long term. Due to the Strategy's 'rules-based' investment process, its portfolio of assets will differ from that of the Index and its returns will likely differ from the Index's return.

Past and Future Performance: Historic performance is not necessarily indicative of actual future investment performance, which could differ substantially.

Footnotes

Firm Definition: For the purpose of complying with the Global Investment Performance Standards (GIPS®), the firm ("SSGA-Global") is defined as all portfolios managed across the global offices of State Street Global Advisors (SSGA) and SSGA Funds Management, Inc., with the exception of business units which are held out to the marketplace as distinct business entities – Fiduciary Advisory Solutions (formerly known as the Office of the Fiduciary Advisor [OFA]) and Charitable Asset Management (CAM). Prior to 1/1/2011, SSGA-Global also excluded its wrap fee business (Intermediary Business Group [IBG]) and assets accounted for on a book value basis (global cash and stable value assets). In January 2011, SSGA acquired the Bank of Ireland Asset Management Limited (now known as SSGA Ireland Limited), a GIPS® Compliant firm. On 1/1/2012 SSGA Ireland Limited assets were merged into SSGA-Global.

Composite Description: The Composite seeks to achieve the Investment Objective described below using the Investment Strategy described below.

Compliance Statement: SSGA-Global claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with GIPS. SSGA-Global claims compliance with the GIPS standards from January 1, 2000. The period prior to January 1, 2000 is not in compliance, as not all actual fee-paying portfolios are in a composite. SSGA-Global has been independently verified for the periods January 1, 2000 through December 31, 2013. The verification report is available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation. In January 2015, the GIPS Firm name changed from "SSGA-Global" to "SSGA-Global". List Available: A complete list of the firm's composites and their descriptions is available upon request.

Creation Date: The composite was created on 1 Mar 13.

Benchmark Description: The benchmark for the composite is the MSCI Emerging Markets Index. Index returns are unmanaged and do not reflect the deduction of any fees or expenses but include all items of income, gain, and loss. **Currency:** Performance is presented in USD.

Use of Subadvisors: None.

Fees: Returns are expressed gross of management fees. Some members of this composite may accrue administration fees. Fee Schedule: Management fees are 0.350% of the first \$50,000,000; 0.250% of the next \$50,000,000; and 0.200% thereafter. The minimum annual management fee for commingled funds is \$10,000. The minimum annual management fee for separately managed accounts is \$150,000. Management fees may be adjusted based upon specific client requirements. Derivatives Use: SSGA may use futures and other derivatives from time to time in the management of the Strategy generally as a temporary substitute for cash investments or for hedging purposes and not with the purpose of creating investment leverage.

Calculation Methodology: Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request.

Annualized Returns: All returns for periods greater than one year have been annualized.

Use of Subadvisors: None.

Exchange Rates Differences Between Composite & Benchmark: None.

Minimum Asset Level for Inclusion: 0.

Dispersion: Asset-Weighted standard deviation is calculated using the annual returns of the accounts that were included in the composite for all periods of the year.

Significant Events: In November 2007, on the departure of the North America CIO Sean Flannery, Global asset class CIOs were appointed (Alistair Lowe, Asset Allocation and Currency CIO; Mark Marinella, Fixed Income CIO; Steve Meier, Cash CIO and Arlene Rockefeller, Equities CIO). In June 2010, Alistair (Ali) Lowe assumed the role of Global Equities CIO, taking over from Arlene Rockefeller, who retired from SSGA after almost 30 years with the firm. Dan Farley was named CIO for Multi Asset Class Solutions replacing Ali Lowe. In December 2011, on the departure of Brad Aham, Michael Ho was appointed as CIO of Emerging Markets Equities and Global Macro. In June 2013, Theodore Gekas was appointed as CIO and Global Head of Quantitative Equities upon the departure of Alistair Lowe. Steve Meier, CIO of Cash, replaced Kevin Anderson, PhD as the CIO of Fixed Income, Currency and Cash. In May 2014, Keith Crawford was appointed Global Head of Strategy, in addition to his current responsibilities as Chief Financial Officer. Crawford succeeded Bernard Reilly, who left the firm. In July 2014, on the departure of Maria Dwyer, Matt Steinaway was named interim Chief Risk Officer. Matt replaced Maria Dwyer, who was appointed to the leadership team of the Office of Regulatory Initiatives Oversight. In November 2014, David Saulnier was appointed as Chief Risk Officer for SSGA, replacing Matt Steinaway. Matt Steinaway resumed his position as Head of Global Cash Management.

Withholding Taxes Differences: None.



KKR Prisma Capital Partners LP

Mandate: Absolute Return

Hired: January 2010

Firm Information

KKR Prisma is a New York based fund of hedge funds manager with \$10.2 billion in assets under management. The firm was founded in 2004 and became part of KKR in 2012.

KKR Prisma has a 70 person dedicated team including 18 people in portfolio management and five people in risk management. The group is an affiliate of KKR asset management with global resources of 600 people and offices in 15 countries.

Key Contacts for ARMB:

Girish Reddy, Managing Partner Eric Wolfe, Senior Portfolio Manager Helenmarie Rodgers, Managing Director, Primary Client Relationship Representative

Investment Approach

KKR Prisma's core investment strategy is to operate a "low beta" approach aimed at deriving an active return with a low beta to traditional asset classes.

The investment philosophy is a team oriented approach; manager selection involves three separate layers of due diligence: investment, risk and operations. Professionals from each team conduct onsite due diligence to produce comprehensive evaluation of managers. Each team operates independently with a full veto right over any investment. The decision-making includes a top down strategy allocation process taking into account global credit spreads, interest rates, GDP growth, etc. combined with portfolio manager input to develop outlooks for each of the underlying hedge fund sectors. At the conclusion of the due diligence process, a white paper is written to document the independent assessments of investment, risk management and operational due diligence. The manager receives a quantitative rating from each of the three due diligence teams and each rating much meet or exceed the expectations set forth by the Investment Committee, which makes all investment decisions. The monitoring process is active, comprehensive and characterized by a high level of interaction between managers and each the due diligence team on a monthly and quarterly basis.

Benchmark: 3-month T-Bill + 5%

Total ARMB Mandate & Fees

03/15: \$ 420.1 million

Assets Managed:

Fees: KKR Prisma invests the majority of the ARMB's AUM in core-diversified hedge funds – Class A investments. KKR Prisma also makes opportunistic co-investments on behalf of the ARMB – Class B investments. The management fee is 0.75% for both classes of investments and the Class B investments have a performance fee of 10% of the gains over a 7% preferred return.

Concerns: None

Performance - Estimated Returns Through 12-31-2014 3-Year 5-Year 1-Year Annualized Annualized KKR Prisma - Net 3.78% 8.18% 5.71% Benchmark – HFRI FoF Comp. 3.33% 5.67% 3.29% Benchmark – T-Bills + 5% 5.03% 5.07% 5.09%

Polar Bear Fund LP

Presentation to: Alaska Retirement Management Board

April 23, 2015



Important Information

Important Information

This presentation is furnished on a confidential basis exclusively to the named recipient to this presentation (the "Recipient") and is not for redistribution or public use. The data and information presented are for informational purposes only. The information contained herein should be treated in a confidential manner and may not be transmitted, reproduced or used in whole or in part for any other purpose, nor may it be disclosed without the prior written consent of Kohlberg Kravis Roberts & Co. L.P. (together with its affiliates, "KKR"). By accepting this material, the Recipient agrees not to distribute or provide this information to any other person. The information is qualified in its entirety by reference to the Limited Partnership Agreement, Investment Management Agreement and Subscription Agreement of Polar Bear Fund LP (the "Fund"), each as amended and/or restated from time to time (the "Fund Documents").

This presentation shall not constitute an offer to sell, the solicitation of any offer to buy or the marketing of, interests ("Interests") in any KKR Prisma product (each a "customized solution"), which may only be made at the time a qualified offeree receives a Confidential Private Placement Memorandum describing the offering and related subscription agreement. Such Interests shall not be offered, sold or marketed in any jurisdiction in which such offer, marketing or sale would be unlawful until the requirements of the laws of such jurisdiction have been satisfied.

The information in this presentation is only as current as the date indicated, and may be superseded by subsequent market events or for other reasons. Nothing contained herein constitutes investment, legal, tax, or other advice, nor is it to be relied on in making an investment or other decision. This presentation should not be viewed as a current or past recommendation or a solicitation of an offer to buy or sell any securities or to adopt any investment strategy.

KKR Prisma became an affiliate of KKR in October 2012, when KKR acquired 100% of the direct and indirect interests of Prisma Capital Partners LP. KKR Prisma operates as a part of KKR's public markets business, which includes the asset management activities of KKR Asset Management LLC ("KAM"). KKR Prisma does not currently intend to invest assets invested in a customized solution in any investment fund sponsored or managed by KKR, including KAM and its subsidiaries.

Employees of KKR Asset Management LLC, KKR Prisma and KKR Capital Markets LLC located in the United States are dual employees of those entities and Kohlberg Kravis Roberts & Co. L.P.

The performance presented herein with respect to the Composite (as defined below) reflects the actual performance realized by KKR Prisma advisory clients net of fees actually charged to each account and any underlying manager fees and expenses; but excluding custody and any other expenses paid directly to third parties by the client. Performance is based on returns provided by the underlying managers, which KKR Prisma believes to be reliable, but KKR Prisma makes no representations or warranties as to their accuracy or completeness. Monthly performance is unaudited. Individual returns for each investor will vary because of, among other things, the timing of such individual's investment.

The performance presented herein with respect to the Fund reflects the actual net performance of the Fund net of management and performance fees. Stated Class A performance is net of 0.7% management fee and applicable expenses at the Fund level and Class B is net of 0.70% management fee and 10% performance fee over a 7% hurdle rate and applicable expenses at the Fund level. Performance is based on returns provided by the underlying managers, which KKR Prisma believes to be reliable, but makes no representations or warranties as to their accuracy or completeness. Monthly performance is unaudited. Fiscal year-end performance through 2013 is audited. Individual returns for each investor will vary because of, among other things, the timing of such individual's investment. Allocations to underlying managers may change at any time in KKR Prisma's discretion.

The KKR Prisma Horizon Composite (the "Composite") contains all fee paying, fully discretionary accounts under management following that strategy for the period beginning in March 2009, regardless of size. The strategy generally seeks returns generated by portfolios emphasizing what KKR Prisma believes to be current investment opportunities. Exposures to key themes are generally achieved through concentrated allocations to underlying sectors, geographies, and/or managers. The accounts that comprise the Composite typically allow for broad investment and liquidity variability. The Composite performance shown reflects the actual gross performance realized by KKR Prisma advisory clients net of fees. Composite performance reflects the deduction of the highest applicable management and performance fees ("Model Net Fees") that would be charged based on the fee schedule appropriate to you for this mandate. Please be advised that the composite man include other investment products that are subject to management fees that are inapplicable to you but are in excess of the Model Net Fee. Therefore, the actual performance of all the portfolios in the composite on a net-of-fees basis will be different, and may be lower, than the Model Net Fee performance. However, such Model Net Fee performance is intended to provide the most appropriate example of the impact management fees would have by applying management fees relevant to you to the gross performance of the composite. The returns are net of underlying manager fees and expenses. In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provided by the underlying managers, which KKR Prisma believes to be reliable, but KKR Prisma makes no representations or warranties as to their accuracy or completeness. The name of this composite was changed from KKR Prisma Opportunistic Strategies Composite to the KKR Prisma Horizon Composite on November 21, 2014. Allocations vary among underlying managers and strategies at any time, and investment vehi



Important Information (continued)

In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provided by the underlying managers, which KKR Prisma believes to be reliable, but KKR Prisma makes no representations or warranties as to their accuracy or completeness. Allocations vary among underlying managers and strategies at any time, and investment vehicles have been and will be added or eliminated from time to time. Current month's performance is estimated.

Past performance is not an indication or guarantee of future performance. This information is strictly confidential and may not be reproduced or redistributed in whole or in part nor may its contents be disclosed to any other person under any circumstances. This information is not intended to constitute legal, tax, or accounting advice or investment recommendations. Please see "Important Information" for important risk disclosures and information regarding the ML T-Bill Index.

Past Performance Does Not Guarantee Future Results.

Customized solutions are speculative investments and are not suitable for all investors, nor do they represent a complete investment program. Customized solutions are available only to qualified investors who are comfortable with the substantial risks associated with investing in customized solutions. An investment in a customized solution includes the risks inherent in an investment in securities. There can be no assurance that an investment strategy will be successful.

Investors in a customized solution may have no right to or a limited right to redeem or transfer their interests in a customized solution. No Interests will be listed on an exchange and it is not expected that there will be a secondary market for any Interests.

The information in this presentation may contain projections or other forward-looking statements regarding future events, targets or expectations regarding the customized solution, or the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here.

The information in this presentation, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

With respect to KKR, references to "assets under management" or "AUM" represent the assets as to which KKR is entitled to receive a fee or carried interest. KKR's calculation of AUM may differ from the calculations of other asset managers and, as a result, KKR's measurements of its AUM may not be comparable to similar measures presented by other asset managers. KKR's definition of AUM is not based on the definitions of AUM that may be set forth in agreements governing the investment funds, vehicles or accounts that it manages and is not calculated pursuant to any regulatory definitions.

References to "KKR Capstone" or "Capstone" are to all or any of Capstone Consulting LLC, Capstone Europe Partners LLP, Capstone Europe (International) Partners LLP, KKR Capstone Asia Limited, and their affiliates, which are owned and controlled by their senior management. KKR Capstone is not a subsidiary or affiliate of KKR. KKR Capstone operates under several consulting agreements with KKR and uses the "KKR" name under license from KKR. References to operating executives, operating experts, or operating consultants are to employees of KKR Capstone and not to employees of KKR. In this presentation, the impact of initiatives, in which KKR Capstone has been involved, is based on KKR Capstone's internal analysis and information provided by the applicable portfolio company. Impacts of such initiatives are estimates that have not been verified by a third party and are not based on any established standards or protocols. They may also reflect the influence of external factors, such as macroeconomic or industry trends, that are unrelated to the initiative presented.

KKR has adopted internal information-sharing policies and procedures which address both (i) the handling of confidential information and (ii) the internal information barrier that exists between the public and private sides of KKR. Both KKR Prisma and KKR's fixed income, mezzanine, special situations and public equity professionals are on the public side of KKR, while KKR's private equity professionals and other affiliated business activities are on the private side of KKR. KKR has compliance functions to administer KKR's internal information-sharing policies and procedures and monitor potential conflicts of interest. Although a customized solutions managed by KKR Prisma may leverage KKR's private side executives, KKR's internal information-sharing policies and procedures referenced above, as well as certain legal and contractual constraints, could significantly limit their ability to do so. Accordingly, as a result of such restrictions, the investment activities of KKR's other businesses may differ from, or be inconsistent with, the interests of and activities which are undertaken for the account of a customized solution, and there can be no assurance that any customized solution will be able to fully leverage the resources and industry expertise of KKR's other businesses. Additionally, there may be circumstances in which one or more individuals associated with KKR will be precluded from providing services to a customized solution because of certain confidential information available to those individuals or to other parts of KKR or because of internal policies and procedures.



Important Information (continued)

General discussions contained within this presentation regarding the market or market conditions represent the view of either the source cited or KKR Prisma. Nothing contained herein is intended to predict the performance of any investment. There can be no assurance that actual outcomes will match the assumptions or that actual returns will match any expected returns. The information contained herein is as of December 31, 2014, unless otherwise indicated, is subject to change, and neither KKR Prisma nor KKR assumes any obligation to update the information herein.

KKR Prisma considers numerous factors in evaluating and selecting portfolio managers, and KKR Prisma may use some or all of the processes described herein when conducting due diligence on a potential fund or portfolio manager. KKR Prisma recognizes that a fund and/or portfolio manager may not meet all of its selection criteria, and KKR Prisma may, in its sole discretion, balance these factors or waive any of its selection criteria or due diligence processes as it deems necessary or appropriate.

Potential loss of investment – No guarantee or representation is made that the investment program used by KKR Prisma will be successful. Customized solutions represent speculative investments and involve a high degree of risk. An investment in any customized solution should be discretionary capital set aside strictly for speculative purposes. Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment in a customized solution. An investment in a customized solution is not suitable for all investors. An investor could lose or a substantial portion of his/her/its investment. Only qualified eligible investors may invest in a customized solution. Because of the nature of the trading activities, the results of a customized solution's operations may be volatile from month to month and from period to period. Accordingly, investors should understand that past performance is not indicative of future results. Customized solutions typically represent that their returns have a low correlation to the major market indices. Investors should be aware that customized solutions may incur losses both when major indices are rising and falling.

The target returns are based upon KKR Prisma's view of the potential returns for investments of the proposed strategy discussed herein, are not meant to predict the returns for any accounts managed by KKR Prisma, and are subject to the following assumptions: KKR Prisma considers a number of factors, including, for example, concentration risk and position sizing, and the use of leverage. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions may have a material impact on the projected returns presented. All data is shown before fees, transactions costs and taxes and does not account for the effects of inflation. Management fees, transaction costs, and potential expenses are not considered and would reduce returns. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown. Target Returns May Not Materialize.

The information in this presentation may contain projections or other forward-looking statements regarding future events, targets or expectations and is only current as of the date indicated. There is no assurance that such events or projections will occur, and may be significantly different than that shown here. The information in this presentation, including projections concerning financial market performance, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.



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Firm Update



KKR Prisma Overview

Experienced Global Alternative Investment Provider

- KKR Prisma, an affiliate of leading global investment firm, KKR, is focused on providing multi-manager hedge fund solutions for alternative investors
- KKR Prisma has a ~70 person dedicated team, which benefits from KKR's network of over 600 executives, including over 300 investment professionals and ~30 senior advisors⁽¹⁾, globally
- KKR has a global presence that includes offices in 15 countries across 5 continents

KKR Prisma's Stable Asset and Client Base

- KKR Prisma has approximately \$10.2 billion in assets under management; over 90% is managed on behalf of institutional clients⁽²⁾
- Investments from current and new clients have helped broaden and diversify KKR Prisma's stable asset base
- No gating or suspension of redemptions since KKR Prisma's inception

KKR Prisma's Strong Absolute and Relative Performance

 The KKR Prisma Horizon Composite has outperformed the HFRI Hedge Fund of Funds Index by 607 bps annualized and US T-Bills by 1081 bps annualized since inception of the Composite in March 2009⁽³⁾

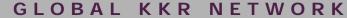
Note: Unless otherwise indicated data is as of February 2015. Please see Important Information pages at the beginning of this presentation and Endnotes at the end of this presentation regarding, among other things, the use of indices, and the risks associated with investing in hedge funds.

- (1) Represents a network of senior executives that work with KKR and KKR portfolio companies.
- (2) KKR Prisma AUM data is as of January 1, 2015 and includes fee-paying assets only.
- (3) Performance is through February 2015 and utilizes February estimates.



The KKR Prisma Team

			Hedge Fund	Leadership			
Girish Reddy, CFA Co-Head of KKR Hedge Funds / Investment Committee Member	Todd Builione Co-Head of KKR Hedge Funds		Wolfe, CFA ment Committee Member	Francis Conr Investment Co Membe	mmittee	Shankar Nagarajan PhD Investment Committee Member	' Paul Roberts Global Head of KKR Hedge Funds Distribution
Portfolio Management	Risk		Operations			kes, Seeding, w Products	Legal & Compliance
Eric Wolfe, CFA (23) Donna Heitzman, CFA, CPA (34) Michael Rudzik (27) Jackie Rosner, CFA, CAIA (22) Guy Saintfiet (20) Daniel Lawee, CFA (19) Matthew Edge, CAIA (17)	Shankar Nagarajan (27) Narender Nanchary FRM (9) Maxim Kovalchuk, C Viviann Chan (4 Michael Diodato, FR	, CFA, FA (7) 4)	Francis Conroy, CPA (34) Mark DeGaetano (33) John Brennan (32) Queenie Chang, CPA, CFA (20) Wilson Tran (10) RJ Tambellini (5) Kenneth Eagle, CPA (15) Sean Fang (12) Kevin Kornobis, CPA (9) Brandon Diez, CPA (7) Natalie Lembesis, CPA (7) Brandon Beckstead (5) Andrew Hess, CPA (5) Stephen Arrow (4) Alice Begovich (3) (Support from members of KKR Credit operations team) Webster Chua (8) (Support from members of KKR Ralance Sheet & KK Prisma teams) (Support from members of KKR Ralance Sheet & KK Prisma teams) (Support from members (29) HM Rodgers (28) John Stimpson (21) Elizabeth Saracco (14) John Diercksen (11) Taski Ahmed, CFA (7) Emily Mason (7) Turia Lahlou (3)		t from members of lance Sheet & KKR	Vincent Cuticello (28) Russell McAleavey (6) Anna Spector (10)	
Peter Zakowich (15) Annie Yangeksakul (13)	Technology	,			Client Management		Administration
Vishal Soni (8) Jonathan Rin, CFA (10) Rahul Mehta (6) Sameer Buch, CFA (6) Ori Hollander (3) Griffin Meyer (3) Woo-Hyung Cho (1) Eric Han (1) Jim Jiang (1)	Dan Moore (24 Kartik Patel, CFA Scott Holzman (2 Yury Kurchin (2 Marcel Kei (12 Harry Seto (10 Michael Du (6)) (19) 22) 0))			HM John Elizabo John Taski Em	Rodgers (28) Stimpson (21) eth Saracco (14) Diercksen (11) Ahmed, CFA (7) illy Mason (7)	Priscilla Gordon (19) ~12 Business Support
Gavyn Davi Senior Advisor / KKR Pris		S	Thomas H enior Advisor / KKI	ealey, CFA R Prisma Co-Fou	nder		l Derman, PhD or / Co-Head of Risk
~120 investmen	professionals in private eq at professionals in credit, perational experts & ~30	mezzanine	& equity strategies		Client	Partner Group (CPG) service & relationship management	KKR Technology Business & Administrative Support
Private Markets	Public Market	s	Industry I	Expertise	Client	& Partner Group	Infrastructure



⁽¹⁾ Represents a network of senior executives that work with KKR and KKR portfolio companies



Polar Bear Fund LP: Portfolio Review



Polar Bear Fund LP – Class A Overview



- Class A is a customized, separately managed account that was started on January 1, 2010 for the sole benefit of Alaska Retirement Management Board.
- This multi-manager, multi-strategy Fund targets stable returns with low correlation to traditional asset classes, while seeking to achieve long-term capital appreciation of at least 5% per year.

CAPITAL ACCOUNT INFORMATION:

Initial Investment, January 2010

Total Additional Subscriptions

Total Redemptions

Current Balance, March 2015

\$306,000,000 ---\$420,117,425

\$50,000,000



Polar Bear Fund LP: Reflection on Q4 2014 and Q1 2015

- We believe the economic environment and market conditions over the past six months have been supportive of hedge funds
- Concentrated portfolios have generally performed better than broadly diversified portfolios
- Recently introduced tactical/niche investment opportunities have contributed to performance
- In our experience, though challenging for most of 2014, European exposure is among the better return generators YTD in 2015

Polar Bear Fund LP – Class A: Historical Performance Summary

HISTORICAL MONTHLY NET PERFORMANCE THROUGH FEBRUARY 2015: CLASS A

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	YEAR
2014	-0.06%	3.17%											3.11%
2014	-0.29%	2.44%	-1.02%	-0.93%	1.35%	1.12%	-0.66%	0.69%	0.36%	-1.37%	1.56%	0.53%	3.78%
2013	2.45%	0.67%	1.06%	1.43%	0.82%	-1.55%	0.56%	-0.60%	1.61%	2.02%	1.41%	1.88%	12.34%
2012	1.80%	1.65%	0.84%	-0.02%	-1.45%	-0.63%	0.93%	1.11%	1.25%	0.18%	0.79%	1.87%	8.59%
2011	0.61%	1.17%	0.24%	1.57%	-0.51%	-1.22%	0.20%	-2.33%	-2.47%	0.40%	-0.36%	-0.25%	-3.00%
2010	-0.04%	0.23%	1.84%	1.37%	-2.35%	-0.95%	0.72%	0.68%	2.25%	1.76%	0.45%	1.40%	7.51%

PERFORMANCE COMPARISON TO BENCHMARKS

Through February 2015

	Polar Bear Fund	Cash	Fund of Funds	World Equities	Commodities	Bonds
	- Class A	ML 3M T-Bills	HFRI FoF Comp.	MSCI World	S&P GSCI TR	Barclays Agg.
1 yr	4.7%	0.0%	4.1%	7.4%	-38.3%	5.0%
3 yr	8.0%	0.1%	5.2%	11.5%	-16.7%	2.8%
5 yr	6.3%	0.1%	3.7%	9.7%	-7.0%	4.3%
ITD	6.1%	0.1%	3.6%	8.7%	-7.3%	4.5%

The indices referenced herein are broad-based securities market indices and used for illustrative purposes only. They have been selected as they are well known and are easily recognizable. Broad-based securities indices are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly into an index. Past performance is no guarantee of future results. See Endnotes for additional information.

CAPITAL ACCOUNT INFORMATION:

Initial Investment, January 2010

Total Additional Subscriptions

Total Redemptions

Current Balance, March 2015

\$50,000,000

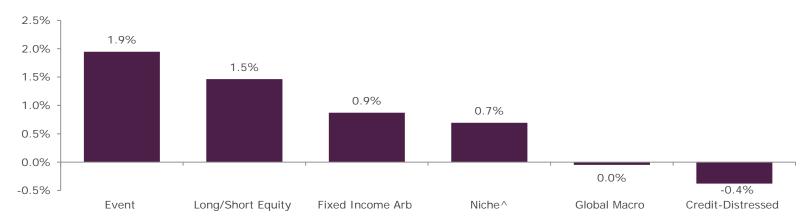
\$306,000,000

\$420,117,425



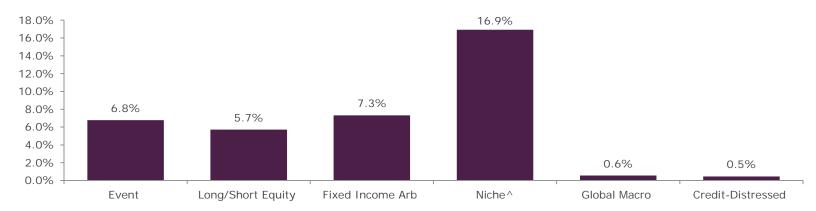
Polar Bear Fund LP – Class A: 2014 Strategy Returns and Attributions

STRATEGY ATTRIBUTIONS



STRATEGY RETURNS

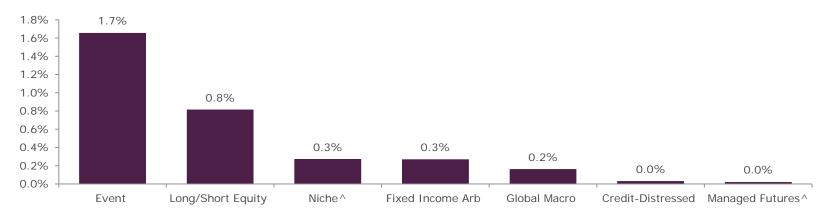
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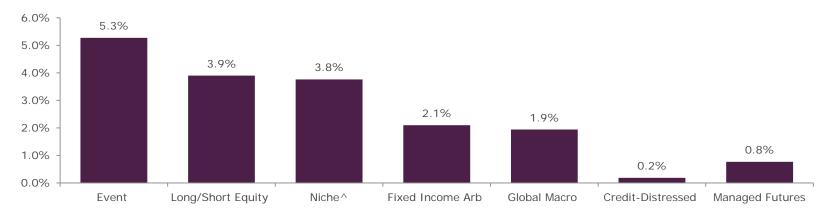


Polar Bear Fund LP – Class A: YTD 2015 Strategy Returns and Attributions

STRATEGY ATTRIBUTIONS



STRATEGY RETURNS

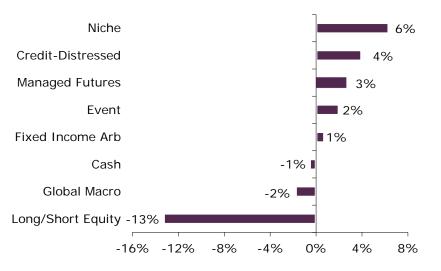




Notes: ^The above represents a manager or strategy added during 2015 and performance does not reflect a full two months of performance. All strategy performance shown is gross of KKR Prisma management and performance fees. Manager performance is net of the underlying hedge fund's management and performance fees, but gross of KKR Prisma fees.

Polar Bear Fund LP – Class A: One Year Strategy Allocation Shifts Ending March 2015



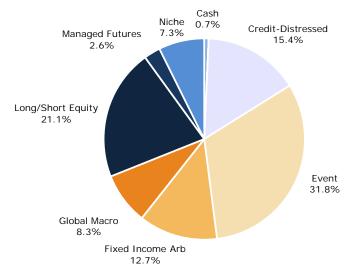


MAJOR STRATEGIC SHIFTS

Long/Short allocation has been reduced to fund additions to:

- <u>Niche</u> allocation increased, as we sourced and implemented various tactical alpha opportunities to capture very specific dislocations (e.g., in merger spreads)
- <u>Credit-Distressed</u> increased allocation to managers that are capable of sourcing opportunities in the US and Europe
- Managed Futures increased strategy diversification within the portfolio

Polar Bear Fund LP, Class A - March 2015 Allocation



PORTFOLIO CONSTRUCTION AS OF MARCH 1, 2015

- > Total Number of Managers: 29
- ➤ Largest Fund Allocation: **5.35%**
- > Total Number of Hedge Fund Strategies: 7
- Largest Single Strategy Allocation: 31.8%



Economic Themes for Q2 2015

Solid Global Growth

- We believe that, unlike in previous years, global growth forecasts will not be downgraded in 2015
- Our nowcast model, which tracks growth in the G7 plus China, shows little movement in our global estimates from the beginning of the year
- However, there has been a redistribution of growth away from the US and towards Europe and Japan, which seems to have been driven partly by lower oil prices and the rising US dollar

Low-Priced Oil Should Persist & Support Consumer Spending

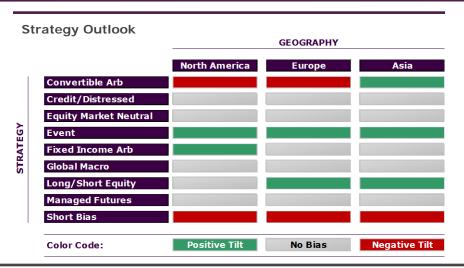
- In our view, the oil price decline may add 0.5% to 1.5% to global GDP in 2015. We do not believe oil will rebound in the near term, as market fundamentals have changed:
 - Saudi Arabians altered their approach to output, with no indication of a change
 - Oil inventories around the world are high
 - o Iranian oil may come back on stream
 - o US fracking is seeing a production decline, which has not yet been felt
- Consumer spending, as a result of the drop in oil, is up more in the Eurozone than in the US, but we expect that US spending may pick up in the next several months

Easy Global Monetary Policy

- In our view, Central Bank policy should remain easy, led by the European Central Bank and the Bank of Japan, in addition to 22 emerging market Central Banks that have cut rates
- The exception is the US, where we believe there may be an interest rate hike from the US Federal Reserve any time from June 2015 onwards
- We believe that policy tightening will be gradual, and we do not foresee a selloff in US bonds, as investors globally continue on the flight for yield

Note: Strategy allocations and forward-looking strategy views may change at any time in KKR Prisma's discretion. Please see Important Information pages at the beginning of this presentation and Endnotes at the end of this presentation regarding, among other things, the use of "forward-looking statements."

Hedge Fund Outlook for Q2 2015



New Portfolio Themes and Strategies

Strategy Diversification

- Strategy diversification may be beneficial in 2015
 - > At the margin, Managed Futures are more appealing now that fears of rising rates have diminished
 - Quantitative Equity Market Neutral could also be considered as a low beta alternative for some Long/Short Equity exposure

Carry Strategies

- US yields seem high on a global basis
 - Fixed Income Arbitrage (particularly ABS) is attractive in the context of low GDP growth and low interest rates in the medium term
 - Managed Futures may also capture carry

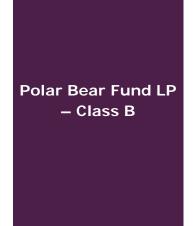
Tactical Alpha
Opportunities

- Continue to emphasize niche and tactical ideas sourced from the KKR network
 - KKR Prisma believes the dislocations in the energy market may be an interesting alpha opportunity in 2015

Note: Forward-looking strategy views may change at any time in KKR Prisma's discretion. Please see Important Information pages at the beginning of this presentation and Endnotes at the end of this presentation regarding, among other things, the use of "forward-looking statements." For illustrative purposes only.



Polar Bear Fund - Class B Overview



- Class B is a portfolio of credit co-invest opportunities, which are direct investments made alongside KKR Prisma's existing hedge fund managers and/or opportunities sourced by KKR Public Markets that capitalize on singular trade or investment opportunities arising out of market inefficiencies or changes in a cycle
 - Co-investing may offer sufficiently higher returns often due to illiquidity
 - Investors may gain exposure to high conviction opportunities
 - Typically at **lower fee** levels than traditional HF investments
- This portfolio seeks to achieve long-term capital appreciation of at least 10-20% per year with a two year targeted deployment of capital

CAPITAL ACCOUNT INFORMATION:

Original Capital Commitment	\$ 100,000,000.00
Capital called for investments	(7,800,000.00)
Unfunded deal commitment(1)	(3,273,192.06)
Deemed Distribution ⁽²⁾	411,971.07
Remaining Capital to Call, March 2015	\$ 89.338.779.01

% of Original Capital Committed: 11.1%



Key Highlights of KKR Prisma's Co-Investment Program

Strategy Objective

- Seeks to generate attractive returns by sourcing, selecting, and structuring difficult-to-access investments
- Seeks to capitalize on credit market dislocations and fill funding "white space" left by banks
- · Seeks to participate in high conviction trades where excess capacity exists

Differentiated Sourcing

- Seeks to capture high-conviction opportunities from multiple investment teams
- Primary sourcing channels include third party managers with whom we have relationships, KKR Credit, and KKR Capital Markets

Significant Investment Opportunities

- Market dislocations and supply and demand dynamics have created four medium-term opportunities
 - o Specialty finance, private debt, structured finance, and stressed & distressed
- Post-financial crisis banking regulations and deleveraging provides investors with new opportunities, as the supply of capital is lower at a time when demand for liquidity remains high

Global Team

 Support from KKR's network of 300+ investment professionals worldwide and KKR Prisma's senior portfolio managers (who offer additional insight into broader strategies and industry trends)

Note: The information presented above is for illustrative purposes only. Please see Important Information at the beginning of this presentation for additional disclosure. There is no guarantee that the Strategy will achieve its investment objectives. Performance may not materialize. Interactions and collaboration between the KSIF PM and KKR investment professionals are subject to KKR's information barrier policies and procedures.

Polar Bear Fund LP – Class B: Historical Performance Summary

HISTORICAL MONTHLY NET PERFORMANCE THROUGH DECEMBER 2014: CLASS B

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	YEAR
2015	0.90%	0.79%											1.70%
2014									0.40%	0.89%	0.88%	0.66%	2.86%

Portfolio Holding	YTD 2014 Attribution		Date Added	Mar-2015 Allocation
Axonic Special Opportunities Fund 2013-1, LP (II)	3.48%	1.91%	Sep-2014	94.4%
KKR Turbine Investors LLC	-0.24%	-0.02%	Nov-2014	2.0%
KKR Turbine Investors LLC - Hedge	0.01%	0.02%	Nov-2014	0.0%
Cash/Other	-0.32%	-0.15%		3.7%
				100.0%

KKR PRISMA =

Axonic Special Opportunity Fund Overview: Mortgage Servicing Rights (MSR) Loan Refinancing

Market Overview

- Bank sales of MSRs to non-bank originators/ servicers due to more onerous capital treatment
- Create potential financing need as non-bank players seek to gain scale

Opportunity

- Provide 2-year financing to refinance existing loan referencing MSR assets
- Loan underwritten by experienced ABS manager

Risks

- Prepayments: Faster prepayments would decrease excess spread earned on reference pool
- Servicer is unable to build enough scale to attract new finance partners at lower cost of capital

Terms Summary

- Maturity: 1-year, followed by a one 1-year extension
- Interest Rate: 10% for first 12 months, then 10.5% for 6 months, and 11% for the final 6 months
- Make-Whole in the first 9 months of the loan, zero thereafter
- Non-recourse leverage at cost of 525bps, with a 50% haircut
- Expected Gross IRR: 13%
- Realized return on original loan: 8.75%



KKR Turbine Investors LLC Overview: U.K. Renewable Lending

Market Overview

- Lack of available financing for < GBP 25MM projects
 - Smaller projects do not get the attention of larger institutions
 - Previous lender, Co-Operative Bank, exited the business
 - Lack of financing enables lenders to finance 10-12% projects at ~8% rate
 - Subsidy regime for renewable power is well established in UK

Opportunity

- Provide financing to wind and hydro projects in the UK
- Assemble a levered portfolio of 15-year, ~8% (S+650bps) loans that can be sold at a lower discount rate once out of construction period
- Projects evaluated by a management team with experience in wind and hydro projects
- Fully amortizing loans over 15 years with no prepayment risk

Risks

- Construction risk
- Changes to UK tariff system
- Unable to aggregate sufficient loans

Terms Summary

- Sell 2x levered portfolio after seasoning period
- Expected Duration: 5 Years
- Expected Gross IRR: 14-16%
- Potential Realization Events: Sell to real money at 6% or 7% discount rate, Sell to Yield Co



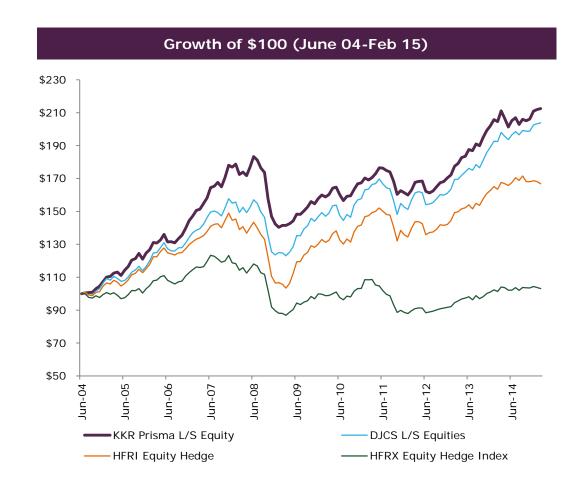
KKR Apex Equities Strategy



KKR Prisma:

10+ Years Investing in Long/Short Equity Managers

- Since inception, KKR Prisma has invested with medium-sized, sector expert hedge fund managers within long/short equity
- KKR Prisma's Long/Short Equity managers have demonstrated strong risk-adjusted returns with lower volatility against relevant benchmark indices
- Long/Short Equity has been a core strategy in KKR Prisma's portfolios since inception in June 2004



Note: For illustrative purposes only. Data as of February 28, 2015 with the exception of the DJCS L/S Equities Index, which is as of January 31, 2015. The performance of KKR Prisma's Long/Short Equity managers is not that of the Strategy, whose performance may materially differ. The KKR Prisma Long/Short Equity manager performance dates back to June 30, 2004 and is comprised of the average performance of all long/short managers on the KKR Prisma Platform. The manager information presented herein is not representative of the managers that currently, or are anticipated to, participate in the Strategy; only managers selected for KKR Prisma's long/short strategy are eligible to participate in the Strategy. Please see Strategy Disclosures and Important Information at the beginning of the presentation for additional disclosures regarding related performance, hypothetical backtested performance, model performance and fees. Please see Endnotes at the end of this presentation for benchmark disclosures.

KKR Apex Equities Strategy

Strategy Overview

- Aims to generate attractive, risk-adjusted returns
 across market environments by investing in the highest
 conviction ideas of "best-in-breed" equity-oriented
 hedge fund managers on KKR Prisma's platform
- Hedge fund managers trade on behalf of KKR Prisma through a managed account arrangement
- KKR manages portfolio construction, exposure, and risk through manager sizing and a short portfolio overlay
- Index and sector ETFs utilized to hedge the portfolio

Portfolio Structuring:

- o Approximately 30-50 stocks
- Approximately 125% long, 75% short, and 50% net exposures

Net range: 30% - 65%Short range: 60% - 95%

Portfolio Targets:

o Target return: 8-10% net of fees

o Target volatility: 8-10%

o Moderate equity beta

Founder's Fees:

- o 1.25% management fee
- o 12.5% performance fee

Summary Benefits of Co-Investing

Alpha Rich Portfolio

 10 years of position-level analysis of hedge funds on KKR Prisma's platform shows that managers' highest conviction positions outperform the market, consistent with external research⁽¹⁾

Low Cost Advantage

 Investors may participate in the strategy at fees below those typically charged by a hedge fund

Unique Structure

 Managers trade on behalf of KKR Prisma, a structure which is not easily replicable

The KKR Investment Advantage

Manager Selection

- All managers have been fully vetted by KKR Prisma's investment, risk, and operational due diligence teams
- Each manager is a sector specialist and has a research team supporting its stock selection process

✓ KKR Risk Management

- KKR's macro and strategic views are imbedded in the KKR Equities Strategy portfolio
- Target exposures and hedges are informed by these views, as are the managers selected for participation in the program

The KKR Apex Equities Strategy attempts to capture the advantages of direct management with the diversity of a Fund of Funds



Thesis: Manager's High Conviction Positions Are Alpha Rich

- <u>Central Thesis:</u> KKR Prisma analyzed 10 years of data from equity-oriented hedge fund managers on our platform. We found their high conviction positions are rich in alpha across time frames, market capitalizations, sectors, liquidity horizons, and momentum factors
- On this basis, we consulted additional outside research, which reached the same conclusion⁽¹⁾
- The KKR Apex Equities Strategy seeks to capture this excess alpha by combining managers'
 high conviction ideas in a single account, and centralizing portfolio and risk management to help drive
 attractive risk-adjusted performance
- We believe blending the highest conviction ideas of our managers brings added diversification
 benefits with respect to investment process risk and operational risk

Given its unique characteristics, we believe the KKR Apex Equities Strategy is positioned to potentially generate attractive risk-adjusted returns across market environments

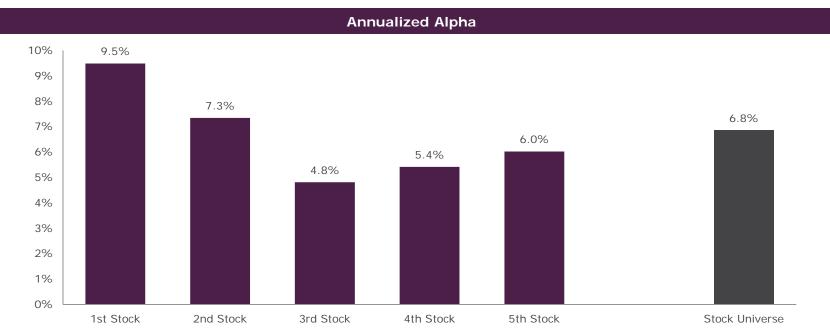
(1) Cohen, Randolph, Polk, Christopher, Silli, Bernhard, "Best Ideas," London School of Economics; May 1, 2010. http://personal.lse.ac.uk/polk/research/bestideas.pdf Please see Strategy Disclosures at the beginning of the presentation for additional disclosures regarding the Strategy. There is no guarantee that the Strategy will achieve its investment objectives.



Research: Stock Universe Analysis by Manager Position Sizes

Position-level alpha is strong across the top 5 largest stocks in managers' portfolios

	1st Stock	2nd Stock	3rd Stock	4th Stock	5th Stock	Stock Universe
Ann. Return: Portfolio	16.8%	14.7%	12.2%	12.8%	13.4%	14.2%
Ann. Return: Benchmark	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
Ann. Alpha	9.5%	7.3%	4.8%	5.4%	6.0%	6.8%
% of Instances with Positive Alpha	53.1%	53.3%	52.0%	50.8%	51.9%	52.2%
Gains to Losses Ratio	1.12	1.05	1.06	1.09	1.07	1.08



Note: Performance from 6/30/2004 to 12/31/2014. Gains to Losses Ratio calculated as the average positive alpha divided by the average negative alpha. The benchmark is reflective of the S&P 500 from 07/2004-12/2011 and MSCI World from 01/2012-12/2014. The performance information included herein is not that of the Strategy, it is hypothetical and backtested. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding hypothetical back-tested performance. There is no guarantee that the Strategy will achieve its investment objectives. Past performance is no guarantee of future results. Please see Endnotes for additional benchmark disclosures.

Research: Stock Universe Exhibits Alpha Throughout the Time Period

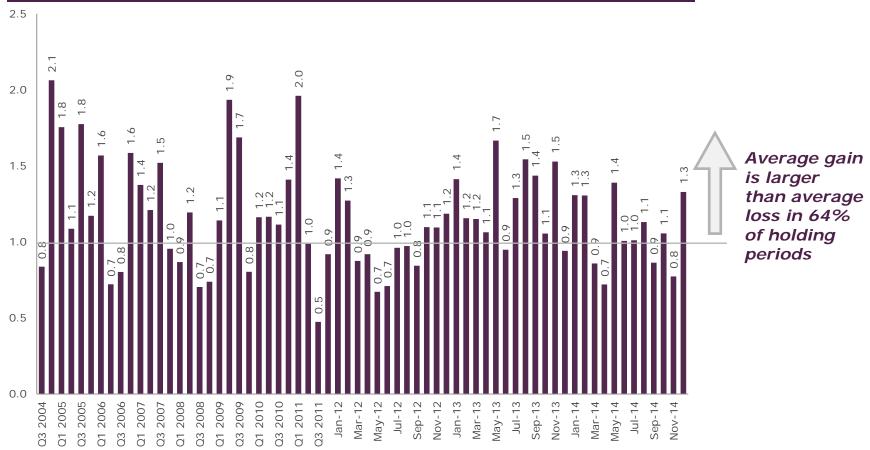
54.0% of stocks on average each holding period exhibit positive alpha

% of Stocks Exhibiting Positive Alpha Holding Period (June 2004-December 2014) 90% 80% 80% 70% 60% 50% 40% 30% 20% 10% Q1 2005 Q3 2005 Q1 2006 Q3 2006 Q1 2007 Q3 2007 Q1 2008 Q3 2008 Q1 2009 Q3 2009 Q1 2010 Q3 2010 Q1 2011 Q3 2011 Mar-12 May-12 Jul-12 Sep-12 Nov-12 Mar-13 May-13 Jul-13 Sep-13 Nov-13 May-14 Jul-14 Q3 2004 -Average: 54.0%

Note: Performance from 6/30/2004 to 12/31/2014. The performance information included herein is not that of the Strategy, it is hypothetical and backtested. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding hypothetical back-tested performance. There is no guarantee that the Strategy will achieve its investment objectives. Past performance is no guarantee of future results. Please see Endnotes for additional benchmark disclosures.

Research: Stock Universe Consistently Exhibits Larger Average Gains





Note: Performance from 6/30/2004 to 12/31/2014. Gains to Losses Ratio calculated as the average positive alpha divided by the average negative alpha. The performance information included herein is not that of the Strategy, it is hypothetical and backtested. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding hypothetical back-tested performance. There is no guarantee that the Strategy will achieve its investment objectives. Past performance is no guarantee of future results. Please see Endnotes for additional benchmark disclosures.

Key Highlights of the KKR Apex Equities Strategy

High Alpha

• KKR Apex Equities Strategy invests in the highest conviction ideas of "best-in-breed" equityoriented hedge fund managers on KKR Prisma's platform

 Because alpha longs are sourced from multiple managers, we believe potential style and sector biases are reduced

Single Layer Fees

- Investors may participate in the KKR Apex Equities Strategy at fees below those typically charged by hedge funds
- Founder's fees: 1.25% management fee / 12.5% performance fee

Manager Edge

- Each participating hedge fund manager has a dedicated research team, whose in-depth analysis drives their stock selection
- The KKR Apex Equities Strategy benefits from each manager focusing on a set of core competencies rather than one team trading across all sectors and geographies

Highly Liquid

- The KKR Apex Equities Strategy invests only in liquid equities, ETFs, and futures
- The strategy offers clients monthly liquidity with 15 days of notice

Fully Transparent

- Clients receive full position-level information on a quarterly basis
- Access to position transparency is also available anytime clients are onsite

Central Risk Management

- Portfolio construction and risk management are controlled by KKR Prisma to ensure appropriate and efficient hedges are implemented
- All manager allocation decisions are made by KKR Prisma and may be used as another tool for managing portfolio tilts and biases

Note: The information presented above is for illustrative purposes only. Strategy highlights and terms are preliminary and subject to change. Please see Strategy Disclosures at the endof the presentation for additional disclosures regarding the Strategy's composition. There is no guarantee that the Strategy will achieve its investment objectives.



KKR Apex Equities Strategy Leverages Deep, Experienced Team

Hedge Fund Leadership

Girish Reddy

Co-Head of KKR Hedge Funds / Investment Committee Member

Todd Builione Co-Head of KKR Hedge Funds

Eric Wolfe

Investment Committee Member

Francis Conrov

Shankar Nagarajan Investment Committee Investment Committee Member Member

Paul Roberts

Global Head of KKR Hedge Funds Distribution

Vishal Soni

KKR Apex Equities Strategy Portfolio Manager

Macro Positioning

Henry McVey

Head of Global Asset Allocation

Gavyn Davies

KKR Prisma Chief Economist

Supported by KKR's additional ~6 person Global Macro & Asset Allocation team and KKR Prisma's ~36 person investment team

Apex Investment Team

Peter Zakowich Global Equity PM

Michael Rudzik

Long/Short Equity PM

Donna Heitzman

Event Equity PM

Matt Edge

European PM

Annie Yang

Asia PM

Jonathan Rin

Principal, Hedge Funds

Woo-Hyung Cho

Analyst, Hedge Funds

Supported by KKR Prisma's ~30 additional hedge fund manager selection team members

Risk

Attilio Meucci

KKR Chief Global Risk Officer

Shankar Nagarajan

Co-Head of Risk, Hedge Funds

Yi Gu

Director, Global Risk

Narender Nanchary

Principal, Hedge Fund Risk

Supported by KKR's additional ~8 global risk team members and KKR Prisma's additional ~8 risk and technology team members

Operational Support

John Brennan

Co-Head of Operational Due Diligence

Jeremy Yashar

Principal, Operations

Vince Cuticello

General Counsel & Chief Compliance Officer

Russell McAleavey

Counsel

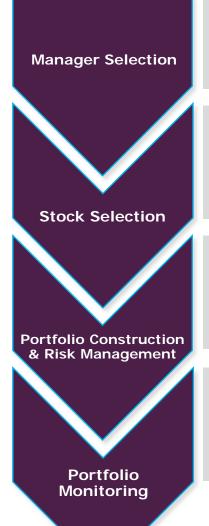
Anna Spector

Deputy Chief Compliance Officer

Supported by KKR's ~30 person legal/compliance team and KKR Prisma's ~15 additional operations team members



KKR Apex Equities Strategy Investment Process: From High Conviction Ideas to Alpha-Rich Portfolio

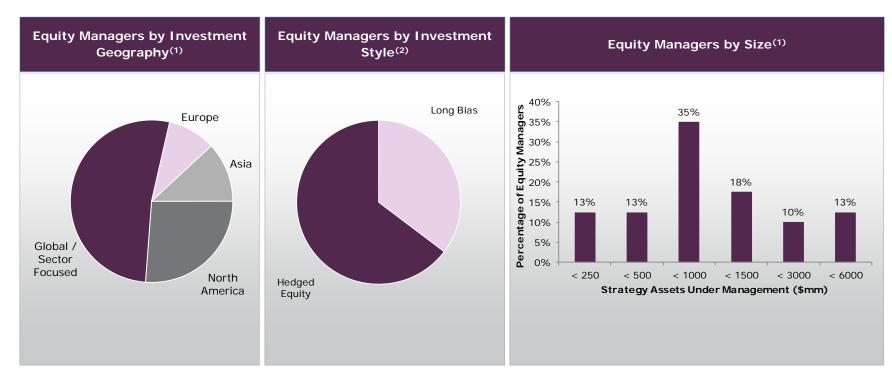


- KKR Prisma has over 10 years of experience selecting equity-oriented hedge fund managers we believe are best-in-class
- Each participating hedge fund manager has passed KKR Prisma's three-pronged due diligence process across investment, risk, and operations
- Each manager participating in the strategy is a sector specialist and has a deep research team supporting its stock picks
- In KKR Prisma's experience evaluating equity-oriented funds, these high conviction positions
 are typically the names within a portfolio that are best researched and carry the highest
 conviction
- In constructing the portfolio and managing risk, the KKR Apex Equities Strategy leverages the intellectual capital of KKR Macro Strategist Henry McVey as well as KKR Prisma's Chief Economist Gavyn Davies and KKR Prisma's investment team
- KKR Prisma's active portfolio, exposure, and risk management seeks to position the strategy to generate attractive risk-adjusted returns across market environments
- · Manager allocations provide KKR Prisma with another tool to adjust portfolio tilts
- PM Vishal Soni conducts ongoing risk monitoring and hedge maintenance with a focus on net, sector, country, and currency exposure
- Manager theses are reviewed to ensure a full understanding of portfolio style biases
- The PM oversees manager position rotation when participating hedge funds move into new, high conviction positions

Note: The information presented above is preliminary, subject to change. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding the Strategy's composition. There is no guarantee that the Strategy will achieve its investment objectives.

KKR Prisma's Universe of Equity Managers

As of January 1, 2015, KKR Prisma has over \$3 billion invested with over 40 managers across Long/Short Equity, Short Bias, and Equity Market Neutral strategies



- (1) Includes equity related strategies such as long/short equity, short bias and equity market neutral strategies
- (2) Includes long/short equity managers only

Note: For illustrative purposes only. Data as of 1/1/2015 and is based on best available information. The manager information presented herein is not representative of the managers that currently, or are anticipated to, participate in the Strategy; only managers selected for KKR Prisma's long/short strategy are eligible to participate in the Strategy. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding the selection of managers. There is no guarantee that the Strategy will achieve its investment objectives.

KKR Apex Equities Strategy Portfolio Composition

Using each manager's top-3 names, KKR Prisma constructs a portfolio

based on risk sensitivities and our macro positioning views

Long Alpha Book

- Top-3 long equity positions, subject to compliance and risk constraints
- Participating hedge funds vary by style, age, size, and specialty

Risk Sensitivities

- Expected Equity

 Beta: 0.40
- Sector: +/- 20% net
- Exchange Rate Sensitivity
- Leverage
- Liquidity
- Size
- Volatility

Short Book Overlay

- Sector, market-cap, geographic, and net exposure tilts
- Broad based index ETFs, such as:
 - o S&P 500, S&P 400 Midcap, Russell Index ETFs
- Sector and region specific ETFs

Final Portfolio

- ~30-50 stocks
- 100-125% long exposure
- 60-80% short exposure
- 30-65% net exposure
- Position size: 2-6% of NAV
- Sector, market-cap, and geographic tilts in line with KKR's macro views

Note: The information presented above is for illustrative purposes only. Strategy's portfolio composition is preliminary and subject to change. Please see Strategy Disclosures and Important Information at the end of the presentation for additional disclosures regarding the Strategy's composition and the use of targeted returns. There is no guarantee that the Strategy will achieve its investment objectives. Please see Endnotes at the end of this presentation for benchmark disclosures.

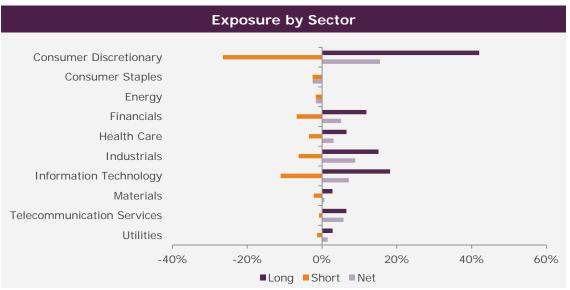
KKR Apex Equities Strategy: Sample Portfolio Snapshot, February 2015

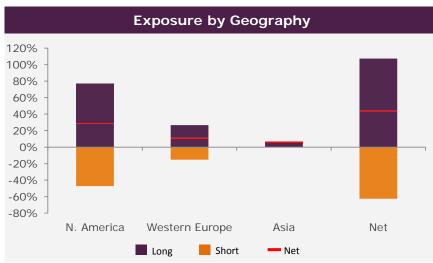
The KKR Apex Equities

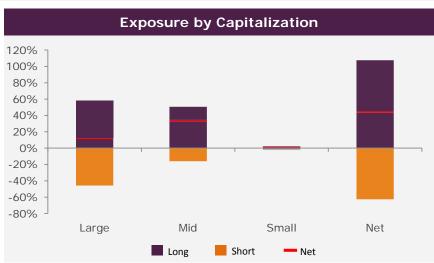
Strategy seeks to be

diversified by sector,

capitalization, and geography







Note: For illustrative purposes only. The Portfolio Snapshot is only representative of the Strategy's portfolio on February 28, 2015. The Strategy's portfolio exposures may materially differ if data was presented as of any other date. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding the Strategy's composition. There is no guarantee that the Strategy will achieve its investment objectives. Please see Endnotes at the end of this presentation for benchmark disclosures.

Within KKR Apex Equities Long Portfolio, Specialist Managers Vary by Style, Geography and Sector Focus

Size of

Team

6

Research

Geographic

Global (primarily

US & Europe

Bias

Trading

Style

Value

Value

Sector / Market Cap

Diversified across sectors and cap-

Focus

Years Since

Inception

6 years

Manager

Manager 1

Manager 14

\$1,360

1 year

Strategy

AUM

\$966

(\$mm)

					North America)		structure
	Manager 2	\$244	4 years	7	Global	Value	Consumer-related sectors
	Manager 3	\$1,107	3 years	8	Global (primarily Europe)	Combination of fundamental investing and short term trading	Large capitalization, European- focus
	Manager 4	\$810	11 years	5	North America	Catalyst	Financial, consumer/retail, and industrials
KKR Apex	Manager 5	\$898	3 years	11	Global	GARP	TMT, gaming, leisure, and consumer sectors
Equities	Manager 6	\$1,987	10 years	23	Global	Value	Basic industry cyclicals, such as metals, energy, homebuilding and
Strategy							building materials, autos and tires, capital goods, aerospace, defense
benefits from							paper and forest products, transportation and chemicals
a diverse pool	Manager 7	\$238	2 years	6	Global	GARP	Large and mid-capitalization
of specialist	Manager 8	\$701	4 years	5	Global	Growth	Technology and media sectors across industries, geographies and market capitalizations
managers	Manager 9	\$1,180	8 years	8	US	Combination of Value, GARP and Growth	Diversified across sectors (ex- financials and health care) with a market cap "sweet spot" of \$3-10 billion
	Manager 10	\$430	3 years	5	Global (US-bias)	Value	Financial sector
	Manager 11	\$463	2 years	8	Global	GARP	Diversified across sectors and capstructure
	Manager 12	\$473	5 years	5	Europe	Value	Mid cap and large cap focus
	Manager 13	\$1,700	13 years	11	Global	Combination of Value and GARP	Consumer and retail sectors

Note: For informational purposes only. The Strategy's current portfolio may materially differ from the portfolio presented above at any time. Please see Strategy Disclosures at the end of the presentation for additional disclosures regarding the selection of managers and portfolio composition. There is no guarantee that the Strategy will achieve its investment objectives. Manager 8, 10, 11, and 14 positions are participating in the program through 13F filings. Strategy AUM is as of Q3 end 2014. All other data as of January 2015.

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Mid cap and large cap focus with an event-driven orientation

Appendix



KKR Apex Equities Relative to Other Long/Short Equity Hedge Fund Alternatives

We believe the KKR Apex Equities Strategy blends the benefits of a long/short equity fund with the multi-manager diversification of 13F funds at below market fees

	13F Strategies	Long/Short Equity Strategies	Apex
Active Management	×		
Multi-Manager Diversification		×	
Highly Liquid			
Short Alpha	×		×
Beta Hedge	×		
Highly Transparent			
Real-Time Information Capture	×		
Below Market Fees		×	
Global Portfolio	×		



KKR Prisma Long/Short Equity Managers: Backtested Performance Summary

Backt	acktested Performance (Net) Since Inception												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2015	0.27%	3.34%											3.62%
2014	-0.57%	3.19%	-2.16%	-2.57%	1.94%	0.85%	-1.99%	1.54%	-0.43%	0.52%	2.32%	0.46%	2.96%
2013	3.11%	0.89%	2.05%	0.41%	2.21%	-0.33%	2.16%	-0.57%	2.74%	2.10%	1.45%	1.84%	19.54%
2012	1.89%	2.88%	0.36%	0.11%	-3.68%	-0.65%	0.74%	1.64%	1.47%	0.38%	1.33%	1.06%	7.64%
2011	-0.70%	0.88%	1.37%	2.06%	-0.11%	-0.84%	-0.49%	-3.27%	-4.68%	1.39%	-0.82%	-0.84%	-6.08%
2010	-0.70%	0.91%	2.40%	0.35%	-2.77%	-2.24%	1.70%	0.16%	2.47%	2.03%	0.40%	1.73%	6.46%
2009	0.82%	-0.02%	0.78%	1.17%	2.81%	-0.06%	1.38%	1.61%	2.15%	-0.85%	2.06%	1.36%	13.97%
2008	-3.55%	0.86%	-1.21%	3.10%	3.52%	-1.19%	-2.60%	-1.58%	-9.19%	-6.83%	-3.10%	-1.41%	-21.47%
2007	2.36%	0.48%	2.27%	2.21%	3.94%	0.50%	1.44%	-1.64%	3.41%	4.39%	-0.64%	1.05%	21.45%
2006	3.45%	-0.26%	1.44%	2.56%	-3.35%	0.06%	-0.48%	1.91%	1.57%	3.13%	3.32%	1.91%	16.13%
2005	0.31%	1.92%	0.50%	-1.78%	2.86%	1.96%	3.33%	0.69%	2.65%	-2.82%	3.09%	1.64%	15.10%
2004	0.00%					0.49%	0.16%	0.21%	2.08%	1.59%	2.66%	2.54%	10.11%

Performance Statistics (Net) Since Inception

	KKR Prisma Long/Short Equity Managers	HFRI FoF Composite	S&P 500 TR
Annualized Return	7.6%	3.5%	8.3%
Cumulative Return	119.5%	44.7%	134.6%
Risk Free Rate (ML 3M T-Bill)	1.5%	1.5%	1.5%
Standard Deviation	7.4%	5.4%	14.4%
Sharpe Ratio	0.82	0.36	0.47

Note: Data as of February 28, 2015 and utilizes February estimates. The KKR Prisma Long/Short Equity manager performance reflects the average performance of all long/short managers on the KKR Prisma Platform. The strategy generally seeks long-term capital appreciation over a several year period. The returns are net of underlying manager fees and expenses. In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provided by the underlying managers, which KKR Prisma believes to be reliable, but makes no representations or warranties as to their accuracy or completeness. The performance of the KKR Prisma Long/Short Equity Managers is not that of the Strategy, whose performance may materially differ. Please see Strategy Disclosures and Important Information at the end of the presentation for additional disclosures regarding related performance, hypothetical backtested performance, model performance and fees, as well as the Endnotes for additional benchmark information.

Apex Equities Strategy Disclosures

Hypothetical backtested returns have many inherent limitations. Unlike actual performance, hypothetical backtested returns do not represent actual investment decisions for client accounts. Since investment decisions were not made, performance results may under- or over-compensate for the effect, if any, of certain market factors, such as lack of liquidity, and may not reflect the impact that certain economic factors may have had on the decision-making process. Although KKR Prisma developed the hypothetical backtested performance herein according to certain defined rules and standards, all backtested performance is developed with the benefit of hindsight. Backtested performance is provided for all periods for which KKR Prisma has sufficient data to prepare backtested performance according to the standards defined below. Other periods selected (if data had been available) may have different results, including losses. There can be no assurance that KKR Prisma will achieve profits or avoid incurring substantial losses. KKR Prisma cannot assure that the hypothetical backtested performance results will be similar to KKR Prisma's management of the Strategy or that the results shown in the hypothetical backtested performance would have been had it actually been managing the Strategy in this manner for the period presented. KKR Prisma believes that the backtested performance shown is reasonably representative of its expected management of the Strategy and is sufficiently relevant for consideration by potential clients.

The hypothetical backtested performance presented herein is adjusted to reflect the reinvestment of dividends and, except where indicated, the anticipated advisory fees of 1.25%/12.5% but does not include brokerage or other fees that may be applicable to the Strategy. Actual fees may vary depending on, among other things, the applicable fee schedule and model size. KKR Prisma's fees are available upon request and also may be found in Part 2A of its Form ADV. Past performance is no guarantee of future results. The hypothetical backtested performance presented herein is provided from June 30, 2004 (the inception date of KKR Prisma's accounts) through December 31, 2014. During this time period, the hypothetical backtested performance is based upon a model comprised of the three largest (in dollar terms) equity holdings of each manager that (i) was classified by KKR Prisma as utilizing a long/short investment strategy or market neutral, (ii) that had a "buy" or "hold" rating as determined by the KKR Prisma investment committee, and (iii) for which complete investment-level holdings information is available (each a "Manager"). Equity holdings eligible for inclusion in the model must have had a median three-month daily traded volume of at least \$20 million USD and their issuer must have a market capitalization of at least \$1.5 billion, each as of the date of inclusion, as described below. Certain differences between the model and the Strategy are disclosed below.

For the period of June 30, 2004 through December 31, 2011, the hypothetical backtested performance presented herein is based solely upon the Form 13F filings of Managers. During this period, a Manager's three largest model-eligible equity holdings ("Holdings") are included in the model as of the first business day of the quarter following the date on which KKR Prisma assigned the Manager a "buy" or "hold" rating. A Manager's Holding are excluded as of the first business day of the quarter following the date on which KKR Prisma assigned the Manager a "sell" rating. For each quarter that a Manager's Holdings are included in (or removed from) the model, the model includes (or excludes) the Holdings listed on the Manager's Form 13F filing for the prior quarter end as of the first business day after the effective date (rather than the publication date) of the filing (e.g., Holdings in a Form 13F filing made on February 10th but reflecting holdings as of December 31 are reflected in the model portfolio as of the first business day in January). Non-U.S. Managers and Managers of global long/short strategies are not included during this period because complete information regarding the holdings of such Managers is not available on Form 13F.

For the period of January 1, 2012 through December 31, 2014, the hypothetical backtested performance presented herein is based upon monthly position reports obtained by KKR Prisma from Managers. During this period, a Manager's Holdings are included in the model as of the first business day of the month following the date on which KKR Prisma assigns the Manager a "buy" or "hold" rating. A Manager's Holdings are excluded as of the first business day of the month following the date on which KKR Prisma assigns the Manager a "sell" rating. For each month that a Manager's Holdings are included in the model, the model includes the Manager's Holdings indicated on the Manager's monthly report for the prior month end (e.g., Holdings identified in a monthly report for December will be included in the model as of January 2nd). During this period, U.S. and non-U.S. Managers, and U.S.-only and global long/short strategies are included in the model.

Although the backtested performance herein is derived from this model, the management of the Strategy may be different than the model used to present the hypothetical backtested performance in several respects. For example, the hypothetical backtested performance assumed that all eligible Managers would participate in the Strategy. KKR Prisma does not anticipate that the Strategy will obtain the participation of each eligible Manager. Additionally, model Holdings include only the equity securities of issuers with a market capitalization of at least \$1.5 billion. Holdings of the Strategy are anticipated to include only the equity securities of issuers with an outstanding public float of at least \$2 billion; provided that the Strategy may, to the extent permissible by applicable law and/or contract, utilize alternative liquidity restraints with respect to any Holding.

Additionally, the Strategy's investment timing may materially differ from the model. Certain Managers implement the strategy on a discretionary basis, and execute transactions on a pari passu basis with the Fund in which KKR Prisma's clients are LP investors, and other clients of the Manager that are invested according to the strategy (if any), via a separately managed account. In such cases, Holdings may be subject to higher volatility and turnover than the model due to the potential for more frequent trading. Additionally, although Managers must initially invest Strategy assets in their top 3 Holdings, Managers may retain Holdings for up to 3 months after a Holding is no longer a top 5 Holding of the Manager. Following the 3 month period, a Holding may be replaced by any of the Manager's top 3 Holdings. Consequently, the Strategy may not be invested in a Manager's top 3 global Holdings at all times.



Apex Equities Strategy Disclosures (continued) & Important Information

In other instances, KKR Prisma will purchase a Manager's Holdings only upon the release of a Manager's Form 13F filings. Such Holdings are not anticipated to represent more than 30% of the Strategy's assets and are limited to Managers that are long-biased, have Strategy-eligible holdings (i.e., have a median three-month volume of at least \$20 million USD and whose issuer has an outstanding public float of at least \$2 billion), and whose top holdings are materially larger (in dollar terms) than its other holdings. This approach varies from the hypothetical backtested performance prior to January 1, 2012, which assigned Holdings to the model as of the business day following the effective date (rather than the filing date) of the Form 13F. Additionally, because U.S. Managers are more likely to make Form 13F filings, non-U.S. Managers may be underrepresented in this portion of the Strategy.

Where indicated, the backtested performance incorporates the application of a static hedging program. The static hedging positions consist of geographic-focused ETFs meeting the beta requirements of the model. Throughout the backtested period, the performance has been adjusted to reflect a 125% long portfolio, and a 75% short portfolio, represented by the static hedge. The Strategy does not intend to implement a static hedge.

Where indicated, the backtested performance incorporates the application of a dynamic hedging program. The dynamic hedging positions consist of geographic-focused ETFs. The size of the dynamic hedge was adjusted on a statistical nondiscretionary basis in response to beta fluctuations of the Strategy's long positions to maintain the Strategy's beta at .5. The Strategy will feature a dynamic hedge, but unlike the backtested model, KKR Prisma will have discretion to adjust the size and geographical exposures of the dynamic hedge based on its view of the market. Backtested performance incorporating both the static and dynamic hedge was calculated assuming an annual leverage cost of LIBOR plus 50 bps and fees of 1.25%/12.5%.

Additional information regarding the hypothetical backtested performance of the Apex Strategy is available upon request.

Apex Stock Universe Disclosure

The presentation of hypothetical backtested performance of the Apex strategy may be accompanied by information regarding the "Stock Universe" from which the backtested performance is derived. Performance, characteristics, and other information regarding the stock universe is presented for comparison purposes only, and does not represent any past or proposed future investment strategy of KKR Prisma. The assumptions used to generate data regarding the stock universe are substantially similar to the assumptions described above with respect to backtested performance of the Apex strategy, but differ in the following ways:

Backtested performance of the Apex Strategy is based on the three largest equity holdings of eligible managers; the Stock Universe reflects the five largest holdings of eligible managers.

Backtested performance reflects the application of leverage and of a static or dynamic hedge, as described above; the Stock Universe information is not adjusted to reflect any leverage or hedge.

Backtested performance is presented net of expected expenses and fees, as described above; performance of stocks in the Stock Universe is presented gross of any fees and expenses.

Backtested performance excludes stocks that do not meet the liquidity requirements described above; the Stock Universe is not adjusted to reflect this limitation. Additional information regarding the Apex Stock Universe is available upon request.

The target returns are based upon KKR Prisma's view of the potential returns for investments of the proposed strategy discussed herein, are not meant to predict the returns for any accounts managed by KKR Prisma, and are subject to the following assumptions: KKR Prisma considers a number of factors, including, for example, concentration risk and position sizing, and the use of leverage. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions may have a material impact on the projected returns presented. All data is shown before fees, transactions costs and taxes and does not account for the effects of inflation. Management fees, transaction costs, and potential expenses are not considered and would reduce returns. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown. Target Returns May Not Materialize.

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The information in this presentation is only as current as the date indicated, and may be superseded by subsequent market events or for other reasons. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be relied on in making an investment or other decision. This presentation should not be viewed as a current or past recommendation or a solicitation of an offer to buy or sell any securities or to adopt any investment strategy.



Apex Equities Important Information (continued)

KKR Prisma became an affiliate of KKR in October 2012 when KKR acquired 100% of the direct and indirect interests of KKR Prisma. KKR Prisma operates as a part of KKR's public markets business, which includes the asset management activities of KKR Credit Advisors (US) LLC ("KCA"). KKR Prisma does not currently intend to invest Fund assets in any investment fund sponsored or managed by KKR, including KCA and its subsidiaries.

Employees of KKR Asset Management LLC, Prisma Capital Partners LP and KKR Capital Markets LLC located in the United States are dual employees of Kohlberg Kravis Roberts & Co. L.P.

The KKR Prisma Low Volatility Strategies Composite (the "Composite") contains all fee paying accounts that KKR Prisma believes reflect its low volatility strategy, excluding accounts of clients for which KKR Prisma manages multiple strategies under a joint fee arrangement, for the period beginning in June 2004, regardless of size. The strategy generally seeks long-term capital appreciation over a several year period with lower volatility than, and low correlation to, broad equity and fixed income indices. The accounts that comprise the Composite typically invest in multi-manager, multi-strategy, diversified portfolios of hedge funds. Between 18.5% and 100% of the Composite, in the time period June 2004 through July 2011, was comprised of a nondiscretionary account that must approve Prisma's recommendations before they are implemented. Allocations vary among underlying managers and strategies at any time, and investment vehicles have been and will be added or eliminated from time to time. Net Composite performance reflects the actual performance realized by KKR Prisma advisory clients net of fees actually charged to each account and any underlying manager fees and expenses; but excluding custody and any other expenses paid directly to third parties by the client.

The KKR Prisma Opportunistic Equity Composite contains all fee paying, fully discretionary accounts under management following that strategy for the period beginning in November 2010 (the inception date of the composite's first account), regardless of size. The strategy generally invests in portfolios of equity-oriented hedge funds, which may include equity long/short, equity market neutral, and equity-event strategies. At times, non-core allocations may also include equity short bias strategies. The KKR Prisma principle performance shown reflects the actual gross performance realized by KKR Prisma advisory clients net of fees. Composite performance shown reflects the deduction of the highest applicable management and performance fees that would be charged based on the fee schedule appropriate to you for this mandate. The composite may include other investment products that are subject to management fees that are inapplicable to you but are in excess of the model net fee. Therefore, the actual performance of all the portfolios in the composite on a net-of-fees basis will be different, and may be lower, than the model net fee performance. However, such model net fee performance is intended to provide the most appropriate example of the impact management fees would have by applying management fees relevant to you to the gross performance of the composite. The returns are net of underlying manager fees and expenses. In calculating this performance, KKR Prisma relieves to be reliable, but KKR Prisma makes no representations or warranties as to their accuracy or completeness. Allocations vary among underlying managers and strategies at any time, and investment vehicles have been and will be added or eliminated from time to time.

The KKR Prisma Long/Short Equity manager performance reflects the average performance of all long/short managers on the KKR Prisma Platform from the inception date of the KKR Prisma Platform on June 2004 through December 2014. The KKR Prisma Long/Short Equity manager performance is gross of advisory fees, net of manager's fees, and includes the reinvestment of distributions, if any. If KKR Prisma's advisory fees were reflected, the performance shown would be lower. Actual fees are described in Part 2A of KKR Prisma's Form ADV and will vary depending on, among other things, the applicable fee schedule and account size. For example, if \$100,000 were invested and experienced a 10% annual return compounded monthly for 10 years, its ending value, without giving effect to the deduction of advisory fees, would be \$270,704 with annualized compounded return of 10.47%. If an advisory fee of 0.95% of the average market value of the account were deducted monthly for the 10-year period, the annualized compounded return would be 9.43% and the ending dollar value would be \$246,355. In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provided by the underlying managers, which KKR Prisma believes to be reliable, but makes no representations or warranties as to their accuracy or completeness.

The KKR Prisma Long/Short Equity manager performance reflects the model performance an investor may have obtained had it invested in the manner shown and does not represent performance that any investor actually attained. The model performance presented is based upon the following assumptions: (i) that an investment was made on the start date and no withdrawal was made through the end date, (ii) the investment was rebalanced monthly, and (iii) each manager on the KKR Prisma Platform permitted redemptions and/or subscriptions as needed. Certain of the assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Model returns have many inherent limitations and may not reflect the impact that material economic and market factors may have had on the decision-making process if client funds were actually managed in the manner shown. Actual performance may differ substantially from the model performance presented. Changes in the assumptions may have a material impact on the model returns presented. Other periods selected may have different results, including losses. There can be no assurance that KKR Prisma will achieve profits or avoid incurring substantial losses.

Limitations of Related Performance. The performance of the KKR Prisma Low Volatility Composite, the KKR Prisma Opportunistic Equity Composite, and KKR Prisma's Long/Short Equity managers are not the performance of the Strategy and are not an indication of how the Strategy would have performed in the past or will perform in the future. The Strategy's performance in the future will be different from the performance shown due to factors including, but not limited to, differences in cash flows, fees, expenses, performance calculation methods, and portfolio sizes and composition. Past performance is no guarantee of future results.



Apex Important Information (continued)

The information in this presentation may contain projections or other forward-looking statements regarding future events, targets or expectations regarding the Fund or the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here. The information in this Presentation, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

With respect to KKR, references to "assets under management" or "AUM" represent the assets as to which KKR is entitled to receive a fee or carried interest. KKR's calculation of AUM may differ from the calculations of other asset managers and, as a result, KKR's measurements of its AUM may not be comparable to similar measures presented by other asset managers. KKR's definition of AUM is not based on the definitions of AUM that may be set forth in agreements governing the investment funds, vehicles or accounts that it manages and is not calculated pursuant to any regulatory definitions.

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KKR has adopted internal information-sharing policies and procedures which address both (i) the handling of confidential information; and (ii) the internal information barrier that exists between the public and private sides of KKR. Both KKR Prisma and KKR's fixed income, mezzanine, special situations and public equity professionals are on the public side of KKR, while KKR's private equity professionals and other affiliated business activities are on the private side of KKR. KKR has compliance functions to administer KKR's internal information-sharing policies and procedures and monitor potential conflicts of interest. Although the Fund may leverage KKR's private side executives, KKR's internal information-sharing policies and procedures referenced above, as well as certain legal and contractual constraints, could significantly limit the Fund's ability to do so. Accordingly, as a result of such restrictions, the investment activities of KKR's other businesses may differ from, or be inconsistent with, the interests of and activities which are undertaken for the account of the Fund, and there can be no assurance that the Fund will be able to fully leverage the resources and industry expertise of KKR's other businesses. Additionally, there may be circumstances in which one or more individuals associated with KKR will be precluded from providing services to the Fund because of certain confidential information available to those individuals or to other parts of KKR or because of internal policies and procedures.

General discussions contained within this presentation regarding the market or market conditions represent the view of either the source cited or KKR Prisma. Nothing contained herein is intended to predict the performance of any investment. There can be no assurance that actual outcomes will match the assumptions or that actual returns will match any expected returns. The information contained herein is as of December 31, 2014, unless otherwise indicated, is subject to change, and neither KKR Prisma nor KKR assumes any obligation to update the information herein.

KKR Prisma considers numerous factors in evaluating and selecting portfolio managers, and KKR Prisma may use some or all of the processes described herein when conducting due diligence on a potential fund or portfolio manager. KKR Prisma recognizes that a fund and/or portfolio manager may not meet all of its selection criteria, and KKR Prisma may, in its sole discretion, balance these factors or waive any of its selection criteria or due diligence processes as it deems necessary or appropriate.

Risks of investing in Apex:

Potential loss of investment – No guarantee or representation is made that the investment program used by KKR Prisma will be successful. The Strategy represents a speculative investment and involves a high degree of risk. An investment in the Strategy should be discretionary capital set aside strictly for speculative purposes. Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment in the Strategy. An investment in the Strategy is not suitable for all investors. An investor could lose or a substantial portion of his/her/its investment. Only qualified eligible investors may invest in the Strategy. Because of the nature of the trading activities, the results of the Strategy's operations may be volatile from month to month and from period to period. Accordingly, investors should understand that past performance is not indicative of future results.

Use of leverage – The Strategy may utilize leverage and may also invest in forward contracts, options, swaps and over-the-counter derivative instruments, among others. Like other leveraged investments, trading in these securities may result in losses in excess of the amount invested.

Fees and expenses – The Strategy may be subject to substantial charges for management, advisory and brokerage fees. It may be necessary for those pools that are subject to these charges to make substantial trading profits to avoid depletion or exhaustion of their assets. Please refer to the Strategy's Confidential Placement Memorandum for a more complete description of risks and a comprehensive description of each expense to be charged the Fund.

Reliance on key persons – The Strategy's manager or advisor has total trading authority over the Strategy and may be subject to various conflicts of interest. The death, disability or departure of the manager or advisor may have a material effect on the Strategy.



Apex Equities Important Information (continued)

Counterparty and bankruptcy risk – Although KKR Prisma will attempt to limit its transactions to counterparties which are established, well-capitalized and creditworthy, the Strategy will be subject to the risk of the inability of counterparties to perform with respect to transactions, whether due to insolvency, bankruptcy or other causes, which could subject the Strategy to substantial losses.

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Endnotes

- (1) Limitations of Related Performance. The performance of the KKR Prisma Low Volatility Composite is not the performance of a customized solution and is not an indication of how a customized solution would have performed in the past or will perform in the future. A customized solution's performance in the future will be different from the performance shown due to factors including, but not limited to, differences in cash flows, fees, expenses, performance calculation methods, and portfolio sizes and composition. The performance presented reflects the performance of accounts managed by KKR Prisma utilizing a strategy substantially similar to that which may be utilized for a customized solution. Past performance is no guarantee of future results.
- (2) Please see Important Information page at the beginning of this presentation and Endnotes at the end of this presentation for important information regarding, among other things, the use of composites and indices, calculation of AUM, and further information on KKR's inside information barrier policies and procedures which may limit the involvement of KKR personnel in certain investment processes and circumstances.
- (3) Certain terms of a customized solution are highlighted above. This summary is qualified in its entirety by the more detailed information contained in the Limited Partnership Agreement, Confidential Private Placement Memorandum and Subscription Agreement pertaining to a customized solution, all of which should be reviewed carefully and contain additional terms to those included in this summary.
- (4) The KKR Prisma Horizon Composite (the "Composite") contains all fee paying, fully discretionary accounts under management following that strategy for the period beginning in March 2009, regardless of size. The strategy generally seeks returns generated by portfolios emphasizing what KKR Prisma believes to be current investment opportunities. Exposures to key themes are generally achieved through concentrated allocations to underlying sectors, geographies, and/or managers. The accounts that comprise the Composite typically allow for broad investment and liquidity variability. The Composite performance shown reflects the actual gross performance realized by KKR Prisma advisory clients net of fees. Composite performance reflects the deduction of the highest applicable management and performance fees ("Model Net Fees") that would be charged based on the fee schedule appropriate to you for this mandate. Please be advised that the composite may include other investment products that are subject to management fees that are inapplicable to you but are in excess of the Model Net Fee. Therefore, the actual performance of all the portfolios in the composite on a net-of-fees basis will be different, and may be lower, than the Model Net Fee performance. However, such Model Net Fee performance is intended to provide the most appropriate example of the impact management fees would have by applying management fees relevant to you to the gross performance of the composite. The returns are net of underlying manager fees and expenses. In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provided by the underlying managers, which KKR Prisma Opportunistic Strategies Composite to the KKR Prisma Horizon Composite on November 21, 2014. Allocations vary among underlying managers and strategies at any time, and investment vehicles have been and will be added or eliminated from time to time. In calculating this performance, KKR Prisma relies on the actual unaudited performance returns provide

Past performance is not an indication or guarantee of future performance. This information is strictly confidential and may not be reproduced or redistributed in whole or in part nor may its contents be disclosed to any other person under any circumstances. This information is not intended to constitute legal, tax, or accounting advice or investment recommendations. Please see "Important Information" for important risk disclosures and information regarding the ML T-Bill Index.

- (5) The indices referenced herein are broad-based securities market indices and used for illustrative purposes only. They have been selected as they are well known and are easily recognizable. Broad-based securities indices are unmanaged and are not subject to fees and expenses typically associated with customized solutions. Investments cannot be made directly into an index. The performance of the indices represents unmanaged, passive buy-and-hold strategies, investment characteristics and risk/return profiles that differ materially from customized solutions, and an investment in a customized solution is not comparable to an investment in such indices or in the securities that comprise the indices. Past performance is no guarantee of future results. See following Endnotes page for additional information. Investments of a customized solution may be illiquid, making, at times, fair market valuation impossible or impracticable. As a result, valuation of a customized solution may be volatile, reducing the utility of comparison to any index whose underlying securities are priced according to market value, such as the indices. Investors should be aware that a customized solution may incur losses both when major indices are rising and when they are falling.
- (6) The information offers an abbreviated version of the team's professional experience; please see Appendix for full biographies. Investment professionals includes those individuals who are directly involved in KKR Prisma's investment process with respect to strategy allocation, portfolio management, manager selection, risk management and due diligence. Gavyn Davies provides support to KKR Prisma's investment process in his role as Senior Advisor to KKR. No representation is made that all of the individuals named will provide services to the strategy.



Endnotes

Indices

The risk/return profile of the indices is materially different from that of a KKR Prisma account, and an investment in a KKR Prisma account is not comparable to an investment in the securities that comprise the indices. Investments of the KKR Prisma account may be illiquid, making at times, fair market valuation impossible or impracticable. As a result, valuation of the KKR Prisma account may be volatile, reducing the utility of comparison to any index whose underlying securities are priced according to market value, such as the indices. Investors should be aware that KKR Prisma accounts may incur losses both when major indices are rising and when they are falling.

The **S&P 500 TR Index** ("**S&P 500**") is comprised of a representative sample of 500 large-cap companies. The index is an unmanaged, float-weighted index with each stock's weight in the index in proportion to its float, as determined by Standard & Poors. The S&P 500 is one of the most widely used benchmarks of U.S. equity performance. For more information on the S&P 500, please visit www.us.spindices.com/indices/equity/sp-500. Unless otherwise indicated, all S&P 500 performance data is as of December 31, 2014 and was retrieved on December 5, 2014.

The Barclays Capital U.S. Aggregate Index ("Barclays Aggregate Bond Index") provides a measure of the U.S. investment grade bond market, which includes investment grade U.S. government bonds, investment grade corporate bonds, mortgage pass-through securities and asset-backed securities that are publicly offered for sale in the United States. The securities in the Index must have at least 1 year remaining to maturity. In addition, the securities must be denominated in US dollars and must be fixed rate, nonconvertible, and taxable. For more information on the Barclays Aggregate Bond Index, please visit www.ecommerce.barcap.com/indices/index.dxml. Unless otherwise indicated, all Barclays Aggregate Bond Index performance is dated as of December 31, 2014 and was retrieved on December 5, 2014.

The Merrill Lynch 3-Month Treasury Bill Index ("ML 3-Month T-Bills") is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. To qualify for selection, an issue must have settled on or before the month-end rebalancing date. While the index will often hold the Treasury Bill issued at the most recent 3-month auction, it is also possible for a seasoned 6-month Bill to be selected. For more information on the ML B-Month T-Bills, please visit www.mlindex.ml.com/gispublic/default.asp. Unless otherwise indicated, all ML 3-Month T-Bills performance data is as of December 31, 2014 and was retrieved on December 5, 2014.

The **Dow Jones Credit Suisse AllHedge Indexes** ("CS/Dow Jones Investable Index") are designed to provide transparent, representative and objective benchmarks of the ten style-based investment strategies of the hedge fund universe. They are constructed by aggregating the ten strategy indexes, and they include funds worldwide. The indexes are rebalanced annually, with a semiannual "partial rebalancing" occurring between each rebalancing. For more information on the CS/Dow Jones Investable Index, please visit http://www.hedgeindex.com/hedgeindex/en/indexmethodology.aspx?cy=USD&indexname=SECT. Unless otherwise indicated, all CS/Dow Jones Investable Index performance data is as of December 31, 2014 and was retrieved on December 5, 2014.

The Dow Jones Credit Suisse Blue Chip Hedge Fund Index is an asset-weighted hedge fund index derived from the Dow Jones Credit Suisse Hedge Fund Index. The index is comprised of the 60 largest funds across the ten style-based sectors in the broad index and is open for investment. It is rebalanced semi-annually and reflects performance net of all hedge fund component performance fees. The Dow Jones Credit Suisse Blue Chip Hedge Fund Index is a rules-based index fully reflects the performance of a diversified market barometer hedae fund industry. For more information on the CS/Dow Jones Investable www.hedgeindex.com/hedgeindex/en/fag.aspx?cy=USD&indexname=INVX. Unless otherwise indicated, all CS/Dow Jones Investable Index performance data is from June 2004 though June 2014, at which point publication of monthly performance values of the CS/Dow Jones Blue Chip Hedge Fund Indexes was discontinued.

The **HFRI FoF Composite Index** is a equal-weighted index includes over 800 constituent funds included in the HFR database. Funds within the index must have at least \$50 million under management or have been actively trading for at least twelve (12) months. For more information on the HFRI FoF Composite Index, please visit www.hedgefundresearch.com/mon_register/index.php?fuse=login_bd&1382601327. Unless otherwise indicated, all HFRI FoF Composite Index performance data is as of December 31, 2014 and was retrieved on December 5, 2014.

The MSCI World USD Gross Index ("MSCI World") is a market capitalization weighted index composed of companies representative of the market structure of 23 developed market countries in North America, Europe, and the Asia/Pacific Region. The index covers approximately 85% of the free float-adjusted market capitalization in each country. For more information on the MSCI World, please visit www.msci.com/products/indices/tools/index.html#WORLD. Unless otherwise indicated, all MSCI World performance data is dated as of December 31, 2014 and was retrieved on December 5, 2014.

The S&P GSCI Total Return Index ("S&P GSCI TR") is a composite index of commodity sector returns representing an unleveraged, long-only investment in commodity futures that is currently diversified across 24 commodities. For more information on the S&P GSCI TR, please visit www.us.spindices.com/performance-overview/commodities/sp-gsci. Unless otherwise indicated, all S&P GSCI TR performance data is as of December 31, 2014 and was retrieved on December 5, 2014.





Callan

April 2015

ARMB Board Meeting

Investment Performance (Final Real Estate) Periods Ended 12/31/14

Paul Erlendson

Senior Vice President

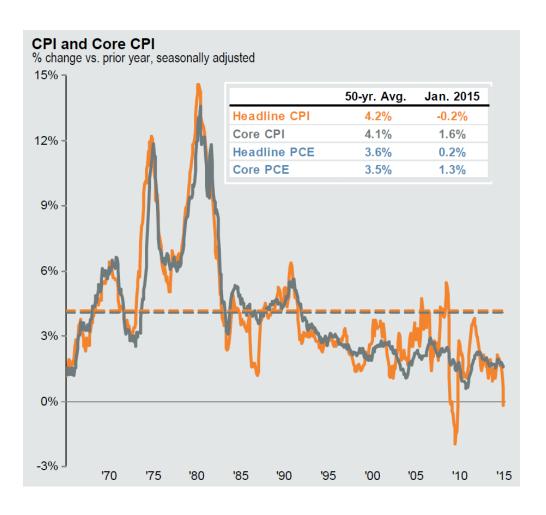
Dana Brown

Senior Vice President

Agenda

- Market and Economic Environment
- Total Fund Performance
 - -Major Asset Classes
 - -Composite Level
 - -Manager Comments

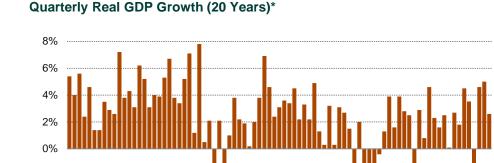
U.S. Economy: Inflation

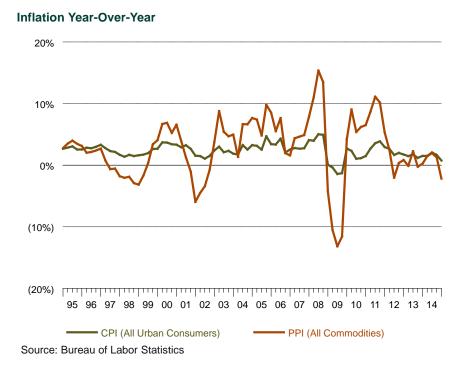


- Inflation remains subdued: For the 12-months ending January, headline CPI fell 0.2% while Core CPI (excluding food and energy) increased 1.6%.
- The current annual rate of Core Inflation rate is well below the long-term average of 4.1%.

U.S. Economy

Periods Ending December 31, 2014





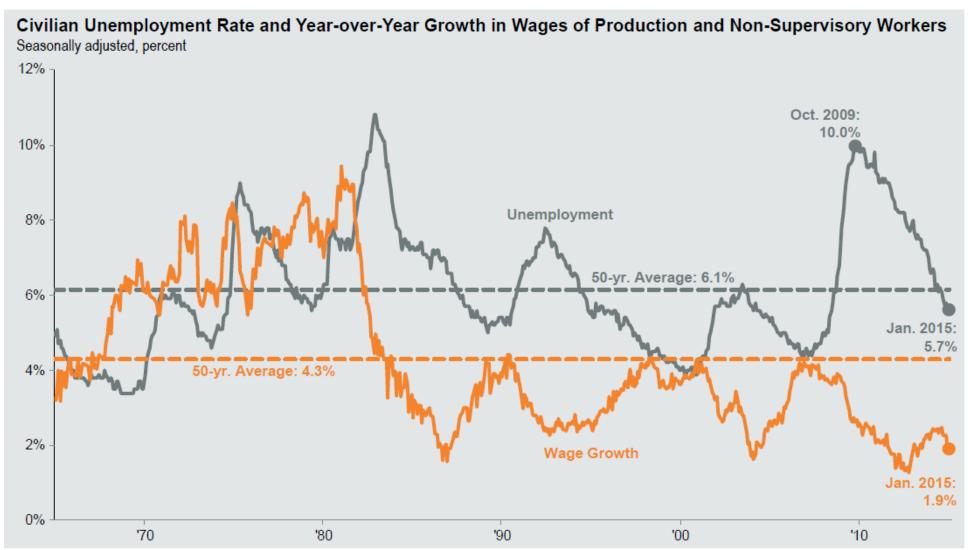
Source: Bureau of Economic Analysis

-4%

-10%

- 4th quarter GDP was up 2.2%, extending the strong growth of 5.0% in the 3rd quarter.
- December headline inflation increased 0.8% from a year earlier, core inflation up 1.6%.
- The unemployment rate dropped to 5.6% in December (down 0.3% during the quarter).
- Labor market strengthened with average addition of 289,000 jobs per month in quarter.
- The shock and uncertainty of the impact of lower oil prices (off 50% from 2014 peak) raised market volatility.

Employment Picture





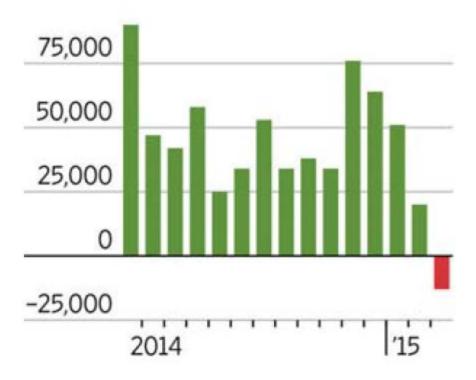


Job growth remains positive in 2015

But the rate of growth is slowing

- US employment picture was very strong in 2014 but has begun slowing in 2015.
- Initial estimates of employment growth in the first two months of 2015 were revised downward.

Monthly change in goodsproducing jobs



Sources: Wall Street Journal, UD DOL.

Asset Class Performance

Periods Ending December 31, 2014

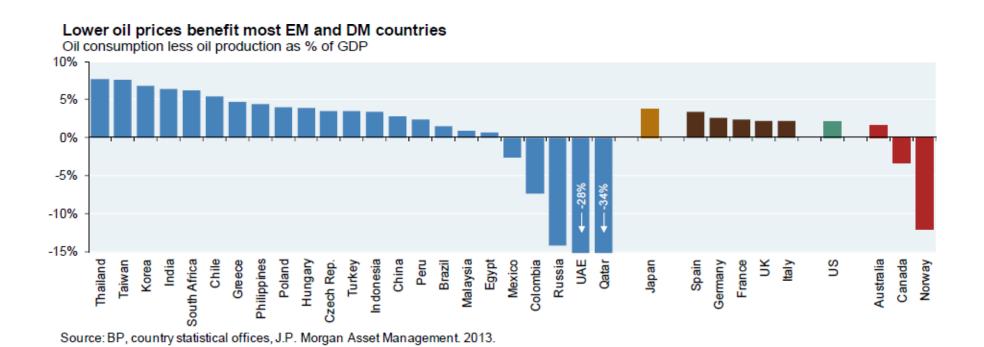
- Russell 2000 best for quarter, gaining 9.7%, up 4.9% in 2014
- S&P 500 gained 4.9% for quarter and 13.7% for the year
- BC Aggregate rose 1.8% for quarter and 6.0% for 2014
- International equities lagged domestic equities for the quarter and year

4/2/15	MTD	YTD
S&P 500	0.0%	0.9%
Russell 2000	0.2%	4.5%
EAFE	1.3%	6.2%
EM	2.0%	4.4%
BC Agg	0.4%	2.0%
HY*	1.2%	2.6%
BC TIPS	0.1%	4.6%

Periodic Table of Investment Returns for Periods Ended December 31, 2014

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell:2000 Index	S&P:500	S&P:500	S&P:400 Mid Cap	S&P:400 Mid Cap
9.7%	13.7%	20.4%	16.5%	9.7%
S&P:400 Mid Cap	S&P:400 Mid Cap	S&P:400 Mid Cap	Russell:2000 Index	MSCI:Emer Markets
0.007	0.00/	00.007	45.50/	0.00/
6.3%	9.8%	20.0%	15.5%	8.8%
S&P:500	Barclays:Aggregate	Russell:2000 Index	S&P:500	Russell:2000 Index
	Index			
4.9%	6.0%	19.2%	15.5%	7.8%
Barclays:Aggregate	Russell:2000 Index	MSCI:EAFE US\$	MSCI:EAFE US\$	S&P:500
Index				
1.8%	4.9%	11.1%	5.3%	7.7%
3 Month T-Bill	3 Month T-Bill	MSCI:Emer Markets	Barclays:Aggregate	Barclays:Aggregate
			Index	Index
0.0%	0.0%	4.4%	4.4%	4.7%
MSCI:EAFE US\$	MSCI:Emer Markets	Barclays:Aggregate	MSCI:Emer Markets	MSCI:EAFE US\$
		Index		
(3.6%)	(1.8%)	2.7%	2.1%	4.4%
MSCI:Emer Markets	MSCI:EAFE US\$	3 Month T-Bill	3 Month T-Bill	3 Month T-Bill
(4.4%)	(4.9%)	0.1%	0.1%	1.5%

Countries that Gain and Lose from Lower Oil Prices



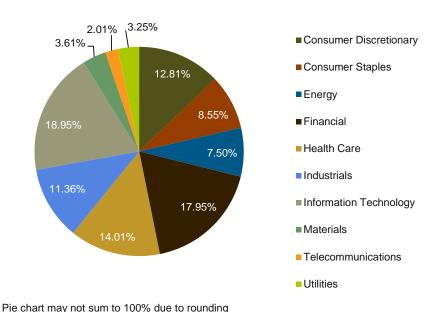
- Most developed and emerging markets stand to gain from lower oil prices
- Countries that have significant oil exports as a % of GDP are hurt Russia, Colombia, Norway, UAE, and Qatar
- Those with significant sovereign wealth funds can manage lower prices better (UAE and Qatar)



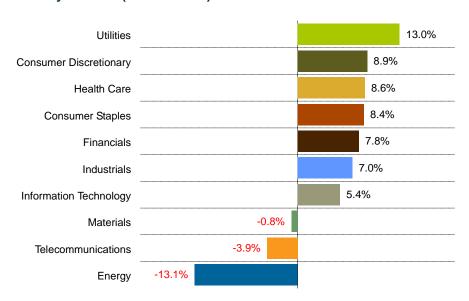
U.S. Equity Returns

Periods Ending December 31, 2014

Economic Sector Exposure (Russell 3000)



Quarterly Returns (Russell 3000)



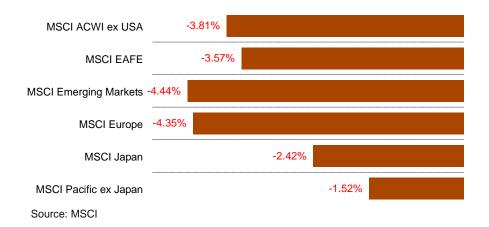
- For the year, large caps outperformed small caps by 8.8%, the widest margin in 16 years
- VIX (S&P volatility) jumped to highest level of the year in October as oil price declines accelerated
- In large caps, no meaningful difference between growth and value during the quarter (Russell 1000 Growth: +4.8%, Russell 1000 Value: +5.0%)
- Tough year for active management, Russell 1000 Growth and Value ranked 29th percentile

Source: Russell Investment Group

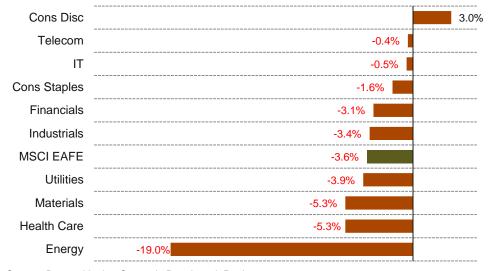
International Equity Returns

Periods Ending December 31, 2014

Regional Quarterly Performance (U.S. Dollar)

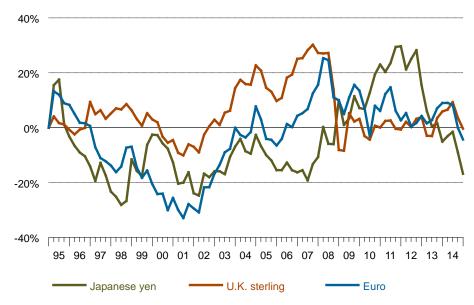


MSCI EAFE Sector Returns



Source: Barrow Hanley Quarterly Benchmark Review

Major Currencies' Cumulative Returns (vs. U.S. Dollar)



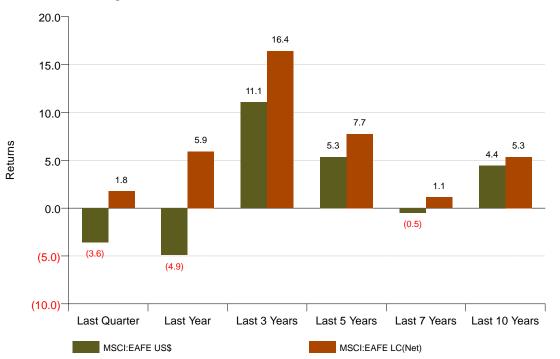
*Euro returns from 1Q99. German mark prior to 1Q99. Source: MSCI

- ACWI ex-U.S. dropped in the quarter and trailed the U.S.; Europe lagged (-4.4%)
- The euro (-4.2%), yen (-8.5%) and pound (-3.8%) continued to depreciate versus the dollar
- Emerging markets lagged their developed counterparts for the quarter

Domestic vs. Local Currency Returns

Currency Effect on U.S. Investors' International Equity Returns

Returns for Various Time Periods
Current Quarter Ending December 31, 2014





- For the quarter, U.S. investors' international equity returns were hurt by the dollar appreciating in value against most foreign currencies. The dollar strengthened vs the Yen, Euro and Pound.
- The Dollar rose 12% in 2014 and has risen by another 9% in the first three months of 2015.

The dollar goes up and down. And up.

Trade-weighted US dollar index versus major currencies



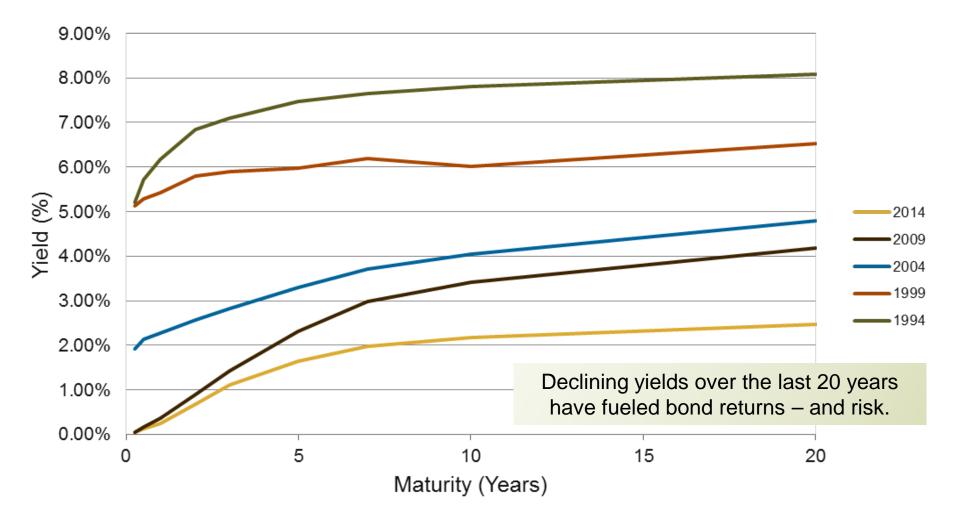
Source: Federal Reserve Bank of St. Louis. Index value March 1973 = 100.

- The Dollar's value peaked on February 25, 1985, trending downward for most of the next 30 years.
- Since bottoming on May 2, 2011, the Dollar's value has risen over 35% as of March 31, 2015.
- Recent Dollar strength significantly detracted from US investors' returns in foreign markets.

Historical Yield Curves

As of December 31, 2014

Treasury Yield Curve



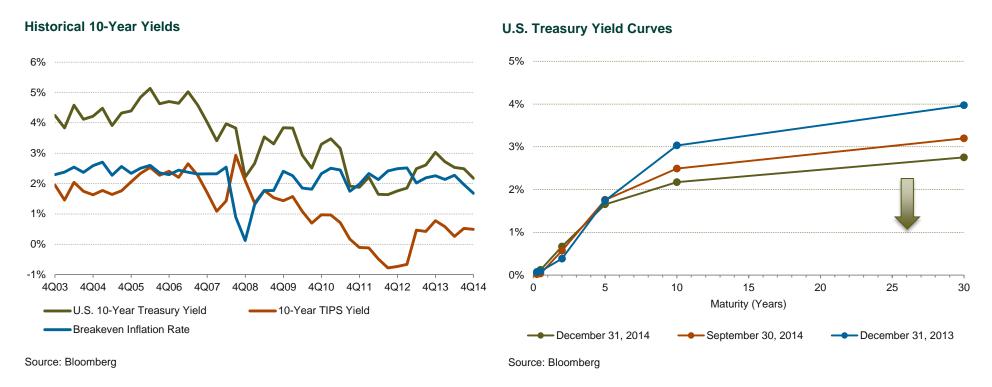
Source: U.S. Treasury Department

Excludes 1-Month and 30-Year Treasuries as yields were not available for all time periods.



Yield Curve Changes

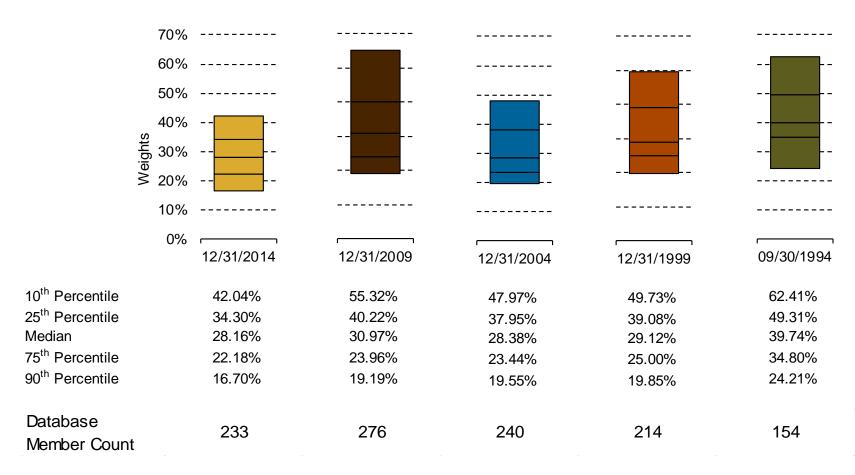
Periods Ending December 31, 2014



- A flattening yield curve helped long-term Treasury returns as rates fell dramatically in 4th quarter.
- The 10-year Treasury yield fell to 2.17%, a decline of 35 basis points from the end of 3rd quarter.
- Real yield on 10-year Treasury was only 0.46% at year end.
- The breakeven inflation rate fell, ending the year at 1.68% as both nominal rates and inflation expectations declined.

Historical Domestic Fixed Income Weights

Total Public Fund Database

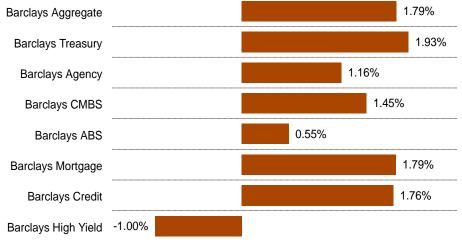


- Public Pension Funds have been reallocating assets away from US fixed income for 20 years.
- The apparent rise in fixed income in 2009 was caused by equity market losses incurred in 2008.

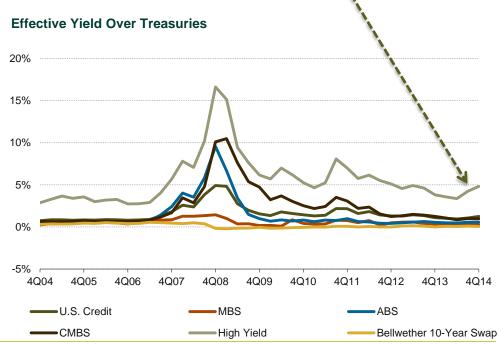
Total Rates of Return by Bond Sector

Periods Ending December 31, 2014

Absolute Returns for Quarter ended December 31, 2014



- Longer duration treasuries outperformed given fall in rates (20 years+ returned 9.4%)
- High yield spreads widened given higher exposure to energy sector



Source: Barclays

Real Estate

Style medians and index returns as of 12/31/14

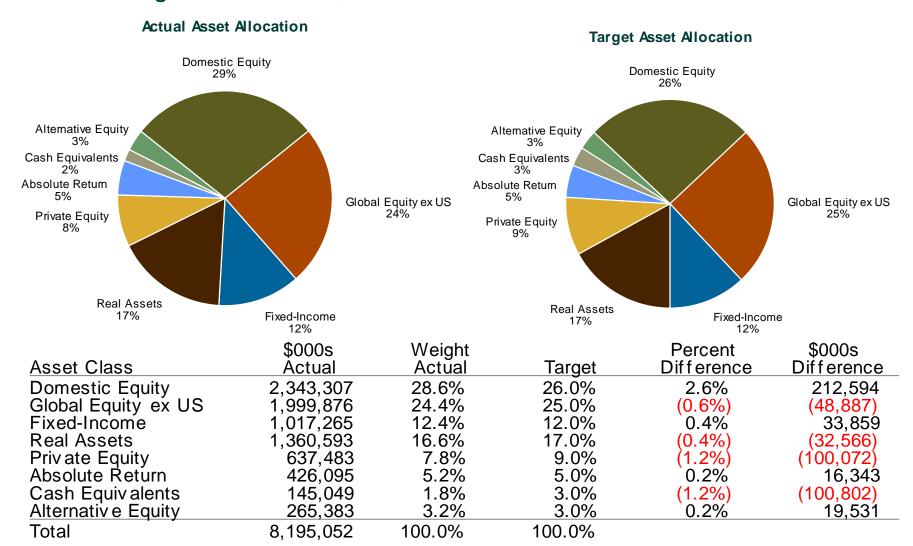
Private Real Estate	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Real Estate Database (net of fees)	2.87	11.90	11.90	12.18	13.72	5.76	7.48
NCREIF Property**	3.04	11.82	11.82	11.11	12.13	8.38	8.89
Public Real Estate							
REIT U.S. Database	14.42	31.15	31.15	16.67	17.77	9.38	14.08
NAREIT Equity	14.20	30.14	30.14	16.33	16.88	8.31	12.67
Global Real Estate							
Global REIT Database	7.84	16.53	16.53	16.08	12.52	7.73	9.42
EPRA/NAREIT Global Developed	8.07	15.89	15.89	15.90	12.04	6.90	10.15

Sources: Callan, Citigroup, JPMorgan Chase & Co.

- The NCREIF Property index's 3.04% return in the fourth calendar quarter of 2014 was split between a 1.29% income return and 1.75% appreciation return.
- A preliminary query of NCREIF tracked 282 institutional asset trades and \$8.0 billion in volume.
 - Fourth quarter trades since 2004 have averaged about \$4.9 billion.
- Domestic REITs raised about \$12.5 billion during the fourth quarter of 2014.

Asset Allocation – Public Employees' Retirement System

Quarter Ending December 31, 2014



PERS is used as illustrative throughout the presentation.

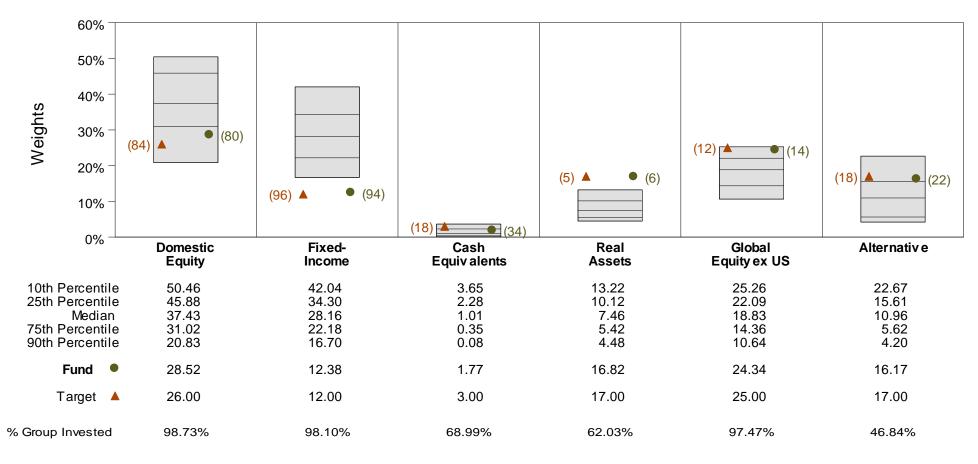
The other plans exhibit similar modest and understandable variations from strategic target allocations.



Asset Allocation vs. Public Funds (PERS)

Callan Public Fund Database

Asset Class Weights vs Public Fund Sponsor Database



- Total domestic equity is above target while global ex-US equity is marginally below target.
- The fixed-income allocation is very low when compared to the allocations of other public funds.
- Policy is "growth" oriented as opposed to "income" oriented.

^{*}Note that "Alternative" includes private equity and absolute return



PERS Results: One- and three-year attribution as of 12/31/14

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
Domestic Equity	28%	26%	11.34%	12.56%	(0.32%)	0.08%	(0.25%)
Fixed-Income	12%	12%	2.30%	2.36%	(0.01%)	(0.01%)	(0.02%)
Real Assets	17%	17%	10.43%	10.97%	(0.09%)	(0.02%)	(0.11%)
Global Equity ex US	25%	25%	(3.12%)	(3.44%)	`0.08%	(0.02%)	`0.06%
Private Equity	8%	9%	18.13%	4.52%	1.04%	`0.02%′	1.06%
Absolute Return	4%	5%	8.34%	5.03%	0.14%	(0.01%)	0.13%
Other Alternatives	4%	3%	6.44%	9.05%	(0.09%)	`0.02%′	(0.06%)
Cash Equiv	3%	3%	0.20%	0.03%	0.00%	0.01%	0.01%′_
Total			6.22% =	5.40% +	· 0.75% +	0.07%	0.81%

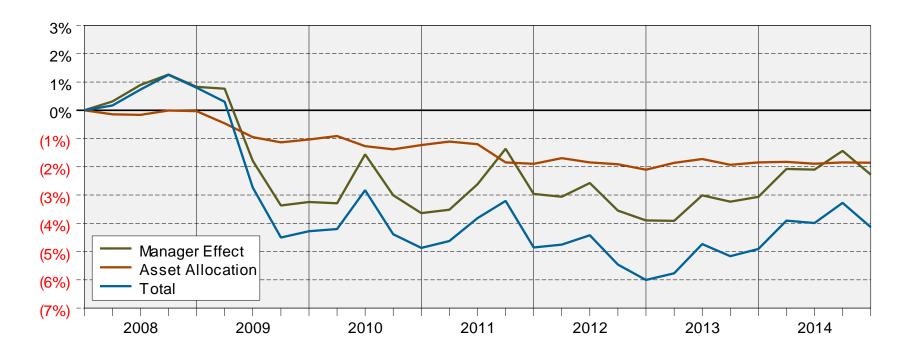
Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relativ e Return
Domestic Equity	29%	26%	19.98%	20.51%	(0.14%)	0.21%	0.07%
Fixed-Income	14%	14%	2.24%	1.56%	0.11%	(0.12%)	(0.01%)
Real Assets	17%	16%	10.89%	9.54%	0.23%	(0.03%)	0.20%
International Equity	23%	24%	10.50%	9.49%	0.24%	(0.13%)	0.11%
Private Equity .	9%	8%	17.61%	16.97%	(0.00%)	0.04%	0.04%
Absolute Return	4%	6%	7.25%	5.07%	0.08%	0.09%	0.17%
Other Alternatives	2%	1%	-	-	(0.02%)	0.01%	(0.01%)
Cash Equiv	3%	4%	0.31%	0.07%	0.01%	0.13%	
Total			12.14% =	11.42%	+ 0.51% +	0.21%	0.72%

• Performance attribution shows a few weak elements but the Total Effects are positive.

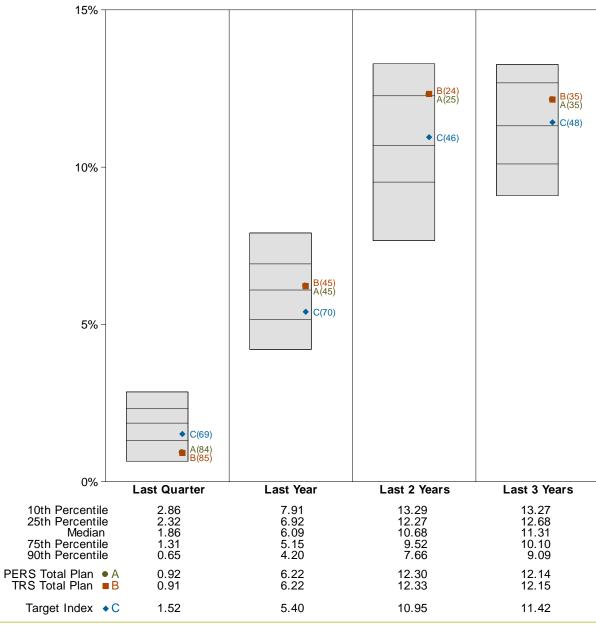
PERS Intermediate-Term Performance as of 12/31/14

Cumulative Relative Attribution Effects



- Performance Attribution illustrates the impact of managers' returns versus their respective indices (called 'Manager Effect') in combination with deviations away from the strategic asset allocation target (called 'Asset Allocation'). Over all, both effects were negative in the recovery year, 2009.
- 'Manager Effect' (green line) has improved since 2010: managers' relative returns are strong.
- The 'Asset Allocation Effect' (the brown line) has been relatively flat since 2012.

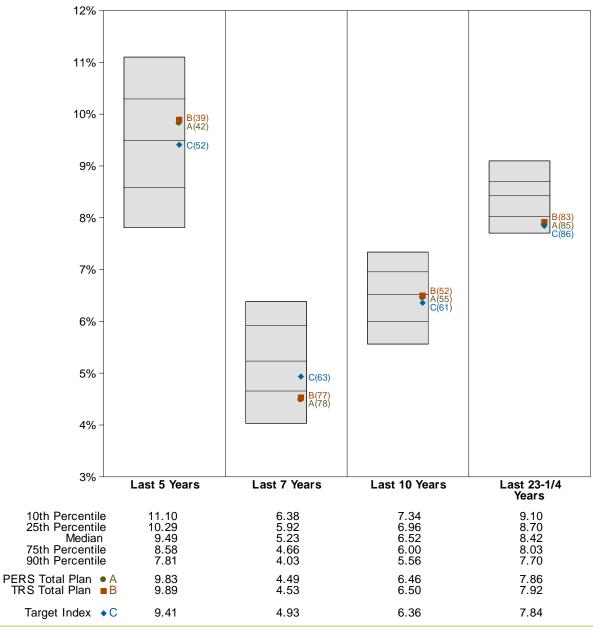
Cumulative Total Fund Returns as of 12/31/14



PERS and TRS have outperformed their peer group median for all cumulative periods between one and three years ended December 31, 2014.

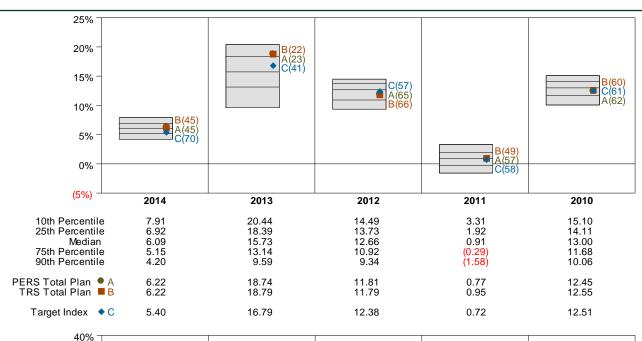


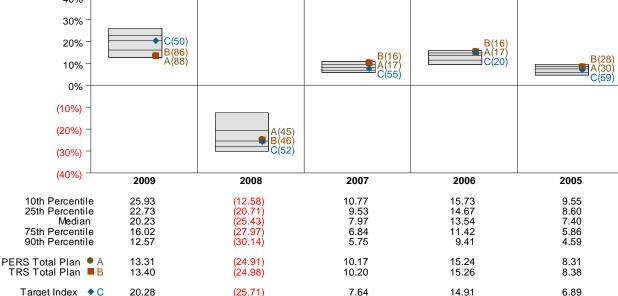
Longer-Term Returns as of 12/31/14



- 5-year performance is above target and median
- 7-year performance still affected by 2009 timing related issues
- 10- and 23-1/4 year results in line with Target
- 10-year return near median

Calendar Period Performance



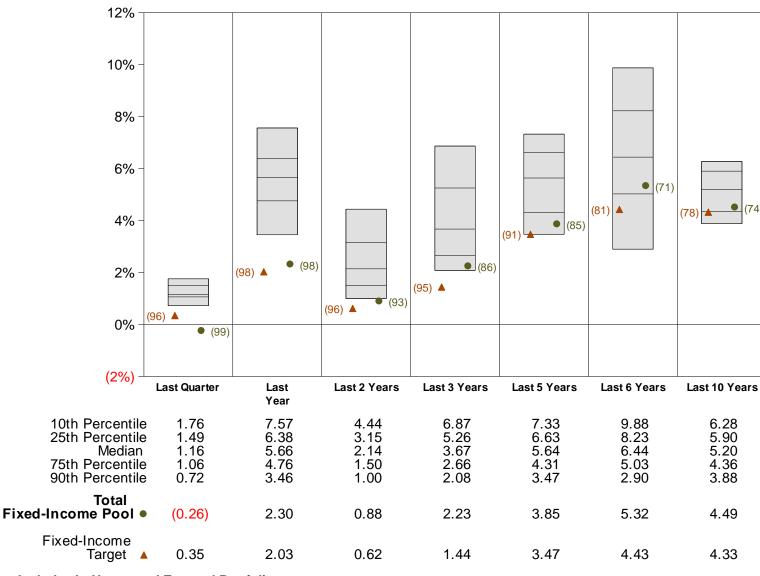


- In nine of the last ten calendar years, the bulk of Public Funds' returns have been positive.
 - Exception was 2008; some negative returns in 2011
- Very tight range of returns during the year of 2014.
- Wide range of returns during calendar 2013 due to varying fixed-income allocations within the Public Fund universe.
- Both Funds ranked above median in six of the ten periods shown.
- TRS's return was above benchmark in eight years while PERS was above benchmark in seven years.



Total Bond as of 12/31/14

Performance vs Pub Pln- Domestic Fixed (Gross)



- The Total Bond portfolio has a custom target, intermediate in nature, that reflects a cautious view on the risk of rising rates.
- The strategy's returns have exceeded its benchmark over all cumulative periods one year and longer.
- Falling interest rates have benefitted longer duration portfolios over the last decade.

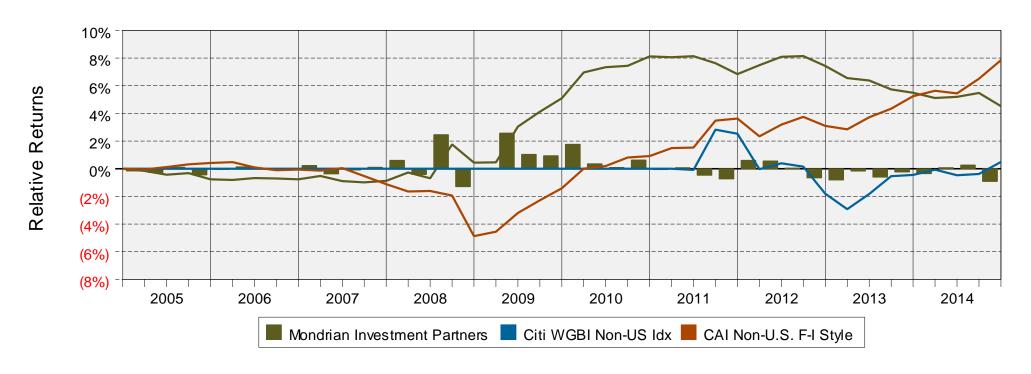
Includes In-House and External Portfolios



Mondrian: Non-U.S. Fixed Income

As of 12/31/14

Cumulative and Quarterly Relative Return vs Mondrian Benchmark



- Over periods greater than six years ending 12/31/14, Mondrian is ahead of benchmark.
- Returns have lagged the custom benchmark in 10 of 16 quarters since 2011.
 - Returns have trailed benchmark in eight of the last ten quarters.
- Mondrian's recent performance is in sharp contrast to the firm's longer term success in managing non-US fixed-income portfolios.

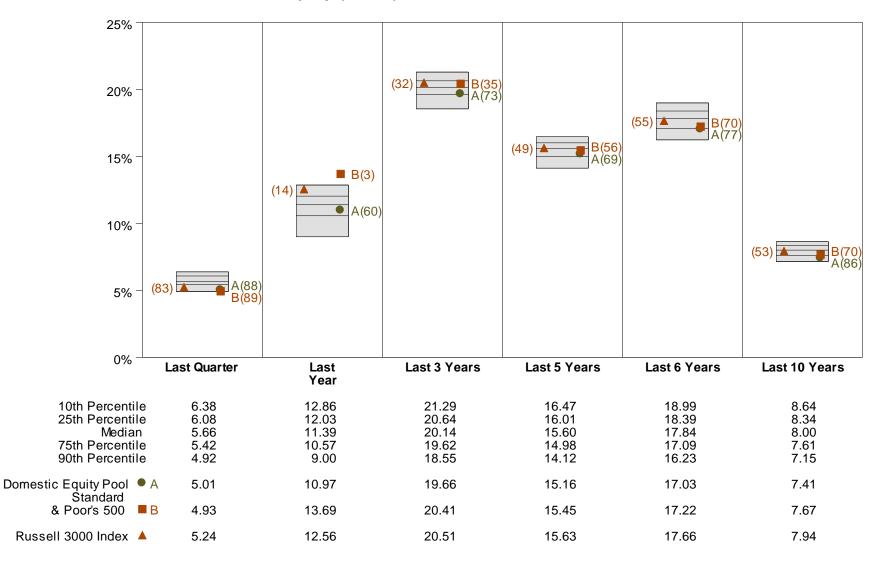
Non-U.S. Fixed Income through 12/31/14 – Mondrian*

- The portfolio lagged its benchmark index in Q4, driven by Mondrian's positioning in the emerging-markets-debt sleeve while its allocation to developed markets performed in line with the index.
 - Overweight in the weak Russian market was the dominant detractor from performance.
 - Mondrian sees exceptional value in the Russian market. These views are consistent with their investment philosophy and process: Russian government bonds offer a very high Prospective Real Yield (the highest in the emerging-markets-debt universe)
 - The Russian rouble is extremely undervalued according to the firm's Purchasing Power Parity currency valuations
 - Russia's fiscal position remains strong
 - -That value has started to be realized year-to-date in 2015
- 2014's underperformance was driven nearly entirely by the underperformance in Q4: the portfolio performed in line with its benchmark index in the second and third quarters, trailing slightly in Q1.
 - A positive influence on portfolio returns was Mondrian's overweight position in the US dollar which increased in value versus other currencies during the fourth quarter of 2014.
 - Mondrian had no exposure to the Eurozone periphery, which outperformed the index
 - -Mondrian sees very poor value in Eurozone-periphery bonds, consistent with their investment philosophy and process. Mondrian does not believe that potential returns in the Eurozone-periphery offer adequate compensation for the major economic and political risks that exist.



Total Domestic Equity through 12/31/14

Performance vs Pub PIn- Domestic Equity (Gross)





Domestic Equity Component Returns

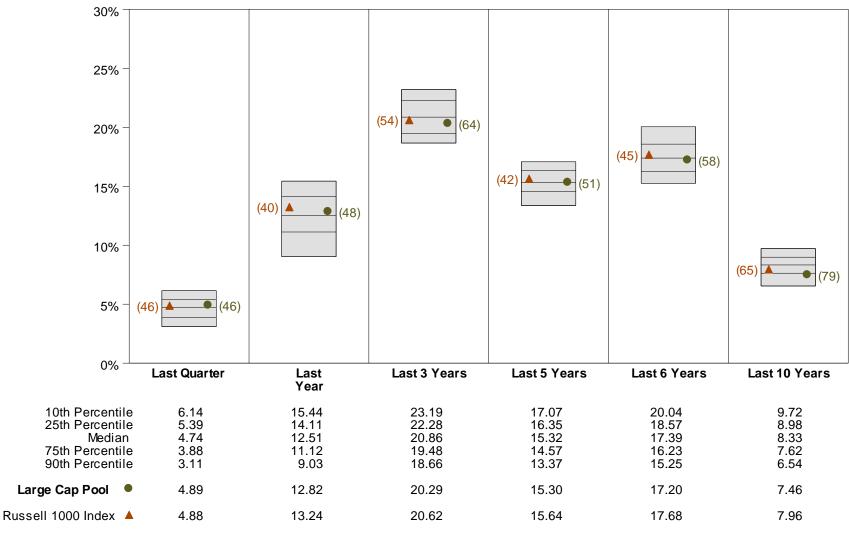
As of 12/31/14

			Last	Last	Last	
	Last	Last	3	5	6 Years	
	Quarter	Year	Years	Years		
Total Dom Equity Pool	5.01%	10.97%	19.66%	15.16%	17.03%	
Russell 3000 Index	5.24%	12.56%	20.51%	15.63%	17.66%	
Large Cap Managers	4.89%	12.82%	20.29%	15.30%	17.20%	
Large Cap Active	5.07%	12.04%	19.90%	15.17%	17.34%	
Large Cap Passive	4.80%	13.28%	20.61%	15.40%	17.06%	
Russell 1000 Index	4.88%	13.24%	20.62%	15.64%	17.68%	
Small Cap Managers	9.53%	4.78%	19.99%	15.98%	17.50%	
Small Cap Active	9.62%	4.87%	20.21%	16.72%	18.57%	
Small Cap Passive	9.05%	4.13%	18.32%	14.10%	15.24%	
Russell 2000 Index	9.73%	4.89%	19.21%	15.55%	17.41%	
Alternative Equity	(0.26%)	6.43%	11.39%	10.28%	-	

- Alternative Equity category includes defensive equity-oriented portfolios:
 - Relational Investors is expected to wind down during 2015
 - The in-house yield-equity portfolio is part of the Alternative Equity composite.
 - The QMA Market Participation Strategy was funded March 11, 2015 (\$200mm) and will be included in the Alternative Equity composite.

Large Cap Domestic Equity Pool through 12/31/14

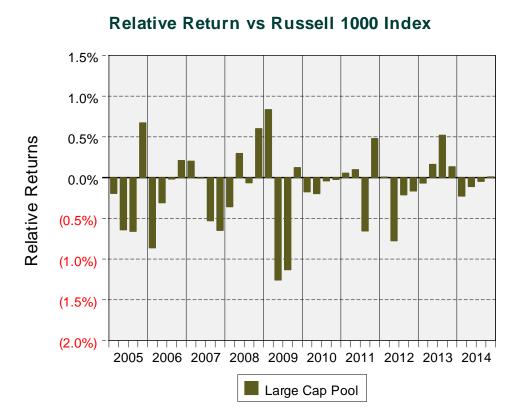
Performance vs CAI Large Capitalization Style (Gross)



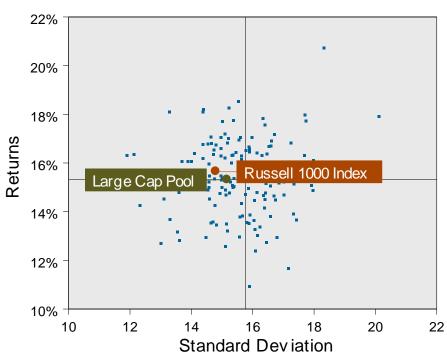
Performance relative to peers has improved and is above median for the last quarter and year.

Large Cap Domestic Equity Pool

As of 12/31/14



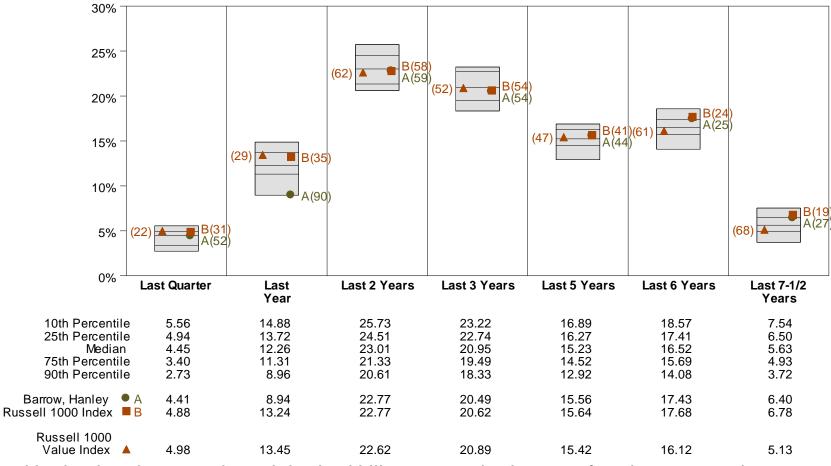
CA Large Capitalization Style (Gross) Annualized Five Year Risk vs Return



- Nearly two-thirds of ARMB's large cap allocation is passive.
- Returns and risk essentially match those of the index even with effect of active managers included.

Barrow Hanley: Large Cap Domestic Equity through 12/31/14

Performance vs CAI Large Cap Value Style (Gross)

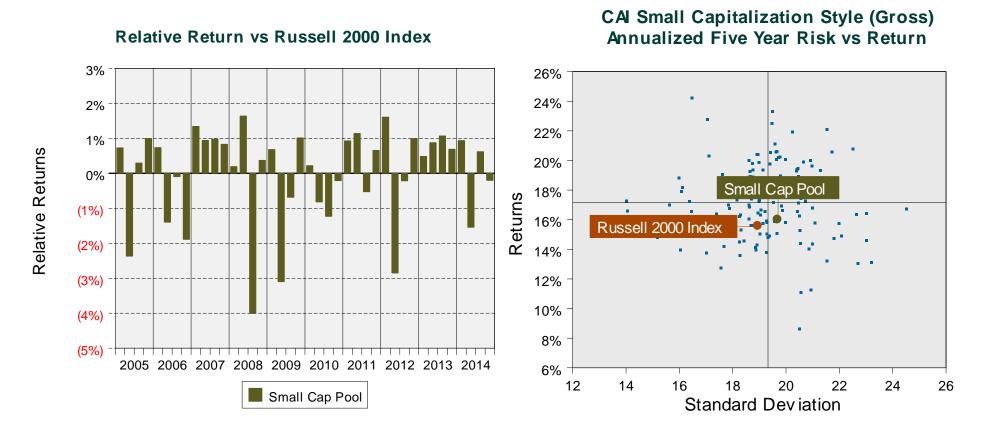


- Barrow Hanley has been underweight the Utility sector, the best performing economic sector during 2014 based on the decline in energy prices. This relative position impaired performance.
- Barrow Hanley has a lower weighted-average market capitalization than its benchmark which hurt relative performance during 2014 as large cap was markedly better than small cap during the year.



Small Cap Domestic Equity Pool

As of 12/31/14

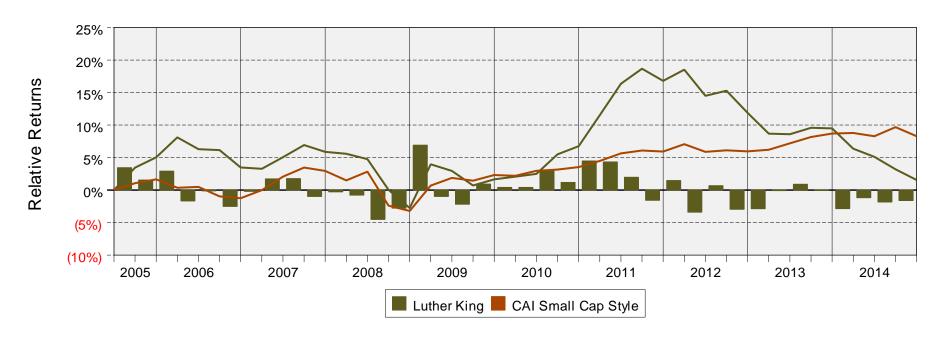


- Cumulative returns are above benchmark for 2-, 3- and 5-year periods.
- Quarterly returns have been above benchmark in six of the last eight quarters.
- Five-year cumulative return volatility is in line with the peer group of small cap managers.

Luther King: Small Cap Domestic Equity

As of 12/31/14

Cumulative and Quarterly Relative Return vs Russell 2000 Index

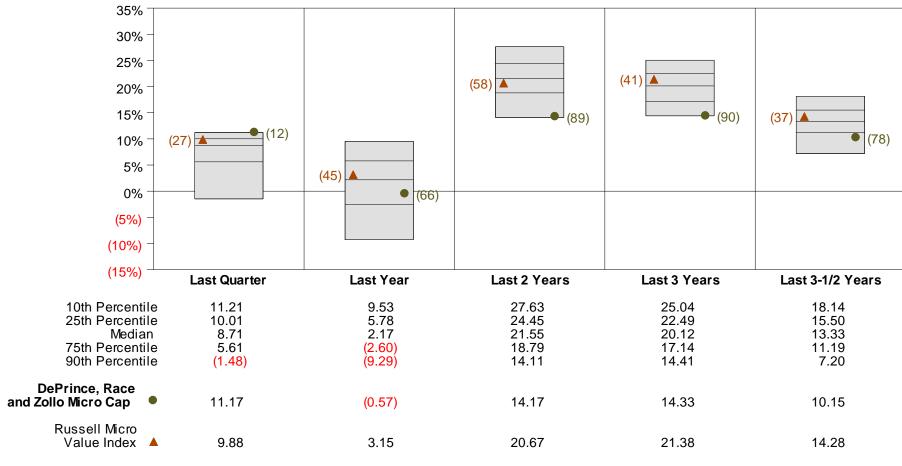


- Luther King is below median for the five-year cumulative period and in each of the last 3 years.
- While beating the Russell 2000 index in the 2009 2011 period, Luther King has trailed the index in each of the last three years. They are ahead of index for periods greater than five (5) years.
- To address performance challenges, Luther King changed some investment rules in mid-2014:
 - Purchases are made for stocks with market capitalization between \$600 million and \$4.5 billion.
 - Sales are now required for holdings that exceed \$6 billion in market cap.
 - Position sizes are trimmed for stock that are greater than 2.5% of the portfolio.

DePrince Race & Zollo: Microcap Domestic Equity

As of 12/31/14

Performance vs CAI Micro Cap Style (Gross)



- DePrince, Race & Zollo Inc. (DRZ) has recently delivered better results versus peers due in part to strong stock selection in the Materials and Industrials sectors.
- DRZ has delivered solid absolute returns with lower volatility than either its peers or its benchmark.



Lord, Abbett Micro Cap: Small Cap Domestic Equity

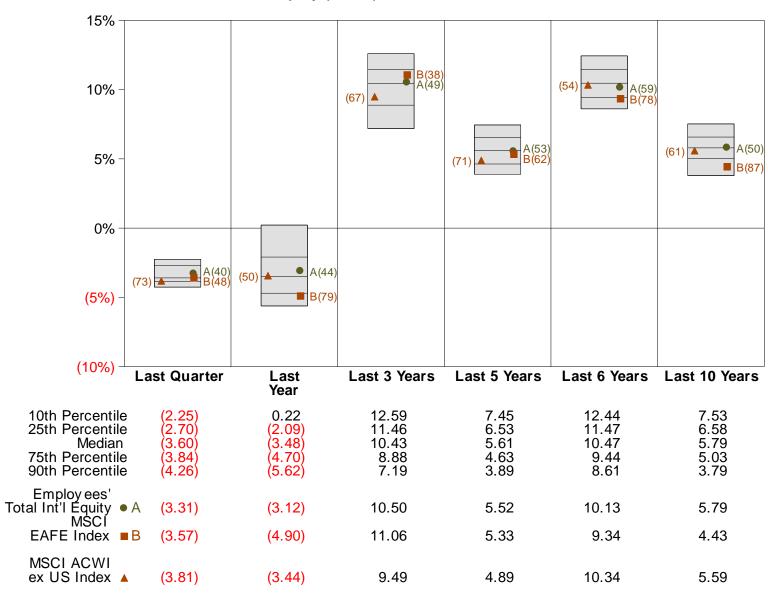
As of 12/31/14
Performance vs CAI Micro Cap Style (Gross)



- Investment returns have been stellar within a growth-oriented market environment.
 - They've produced returns better than benchmark is six of the last eight quarters.
 - Security selection, particularly in the Health Care sector, has been driving this manager's excess returns.
- Lord, Abbett's style is a great complement to DRZ's value-orientation.

International Equity through 12/31/14

Performance vs Pub Pln-International Equity (Gross)

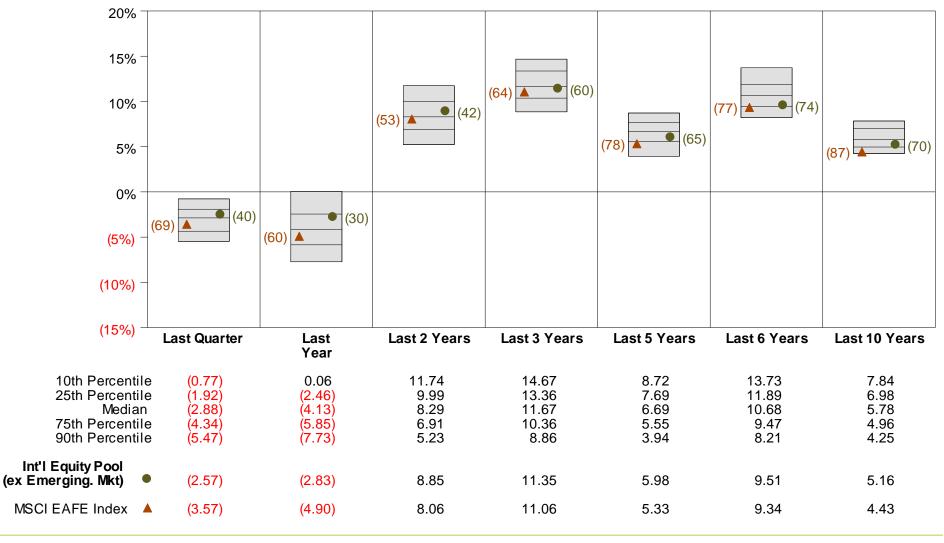


- Relative returns are improving.
- Risk-adjusted returns are in line with median.

International Equity ex Emerging Markets

As of 12/31/14

Performance vs CA Non-U.S. Equity Style (Gross)



International Equity ex Emerging Markets

As of 12/31/14

	_		Last	Last	Last
	Last Quarter	Last Year	3 Years	5 Years	10 Years
Int'l Equity Pool (ex Emerging Mkt)	(2.57%)	(2.83%)	11.35%	5.98%	5.16%
Allianz Global Investors	(4.29%)	-	-	-	-
Baillie Gifford ACWI ex US	(1.09%)	-	-	-	-
Blackrock ACWI ex US IMI	(3.85%)	(3.70%)	-	-	-
Brandes Investment	(3.83%)	(2.98%)	11.69%	5.86%	5.50%
Capital Guardian	(1.58%)	(4.78%)	12.46%	6.86%	5.62%
Lazard Asset Intl	(2.87%)	(2.71%)	12.15%	6.88%	6.11%
McKinley Capital	2.28%	4.30%	13.20%	7.04%	-
SSgA Int'l	(3.72%)	(3.45%)	9.60%	5.06%	-
Schroder Inv Mgmt	(2.93%)	(2.50%)	14.60%	-	-
Mondrian Intl Sm Cap	(0.58%)	(4.01%)	12.62%	-	-
MSCI EAFE Index	(3.57%)	(4.90%)	11.06%	5.33%	4.43%
MSCI ACWI ex-US IMI Index	(3.88%)	(3.89%)	9.22%	4.71%	5.37%

- The combination of managers within the international equity ex-emerging markets allocation has produced returns above benchmark the MSCI EAFE Index over all cumulative periods.
- After a period of difficulty, McKinley Capital has been a very strong element within the structure.
 - The manager lagged significantly in the 2008-09 period and came back strongly in 2013 and 2014.

Emerging Markets Pool through 12/31/14

Performance vs CAI Emerging Markets Equity DB (Gross)



• The Emerging Markets Pool struggled in the latest quarter, but are near benchmark longer term.

Emerging Markets Pool

As of 12/31/14

	Loot	Loot	Last	Last	Last
	Last Quarter	Last Year	3 Years	5 Years	10 Years
Emerging Markets Pool	(8.07%)	(4.19%)	4.25%	1.73%	8.86%
Lazard Emerging	(6.70%)	(4.16%)	5.17%	3.28%	-
Eaton Vance(net)	(8.29%)	(3.85%)	5.12%	2.78%	-
MSCI Emerging Mkts	(4.44%)	(1.82%)	4.41%	2.11%	8.78%
Everest Frontier Markets	(12.82%)	-	-	-	-



Notes on Everest and ARMB's Frontier Portfolio*

- Following the Swiss decision to de-link its currency from the Euro, the Swiss Franc rapidly
 increased in value creating difficulties in Everest's Global fund. Client redemptions have led the
 firm to a decision to wind-down all strategies except the Emerging Market Fund.
- The Frontier markets portfolio management team have agreed to move to another firm.
- Everest reports that approximately 77% of the Frontier Markets Equity fund will be liquidated by March 31, 2015 with proceeds expected to be distributed on April 15, 2015
- Any remaining assets in the Frontier Markets Equity fund will be sold in an orderly and opportunistic manner with sales proceeds distributed to clients.
- Everest has indicated that no management fees will be incurred following March 31, 2015
 - -The firm's role as the discretionary investment manager requires it to manage the fund's liquidation in an orderly manner; to obtain fair value for assets that are sold; and to manage the fund in the best interest of the investors
 - Less liquid investments owned in more than one portfolio will generally be sold across all portfolios on a pro rata basis. This avoids favoring investors in one strategy over another.

*Comments from Everest and Callan



Final Real Assets through 12/31/14

				Last	Last
	Last	Fiscal	Last	3	5
	Quarter	YTD	Year	Years	Years
Real Assets	1.11%	1.92%	10.39%	10.75%	10.80%
Real Assets Target (1)	3.54%	4.37%	10.97%	9.54%	10.29%
Real Estate Pool	4.76%	5.91%	13.81%	11.08%	12.09%
Real Estate Target (2)	4.03%	6.24%	13.42%	11.68%	12.71%
Private Real Estate	2.84%	4.92%	10.60%	10.16%	11.49%
NCREIF Total Index	3.04%	5.76%	11.82%	11.11%	12.13%
REIT Internal Portfolio	13.03%	10.40%	28.46%	16.13%	16.94%
NAREIT Equity Index	12.94%	10.13%	28.03%	16.38%	16.91%
Total Farmland	1.23%	2.77%	6.00%	13.44%	11.11%
UBS Agriv est	1.47%	3.33%	7.55%	15.35%	12.21%
Hancock Agricultural	0.70%	1.51%	2.85%	10.11%	9.25%
ARMB Farmland Target (3)	1.58%	2.96%	7.92%	13.61%	12.66%
Total Timber	1.23%	1.79%	9.65%	6.72%	4.74%
Timberland Investment Resources	1.85%	2.65%	6.58%	5.95%	3.23%
Hancock Timber	(0.48%)	(0.54%)	15.35%	8.09%	7.50%
NCREIF Timberland Index	6.02%	7.58%	10.48%	9.30%	5.78%
TIPS Internal Portfolio	(0.04%)	(2.04%)	3.47%	0.45%	4.32%
BC US TIPS Index	(0.03%)	(2.07%)	3.64%	0.44%	4.11%
Total Energy Funds *	(1.33%)	1.96%	(1.85%)	0.82%	4.53%
CPI + 5%	(0.52%)	0.48%	5.33%	6.15%	6.67%
MLP Composite	(8.28%)	(8.46%)	14.80%	-	-
Alerian MLP Index	(12.29%)	(9.90%)	4.80%	11.90%	16.74%
Infrastructure	(0.67%)	(4.02%)	-	-	-
Brookfield	(1.99%)	(2.92%)	-	-	-
Lazard	0.87%	(5.05%)	-	-	-
Global Infrastructure Idx	1.20%	(2.62%)	12.98%	13.28%	8.90%

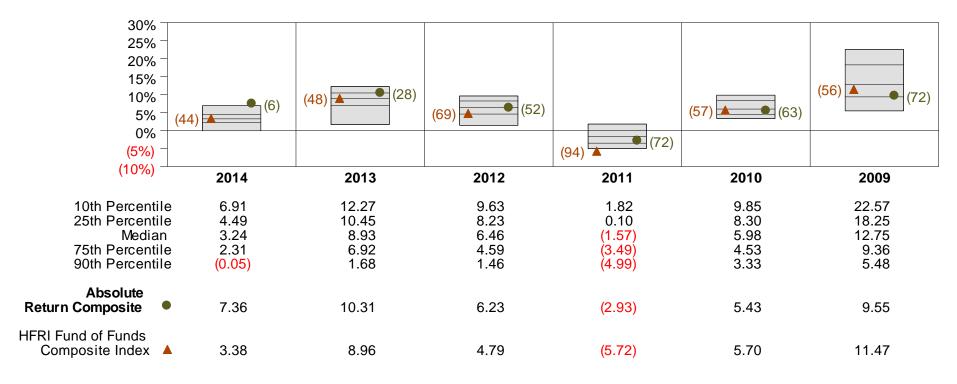
Real estate returns are provided to Callan by ARMB's real estate consultant.



Absolute Return Composite

As of 12/31/14

Performance vs Absolute Return Hedge FoFs Style (Net)



- Absolute return allocation has exceeded HFRI FoF Index over last four calendar years and above
- The absolute return allocation has trailed in prior calendar years

Absolute Return Composite

As of 12/31/14

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Absolute Ret Composite	0.86%	7.36%	7.95%	5.18%	3.98%
Crestline	2.33%	19.04%	10.57%	7.25%	5.00%
Glob Asset Mgt	0.19%	4.80%	7.47%	4.85%	-
Prisma Capital	0.70%	3.78%	8.18%	5.71%	-
HFRI Fund of Funds Compos	0.91%	3.33%	5.67%	3.29%	3.03%



Individual Account Option Performance: 12/31/14

Balanced & Target Date Funds





Other Options: 12/31/14

Active Equity, Stable Value, and Interest Income

Investment Manager	Market Value (\$mm)	Last Quarter 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
Active and Other Funds											
Brandes Int'l Equity	\$76	-4.5 75	-4.1 31	10.8 48	5.0 61		15.4 94		-0.1 62	2.8 75	0.3 46
CAI Mut Fd: Non-U.S. Equity Style MSCI EAFE Index		-3.6 56	-4.9 38	11.1 42	5.3 56	-0.5 64	16.9 80				0.3 48
Allianz/RCM Socially Responsible	\$42	4.2 50	11.7 40	17.1 85	12.5 81		16.2 27		-0.5 84	2.6 69	0.8 81
CAI Mut Fd: Core Equity Style KLD 400 Social Idx		4.9 35	12.7 28	20.2 29	14.6 35	7.8 12	14.2 83		,		1.0 27
T. Rowe Price Small Cap	\$131	9.4 23	7.3 15	21.1 17	18.7 6	11.9 5	19.1 53		2.1 ₁	1.2 99	1.0 9
CAI Mut Fd: Sm Cap Broad Style Russell 2000 Index		9.7 16	4.9 36	19.2 40	15.5 39	8.2 46	19.0 55				0.8 39
T. Rowe Price Stable Value	\$345	0.6 9	2.6 1	2.7 1	3.1 2	3.4 14	0.3 58		6.0 7	0.1 68	10.8 23
CAI Stable Value Database 5 Yr U.S. Treas Rolling		0.3 63	1.4 60	1.7 52	2.3 44	2.7 47	0.4 36				5.7 64
Def Comp Interest Income Fund	\$183	0.7 1	2.9 1	3.1 ₁	3.5 1	3.8 1	0.3 64		9.3 2	0.1 91	12.9 15
CAI Stable Value Database 5 Yr U.S. Treas Rolling		0.3 63	1.4 60	1.7 52	2.3 44	2.7 47	0.4 36				5.7 64
Retums: Risk: above median below m third quartile second fourth quartile first qua	quartile	Risk	Quadrant:		Excess Re above r third qu fourth q	nedian artile		racking Error: below mediar second quarti first quartile		Sharpe R above third c	median Juartile



Passive Options: 12/31/14

	Market Value	Last Quarter	Last Year	3 Year	5 Year	7 Year	5 Year	5 Year Risk	5 Year Excess	3 Year Tracking	5 Year Sharpe
Investment Manager	(\$mm)	Return	Return	Return	Return	Return	Risk	Quadrant	Rtn Ratio	Error	Ratio
Index Funds											
SSgA S&P 500 Index Fund (i) CAI Large Cap Core Style	\$348	4.9 58	13.7 50	20.4 65	15.5 47	7.3 72	14.4 84		0.3 36	0.0 100	1.1 41
S&P 500 Index		4.9 58	13.7 50	20.4 65	15.5 47	7.3 75	14.4 84				1.1 41
BlackRock S&P 500 Index Fund (i) CAI Mut Fd: Core Equity Style (Gross) S&P 500 Index	\$182	4.9 42	13.7 ₂₅	20.4 51 20.4 54	15.5 39 15.5 40	7.4 42 7.3 43	14.4 81 14.4 81		1.0 1	0.0 98	1.1 29
	ФC4					1.5 43			0.4	0.4	
SSgA Russell 3000 Index Fund (i) CAI Mut Fd: Large Cap Broad Style (Net) Russell 3000 Index	\$61	5.2 27 5.2 27	12.6 28 12.6 28	20.5 32 20.5 32	15.6 23	7.5 26	15.0 68 15.1 67		0.1 ₁₅	0.1 100	1.0 ₁₁
	- d (:)\$*0.4		-4.4 35			7.5 26	17.0 77		-0.1 82	0.9 100	0.2 72
SSgA World Equity ex-US Index Fun CAI MF: Non-U.S. Equity Style (Net) MSCI ACWI x U.S. Index (Net)	ia (i)524	-4.4 75 -3.9 64	- 4.4 35	8.9 78 9.0 77	4.3 77 4.4 71	-0.6 65	16.8 82		-0. 1 82	0.9 100	0.2 72
SSgA Global Balanced (i)	\$57	0.4 53	4.1 52	9.0 77	7.4 47	0.0 05	9.1 49		0.6 13	0.3 100	0.8 63
CAI Int'l/Global Balanced Database	φυι	0.4 53	4.1 52	9.3 42	7.4 4/		3. 1 49		0.0 13	0.3 100	0.0 63
Global Balanced Custom Benchmark		0.5 50	4.0 53	9.1 44	7.2 53		9.1 50				0.8 67
SSgA Long US Treasury Bond (i) CAI Mut Fd: Extended Mat Fixed Income	\$16	8.6 10	25.1 ₁₃	4.1 36	9.9 26		15.1 ₁₆		-0.5 43	0.1 99	0.7 41
Barclays Long Treasury Index		8.6 9	25.1 13	4.2 33	10.0 24	8.2 38	15.1 16				0.7 40
SSgAUS TIPS (i) Lipper: TIPS Funds	\$16	-0.1 10	3.5 10	0.3 31	4.0 13		5.4 63		-3.9 94	0.0 100	0.7 9
Barclays U.S. TIPS Index		-0.0 8	3.6 7	0.4 24	4.1 6	4.2 11	5.4 63				0.7 3
SSgA World Gov't Bond ex-US (i) CAI Mut Fd: Global Fixed Income Style	\$10	-3.0 83	-2.8 88	-2.0 98	0.8 90		7.3 14		-0.4 96	0.1 99	0.1 90
Citi WGBI Non-U.S. Index		-2.9 83	-2.7 88	-1.9 98	0.9 90	2.6 86	7.3 15				0.1 90
SSgAUS REIT Index Fund (i) CAI Mut Fd: Real Estate Database	\$36	15.0 19	31.6 12	15.8 30	16.7 28		15.0 53		-2.0 98	0.1 99	1.1 29
DJ US Select REIT Index		15.1 14	32.0 6	16.1 18	17.0 14	8.0 41	15.1 40				1.1 24
Returns: Risk: above median below med third quartile second qu fouth quartile first quarti	uartile	Risk	Quadrant:		Excess Re above n third qu fourth q	nedian artile		racking Error: below median second quarti first quartile		Sharpe Rabove third q	median uartile
·	Market	Last	Last	3	5	7	5	5 Year	5 Year	3 Year	5 Year
Investment Manager	Value (\$mm)	Quarter Return	Year Return	Year Return	Year Return	Year Return	Year Risk	Risk Quadrant	Excess Rtn Ratio	Tracking Error	Sharpe Ratio
BlackRock Govt/Credit (i)	\$48	1.8 9	6.0 29	2.7 80	4.6 70	4.6 66	3.6 7		-2.8 97	0.0 99	1.2 88
CAI Mut Fd: Core Bond Style Barclay's Gov't/Credit Bd	Ψτυ	1.8 8	6.0 28	2.8 77	4.7 67	4.8 61	3.6 7		2.0 37	0.0 55	1.3 87
BlackRock Intermediate Gov't Bond	(i) \$14	0.9 22	2.4 44	0.8 75	2.6 60	3.3 74	2.6 29		-4.9 100	0.0 97	1.0 82
CAI MF: Intermediate Fixed Income Style Barclay's Gov Inter	(1) VIT	0.9 21	2.5 39	1.0 65	2.8 57	3.4 65	2.6 29		100	0.0 9/	1.1 80
• • • • • • • • • • • • • • • • • • • •						30					
		D: I	Quadrant:		Excess Re	turn Datio:	т.	racking Error:		Sharpe R	atio:
Retums: Risk:		KISH	Quadiani.				_				
Retums: Risk: above median below median third quartile second qu		KISI	Quadrani.		above n	nedian	_	below median			median

(i) – Indexed scoring method used. Green: manager & index differ by less than +/- 10 percentiles; Yellow: manager and index differ by +/- 20 percentiles; Red: manager & index differ by more than 20 percentiles.



Alaska Retirement Management Board

Cash Equitization

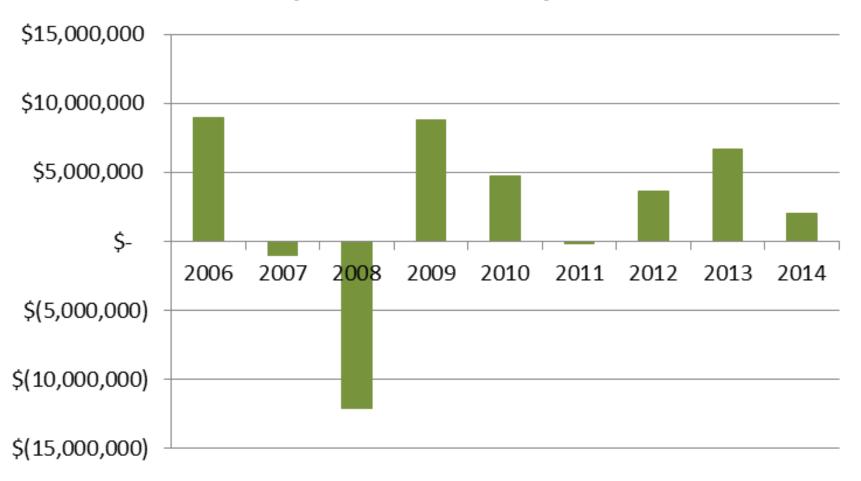
April 2015

- Large cap managers can hold up to 3% in cash; small cap and international managers up to 5%. This provides managers with some flexibility when buying and selling securities.
- However, we anticipate a return drag at the portfolio level over the long term as cash should have a lower return than equities.
- The cash equitization program increases exposure to the equity market to reduce this cash drag.

- The ARMB program began in July of 2006 (Resolution 2006-06 was signed in February).
- SSgA is the investment manager. This program originally involved domestic large cap, domestic small cap and international equity managers. International cash equitization activity stopped in early 2007.
- SSgA transacts in futures contracts on margin utilizing an account at JP Morgan.

Department of Revenue

ARMB Cash Equitization - Return by Calandar Year



Department of Revenue

ARMB Cash Equitization - Cumulative Return



Department of Revenue

Alaska Retirement Management Board

Cash Equitization

April 2015

ALASKA RETIREMENT MANAGEMENT BOARD

SUBJECT:	Asset Allocations –	ACTION:	X
	Resolutions 2015-03 and 2015-04	_	
DATE:	April 24, 2015	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 ten-year capital market assumptions, board goals, actuarial assumptions, and other factors.

STATUS:

At the February 2015 meeting of the Board, Callan Associates, Inc. (Callan) presented the 2015 capital market projections that are the basis for the asset allocation and optimization process. On March 19, 2015, Chief Investment Officer Gary Bader and Manager of Fixed Income Bob Mitchell conferred by phone with Paul Erlendson and Dana Brown of Callan and Investment Advisory Council (IAC) members Dr. William Jennings and Dr. Jerrold Mitchell regarding asset allocation for the next fiscal year.

As a result of that phone meeting, 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 2015-03 – 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

PERS, TRS, All Other Death & Disability Fund

Resolution 2015-04 – Alaska National Guard and Naval Militia Retirement Systems

RECOMMENDATION:

The Alaska Retirement Management Board adopt Resolutions 2015-03 and 2015-04 approving the asset allocations for fiscal year 2016.

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/Firefighters Occupational Death & Disability Fund
PERS, TRS, All Other Death & Disability Fund

Resolution 2015-03

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, 2015:

Target Asset Allocation

Asset class	Allocation	Range
Broad Domestic Equity	26%	± 6%
Global Equity Ex-US	25%	± 4%
Private Equity	9%	± 5%
Real Assets	17%	± 8%
Absolute Return	5%	± 4%
Fixed Composite	12%	± 5%
Alternative Equity Strategies	3%	± 2%
Cash Equivalents	3%	± 3%
Total	100%	
Projected Arithmetic Return		3.1% 7.2%
Expected Return – 10-Year Geo Projected Standard Deviation		5.3%
Projected Standard Deviation	13	.370
This resolution repeals and replaces ReDATED at Anchorage, Alaska this		5.
_	(Chair
ST:		

ATTEST:

Secretary

State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD Relating to Asset Allocation

For the Alaska National Guard and Naval Militia Retirement Systems

Resolution 2015-04

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, 2015:

Target Asset Allocation

Asset class Broad Domestic Equity Global Equity Ex-US Fixed Composite Cash Equivalents Total	Allocation 29% 20% 48% 3% 100%	± ± ±	
Projected Arithmetic Return Expected Return – 10-Year Ge Projected Standard Deviation This resolution repeals and replaces R	9.6% Resolution 2014-08.		
DATED at Anchorage, Alaska this EST:	day of April, 2013. Chair		
A) I .			

ATTEST:

Secretary

Callan

March 19, 2015

ARMB Asset Allocation Teleconference

ARMB Staff and IAC

2015 – 2024 Assumptions Broadly Unchanged From 2014

Broad market bond returns held at 3.0%.

- We expect interest rates to rise, especially if the economy continues to expand and the Fed executes on its stated unemployment-rate-linked monetary policy. Bonds will suffer capital loss before higher yields kick in. We expect cash yields to move toward 3.0% and 10-year Treasury yields to reach 5% over the ten-year projection

 a reversion to mean.
- Project an upward sloping yield curve, but a very slim risk premium for bonds over cash (0.75%).
- Cash returns nudged upward to 2.25% to reflect expected rise in Fed Funds rate.
- Longer duration returns lowered, reflecting sharp reduction in yields in 2014.

Domestic Equity held at 7.60%, Non-U.S. Equity at 7.80%.

- US markets enjoyed robust returns, but the US economic outlook is now stronger and fundamentals remain reasonable.
- Building equity returns from long-term fundamentals, we can build an expectation to just shy of 8%:
 - -2.5-3.5% real GDP growth, which means roughly 5-6% nominal earnings growth,
 - -2.5 % dividend yield,
 - Expect something more from return on free cash flow, besides dividends (The "buyback yield" has been exceptional, one good use of all that cash), perhaps 50-100 bps,
 - Small premium for Non-US over Domestic, largely due to Emerging Markets.

Real Estate return held at 6.15%.

- Reflects downward pressure on income returns at 4-5% with increased competition for investment.
- Asset class eyed by those hungering for yield.

Hedge Fund return raised to 5.25%

Expectations of T-bill plus 3%; reflects increase in cash.



Capital Market Assumptions: 2015 - 2024

Risk and return projections

	Projected Arithmetic	10 Yr. Geometric	Projected Standard
AssetClass	Return	Mean Return	Deviation
Broad Domestic Equity	9.15%	7.61%	19.02%
Large Cap	8.90%	7.49%	18.30%
Buy Write	7.00%	6.26%	13.50%
Yield Alternatives	6.25%	5.70%	11.75%
Small/Mid Cap	10.15%	7.82%	22.95%
Alternative Equities	7.80%	6.94%	14.65%
International Equity	9.25%	7.48%	20.20%
Emerging Markets Equity	11.45%	7.88%	27.95%
Global ex US Equity	9.80%	7.80%	21.46%
Intermediate Treasurys	2.85%	2.82%	3.60%
Domestic Fixed	3.05%	3.02%	3.75%
Non US Fixed	2.70%	2.29%	9.40%
TIPS	3.10%	3.00%	5.30%
High Yield	5.50%	5.00%	11.10%
Fixed Income Composite	3.10%	3.07%	3.63%
Real Estate	7.35%	6.17%	16.50%
Timberland	7.65%	6.32%	17.50%
Farmland	7.65%	6.32%	17.50%
Real Assets	6.56%	5.90%	12.76%
Hedge Funds	5.55%	5.23%	9.30%
Private Equity	13.55%	8.48%	33.05%
Cash Equivalents	2.25%	2.27%	0.90%
Inflation	2.25%	2.26%	1.50%



Capital Market Projections, 2015-2024

Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Broad Domestic Equity	1.000																						
2 Large Cap	0.997	1.000																					
3 Buy Write	0.804	0.800	1.000																				
4 Yield Alternatives	0.812	0.820	0.760	1.000																			
5 Small/Mid Cap	0.965	0.940	0.780	0.750	1.000																		
6 Alternative Equities	0.975	0.977	0.898	0.883	0.923	1.000																	
7 International Equity	0.852	0.850	0.740	0.800	0.820	0.864	1.000																
8 Emerging Markets Equity	0.861	0.855	0.730	0.780	0.840	0.861	0.860	1.000															
9 Global ex US Equity	0.882	0.879	0.760	0.819	0.853	0.890	0.986	0.933	1.000														
10 Intermediate Treasurys	-0.164	-0.150	-0.200	-0.140	-0.200	-0.171	-0.170	-0.210	-0.188	1.000													
11 Domestic Fixed	-0.107	-0.100	-0.150	-0.030	-0.125	-0.109	-0.100	-0.145	-0.118	0.880	1.000												
12 Non US Fixed	0.014	0.050	0.000	0.210	-0.100	0.065	0.060	-0.090	0.013	0.480	0.510	1.000											
13 TIPS	-0.050	-0.045	-0.050	0.140	-0.065	-0.020	-0.045	-0.060	-0.051	0.560	0.580	0.340	1.000										
14 High Yield	0.605	0.605	0.670	0.840	0.575	0.698	0.570	0.565	0.586	-0.010	0.040	0.120	0.030	1.000									
15 Fixed Income Composite	0.059	0.079	0.046	0.200	-0.009	0.094	0.055	-0.017	0.033	0.914	0.842	0.676	0.541	0.329	1.000								
16 Real Estate	0.735	0.730	0.440	0.640	0.715	0.680	0.650	0.645	0.669	-0.040	-0.020	-0.050	0.005	0.540	0.120	1.000							
17 Timberland	0.584	0.580	0.350	0.500	0.570	0.539	0.520	0.510	0.533	-0.030	-0.020	-0.040	0.000	0.430	0.097	0.800	1.000						
18 Farmland	0.554	0.550	0.330	0.480	0.540	0.512	0.490	0.480	0.502	-0.050	-0.050	-0.050	0.000	0.400	0.070	0.750	0.600	1.000					
19 Real Assets	0.722	0.718	0.431	0.643	0.702	0.670	0.639	0.631	0.657	0.005	0.023	-0.023	0.087	0.535	0.161	0.989	0.840	0.802	1.000				
20 Hedge Funds	0.764	0.760	0.630	0.610	0.740	0.747	0.700	0.725	0.730	0.060	0.095	-0.180	0.070	0.540	0.166	0.585	0.460	0.450	0.585	1.000			
21 Private Equity	0.943	0.940	0.760	0.820	0.910	0.929	0.900	0.895	0.927	-0.220	-0.180	-0.060	-0.090	0.610	-0.004	0.715	0.570	0.550	0.701	0.735	1.000		
22 Cash Equivalents	-0.042	-0.030	0.000	-0.100	-0.080	-0.035	-0.010	-0.100	-0.040	0.200	0.100	-0.090	0.070	-0.110	0.102	-0.060	-0.050	-0.050	-0.055	-0.070	0.000	1.000	
23 Inflation	0.161	0.150	0.200	0.200	0.190	0.181	0.190	0.170	0.190	-0.250	-0.280	-0.150	0.160	0.180	-0.182	0.180	0.174	0.150	0.197	0.310	0.180	0.050	1.000



PERS Asset Mix Alternatives

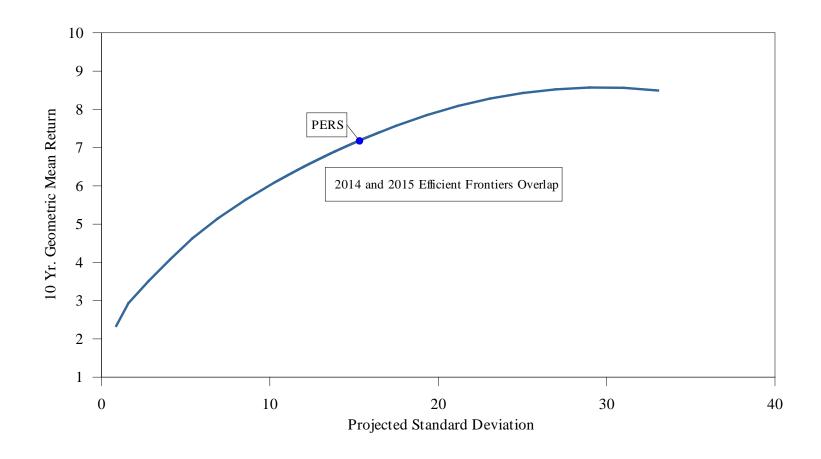
Asset Classes	PERS	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad Domestic Equity	26%	23%	25%	27%	29%	31%
Alternative Equities	3%	3%	4%	4%	5%	5%
Global ex US Equity	25%	19%	21%	23%	25%	28%
Fixed Income Composite	12%	27%	21%	16%	10%	3%
Real Assets	17%	12%	12%	12%	12%	12%
Hedge Funds	5%	8%	8%	8%	8%	9%
Private Equity	9%	5%	6%	7%	8%	9%
Cash Equivalents	3%	3%	3%	3%	3%	3%
Totals	100%	100%	100%	100%	100%	100%
Uncompounded Return	8.1%	7.0%	7.4%	7.8%	8.2%	8.6%
10-Year Compounded Return	7.2%	6.5%	6.7%	7.0%	7.2%	7.5%
Risk (Standard Deviation)	15.3%	12.1%	13.3%	14.3%	15.6%	16.9%
Simulated Sharpe Ratio	0.313	0.341	0.330	0.321	0.311	0.301
Public Equity	54%	45%	50%	54%	59%	64%
Public Fixed	15%	30%	24%	19%	13%	6%
Alternatives	31%	25%	26%	27%	28%	30%

[&]quot;Alternatives" in the bottom box includes illiquid assets: Real Assets, Hedge Funds, and Pvt Equity.



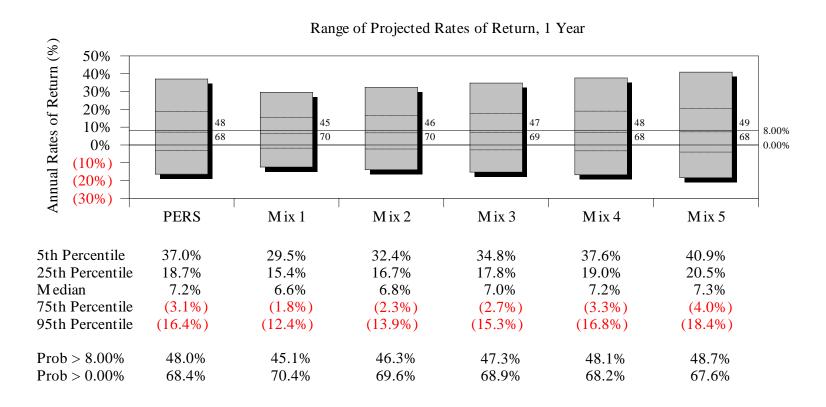
PERS Efficient Frontier

10-Year Geometric Return and Risk



PERS Range of Projected Returns

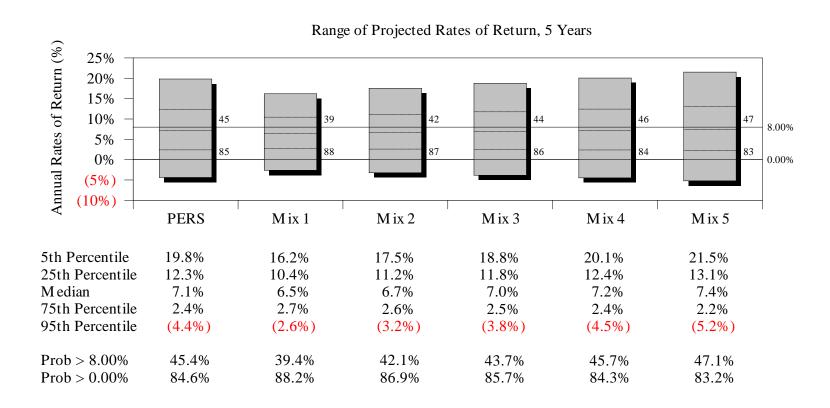
One-Year Projection Period



Alternative Mixes 1-5 reflect the composition of mixes shown on slide 4.

PERS Range of Projected Returns

Five-Year Projection Period

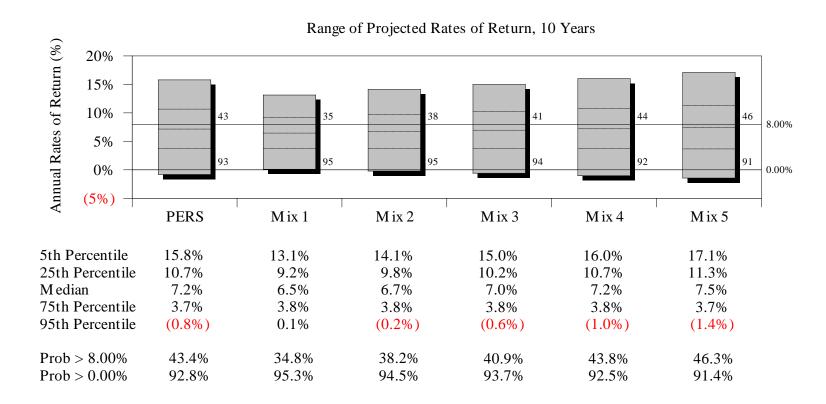


Alternative Mixes 1-5 reflect the composition of mixes shown on slide 4.

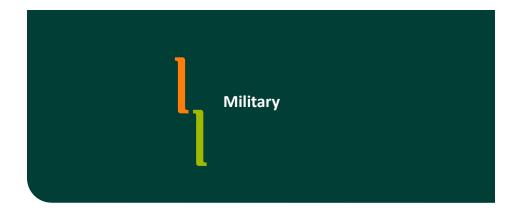


PERS Range of Projected Returns

10-Year Projection Period



Alternative Mixes 1-5 reflect the composition of mixes shown on slide 4.



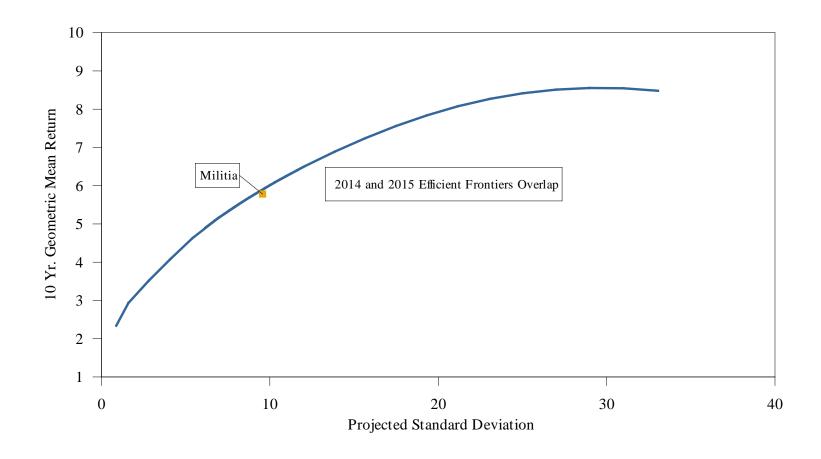
Military Asset Mix Alternatives

Asset Classes	Militia	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Broad Domestic Equity	29%	22%	25%	28%	32%	35%
Global ex US Equity	19%	15%	17%	19%	21%	23%
Fixed Income Composite	49%	60%	55%	50%	44%	39%
Cash Equivalents	3%	3%	3%	3%	3%	3%
Totals	100%	100%	100%	100%	100%	100%
Uncompounded Return	6.1%	5.4%	5.7%	6.1%	6.4%	6.7%
10-Year Compounded Return	5.8%	5.3%	5.5%	5.8%	6.0%	6.3%
Risk (Standard Deviation)	9.6%	7.7%	8.5%	9.4%	10.4%	11.4%
Simulated Sharpe Ratio	0.360	0.381	0.372	0.362	0.352	0.342
Public Equity	48%	37%	42%	47%	53%	58%
Public Fixed	52%	63%	58%	53%	47%	42%



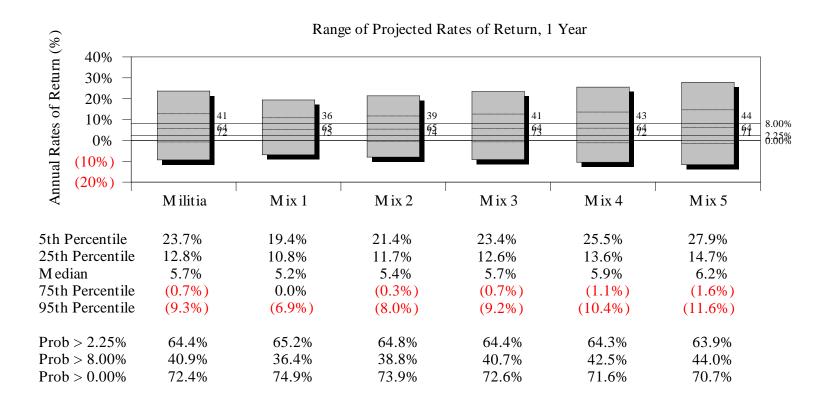
Military Efficient Frontier

10-Year Geometric Return and Risk



Military Range of Projected Returns

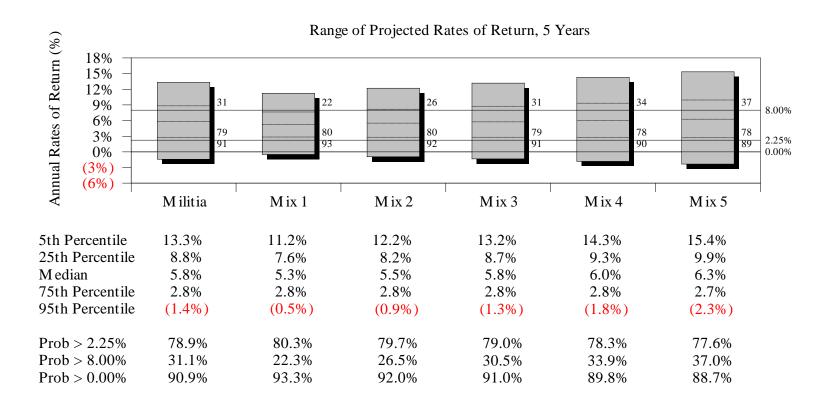
One-Year Projection Period



Mixes shown above reflect the composition of mixes shown on slide 11.

Military Range of Projected Returns

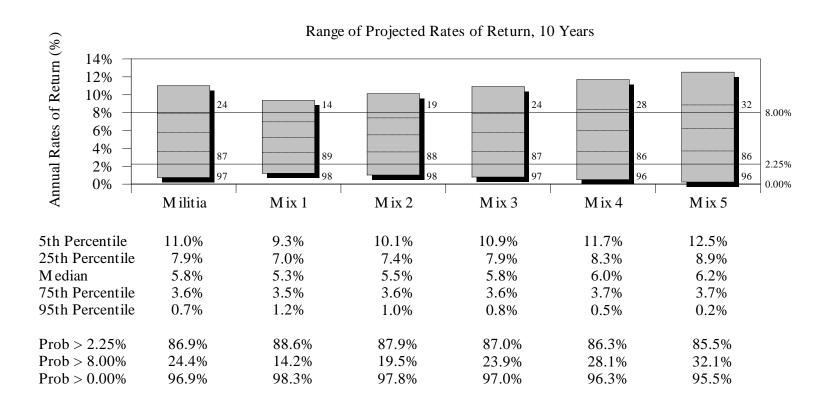
Five-Year Projection Period



Mixes shown above reflect the composition of mixes shown on slide 11.

Military Range of Projected Returns

10-Year Projection Period



Mixes shown above reflect the composition of mixes shown on slide 11.

SUBJECT:	Accounting change to Holding Accounts	ACTION:	<u>X</u>
DATE:	April 24, 2015	INFORMATION:	
D V CK CD U	I IND:		

BACKGROUND:

There are four holding accounts related to the retirement systems which facilitate the transition of cash from employers to the third party administrator for participant directed funds. Three of these accounts (DCR-PRS and DCR-TRS Holding and SBS Cash Transition accounts) have separate asset allocations which the ARMB has set through resolutions. These three accounts have had a 100% cash allocation since they have been created. The fourth account (Deferred Compensation fund) does not have a separate asset allocation. Instead, it is invested alongside other state accounts through the current state accounting system.

Staff, while working towards implementation of the new state accounting system (known as IRIS), discovered the differences in how the holding accounts were being accounted for and invested and after researching, could find no reason why the three accounts were set up the way they had been. Staff believe that the accounting for the Deferred Compensation fund is the better method to account for all four accounts in IRIS.

STATUS:

Staff discussed the potential change with the Division of Retirement and Benefits and the Finance Division as well as consulted historical records of ARMB/ASPIB and counsel. In doing so, staff determined that the Department of Administration is responsible for the cash that the four accounts contain until the funds are released to the third party administrator.

RECOMMENDATION:

The Alaska Retirement Management Board revoke Resolutions 2006-21 and 2014-09 which set the asset allocation for the SBS Cash Transition Fund and the DCR-PRS and DCR-TRS Holding accounts, respectively.

SUBJECT:	Alaska Target Retirement 2060 Trust	ACTION:	<u>X</u>
DATE:	April 24, 2015	INFORMATION:	

BACKGROUND

The participant directed plans under the fiduciary responsibility of Alaska Retirement Management Board (ARMB)—Deferred Compensation Plan, Supplemental Annuity Plan and PERS/TRS Defined Contribution Retirement Plans—offer target date investment options that are intended to be "one decision" funds for the plan participants. Target date funds gradually become more conservative as the target date approaches. Through Resolution 2008-02, ARMB established age-based target date funds as the default option for the Defined Contribution Retirement accounts and the Supplemental Benefits System accounts effective July 1, 2009. Subsequently, through Resolution 2008-26, ARMB permitted all participant directed plans to invest in the funds.

STATUS

ARMB has been adding target date funds in five year increments with the last addition being the Alaska Target Retirement 2045, 2050 and 2055 Trusts in 2009.

Staff recommends the following addition be made to the current suite of options in order to offer a full menu of target date options as more participants born in 1993 or after enter into the system.

Year of Birth	<u>Default Option</u>
1993 or after	Alaska Target Retirement 2060 Trust (proposed)
1988 - 1992	Alaska Target Retirement 2055 Trust
1983 - 1987	Alaska Target Retirement 2050 Trust
1978 - 1982	Alaska Target Retirement 2045 Trust
1973 - 1977	Alaska Target Retirement 2040 Trust
1968 - 1972	Alaska Target Retirement 2035 Trust
1963 – 1967	Alaska Target Retirement 2030 Trust
1958 - 1962	Alaska Target Retirement 2025 Trust
1953 - 1957	Alaska Target Retirement 2020 Trust
1948 - 1952	Alaska Target Retirement 2015 Trust
1943 - 1947	Alaska Target Retirement 2010 Trust

As required by Alaska Statute, staff has consulted with the Commissioner of Administration.

RECOMMENDATION

The Alaska Retirement Management Board direct staff to add Alaska Target Retirement 2060 Trust to the current target date options.

SUBJECT:	KKR Prisma Apex Equities Strategy	ACTION:	X
DATE:	April 24, 2015	INFORMATION:	

BACKGROUND:

The Alaska Retirement Management Board has been an investor in Absolute Return and hedge fund investment strategies since November of 2004. In 2013, the ARMB adopted a more opportunistic and less constrained approach to absolute return. The revised program focuses on producing higher returns, with the ability to take on additional risk and market correlation. Since 2013, KKR Prisma has managed a concentrated absolute return strategy and made selective opportunistic co-investments for the ARMB.

STATUS:

KKR Prisma recently launched an investment initiative based on investing in a diversified portfolio of their equity managers best ideas. Academic research suggests that the high conviction positions of equity hedge fund managers have significant outperformance. KKR Prisma analyzed 10 years of data from their hedge fund platform and reached the same conclusion.

KKR Prisma has structured their Apex Equities Strategy to seek to capture the excess returns of their manager's highest conviction ideas. KKR Prisma will provide centralizing portfolio and risk management to help drive risk adjusted performance. The Apex Equities Strategy targets a net return of 9-11% with 8-12% volatility and will have an expected equity beta of 0.40. Sector, currency, leverage, liquidity, size, and volatility are the other core risk sensitivities that will managed by KKR Prisma. The strategy will offer monthly liquidity and lower fees than those typically charged by the underlying hedge funds. Staff recommends expanding the KKR Prisma investment mandate to incorporate an allocation to the Apex Equities strategy.

RECOMMENDATION:

That the Alaska Retirement Management Board direct staff to negotiate an amendment to KKR Prisma's contract to allow for investing up to \$100 million in the Apex Equities Strategy.

SUBJECT:	Zebra Capital Management – Micro Cap	ACTION:	X
DATE:	April 24, 2015	INFORMATION:	

BACKGROUND:

Zebra Capital Management (Zebra) was founded in 2001 by Roger Ibbotson. Zebra Investment and Research teams focus on capturing the popularity premium in global equity markets. Zebra strategies seek to systematically invest in stocks that are less popular but nonetheless have strong fundamental characteristics.

At the October 2014 ARMB Education Conference, Roger Ibbotson discussed the topics of asset allocation and risk premia. Mr. Ibbotson also introduced the concept of the popularity premia. Popularity is how much a stock is liked and is measured by the level of interest in the marketplace.

STATUS:

In December 2014 and January 2015, staff participated in several conference calls with Zebra to discuss their investment research and strategy. Zebra's research indicates that the popularity premia is a powerful predictor of performance in the micro cap space. In January 2015, staff requested that Zebra analyze the prospects of implementing their investment research and strategy in a U.S. micro cap universe. Zebra responded with a micro cap strategy based on back testing that showed positive relative performance compared to the Russell Micro Cap Index.

Subsequent to staff reviewing Zebra's micro cap results, staff directed Callan to conduct a review of the strategy. In March 2015, Callan completed their analysis and concluded that although there is no live performance, the back testing approach and methodology seemed reasonable. Callan further concluded that Zebra implements a unique investment process that should complement the investment approach of ARMB's existing micro cap managers.

On April 1, 2015, ARMB staff visited the offices of Zebra Capital Management.

RECOMMENDATION:

The Alaska Retirement Management Board hire Zebra Capital Management to manage a \$75 million micro cap strategy, subject to successful contract and fee negotiations. The Zebra Capital Management micro cap strategy would be managed within the Domestic Equity asset class.



Manager: Zebra Capital Management, LLC

Product: Zebra US Micro Cap Liquidity

Introduction

ARMB's Chief Investment Officer, Gary Bader, requested Callan Associates conduct a review of Zebra Capital's US Micro Cap Liquidity portfolio. Zebra Capital Management, LLC (ZCM) seeks to outperform the Russell Micro Cap Index by 2% per annum over a market cycle with risk, being defined as the standard deviation of the portfolio's returns, similar to that of the benchmark. Of note, ZCM does not currently manage a live US Micro Cap Liquidity portfolio. This report presents our observations of the organization, investment team, and strategy.

Organization

Zebra Capital Management, LLC is an independent investment management firm registered with the U.S. Securities and Exchange Commission and located in Milford, CT. Established in 2001 by Roger G. Ibbotson, the firm's initial strategy was a market neutral portfolio; this traditional quantitative multi-factor portfolio was called EVT Equity Market Neutral. Founding partner Zhiwu Chen was the key investment professional and responsible for the day-to-day management of the EVT Market Neutral strategy. Although Ibbotson held a 33% equity stake in ZCM, he spent more of his time managing "Ibbotson & Associates" than directly impacting the Zebra EVT Market Neutral portfolio. Ibbotson sold "Ibbotson & Associates" to Morningstar in 2006 which allowed him to focus his research effort on the behavioral finance anomaly called "popularity."

The EVT Market Neutral portfolio performed well from 2001 through 2008; assets under management peaked at \$315 million. The 2008 Global Financial Crisis caused the largest investor, a US Fund of Hedge Funds, to redeem approximately \$200 million to satisfy the liquidity needs of its investor base. In addition, the Zebra EVT portfolio underperformed during the 2009 market recovery further limiting the prospect for new business.

In 2010, the same US Fund of Hedge Fund client that redeemed a significant amount of capital in 2008 offered ZCM a new mandate. However, after discussions with Ibbotson, the investor requested a portfolio based on Ibbotson's "popular" liquidity factor research. ZCM launched the new Global Equity Beta Neutral portfolio in June 2010; the US Fund of Hedge Funds client, a family office, and Ibbotson's personal capital funded the new strategy. With ZCM now focused on Ibbotson's popularity and liquidity investment process, Chen left the firm in 2010 and sold his equity stake back to the organization.

Manager: Zebra Capital Management, LLC **Product:** Zebra US Micro Cap Liquidity

> As of year-end 2014, Ibbotson owned 70% of the firm's overall shares (100% of Class A). John Holmgren, President, held 20% (66.67% of Class B), and Peter Schaffer, Chief Operations Officer, owned 10% (33.33% of Class B). All shares retain voting rights and participate in profit sharing. Class B shares partake in the future profitability of ZCM beyond a pre-determined fair market value. The organization is debt free and future equity distributions are currently in progress to broaden ownership.

> At year-end 2014, ZCM managed \$574 million across six strategies. In June 2014, the firm hired Mike Reed to manage a statistical arbitrage strategy in order to diversify ZCM's revenue stream. Tables 1 and 2 below list current strategies, largest clients and assets under management:

Table 1

Strategy	Inception	AUM (\$mm)
Global Equity Beta Neutral	June 2010	\$240.0
U.S. Liquidity Large Cap	June 2010	\$2.3
U.S. Liquidity Small Cap	June 2010	\$24.5
Japan Liquidity Return	January 2010	\$273.6
Global Liquidity Return	June 2010	\$6.5
Australian Liquidity	June 2012	\$26.0
Total		\$573.0

Table 2 below discloses ZCM's four largest clients across the organization:

Table 2

Account	Strategy	AUM (\$mm)
Hewlett Packard	Global Equity Beta Neutral	\$143
UK Corporate Pension	Japan Liquidity Return	\$137
Russell Investments*	Japan Liquidity Return	\$136
US Fund of Hedge Funds	Global Equity Beta Neutral	\$46
Total		\$462

^{*} ZCM manages three accounts/funds at \$137 million for Russell Investments. Russell also advises the \$137 million UK Corporate Pension client listed above.

ZCM appointed an Academic Advisory Board consisting of Nicholas Barberis, William Goetzmann, and X. Frank Zhang. ZCM is unaware of any pending litigation or legal proceedings and has no history of business litigation, legal proceedings, or regulatory action. The SEC examined ZCM the week of December 8, 2014; the firm has yet to receive any feedback from the SEC but to the best of ZCM's knowledge, there were no deficiencies.

Team/Investment **Professionals**

Roger Ibbotson founded ZCM in 2001 and currently serves as Chairman and Chief Investment Officer; he also works as a Professor in the Practice Emeritus of Finance at Yale School of Management and serves on the Board of Directors at Dimensional Fund Advisors. Ibbotson was the former Chairman of "Ibbotson & Associates"; he currently serves as an external advisor to Morningstar, speaking at a few conferences per year. Ibbotson is 70 years old, remains active with the day-to-day management of ZCM, and comes into the office four out of five days during a typical week.

ZCM had a total of 14 professionals as of year-end 2014. Key members of the investment team are listed in Table 3 below:

Table 3

Name	Years' Experience	Years in Current Role	Years with ZCM
Roger Ibbotson	40	13	13
Daniel Kim	3	3	3
Mike Holmgren	25	3	3
Mark Saldutti	13	4	4

Kim leads proprietary research and development at ZCM, including quantitative analysis of global equity markets, generation of investment ideas and research reports, and management of R&D processes. Kim earned A.B. magna cum laude, A.M. and Ph.D. degrees in Physics from Harvard University and an M.B.A. from Yale. Holmgren joined the firm in 2013 as Director of Applied Research for the development and implementation of investment strategies. Prior to joining ZCM, Holmgren provided equity research at ITSA, LLC. Saldutti joined ZCM four years ago as a trader; most recently he was the head trader and risk manager at Chora Capital. Prior to Chora Capital, Saldutti traded for New York and London-based hedge fund Vicis Capital.

Overall firm stability appears strong. ZCM did lose analyst Gary Lin in 2010, but Lin worked with Zhiwu Chen on the prior quantitative multi-factor model and was not involved with the current approach. John Holmgren, President, joined in 2011 and has 32 years' experience. Prior to joining ZCM, Holmgren was President and CIO of HCM, a global investment management and research firm specializing in bottom up quantitative models from 2007 until 2011. Peter Schaffer, Chief Operations Officer, joined the firm in 2008 and has 29 years' experience. Prior to joining ZCM, Schaffer worked at Avenue Capital, a global multistrategy hedge fund as Chief Risk Officer and head of firm-wide information systems. Both Holmgren and Schaffer hold equity in the organization. In 2013, ZCM hired two professionals (Jim Vomvas and Mark LeScozec) to upgrade the Operations and Information Technology departments.

Investment Philosophy and Process¹

The Zebra US Micro Cap portfolio (ZMC) utilizes a systematic approach to identify US micro-cap securities that are relatively unpopular and then combines several measures of fundamental strength to identify investment opportunities. "Popularity" reflects how much a stock is liked and is measured by the level of interest in the marketplace. In addition, Zebra gauges fundamental strength by observing companies' income statements and balance sheets. The portfolio construction process applies the ZMC metrics to maximize the desired characteristics while managing risk. The final portfolio consists of securities that are fundamentally strong but may have been overlooked by other investors.

Research is organized in four areas of research, as follows. Academic research is focused on maintaining and contributing to the body of knowledge in the investment field; Discovery research is proprietary original research that is focused on signal identification and application; Applied research verifies and applies the signals derived from Discovery research; and Implementation research is focused on finding better ways to execute the portfolio in the marketplace. ZCM structures portfolios to maximize desired characteristics while minimizing unintended risks. ZCM utilizes raw data from multiple sources; all data is used in customized packages, including proprietary in-house systems.

The US Micro Cap selection is refined from a broad security universe primarily drawn from the constituents of the Russell Micro Cap Index. The universe is qualified by minimum share price, liquidity, and sector constraints. ZCM's metrics are designed to identify securities that are fundamentally strong but are "less popular" and not yet recognized by the market. In addition, the ZCM metrics identify securities that are over traded, "more popular" with weak fundamentals that ZCM under weights or eliminates from portfolio consideration. ZCM implements a systematic, disciplined process to evaluate equity securities and generate a composite score. The selection criteria (applied within each GICS sector sub-universe) are as follows:

- Exclude the highest 25% of age-weighted share turnover (24-36 historical monthly time periods)
- Exclude the highest 10% in the Amihud metric (highest price impact over the prior 12month time period)
- Require top 50% of 12-month historic and future earnings yield (forward earnings included if available)
- Require top 50% of long-term gross profits/assets (historical 24-month time period)

Callan Knowledge. Experience. Integrity.

¹ Paraphrased and quoted from ZCM's marketing materials, Due Diligence Questionnaire, and representative information provided to Callan.

> Only REITs employ a different scoring methodology; this is based on this industry's unique characteristics. The model portfolio is constructed from the bottom-up based on the composite score. ZCM's buy and sell disciplines are mirror images of each other; ZCM does not set explicit alpha targets for each security but rather rebalances the portfolio on a regular time-weighted basis. Portfolios are monitored for sensitivity to factor risks such as style, capitalization size, momentum, yield, and leverage.

Performance and **Portfolio Characteristics**

The US Micro Cap Liquidity portfolio will hold approximately 200 to 220 securities. Simulated portfolio results produce an average portfolio turnover rate of 75%. However, the investment professionals believe actual turnover will be lower given the arbitrary turnover created by systematically creating a new universe each calendar year. ZCM rebalances on a consistent basis with portfolio manager and trader oversight. The portfolio rebalance is designed to reposition the portfolio based on the aggregate signal and maximize the information of ZCM's metrics. The team will rebalance on a semi-annual basis; to avoid any front running possibilities, investment professionals will rebalance gradually. Intra-period rebalancing will only occur if a security experiences unusual price behavior, such as due to legal or M&A activity.

The portfolio will be GICS sector neutral on a capitalization-weighted basis versus the Russell Micro Cap Index. Maximum position size will be 1% at rebalance; ZCM will let winners appreciate between the semi-annual rebalance targets. Back tests demonstrate better returns can be achieved by letting securities migrate to higher popularity quartiles as investors' interest increases causing price appreciation and momentum factor exposure.

While the stated benchmark is the Russell Micro Cap Index, ZCM would be comfortable with either the Russell Micro Cap or Russell Micro Cap Value Index for return comparison. ZCM believes there is a link between liquidity and valuation. Liquid securities are easier to trade with lower market impact so investors will pay a higher price for the same set of cash flows. Less liquid securities (not illiquid) are more difficult to trade and maintain a lower price for the same set of cash flows. The resulting portfolio exhibits value-like portfolio characteristics (based on the MSCI Z-Scores) and typically a slightly lower beta than the benchmark.

The live ZCM US Small Cap portfolio, which implements the same investment criteria, also exhibits value portfolio characteristics based on the MSCI Z-Scores versus the Russell 2000 Index. Both the ZCM Small Cap and simulated ZCM Micro Cap portfolios exhibit slightly higher correlations and beta to the value benchmarks than the core benchmarks. Likewise, tracking error is lower to the value benchmarks than to core benchmarks.

ZCM does not currently manage a live dedicated micro-cap portfolio; the performance results presented are simulated. However, the firm does invest in domestic micro-cap securities within existing Zebra strategies.

> The ZCM Global Equity Beta Neutral and ZCM US Small Cap portfolios currently hold 11 and 126 securities, respectively, which account for a 3.42% and 25% weight of the simulated US Micro cap portfolio, respectively.

> ZCM's investment strategy is based on behavioral finance and seeks to systematically capture anomalies in the public equity markets. The term "Smart Beta" recently gained the interest of the financial community. Many investment management organizations created strategies to capture certain factors and/or anomalies such as size, quality, value, momentum, and volatility. One of the main concerns prospective investors may have with these Smart Beta portfolios is the significant time period each single factor can be out of favor and underperform a capitalization-weighted index. To combat the potential for longterm underperformance, organizations created multi-factor portfolios, combining factors which possess attractive correlation relationships and potentially smooth the performance pattern.

> The ZCM approach relies on a single liquidity factor that Ibbotson and Chen believe should be included in future asset price studies as an investment factor or style. Although the investment thesis is focused on one factor (liquidity) the process and resulting portfolio should deliver multiple factor exposure to help reduce the possibility of prolonged underperformance. ZCM exhibited a Fama-French four factor regression on the U.S. Micro Cap Liquidity portfolio from 1984 to 2014. Results demonstrate positive exposure to both size and value factors; momentum was surprisingly neutral over this time period.

Summary

Roger Ibbotson is well recognized within academia and the financial community. His work on "Liquidity as an Investment Style" received recognition in the Graham and Dodd Awards as the best article in 2014. The organization currently manages \$574 million in assets and employs 14 professionals. An ARMB allocation of \$100 million to a ZCM micro-cap mandate would be significant to the firm and represent roughly 15% of firm-wide assets under management. ZCM is highly leveraged to a few important client and consultant relationships; total firm assets would be significantly impacted if ZCM lost any of these existing large mandates.

ZCM is an employee-owned organization that is debt free and has demonstrated professional stability since the introduction of the current investment approach. Ibbotson's reputation and credentials may give him a competitive advantage to hire experienced professionals over competing organizations. John Holmgren, President, and Peter Schafer, COO, are experienced professionals running the day-to-day operations of the investment management organization.

While the four-person investment team retains a high level of investment experience overall, this group has collectively worked together for only a short amount of time at ZCM. The investment team and approach utilized today commenced in June 2010; there is a limited

Manager: Zebra Capital Management, LLC **Product:** Zebra US Micro Cap Liquidity

> performance history across the strategy platform. There is no live auditable micro-cap track record to review; simulated results should be reviewed with a grain of salt. Mechanically driven simulated returns are based on a specific set of rules; it cannot replicate the human impact and flexibility that would be incorporated into the investment process. However, ZCM does have experience running live capital in the U.S. micro-cap space across two other strategies and the back testing approach and methodology seem reasonable. The proposed portfolio is appropriately diversified holding over 200 securities; portfolio construction guidelines will keep the portfolio sector neutral versus the Russell Micro Cap Index.

> ZCM implements a unique investment process and should complement the investment approach of ARMB's existing micro-cap managers Lord, Abbett and DePrince, Race, and Zollo (DRZ). Based on fourth quarter 2014 portfolio holdings, the ZCM simulated portfolio and the Lord, Abbett Micro Growth portfolio held 10 common securities representing 2% and 12% of capital, respectively; on a three-year basis, portfolios averaged 10 overlapping securities representing 3% and 12%. Based on fourth quarter 2014 holdings, the ZCM simulated portfolio and the DRZ Micro Value portfolio held 12 common securities representing 6% and 23% of capital, respectively; on a three-year basis, portfolios averaged 15 common securities representing 6% and 19%.

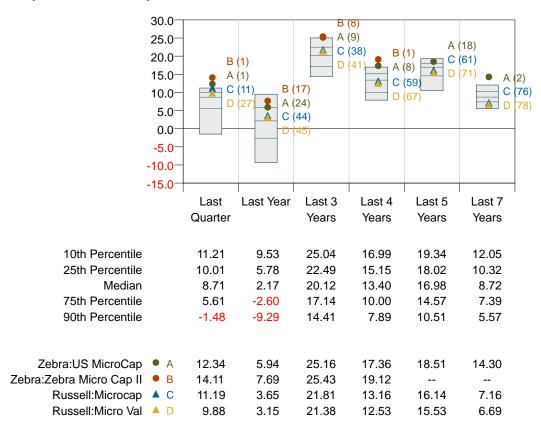
> Backtested performance results for two ZCM hypothetical microcap models are compared to a universe of core micro cap equity investment strategies in **Chart 1**.

> Zebra US Micro Cap performance results represent a simulated backtest based on a starting universe consisting of the bottom half 1000 securities in the Russell 2000 Index (the top half of the Russell Micro Cap Index).

> Zebra US Micro Cap II performance results represent a simulated backtest based on a starting universe consisting of the Russell Micro Cap Index. At this time, Zebra was only able to provide 16 quarters of simulated returns utilizing the full Russell Micro Cap Index given the lack of data beyond the most recent five-year period.

Manager: Zebra Capital Management, LLC **Product:** Zebra US Micro Cap Liquidity

Chart 1 Returns for Periods ended December 31, 2014 **Group: Callan Micro Cap Core**



Backtested performance information presented represents gross backtested results for the dates indicated. The performance was derived by backtesting, not from actual accounts. Backtesting of performance is prepared using computer models. Backtested performance does not represent actual account performance and should not be interpreted as an indication of such performance.

This past performance does not represent the behavioral impact that material economic and market factors might have on an investment adviser's decision making process if the adviser were actually managing clients' money.

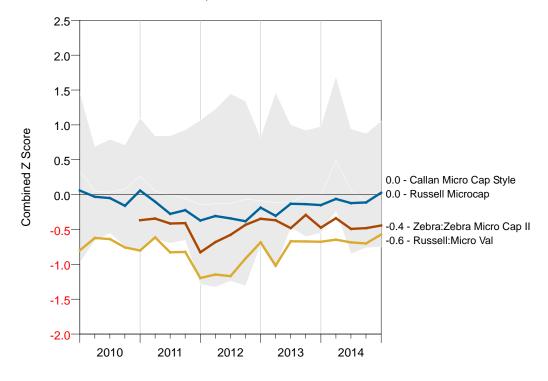
The backtesting of performance also differs from actual account performance because the investment strategy may be adjusted at any time, for any reason and can continue to be changed until desired or better performance results are achieved. Performance returns include cash and cash equivalents and reflect the reinvestment of dividends, interest and other earnings.

> Performance is calculated on a trade date basis and is presented gross of management fees, accrued performance fees, commissions and other expenses as applicable. As with any investment strategy, there is potential for profit as well as the possibility of loss.

> The shaded area in Chart 2 below illustrates the range of MSCI combined Z-scores for members of the Callan Microcap style group. Higher combined Z-scores reflect a growth orientation for a portfolio of holdings. A lower combined Z-score (as demonstrated by the yellow line representing the Russell Micro Cap Value index) are consistent with a portfolio's value orientation. The Zebra Micro Cap II model portfolio exhibits a value tilt.

Combined Z Score for 5 Years ended December 31, 2014

Chart 2



Mark N. Stahl, CFA

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SUBJECT:	Investment Advisory Council Member	ACTION:	X
	Contract Expiration	_	
		INFORMATION:	
DATE:	April 24, 2015	- -	

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 three advisory positions are designated by areas of expertise: an academic advisor, an advisor with experience as trustee/manager of a public fund or endowment, and an advisor with experience as a portfolio manager. IAC members currently attend ARMB meetings, an annual manager review meeting, and the annual education conference.

STATUS:

The term of Dr. Jerrold Mitchell expires June 30, 2015. Dr. Mitchell holds the seat designated for the advisor with experience as a portfolio manager. Dr. Mitchell has been an IAC member for ASPIB and ARMB since 1995, providing invaluable advice and insight for trustees and staff as the fund added asset classes such as private equity, real estate, agriculture, timber, energy and absolute return. Treasury staff believes that Dr. Mitchell's longevity with ARMB, ASPIB and the Department of Revenue make him an invaluable contributor and advisor for the staff and trustees. Dr. Mitchell has advised staff that he would like to continue as an IAC member.

RECOMMENDATION:

That the Board reappoint Dr. Mitchell to a three-year term on the Investment Advisory Council beginning July 1, 2015 and ending June 30. 2018.

ALASKA RETIREMENT MANAGEMENT BOARD M E M O R A N D U M

To: ARMB Trustees From: Judy Hall Date: April 10, 2015

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
Martin Pihl	Trustee	Account Termination/Rollover	2/15/15
Gary Bader	Chief Investment Officer	Equities Real Estate	2/10/15 3/5/15
Casey Colton	Investment Officer	Real Estate	12/19/14

Alaska Retirement Management Board 2015 Meeting Calendar

February 11 – Wednesday	Committee Meetings:	Audit Legislative
February 12-13 Thursday-Friday Juneau	*Review Capital Market *Manager Presentations	-
April 22 – Wednesday	Committee Meetings:	Actuarial Committee (new) Defined Contribution Committee
April 23-24 Thursday-Friday Anchorage	*Adopt Asset Allocation *Performance Measure *Buck Consulting Acture *GRS Actuary Certification *Review Private Equity *Manager Presentation	ment – 4 th Quarter lary Report ation y Annual Plan
June 17 – Wednesday	Committee Meetings:	Audit
June 18-19 Thursday-Friday Anchorage	*Final Actuary Report/ *Performance Measure *Manager Presentations	7
September 23 – Wednesday	Committee Meetings:	Audit Budget Salary Review
September 24-25 Thursday-Friday Fairbanks	*Audit Results/Assets - *Approve Budget *Performance Measure *Real Estate Annual Pl *Real Estate Evaluation *Manager Presentations	ment – 2 nd Quarter an n – Townsend Group
October 22-23 Thursday-Friday New York City	Education Conference	
October	Audit Committee	
December 2 – Wednesday	Committee Meetings:	Audit Legislative
December 3-4 Thursday-Friday Anchorage	Audit Report - KPMG Performance Measuren Manager Review (Ques Private Equity Review *Manager Presentations	stionnaire)