

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Delores Turner, Manager of Human Resources

FROM: Lisa Sorani, Manager of HR Employee Services *LS*.

SUBJECT: Retirement Board Regular Meeting – March 19, 2015

A regular meeting of the Retirement Board will convene at 8:30 a.m. on Thursday, March 19, 2015 in the Training Resource Center (TRC1) of the Administration Building.

Enclosed are the agenda for the March 19, 2015 meeting and the minutes for the January 15, 2015 regular meeting. The package also includes the following: **(1) ACTION** items: Determination of the annual retiree Cost Of Living Adjustment (COLA), Adopt Retirement Board Rule C-23 Retirement Board Training Policy; **(2) INFORMATION** items: Retirement System Training , 4th Quarter Performance Review as of December 31,2014, Actuarial Funding Policy Update, Review of Proposed Board of Directors Vesting Change, Training Module – Domestic Equities, Investment Manager Presentation, Review of HIB and COLA, Retirement Board Member Election Schedule; **(3) REPORTS FROM THE RETIREMENT BOARD.**

LS:eg

Enclosures

AGENDA
EBMUD EMPLOYEES' RETIREMENT SYSTEM
March 19, 2015
Training Resource Center (TRC1) 8:30 a.m.

ROLL CALL:

PUBLIC COMMENT: The Retirement Board is limited by State Law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

CONSENT CALENDAR:

1. Approval of Minutes – Regular meeting of January 15, 2015
2. Ratifying and Approving Investment Transactions by Counselors for December 2014 and January 2015 (R.B. Resolution No. 6816)
3. Ratifying and Approving Short-Term Investment Transactions by Treasurer for December 2014 and January 2015 (R.B. Resolution No. 6817)
4. Treasurer's Statement of Receipts and Disbursements for December 2014 and January 2015

ACTION:

5. Determination of the annual retiree Cost Of Living Adjustment (COLA) to be effective July 1, 2015 (R.B. Resolution No. 6818) – E. Grassetti
6. Adopt Retirement Board Rule C-23 Retirement Board Training Policy (R.B. Resolution No. 6819) – E. Grassetti

INFORMATION:

7. Retirement System Training – E. Grassetti
8. 4th Quarter Performance Review as of December 31, 2014 – E. Sandler
9. Actuarial Funding Policy Update – E. Sandler
10. Review of Proposed Board of Directors Vesting Change – L. Matthew / E. Grassetti
11. Training Module – Domestic Equities – E. Sandler
12. Investment Manager Presentation – E. Sandler

13. Review of HIB and COLA – E. Grassetti

14. Retirement Board Member Election Schedule – E. Grassetti

REPORTS FROM THE RETIREMENT BOARD:

15. Brief report on any course, workshop, or conference attended since the last Retirement Board meeting.

ITEMS TO BE CALENDARED:

MEETING ADJOURNMENT:

The next regular meeting of the Retirement Board will be held at 8:30 a.m. on Thursday, May 21, 2015.

2015 Retirement Board Meetings

May 21, 2015

July 16, 2015

September 17, 2015

November 19, 2015

MINUTES OF THE RETIREMENT BOARD
January 15, 2015

A regular meeting of the Retirement Board convened on Thursday, January 15, 2015 at 8:38 a.m. in the Large Training Resource Center (TRC) Room. The meeting was called to order by President Doug Higashi.

Roll Call – The following Retirement Board Members were present: Alex Coate, Doug Higashi, Tim McGowan, Frank Mellon, William Patterson, and Lisa Ricketts.

The following staff members were present: Jylana Collins, Rod Deiter, Elizabeth Grassetti, Eric Sandler, Sophia Skoda, Lisa Sorani, and Delores Turner.

ANNOUNCEMENTS FROM CLOSED SESSION

The Retirement Board approved the disability retirement of Margaret Birmingham (R.B Resolution No. 6812). The motion was made by Frank Mellon and seconded by Tim McGowan. The motion carried (5-0) by the following voice vote: AYES (Coate, Higashi, McGowan, Mellon, Patterson), NOES (none), ABSTAIN (none), ABSENT (none).

PUBLIC COMMENT

Leon Duan from ASCME Local 444 was introduced as the new representative attending the Retirement Board Meetings, and spoke on behalf of Margaret Audrey Birmingham and her application for disability retirement.

Frank Mellon introduced Marguerite Young, the newest member of the Board of Directors.

1 - 4. **Consent Calendar** – A motion was made by Frank Mellon and seconded by Bill Patterson to approve the Consent Calendar. The motion carried (5-0) by the following voice vote: AYES (Coate, Higashi, McGowan, Mellon, Patterson), NOES (none), ABSTAIN (none), ABSENT (none).

ACTION

5. **Adopt the Actuarial Valuation of the Retirement System as of June 30, 2014** – Andy Yeung from Segal presented the actuarial valuation as of June 30, 2014. Both assets and payroll were up which caused funding levels to increase to 68.9% for the pension plan on a valuation value of assets basis and unfunded liabilities down by \$4 million dollars. The unfunded liabilities decreased due to higher than expected investment returns, less than expected salary increases, lower than expected COLA increases for retirees, offset by changes to economic assumptions (reduction in the assumed rate of return), mortality losses for retirees (retirees living longer) and higher than expected liabilities for recently retired 1980 plan Members. The recommended employer contribution rates for the 2015-2016 fiscal year decreased slightly to 43.22% for the 1980 Plan and 35.98% for the 2013 Plan.

The HIB valuation also showed an increase in funding level to 17.83%.

Bill Patterson moved to accept the recommended rates for 2015-2016 and Doug Higashi seconded the motion. The motion carried (5-0) by the following voice vote: AYES (Coate, Higashi, McGowan, Mellon, Patterson), NOES (none), ABSTAIN (none), ABSENT (none).

6. Declaring the interest rate to be credited to Member contributions for the period ending December 31, 2014 – Elizabeth Grasseti advised the Board that the rate of interest to be credited to accumulated Member's contributions for the semi-annual period ending 12/31/2014 is the lesser of the assumed rate of return of 7.75% or the five year average rate of return for the retirement system investments which was 15%. Frank Mellon moved the resolution to credit a rate of 7.75% to Member Contributions (3.875% semi-annually). Bill Patterson seconded the motion. The motion carried (5-0) by the following voice vote: AYES (Coate, Higashi, McGowan, Mellon, Patterson), NOES (none), ABSTAIN (none) ABSENT (none).

INFORMATION

7. Draft Retirement Board Training Policy – Elizabeth Grasseti presented the draft Retirement Board Training Policy and stated that it would be brought back in March 2015 as a Retirement Board Rule. The Board asked that a budget also be developed for training, and staff indicated that a budget for Retirement System expenses including training would be developed and presented at the March 2015 meeting.

8. Training Opportunities Schedule – Elizabeth Grasseti presented the CALAPRS training schedule for 2015.

9. Employee Retirement System Education Modules – Eric Sandler introduced the concept of retirement system training modules and reviewed the scheduled trainings for the 2015 retirement board meetings.

10. Training Module – International Equities – Eric White from PCA provided the first training module which was a review of the international equity class. He pointed out that 51% of the global equity markets are based outside of the United States and that international equities provide a large opportunity set for investments, many of which are household names in the United States. The international equity markets are divided into developed and emerging markets, with emerging markets having experienced rapid growth over the past 30 years and representing 50% of the global economy. International equities provide diversification in a portfolio and have unique risks associated with them. He then reviewed EBMUDERS' allocation to international equities and how the allocations to Fisher Investments and Franklin-Templeton provide diversification and have low correlation to each other.

11. Presentation from Investment Manager Fisher Investments – Margaret Chan, Relationship Manager for Fisher Investments, provided a brief overview of the firm, investment philosophy, and process for investment selection. She explained how the investment portfolios are constructed and which countries and sectors are over-weighted and under-weighted relative to the index. She then discussed the benefits Fisher believes it brings to its investors.

12. **Health Insurance Benefit Survey Results** – Elizabeth Grasseti presented the annual Health Insurance Benefit Survey. Generally the trends have continued with systems increasing vesting requirements and co-pays on insurance plans. Insurance premiums have increased approximately 6.7% on average. The board requested that next year the OPEB liability for each plan be shown along with a ranking of the benefits and a count of the number of EBMUD retirees and beneficiaries eligible for Medicare.

13. **Explanation of Purchase of Service Calculation** – Elizabeth Grasseti briefly reviewed the inputs that are used to determine the costs to purchase retirement service credit.

REPORTS FROM THE RETIREMENT BOARD:

14. Frank Mellon said he had attended the International Foundation Conference and reminded the board that he had access to presentation materials and would share them if there was interest.

Alex Coate informed the Retirement Board that the Board of Directors had asked that the Retirement Board review the effect on the retirement system of changing the Employees Retirement System vesting requirement for Board Members from five years of service to ten years of service.

ITEMS TO BE CALENDERED

- Proposed Retirement System Budget
- Retirement Board Training
- Review of Board of Directors Retirement Vesting change
- Audit of Actuary

ADJOURNMENT – William Patterson moved to adjourn the meeting at 12:37 a.m. and Doug Higashi seconded the motion; the motion carried (5-0) by the following voice vote: AYES (Coate, Higashi, McGowan, Mellon, Patterson), NOES (none), ABSTAIN (none), ABSENT (none).

ATTEST: _____
Secretary

President

3/19/2015

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Members of the Retirement Board

FROM: Eric L. Sandler, Director of Finance



SUBJECT: Investment Transactions by Retirement Fund Managers for December 2014
and January 2015

The attached Investment Transactions by Retirement Fund Managers report for the months of December 2014 and January 2015 is hereby submitted for Retirement Board approval.

Attachment

ES:SS:PL

INVESTMENT TRANSACTIONS BY RETIREMENT FUND MANAGERS

December 2014

	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
Western Asset Management Co.-IG	\$1,426,533	\$1,899,095	\$64,557,988
Western Asset Management Co.-HI	\$0	\$0	\$31,461,639
Western Asset Management Co.-HY	\$0	\$0	\$30,340,544
C.S. McKee	\$10,364,425	\$5,643,071	\$131,575,752
TOTAL	\$11,790,958	\$7,542,166	\$257,935,924
DOMESTIC EQUITY			
Barrow, Hanley, Mewhinney	\$0	\$274,900	\$154,555,433
Opus Capital	\$1,420,874	\$1,672,300	\$30,225,486
Russell 1000 Growth Index Fund	\$0	\$0	\$228,965,498
Russell 2000 Growth Index Fund	\$0	\$0	\$24,312,589
INTECH	\$2,743,490	\$2,503,478	\$65,659,768
T. Rowe Price	\$1,744,098	\$1,651,299	\$62,539,493
Total Domestic Equity	\$5,908,462	\$6,101,977	\$566,258,268
COVERED CALLS			
Parametric (BXM)	\$1,443,095	\$1,234,175	\$91,884,199
Parametric (Delta-Shift)	\$819,104	\$600,034	\$95,532,453
Van Hulzen	\$12,223,001	\$10,130,766	\$91,979,906
Total Covered Calls	\$14,485,200	\$11,964,975	\$279,396,557
INTERNATIONAL EQUITY			
Franklin/Templeton	\$132,167	\$541,001	\$87,184,476
Fisher Investments	\$0	\$0	\$91,379,710
Total International Equity	\$132,167	\$541,001	\$178,564,186
REAL ESTATE EQUITY			
RREEF America II	\$0	\$0	\$26,414,958
CenterSquare	\$4,148,693	\$4,215,130	\$48,056,113
Total Real Estate	\$4,148,693	\$4,215,130	\$74,471,071
TOTAL ALL FUND MANAGERS	\$36,465,480	\$30,365,249	\$1,356,628,006

January 2015

	PURCHASES	SALES	PORTFOLIO VALUE
FIXED INCOME			
Western Asset Management Co.-IG	\$590,000	\$918,685	\$64,840,211
Western Asset Management Co.-HI	\$0	\$0	\$31,461,639
Western Asset Management Co.-HY	\$0	\$0	\$29,990,253
C.S. McKee	\$22,233,275	\$13,764,118	\$134,208,154
TOTAL	\$22,823,275	\$14,682,803	\$260,500,258
DOMESTIC EQUITY			
Barrow, Hanley, Mewhinney	\$403,111	\$431,087	\$147,890,431
Opus Capital	\$1,681,290	\$1,500,068	\$28,745,161
Russell 1000 Growth Index Fund	\$0	\$0	\$222,666,137
Russell 2000 Growth Index Fund	\$0	\$0	\$23,759,920
INTECH	\$901,399	\$866,363	\$65,147,346
T. Rowe Price	\$3,111,729	\$2,764,668	\$62,427,225
Total Domestic Equity	\$6,097,529	\$5,562,186	\$550,636,221
COVERED CALLS			
Parametric (BXM)	\$2,232,932	\$1,591,505	\$90,773,705
Parametric (Delta-Shift)	\$764,556	\$515,306	\$93,162,094
Van Hulzen	\$27,724,003	\$2,587,260	\$89,623,052
Total Covered Calls	\$30,721,491	\$4,694,071	\$273,558,851
INTERNATIONAL EQUITY			
Franklin/Templeton	\$559,871	\$766,909	\$87,166,161
Fisher Investments	\$0	\$0	\$92,192,679
Total International Equity	\$559,871	\$766,909	\$179,358,840
REAL ESTATE EQUITY			
RREEF America II	\$0	\$0	\$26,688,828
CenterSquare	\$2,099,356	\$2,060,605	\$51,109,508
Total Real Estate	\$2,099,356	\$2,060,605	\$77,798,336
TOTAL ALL FUND MANAGERS	\$62,301,522	\$27,766,574	\$1,341,852,506

Prepared By:



Date:

February 26, 2015

R.B. RESOLUTION NO. 6816

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY THE COUNSELORS
FOR MONTHS OF DECEMBER, 2014 AND JANUARY, 2015

Introduced by: ; Seconded by:

WHEREAS, Retirement Board Rule No. B-5 provides for investment transactions without prior specific approval by the Retirement Board; and

WHEREAS, investment transactions have been consummated during December, 2014 and January, 2015, in accordance with the provisions of said rule and in securities designated as acceptable by Retirement Board Resolution No. 4975, as amended;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions appearing on the following exhibits are hereby ratified and approved.

President

ATTEST:


Secretary


3/19/15

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: January 23, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Eric L. Sandler, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Short Term Investment Transactions for December 2014

The attached Short Term Investment Transactions report for the month of December 2014 is hereby submitted for Retirement Board approval.

ES/sk

**EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF DECEMBER 2014**

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MAT</u>	<u>YIELD (%)</u>
3,300,000.00	Local Agency Investment Fund	5-Dec-14		0.267
3,300,000.00	Local Agency Investment Fund	19-Dec-14		0.267
<u>(7,000,000.00)</u>	Local Agency Investment Fund		31-Dec-14	0.267
\$ (400,000.00)	Net Activity for Month			

SUBMITTED BY



D. Scott Klein
Controller

DATE

1/27/15



S. Skbda, Treasury Mgr




S. Lindley, Acctg Sys Supvr


prepared by vwong

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: February 18, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Eric L. Sandler, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Short Term Investment Transactions for January 2015

The attached Short Term Investment Transactions report for the month of January 2015 is hereby submitted for Retirement Board approval.

ES/sk

**EBMUD EMPLOYEES' RETIREMENT SYSTEM
SHORT TERM INVESTMENT TRANSACTIONS
CONSUMMATED BY THE TREASURER
MONTH OF JANUARY 2015**

<u>COST/ FACE VALUE</u>	<u>DESCRIPTION</u>	<u>DATE OF PURCHASE</u>	<u>DATE OF SALE/MAT</u>	<u>YIELD (%)</u>
3,300,000.00	Local Agency Investment Fund	2-Jan-15		0.262
3,300,000.00	Local Agency Investment Fund	16-Jan-15		0.262
(7,100,000.00)	Local Agency Investment Fund		29-Jan-15	0.262
<u>3,300,000.00</u>	Local Agency Investment Fund	30-Jan-15		0.262
<u>\$ 2,800,000.00</u>	Net Activity for Month			

SUBMITTED BY _____



D. Scott Klein
Controller

DATE _____

2-19-15



S. Skoda, Treasury Mgr



S. Lindley, Acctg Sys Supvr

prepared by vwong

R.B. RESOLUTION NO. 6817

RATIFYING AND APPROVING INVESTMENT TRANSACTIONS BY THE TREASURER
FOR DECEMBER, 2014 AND JANUARY, 2015

Introduced by: ; Seconded by:

WHEREAS, Retirement Board Rule No. B-7 provides for the temporary investment of retirement system funds by the Treasurer or Assistant Treasurer in securities authorized by Sections 1350 through 1366 of the Financial Code or holding funds in inactive time deposits in accordance with Section 12364 of the Municipal Utility District Act; and

WHEREAS, investment transactions during December 2014, and January, 2015 have been made in accordance with the provisions of the said rule;

NOW, THEREFORE, BE IT RESOLVED that the investment transactions consummated by the Treasurer and included on the attached Exhibit A for December 2014, and January, 2015 are hereby ratified and approved.

President

ATTEST:


Secretary


3/19/2015

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: January 26, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Eric L. Sandler, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Statement of Receipts and Disbursements for December 2014

The attached Statement of Receipts and Disbursements report for the month of December 2014 is hereby submitted for Retirement Board approval.

ES/sk

**STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF DECEMBER 2014**

CASH BALANCE November 30, 2014 \$ 748,170.72

RECEIPTS

Employees' Contributions	\$	1,015,864.00	
District Contributions		5,605,817.01	
LAIF Redemptions		7,000,000.00	
Refunds and Commission Recapture		<u>27,033.96</u>	
TOTAL Receipts			13,648,714.97

DISBURSEMENTS

Checks/Wires Issued:

Service Retirement Allowances	\$	6,085,612.63	
Disability Retirement Allowances		143,729.39	
Health Insurance Benefit		0.00 *	
Payments to Retiree's Resigned/Deceased		4,909.79	
LAIF Deposits		6,600,000.00	
Administrative Cost		<u>113,226.19</u>	
TOTAL Disbursements			(12,947,478.00)

CASH BALANCE DECEMBER 31, 2014 \$ 1,449,407.69

LAIF 14,075,182.80

LAIF and Cash Balance DECEMBER 31, 2014 \$ 15,524,590.49

Domestic Equity

Barrow Hanley	\$	154,555,433.49
Russell 1000 Index Fund		228,965,498.26
Russell 2000 Growth Index Fund		24,312,589.14
Opus		30,225,486.28
Intech		65,659,767.81
T. Rowe Price		<u>62,539,493.09</u>
Subtotal Domestic Equity		566,258,268.07

Covered Calls

Parametric (BXM)	\$	91,884,198.61
Parametric (Delta-Shift)		95,532,452.79
Van Hulzen		<u>91,979,905.88</u>
Subtotal Covered Calls		279,396,557.28

International Equity

Franklin/Templeton	\$	87,184,475.88
Fisher Investments		<u>91,379,709.94</u>
Subtotal International Equity		178,564,185.82

Real Estate

Real Estate RREEF	\$	26,414,958.00
Center Square		<u>48,056,113.19</u>
Subtotal Real Estate		74,471,071.19

Fixed Income

CS Mckee	\$	131,575,752.28
Western Asset Mgt Co-Short Term Inv Grade		64,557,988.44
Western Asset Mgt Co-Short Term High Income		31,461,639.19
Western Asset Mgt Co-Short Term High Yield		<u>30,340,543.59</u>
Subtotal Fixed Income		257,935,923.50

Total for Domestic & International Equities 1,356,626,005.86

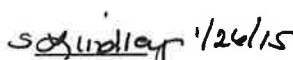
MARKET VALUE OF ASSETS at DECEMBER 31, 2014 \$ 1,372,150,596.35

Respectfully submitted,


D. Scott Klein
Controller

1/27/15


S. Skoda
Treasury Mgr



S. Lindley
Acctg Sys Supvr
prepared by wong


*December Health Insurance Premiums paid in January

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: February 18, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Eric L. Sandler, Director of Finance 

FROM: D. Scott Klein, Controller 

SUBJECT: Statement of Receipts and Disbursements for January 2015

The attached Statement of Receipts and Disbursements report for the month of January 2015 is hereby submitted for Retirement Board approval.

ES/sk

**STATEMENT OF RECEIPTS AND DISBURSEMENTS
EMPLOYEES' RETIREMENT FUND
MONTH OF JANUARY 2015**

CASH BALANCE December 31, 2014 \$ 1,449,407.69

RECEIPTS

Employees' Contributions	\$	1,530,377.23 *	
District Contributions		8,427,204.71 *	
LAIF Redemptions		7,100,000.00	
Refunds and Commission Recapture		<u>2,064.91</u>	
TOTAL Receipts			17,059,646.85

DISBURSEMENTS

Checks/Wires Issued:

Service Retirement Allowances	\$	6,170,494.29	
Disability Retirement Allowances		140,988.00	
Health Insurance Benefit		1,611,399.09 **	
LAIF Deposits		9,900,000.00	
Administrative Cost		<u>142,163.58</u>	
TOTAL Disbursements			(17,965,044.96)

CASH BALANCE JANUARY 31, 2015 \$ 544,009.58

LAIF 16,886,846.70

LAIF and Cash Balance JANUARY 31, 2015 \$ 17,430,856.28

Domestic Equity

Barrow Hanley	\$	147,890,431.47	
Russell 1000 Index Fund		222,666,136.86	
Russell 2000 Growth Index Fund		23,759,920.06	
Opus		28,745,161.47	
Intech		65,147,346.35	
T. Rowe Price		<u>62,427,225.22</u>	
Subtotal Domestic Equity		550,636,221.43	

Covered Calls

Parametric (BXM)	\$	90,773,704.81	
Parametric (Delta-Shift)		93,162,094.34	
Van Hulzen		<u>89,623,051.59</u>	
Subtotal Covered Calls		273,558,850.74	

International Equity

Franklin/Templeton	\$	87,166,160.88	
Fisher Investments		<u>92,192,679.21</u>	
Subtotal International Equity		179,358,840.09	

Real Estate

Real Estate RREEF	\$	26,688,828.00	
Center Square		<u>51,109,508.37</u>	
Subtotal Real Estate		77,798,336.37	

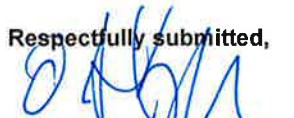
Fixed Income

CS Mckee	\$	134,208,154.11	
Western Asset Mgt Co-Short Term Inv Grade		64,840,211.44	
Western Asset Mgt Co-Short Term High Income		31,461,639.19	
Western Asset Mgt Co-Short Term High Yield		<u>29,990,253.12</u>	
Subtotal Fixed Income		260,500,257.86	


Total for Domestic & International Equities **1,341,852,506.49**

MARKET VALUE OF ASSETS at JANUARY 31, 2015 **\$ 1,359,283,362.77**

Respectfully submitted,


D. Scott Klein
Controller


S. Skoda
Treasury Mgr


S. Lindley
Acctg Sys Supvr
prepared by vwong


* Contributions from 3 payroll periods

**Dec 2014 and Jan 2015 Insurance Premiums paid in January

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Members of the Retirement Board

FROM: Elizabeth Grasseti, Sr. Human Resources Analyst 

SUBJECT: Determination of Retiree Cost of Living Adjustment

ACTION: Vote on Resolution No. 6818

RECOMMENDATION

The Board adopt Resolution No. 6818 authorizing a 2.7% COLA for retirees and allow retirees with accumulated COLA bank credit to receive up to an additional 0.3% or the actual amount of their accumulated past COLA bank credit, whichever is less, effective July 1, 2015.

DISCUSSION

Section 33 of the Retirement Ordinance, and Retirement Board Rule No. B-11 provide for Cost of Living Adjustments (COLA) for retirees. The COLA is effective every July 1st and is based on the change in the Consumer Price Index-Urban (CPI-U) for the Bay Area from December to December.*

The change in the CPI-U for purposes of calculating the COLA for the fiscal year beginning July 1, 2015 is the percentage difference between 245.711 and 252.273 or 2.7%.

The retiree COLA is limited to a maximum of either 3% or 5%, depending on the Pension Benefit Obligation (PBO) funding ratio, which is the ratio Retirement System market assets to liabilities. If the funding ratio is less than 85%, then the maximum COLA is 3%; otherwise, the maximum COLA is 5%.

According to the June 30, 2014 Actuarial Valuation, the PBO funding ratio of the Retirement System was 74.2%. Therefore the maximum COLA payable is 3.0 %. Retirees who were not retired 12 full months prior to the July 1st effective date of the COLA increase receive a prorated increase equal to 1/12th of the COLA for each full month they were retired before the effective date of the COLA.

¹ * The Department of Labor, San Francisco Office "Consumer Price Index, All Items, 1982-1984=100, San Francisco-Oakland_San Jose, Consumer Price Index for All Urban Consumers. (NOTE: The CPI-U is different from the "Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) used for District employee COLAs. The CPI-U index which is specified in the Retirement System rules covers approximately 32 percent of the same population. In addition to blue collar and clerical workers, the CPI-U includes professional, managerial, and technical workers, as well as the self-employed, short-term workers, the unemployed and retirees not in the labor force.)

The Retirement Ordinance also directs that if the CPI-U is more than the maximum permissible amount, then the excess is accumulated in retirees COLA banks for use in later years when the CPI-U is less than the maximum level. Because the CPI-U is less than the maximum COLA of 3% allowed under Section 33, the difference between the maximum of 3% and the CPI for the year of 2.7%, or 0.3% will be drawn from 59 retiree COLA banks.

EG/eg

R. B. RESOLUTION NO. 6818

DECLARING THE COST OF LIVING ADJUSTMENT
TO BE EFFECTIVE AS OF JULY 1, 2015

Introduced by: _____; seconded by: _____

Pursuant to the provision of Section 33 of Ordinance No. 40 as amended, the Retirement Board Rule No B-11 adopted in accordance with said Section 33, the cost of living adjustment to be effective July 1, 2015, is hereby established to be 2.7 percent.

Employees who retired on or before July 1, 2015, will receive a 2.7 percent increase. Employees who retired after July 1, 2015, will receive a proration of 2.7 percent, or 1/12 of the full COLA for each full month retired since July 1, 2015. Retirees with accumulated past COLA bank credit will receive up to an additional 0.3 percent, or the actual amount of their accumulated past COLA bank credit, whichever is less.

Any other resolution or parts of resolution, in conflict herewith are hereby rescinded and cancelled.

President

ATTEST: _____
Secretary


3/19/2015

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Retirement Board

THROUGH: Lisa Sorani, Manager of Employee Services

FROM: Elizabeth Grasseti, Sr. Human Resources Analyst 

SUBJECT: Retirement Board Rule Addition

RECOMMENDATION

Approve the addition of Retirement Board Rule C-23, Retirement Board Training Policy in order to provide minimum training standards for Retirement Board Members and a process for authorizing and reimbursing Board Member's training.

DISCUSSION

Retirement Board Members have a fiduciary responsibility to manage the retirement system. With this responsibility comes the need for training and information on benefits, financial, actuarial and policy information, and current economic and political events. The following training policy would provide for a minimum training standard, a process for authorizing and reimbursing training, and a process for tracking training.

The proposed rule is below:

Retirement Board Training Policy

In order for Retirement Board Members to carry out their fiduciary duties, Board Members need to receive training and information on current benefits, financial, actuarial, and policy information pertinent to the administration of public pension plans and on the investment of public pension funds.

To accomplish this goal, Retirement Board Members are required to receive a minimum of 24 hours of education related to their duties as a Board member every two years. Appropriate topics may include, but are not limited to the following:

- Fiduciary responsibilities
- Ethics
- Pension fund investments and investment program management
- Actuarial studies
- Pension funding
- Retirement benefits administration

- Pension fund governance
- New board member orientation

Retirement Board Members may attend educational seminars and conferences sponsored by state and national public pension fund organizations, academic institutions, and similar sponsors.

Additionally, educational sessions held during EBMUD's Retirement Board meetings will be counted toward compliance with this policy.

Tracking:

Compliance with this policy will be monitored by the Secretary of the Board. Retirement Board Members will provide certificates of completion or other proof of training to the Secretary of the Board or designee. Staff will provide annual updates as to their progress toward the requirement.

Budgeting:

Retirement Board Training is considered a plan expense and will be charged to the Retirement System. District employees who are Retirement Board members will charge training time to the Retirement System. Staff will apprise the Retirement Board of the amount budgeted for training annually. Retirement Board Members are encouraged to take advantage of local and in-State training opportunities offered by CALAPRS and/or other providers whenever possible.

Requesting Training:

Retirement Board Members will obtain authorization from President of the Board prior to attending training. The President of the Board will obtain approval from the Vice-President of the Board. Training requests will include the title of the training, sponsor, location, tuition and fees, estimated travel expenses, and training hours. The President of the Board will verify that allotted funds are available as part of the authorization process. Retirement Board Members who are employees of the District will also be required to obtain written approval from their Supervisor for any time away from their regular duties prior to submitting the request to the President. The President will provide approval or denial of request within one week of receipt. All training requests must be in accordance with District Procedure 438 – Reimbursement of Employee Business Expenses.

Training Reimbursement:

After completion of the training or conference, Board Members will provide a full expense accounting and reimbursement request and certificates of completion or other proof of attendance to President of the Board and the Secretary of the Board. The Secretary of the Board will approve the reimbursement request and coordinate the reimbursement with the Finance Department. All training reimbursements must be in accordance with District Procedure 438 – Reimbursement of Employee Business Expenses

LS:eg

R.B. RESOLUTION NO. 6819

ADOPTING RULE C-23 TO ADD A RETIREMENT BOARD TRAINING POLICY

Introduced by: ; Seconded by:

WHEREAS, Section 4(b) of the Retirement Ordinance authorizes the Retirement Board to adopt such rules and regulations as are necessary and proper in the administration of the provisions of the Retirement Ordinance; and

WHEREAS, the Retirement Board wishes to add Retirement Board Rule C-23 RETIREMENT BOARD TRAINING POLICY, in order to provide minimum training standards for Retirement Board Members, and a process for authorizing and reimbursing Board Member's training; and

NOW, THEREFORE, BE IT RESOLVED, that Retirement Board Rules are amended as follows:

1. Retirement Board Rule C-23 shall be added as follows:

RULE NO. C-23

Retirement Board Training Policy Adopted
by Motion 3/19/15 Resolution No. 6819

In order for Retirement Board Members to carry out their fiduciary duties, Board Members need to receive training and information on current benefits, financial, actuarial, and policy information pertinent to the administration of public pension plans, and on the investment of public pension funds.

To accomplish this goal, Retirement Board Members are required to receive a minimum of 24 hours of education related to their duties as a Board member every two years. Appropriate topics may include, but are not limited to the following:

- Fiduciary responsibilities
- Ethics
- Pension fund investments and investment program management
- Actuarial studies
- Pension funding
- Retirement benefits administration
- Pension fund governance
- New board member orientation

Retirement Board Members may attend educational seminars and conferences sponsored by state and national public pension fund organizations, academic institutions, and similar sponsors.

Additionally, educational sessions held during EBMUD's Retirement Board meetings will be counted toward compliance with this policy.

Tracking:

Compliance with this policy will be monitored by the Secretary of the Board. Retirement Board Members will provide certificates of completion or other proof of training to the Secretary of the Board or designee. Staff will provide annual updates as to their progress toward the requirement.

Budgeting:

Retirement Board Training is considered a plan expense and will be charged to the Retirement System. District employees who are Retirement Board members will charge training time to the Retirement System. Staff will apprise the Retirement Board of the amount budgeted for training annually. Retirement Board Members are encouraged to take advantage of local and in-State training opportunities offered by CALAPRS and/or other providers whenever possible.

Requesting Training:

Retirement Board Members will obtain authorization from President of the Board prior to attending training. The President of the Board will obtain approval from the Vice-President of the Board. Training requests will include the title of the training, sponsor, location, tuition and fees, estimated travel expenses, and training hours. The President of the Board will verify that allotted funds are available as part of the authorization process. Retirement Board Members who are employees of the District will also be required to obtain written approval from their Supervisor for any time away from their regular duties prior to submitting the request to the President. The President will provide approval or denial of request within one week of receipt. All training requests must be in accordance with District Procedure 438 – Reimbursement of Employee Business Expenses.

Training Reimbursement:

After completion of the training or conference, Board Members will provide a full expense accounting and reimbursement request and certificates of completion or other proof of attendance to President of the Board and the Secretary of the Board. The Secretary of the Board will approve the reimbursement request, and coordinate the reimbursement with the Finance Department. All training reimbursements must be in accordance with District Procedure 438 – Reimbursement of Employee Business Expenses

These requirements shall be in addition to the ethics training required under AB 1234.

ADOPTED this 19th day of March, 2015 by the Retirement Board.

President


ATTEST:

Secretary

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Members of the Retirement Board

FROM: Elizabeth Grasseti, Senior Human Resources Analyst 

THROUGH: Lisa Sorani, Manager of Employee Services

SUBJECT: Retirement Board Training

Staff is presenting for Board discussion a proposed Retirement Board training policy. As requested by the Board, the policy addresses training requirements and spending limits.

In response to a request from Retirement Board Members for a Retirement Board training policy, staff polled a number of retirement systems on their training requirements and budgets and presented the results to the Board for discussion. The proposed training policy reflects the Board's discussion and addresses minimum training requirements, an approval and reimbursement process, and a limit on training expenses for each Board member, discussed in more detail below. Should this policy be adopted it will become a new Retirement Board Rule.

In order to establish the appropriate limit on training expenses, staff reviewed responses to the poll, and also reviewed past training and travel expenditures. As a result, staff recommends setting the limit for training expenses at \$2,500 annually per Board Member for FY16 and FY17. In total the amount proposed for the six Retirement Board Members is \$15,000 per fiscal year. In order to provide context for this expenditure, the table below summarizes actual Retirement System expenditures for FY 14.

Description	Details	Actual FY14 (\$000)
Investment Advisors	Fees paid to Investment Managers	2,867.5
Labor	6 full-time staff: 4 HR, 2 Accounting	682.7
Custodial Asset Management	Fees paid to Northern Trust	302.5
Overhead	Retirement system administrator, contracts, mailing, etc.	259.2
Asset Performance Evaluation	Fees paid to PCA	180.6
Actuarial Expenses	Fees paid to actuary, Segal Co.	115.2
Audit Expenses	Fees paid to auditor, Maze & Associates	17.5
Securities Lending Fees	Transaction Costs	267.5
Collateral Lending Expenses	Transaction Costs	67.5
Total		4,760.2

4Q 2014

EAST BAY MUNICIPAL UTILITY DISTRICT QUARTERLY REPORT



This report is solely for the use of client personnel. No part of it may be circulated, quoted, or reproduced for distribution outside the client organization without prior written approval from Pension Consulting Alliance, Inc.

Nothing herein is intended to serve as investment advice, a recommendation of any particular investment or type of investment, a suggestion of the merits of purchasing or selling securities, or an invitation or inducement to engage in investment activity.

TABLE OF CONTENTS

- 1** INTRODUCTION
- 2** INVESTMENT MARKET RISK METRICS
- 3** ECONOMIC OVERVIEW
- 4** EBMUD PORTFOLIO REVIEW

- Risk Return Analysis
- Total Plan Performance
- Asset Allocation
- Manager Performance
- Performance Monitoring
- Peer Universe

APPENDIX

- Glossary of Terms
- EBMUD Policy Benchmark Composition
- Definition of Benchmarks
- Risk Metric Description

INTRODUCTION

The EBMUD Total Portfolio had an aggregate value of \$1.4 billion as of December 31, 2014. During the latest quarter, the Total Portfolio increased in value by \$29.3 million, and over the latest year the Total Portfolio increased by \$102.5 million. Outside of international equities and commodities, the majority of global markets finished the year strong with positive returns during the fourth quarter of 2014. U.S. equities as a whole were up approximately 5% for the quarter, as small cap stocks rebounded from a very poor third quarter to produce returns of 9-10%. Developed international and emerging market equities produced negative returns for the second straight quarter as a strengthening U.S. dollar acted as a headwind to U.S. investors. The broad commodity market produced its second quarter in a row of double digit losses as the price of oil dropped to near \$50 a barrel at quarter end, its lowest price since 2009. The Federal Reserve concluded their bond buying program in the quarter and stated that they remain on course but will remain cautious when deciding to raise rates in mid-2015. During 2015, U.S. and European central bank actions, commodity prices, currency fluctuations, and economic growth will remain dominant influences in the investment markets.

Asset Allocation Trends

With respect to policy targets, the Total Portfolio ended the latest quarter overweight Domestic Equity and Cash, underweight International Equity and Total Fixed Income, and relatively near target in all other asset classes (variance < 0.5%). The asset allocation targets (see table on page 22) reflect those elected by the Board in September 2013.

Recent Investment Performance

The Total Portfolio outperformed the policy benchmark over each time period measured ending December 31, 2014. Relative outperformance for the recent quarter was due to strong results posted in Public Equities and Real Estate. Trailing 10-year results underperformed EBMUD's 7.75% actuarial rate, but 20-year results exceeded it.

The Total Portfolio outperformed the Median Public Fund return over each time period reported which can be attributed to overall asset allocation differences, most notably the Total Portfolio's larger allocation to domestic equity investments (including covered calls).

Recent Investment Performance, Gross of Fees

	Quarter	1 Year	3 Year	5 Year	10 Year	20 Year
Total Portfolio	2.9	8.0	14.6	11.6	7.2	9.1
<i>Policy Benchmark¹</i>	<i>1.9</i>	<i>7.2</i>	<i>13.3</i>	<i>10.6</i>	<i>6.9</i>	<i>8.7</i>
Excess Return	1.0	0.8	1.3	1.0	0.3	0.4

	Quarter	1 Year	3 Year	5 Year	10 Year	20 Year
Total Portfolio	2.9	8.0	14.6	11.6	7.2	9.1
<i>Median Public Fund²</i>	<i>1.5</i>	<i>6.5</i>	<i>11.6</i>	<i>9.9</i>	<i>6.7</i>	<i>8.3</i>
Excess Return	1.4	1.5	3.0	1.7	0.5	0.8

¹ Policy Benchmark consists of 40% Russell 3000 (blend), 15% MSCI ACWixU.S. (blend), 20% CBOE BXM, 10% BC Aggregate, 5% BC US 1-3 Year Government/Credit, 2.5% BC 1-5 Year U.S. High Yield Cash Pay, 2.5% S&P/LSTA Performing Loans, 2.5% NCREIF (lagged), and 2.5% FTSE NAREIT All Equity REITs index 4/1/14-present; see Appendix for historical Policy Benchmark composition.

² Mellon Total Fund Public Universe.

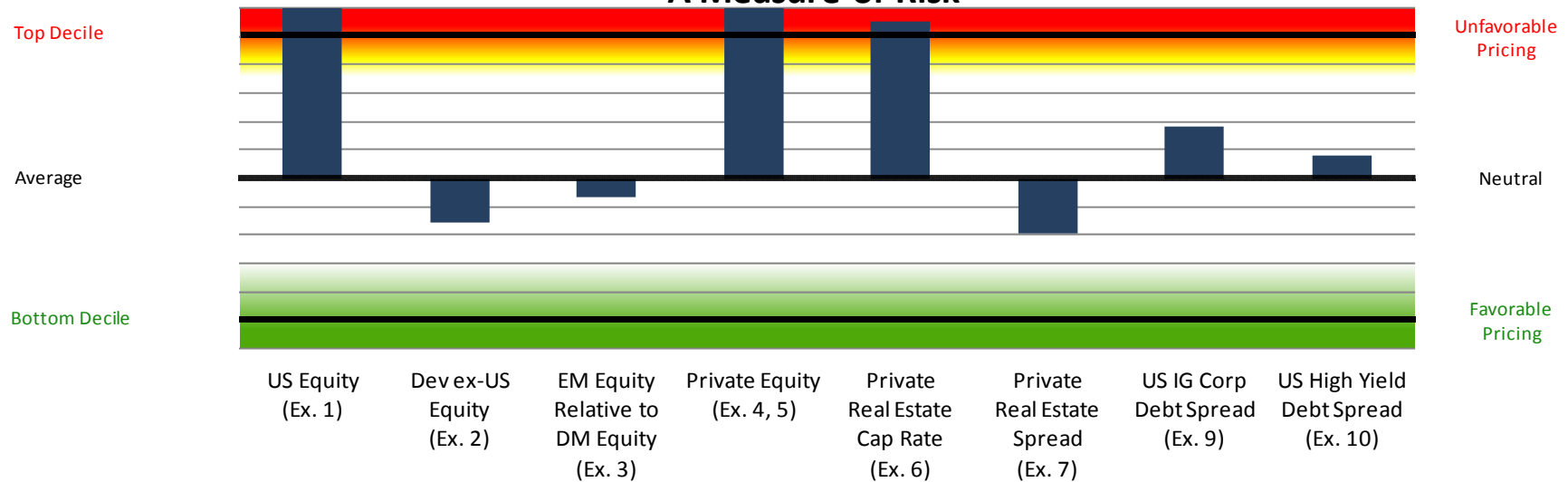
INVESTMENT MARKET RISK METRICS³

- U.S. equity valuation metrics hit new post-financial-crisis highs and remain within top decile valuation levels.
- Commodity prices remain in freefall (oil <\$50), hitting lowest inflation-adjusted levels since index inception. Oil prices declined almost 30% in one month.
- Breakeven inflation continued to drop, declining to a reading of below 1.7% for the first time since the Euro crisis and bailouts of 2010.
- The yield on the 10-year Treasury declined below 2% after month end.
- The yield curve slope flattened (bearish), as long-term rates declined.
- The PCA Market Sentiment Indicator "PMSI" remained neutral in December, after turning neutral in November. The trend is down.
 - This change was driven by year-over-year credit spread widening
 - While, year-over-year equity returns remain comfortably positive
 - Conflicting signals result in a grey (inconclusive / neutral) sentiment reading
- Commodity price declines, low inflation expectations, and falling interest rates point to global growth concerns, particularly outside of the United States.
- U.S. stock markets rose. Stock markets outside the U.S. broadly declined.
- Private equity valuations remain at top decile levels.
- U.S. equity volatility (VIX) rose, but only to 19, near long-term average levels.

³ See Appendix for the rationale for selection and calculation methodology used for the risk metrics.

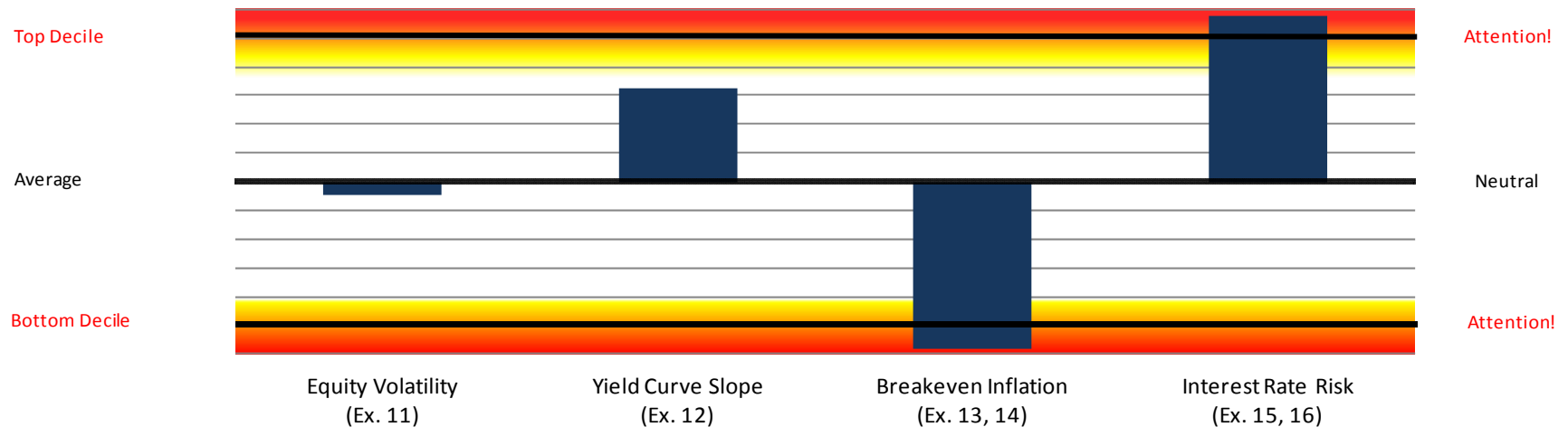
Valuation Metrics versus Historical Range

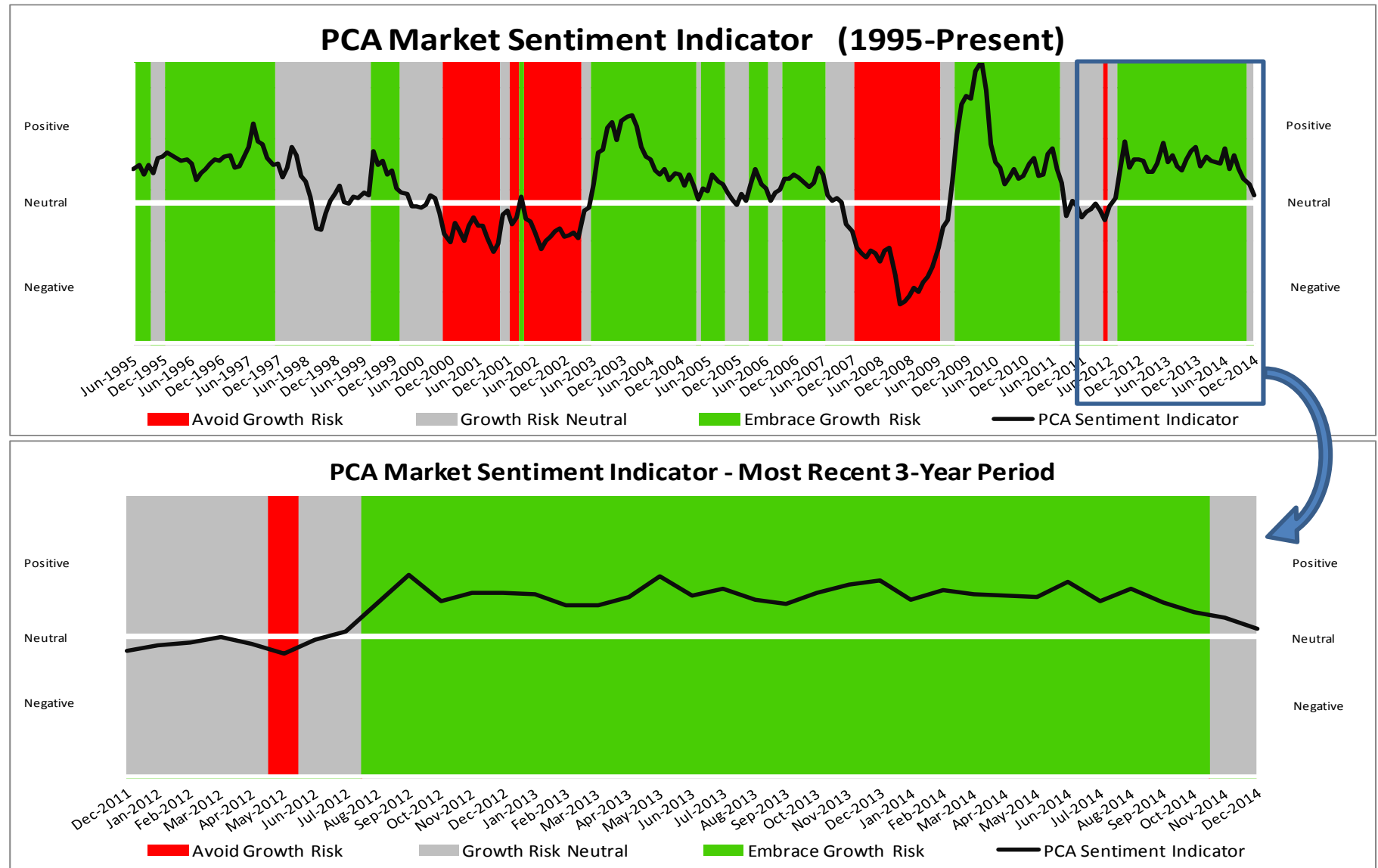
A Measure of Risk



Other Important Metrics within their Historical Ranges

Pay Attention to Extreme Readings





Information Behind Current Sentiment Reading

Bond Spread Momentum Trailing-Twelve Months

Equity Return Momentum Trailing-Twelve Months

Agreement Between Bond and Equity Momentum Measures?

Negative

Positive

Disagree



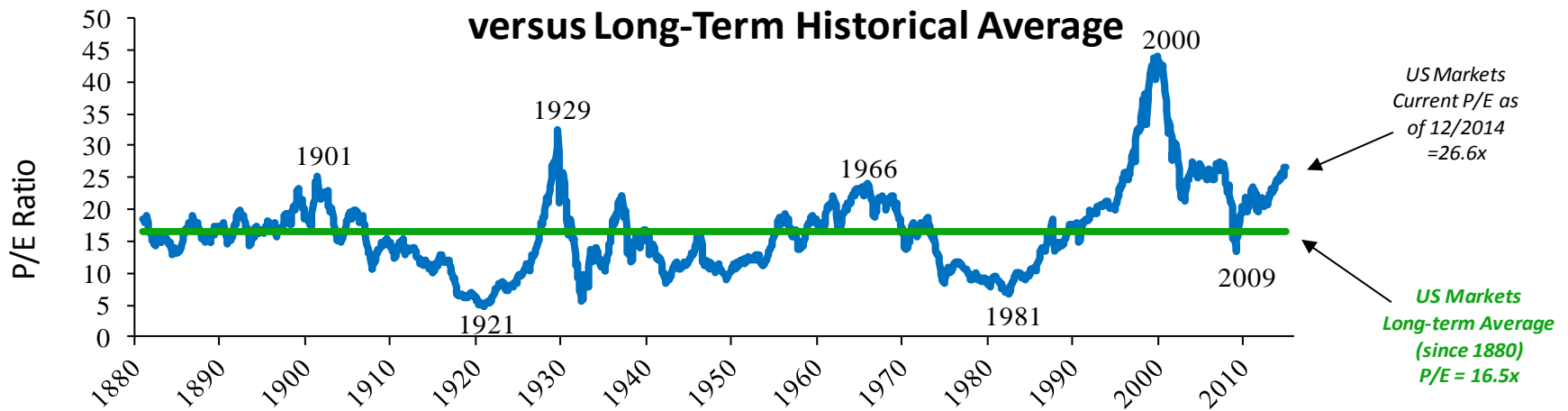
Growth Risk Visibility (Current Overall Sentiment)

Neutral

Developed Public Equity Markets

Exhibit 1

U.S. Equity Market P/E Ratio¹ versus Long-Term Historical Average

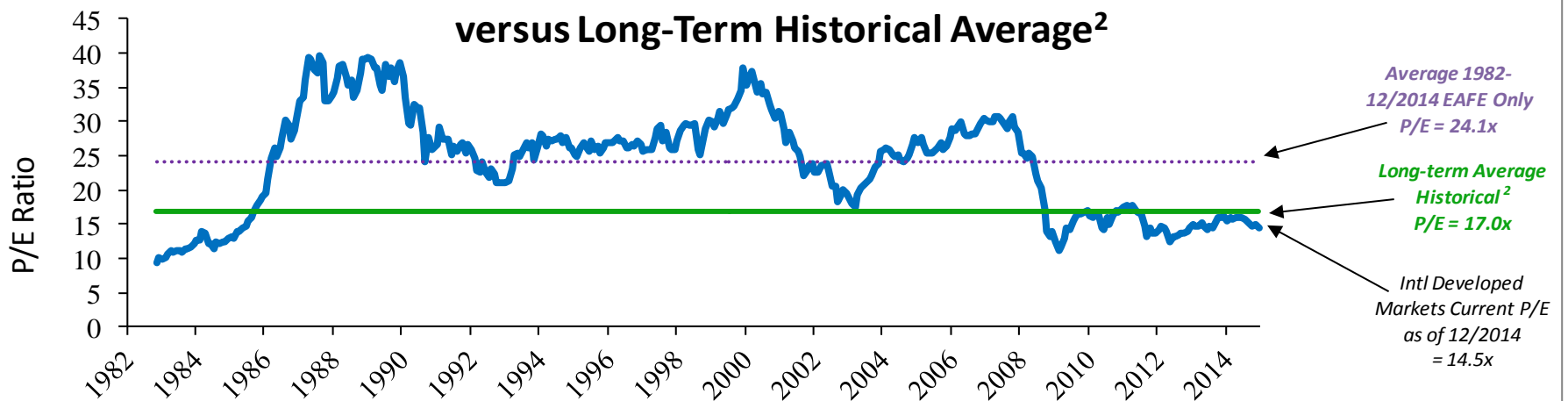


¹ P/E ratio is a Shiller P/E-10 based on 10 year real S&P 500 earnings over S&P 500 index level.

(Please note different time scales)

Exhibit 2

Developed ex-U.S. Equity Market P/E Ratio¹ versus Long-Term Historical Average²

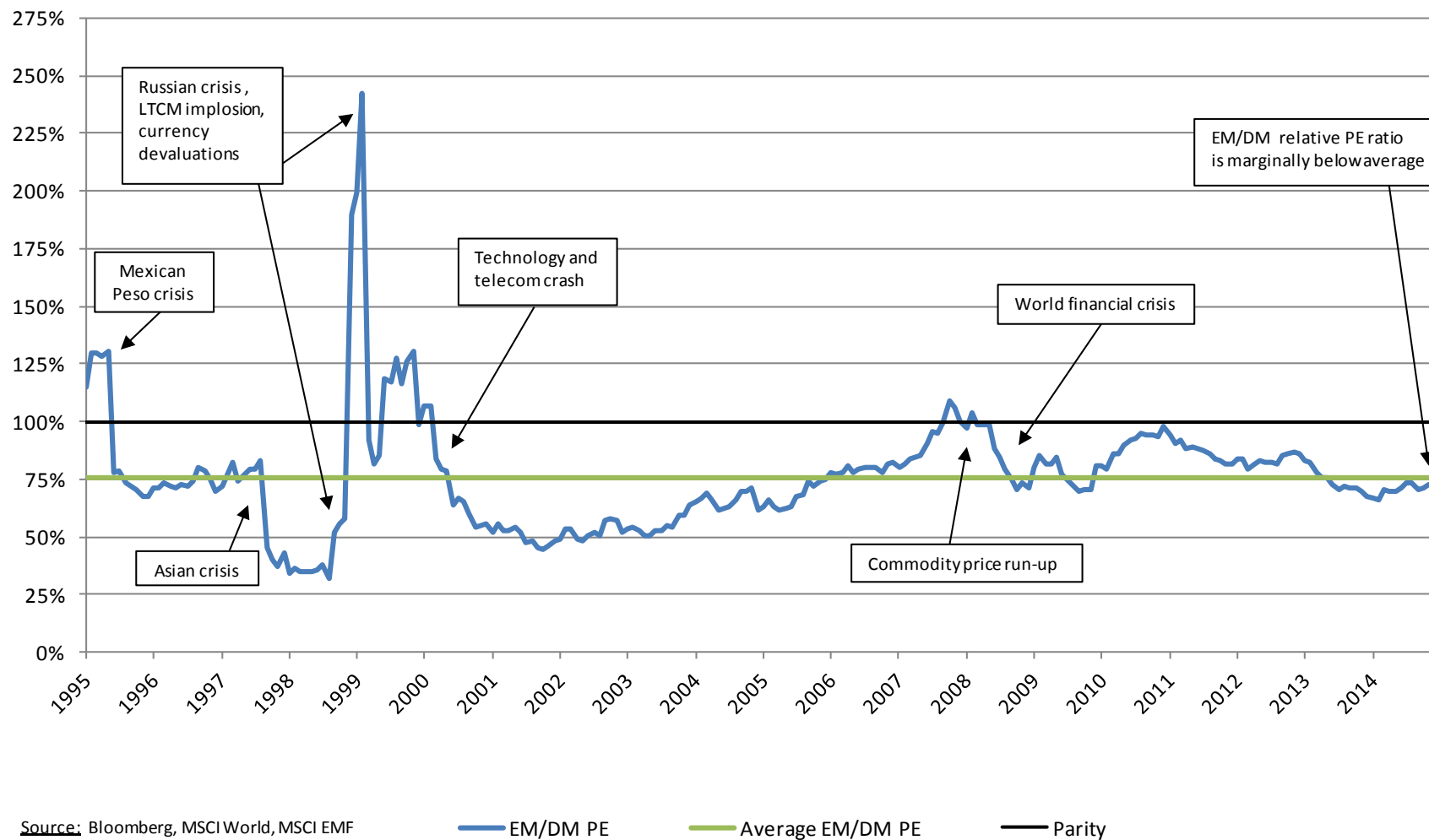


¹ P/E ratio is a Shiller P/E-10 based on 10 year real MSCI EAFE earnings over EAFE index level.

² To calculate the LT historical average, from 1881 to 1982 U.S. data is used as developed market proxy. From 1982 to present, actual developed ex-US market data (MSCI EAFE) is used.

Emerging Markets Public Equity Markets

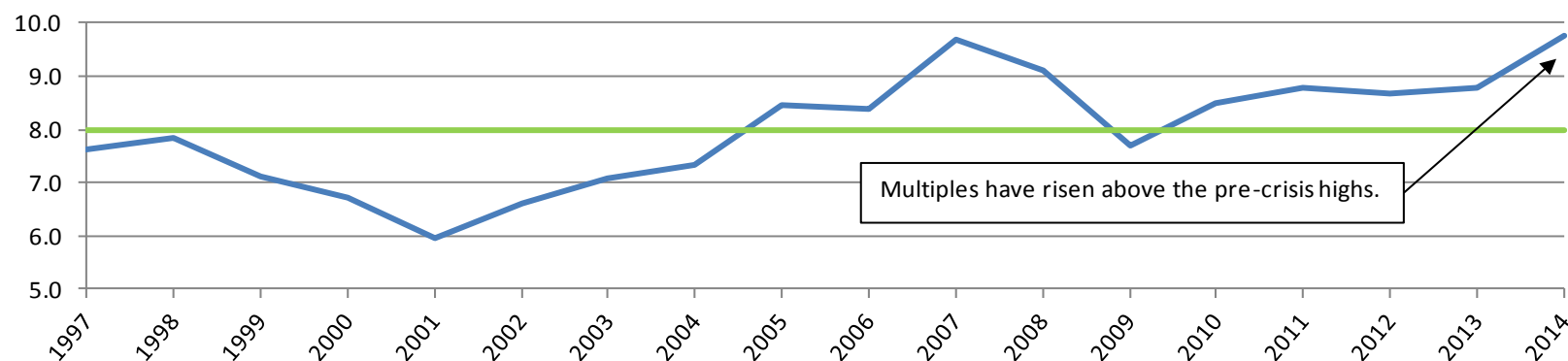
Exhibit 3

**Emerging Markets PE / Developed Markets PE
(100% = Parity between PE Ratios)**

U.S. Private Equity Markets

Exhibit 4

Price to EBITDA Multiples Paid in LBOs

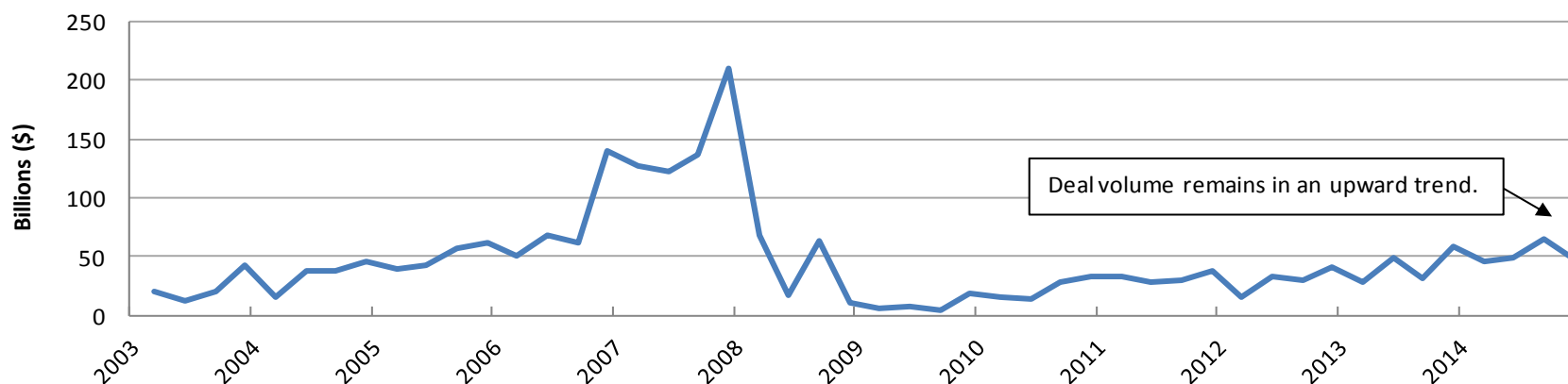


Source: S&P LCD study

(Please note different time scales)

Exhibit 5

Disclosed U.S. Quarterly Deal Volume*



Source: Thomson Reuters Buyouts

* quarterly total deal size (both equity and debt)

Private Real Estate Markets

Exhibit 6

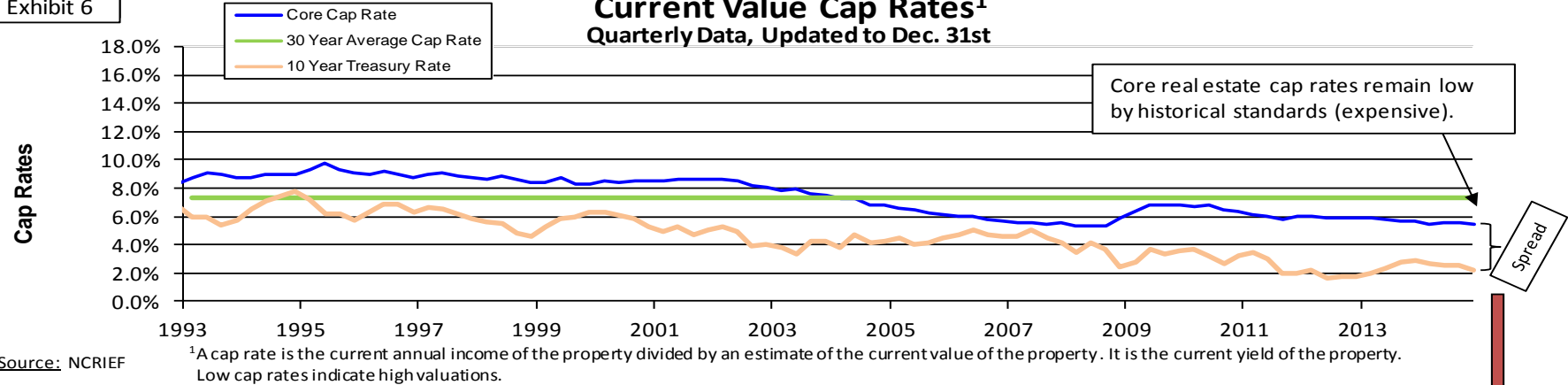
Current Value Cap Rates¹
Quarterly Data, Updated to Dec. 31st

Exhibit 7

Core Cap Rate Spread over 10-Year Treasury Interest Rate

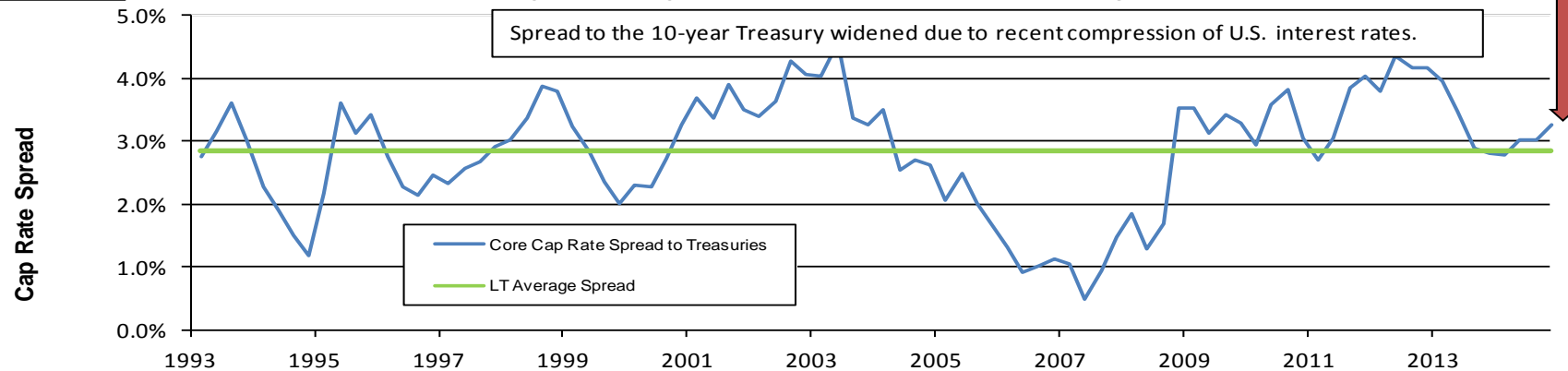
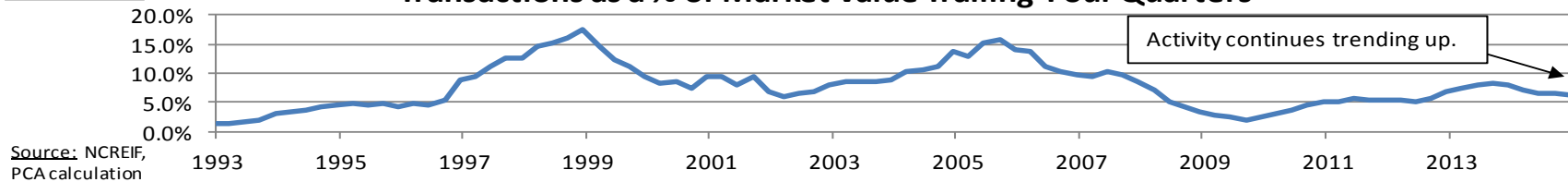


Exhibit 8

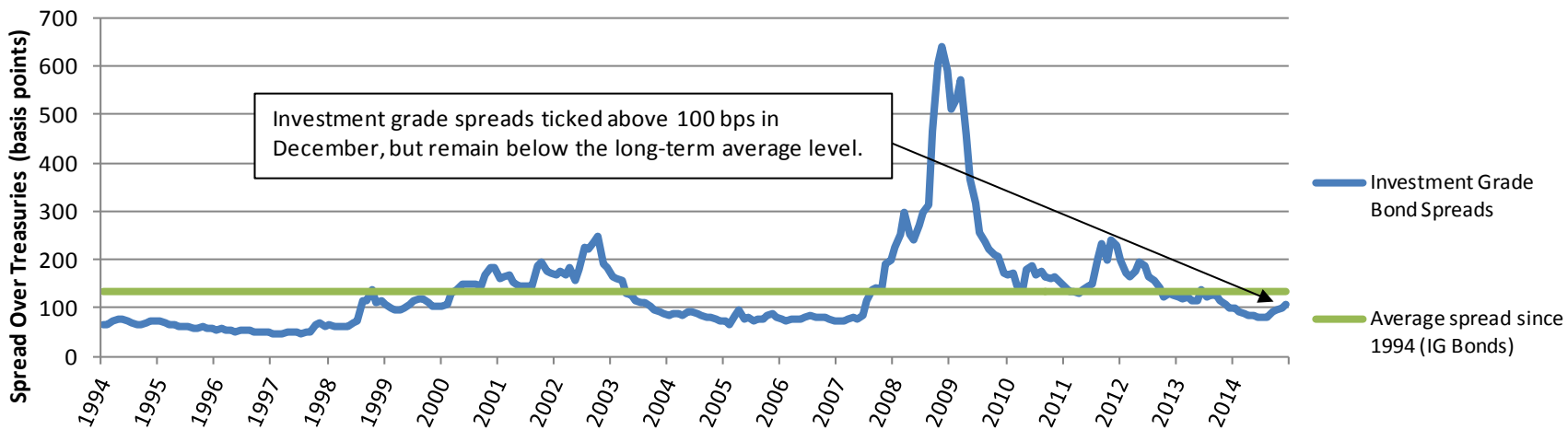
Transactions as a % of Market Value Trailing-Four Quarters



Credit Markets U.S. Fixed Income

Exhibit 9

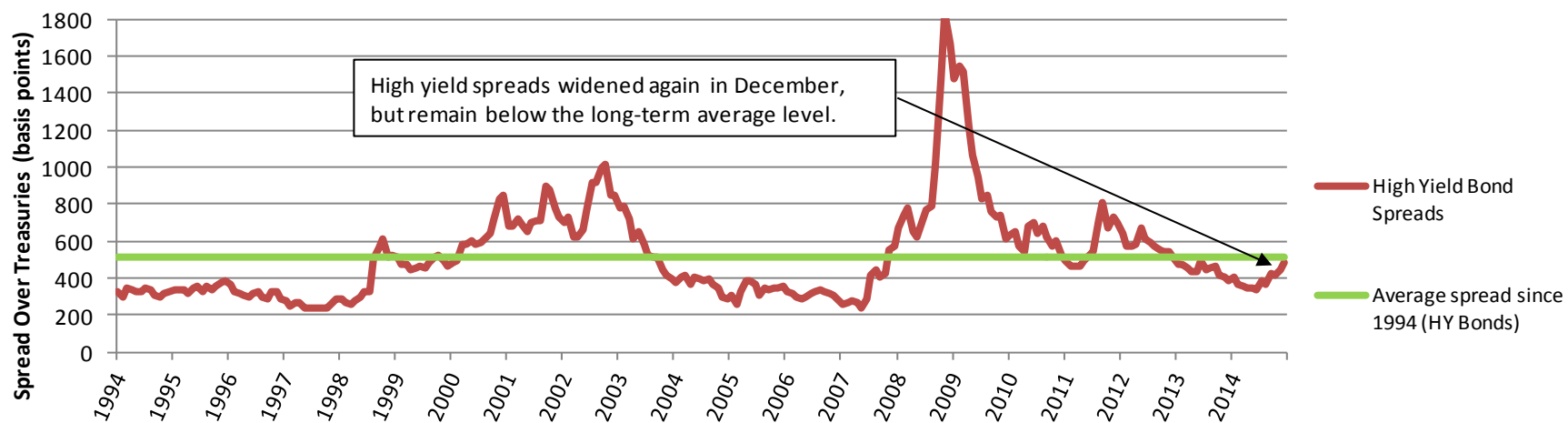
Investment Grade Corporate Bond Spreads



Source: LehmanLive: Barclays Capital US Corporate Investment Grade Index Intermediate Component.

Exhibit 10

High Yield Corporate Bond Spreads

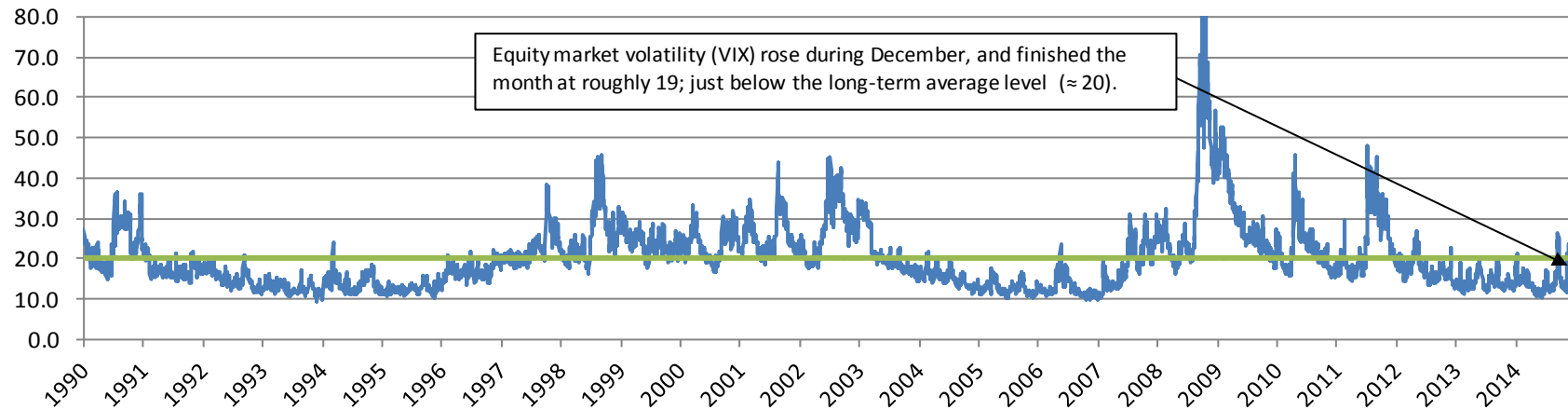


Source: LehmanLive: Barclays Capital U.S. Corporate High Yield Index.

Other Market Metrics

Exhibit 11

VIX - a measure of equity market fear / uncertainty

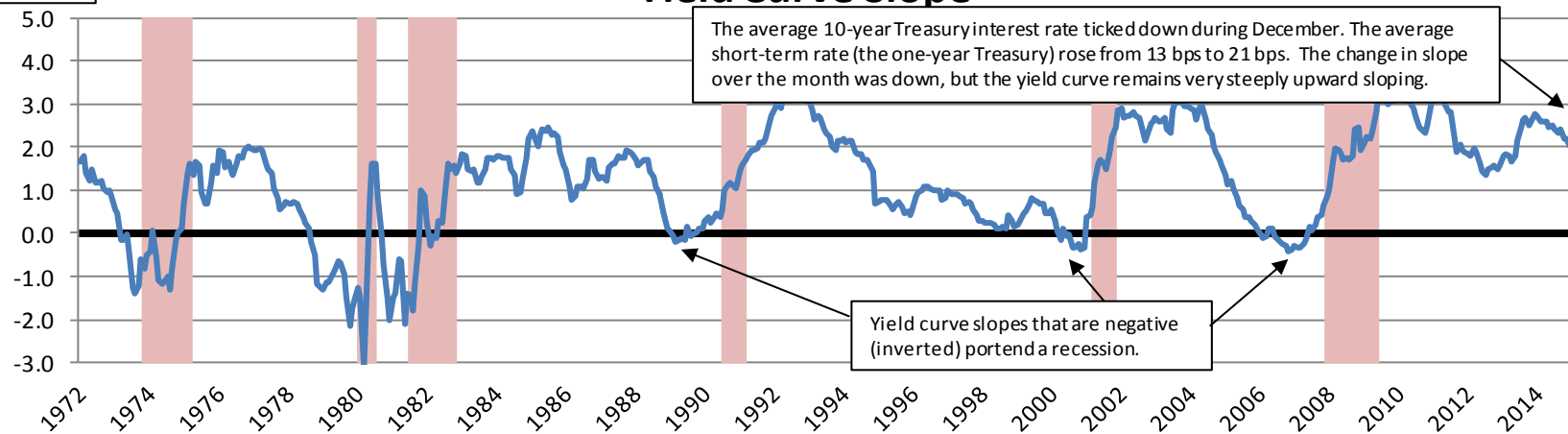


Source: <http://www.cboe.com/micro/vix/historical.aspx>

(Please note different time scales)

Exhibit 12

Yield Curve Slope



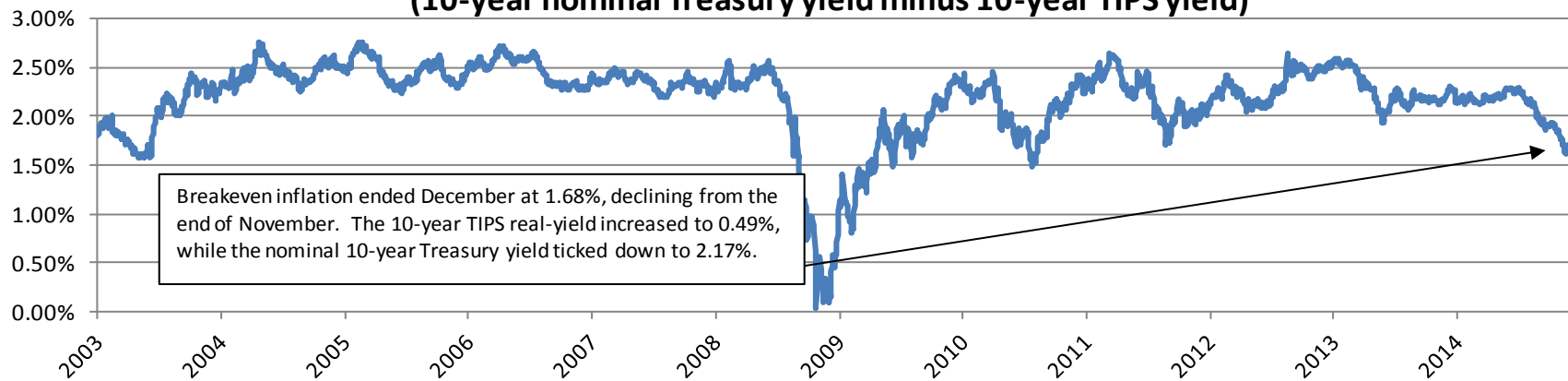
Source: www.ustreas.gov (10-year treasury yield minus 1-year treasury yield)

Recession Dating: NBER <http://www.nber.org/cycles.html>

Measures of Inflation Expectations

Exhibit 13

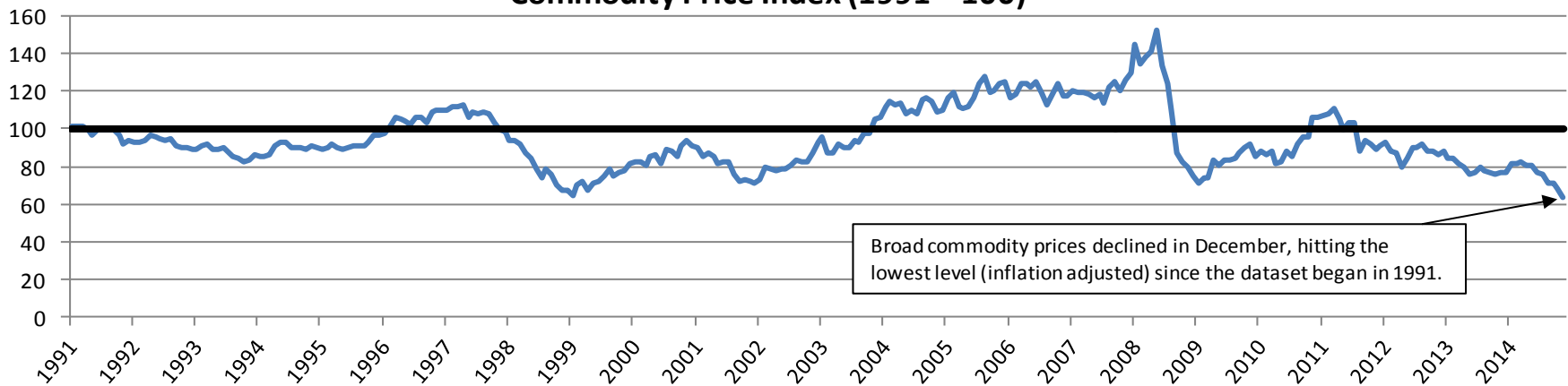
10-Year Breakeven Inflation (10-year nominal Treasury yield minus 10-year TIPS yield)



(Please note different time scales)

Exhibit 14

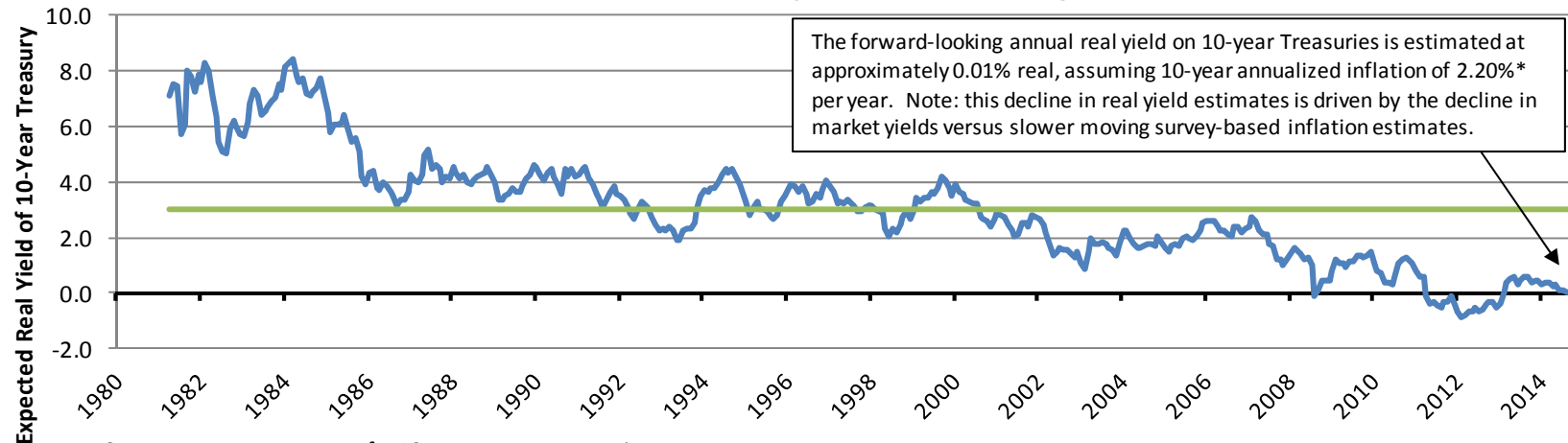
Inflation Adjusted Bloomberg Commodity Price Index (1991 = 100)



Measures of U.S. Treasury Interest Rate Risk

Exhibit 15

Estimate of 10-Year Treasury Forward-Looking Real Yield

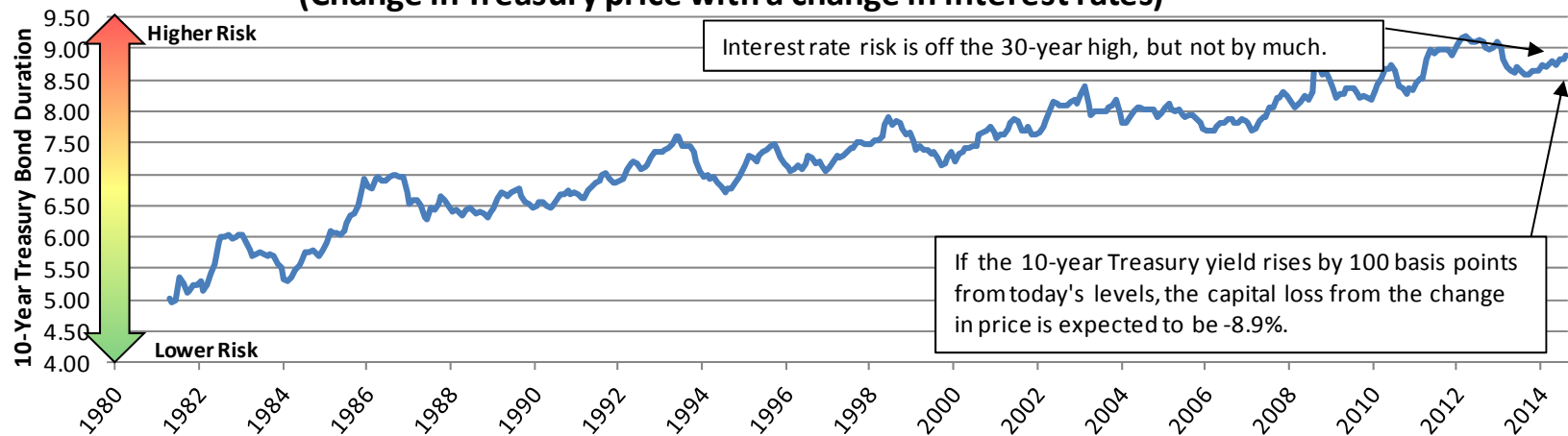


Sources: www.ustreas.gov for 10-year constant maturity rates

*Federal Reserve Bank of Philadelphia survey of professional forecasts for inflation estimates

Exhibit 16

10-Year Treasury Duration (Change in Treasury price with a change in interest rates)



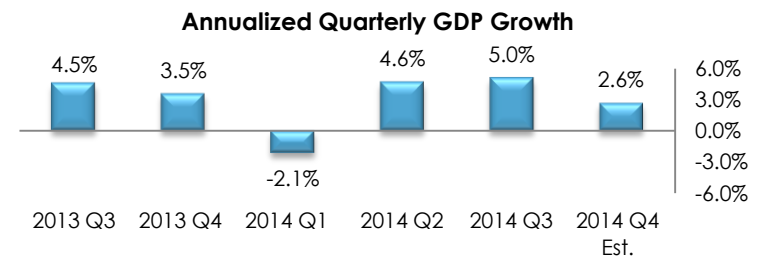
Source: www.ustreas.gov for 10-year constant maturity rates, calculation of duration

ECONOMIC OVERVIEW

US Equities recovered from sharp selloffs in October and December to reach all time highs near the end of 2014. International equities faced economic growth concerns and deflationary pressures, causing international equities to post their second consecutive negative quarter and pushing them into negative territory for the year. US GDP (advanced estimate) continued to grow in the fourth quarter but decelerated from the third quarter, primarily due to an upturn in imports, a downturn in federal government spending, and declines in nonresidential fixed investment and in exports. The unemployment rate continued its gradual decline hitting 5.6% at the end of the quarter. Inflation also declined during the quarter and finished <1% for the year. In October, the Fed followed through and ended its bond-buying program in addition to assuring investors that they are taking a cautious approach to raising short-term interest rates in 2015. The US dollar continued to rally against the Euro, acting as a headwind for non-dollar denominated international and emerging market financial assets, as it appreciated another 4.2% during the quarter ending at +12.0% versus other currencies for the year. Commodities suffered a double digit decline for the second straight quarter as oil prices ended the quarter near \$50 a barrel, a level not seen since 2009.

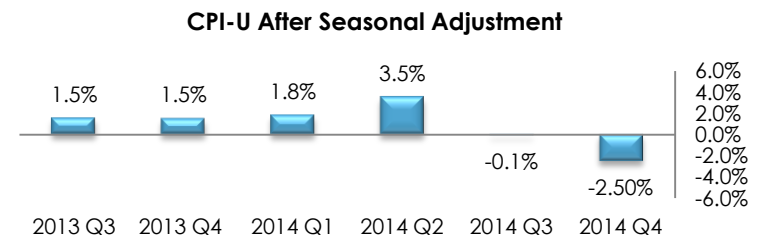
Economic Growth

- Real GDP increased at an annualized rate of 2.5 percent in the fourth quarter of 2014 after increasing at an annualized rate of 5.0 percent in the third quarter of 2014.
- GDP growth deceleration was accounted for by an upturn in imports, a downturn in federal government spending, and declines in nonresidential fixed investment and in exports.
- Private inventory investment and an acceleration in personal consumption expenditures were two of the main contributors to GDP growth during the quarter.



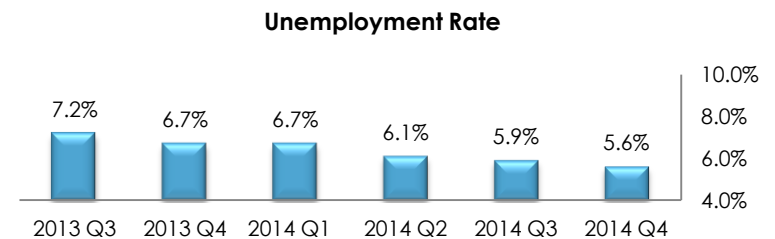
Inflation

- The Consumer Price Index for All Urban Consumers (CPI-U) decreased by 2.5 percent in the quarter on an annualized basis, after seasonal adjustment, due mainly to declines of energy prices.
- Quarterly percent changes may be adjusted between data publications due to periodic updates in seasonal factors.
- Core CPI-U increased by 1.1 percent for the quarter on an annualized basis.
- Over the last 12 months, CPI-U increased 1.6 percent after seasonal adjustment.



Unemployment

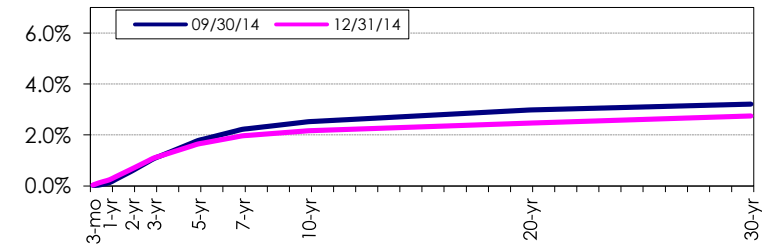
- The US economy gained approximately 866,000 jobs in the quarter.
- The official unemployment rate dropped to 5.6% at quarter end.
- The majority of jobs gained occurred in professional and business services, education and health services, and leisure and hospitality.



Interest Rates & US Dollar

- US Treasury yields fell on average over the quarter.
- The Federal Reserve has maintained the federal funds rate between 0.00% and 0.25% since December 2008.
- The US dollar appreciated against the Euro, Yen and Sterling by 4.2%, 9.2%, and 3.9%, respectively.

Treasury Yield Curve Changes

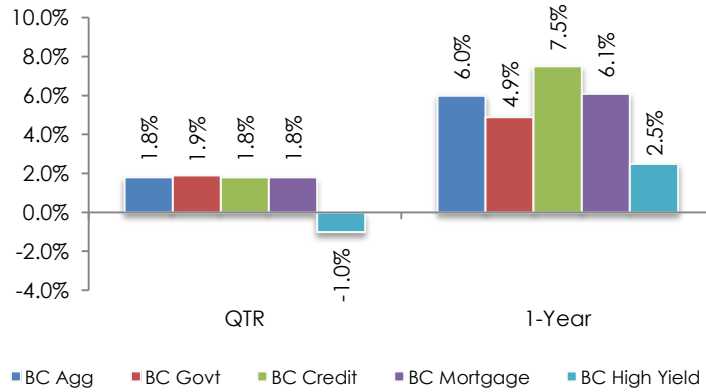


Source: US Treasury Department

Fixed Income

- US bond markets delivered positive returns during the quarter excluding high yield.
- Investment grade credit led positive bond market returns in all sectors over the trailing 1-year period.

Fixed Income Returns

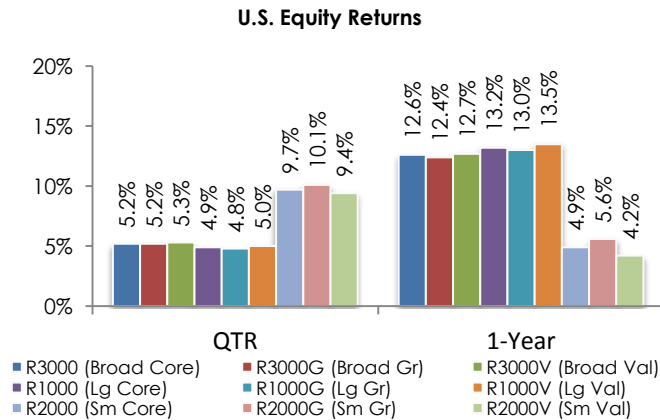
US Fixed Income Sector Performance
(BC Aggregate Index)

Sector	Weight	QTR	1 Year
Governments*	40.3%	1.9%	4.9%
Agencies	5.0%	0.7%	3.6%
Inv. Grade Credit	23.3%	1.8%	7.5%
MBS	28.8%	1.8%	6.1%
ABS	0.6%	0.5%	1.9%
CMBS	2.0%	1.4%	3.9%

*US Treasuries and Government Related

US Equities

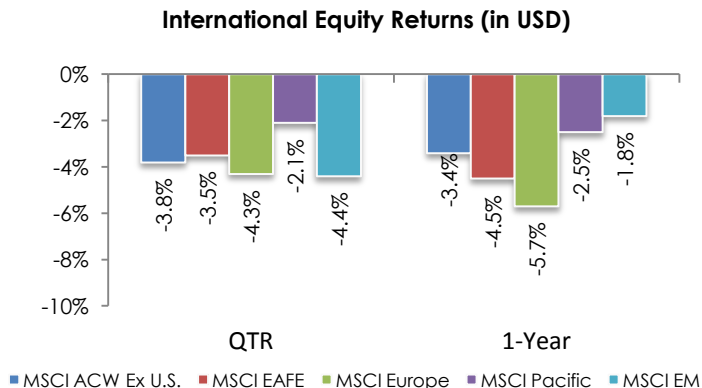
- Large cap US equities were outpaced by small cap stocks during the quarter but remained ahead during the longer 1-year period.
- During the quarter and 1-year periods, value outperformed growth in large cap stocks, while growth outperformed value in small cap stocks.



US Equity Sector Performance (Russell 3000 Index)			
Sector	Weight	QTR	1 Year
Information Tech.	19.0%	5.4%	17.8%
Financials	18.0%	7.8%	14.4%
Health Care	14.0%	8.6%	25.1%
Consumer Disc.	12.8%	8.9%	9.2%
Industrials	11.4%	7.0%	8.0%
Consumer Staples	8.5%	8.4%	15.9%
Energy	7.5%	-13.1%	-10.0%
Materials	3.6%	-0.8%	5.7%
Utilities	3.2%	13.0%	26.9%
Telecomm. Serv.	2.0%	-3.9%	2.5%

International Equities

- International markets performed poorly during the quarter partially due to the strengthening US dollar.
- One year returns were also poor as most markets finished in negative territory, owing significantly to relation currency depreciation abroad.



International Equity Region Performance (in USD) (MSCI ACW Index ex US)			
Sector	Weight	QTR	1 Year
Europe Ex. UK	31.8%	-4.3%	-5.8%
Emerging Markets	21.7%	-4.4%	-1.8%
United Kingdom	15.0%	-4.2%	-5.4%
Japan	15.1%	-2.4%	-3.7%
Pacific Ex. Japan	8.8%	-1.5%	-0.3%
Canada	7.6%	-4.6%	2.2%

Market Summary – Long-term Performance*

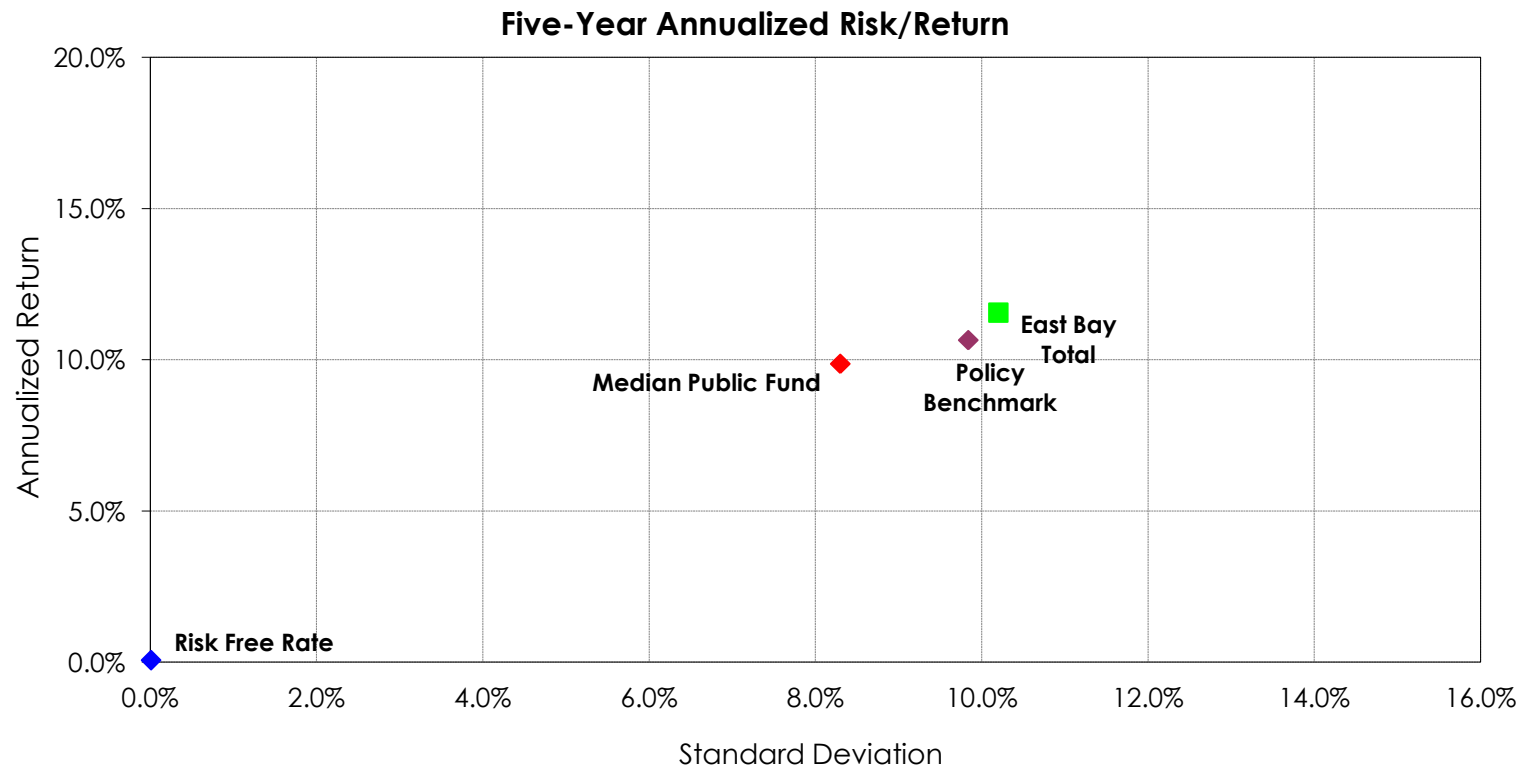
Indexes	1 Year	3 Year	5 Year	10 Year	20 Year
Global Equity					
MSCI All Country World	4.7%	14.7%	9.7%	6.6%	7.4%
Domestic Equity					
S&P 500	13.7%	20.4%	15.5%	7.7%	9.9%
Russell 3000	12.6%	20.5%	15.6%	7.9%	10.0%
Russell 3000 Growth	12.4%	20.3%	15.9%	8.5%	8.9%
Russell 3000 Value	12.7%	20.7%	15.3%	7.3%	10.5%
Russell 1000	13.2%	20.6%	15.6%	8.0%	10.0%
Russell 1000 Growth	13.0%	20.3%	15.8%	8.5%	9.0%
Russell 1000 Value	13.5%	20.9%	15.4%	7.3%	10.5%
Russell 2000	4.9%	19.2%	15.5%	7.8%	9.6%
Russell 2000 Growth	5.6%	20.1%	16.8%	8.5%	7.8%
Russell 2000 Value	4.2%	18.3%	14.3%	6.9%	11.0%
CBOE BXM	5.6%	8.0%	7.1%	4.8%	8.0%
International Equity					
MSCI All Country World ex US	-3.4%	9.5%	4.9%	5.6%	5.8%
MSCI EAFE	-4.5%	11.6%	5.8%	4.9%	5.4%
MSCI Pacific	-2.5%	9.8%	5.8%	4.4%	2.0%
MSCI Europe	-5.7%	12.5%	5.9%	5.2%	8.0%
MSCI EM (Emerging Markets)	-1.8%	4.4%	2.1%	8.8%	6.0%
Fixed Income					
BC Universal Bond	5.6%	3.2%	4.8%	4.9%	6.4%
BC Global Agg – Hedged	7.6%	4.3%	4.6%	4.7%	6.3%
BC Aggregate Bond	6.0%	2.7%	4.4%	4.7%	6.2%
BC Government	4.9%	1.4%	3.7%	4.3%	5.9%
BC Credit Bond	7.5%	4.8%	6.3%	5.5%	6.9%
BC Mortgage Backed Securities	6.1%	2.4%	3.7%	4.7%	6.1%
BC High Yield Corporate Bond	2.5%	8.4%	9.0%	7.7%	7.9%
BC WGILB - Hedged	9.0%	2.9%	5.0%	4.9%	NA
BC Emerging Markets	4.8%	5.8%	7.4%	7.8%	10.7%
Real Estate					
NCREIF (Private RE)	11.8%	11.1%	12.1%	8.4%	9.6%
NAREIT (Public RE)	27.2%	16.4%	16.6%	7.5%	11.1%
Commodity Index					
Bloomberg Commodity <small>(formerly DJUBS)</small>	-17.0%	-9.4%	-5.5%	-1.9%	3.2%

* Performance is annualized for periods greater than one year.

EBMUD PORTFOLIO REVIEW

EAST BAY RISK/RETURN ANALYSIS

Period ending December 31, 2014



*Median Fund is the Mellon Total Fund Public Universe.

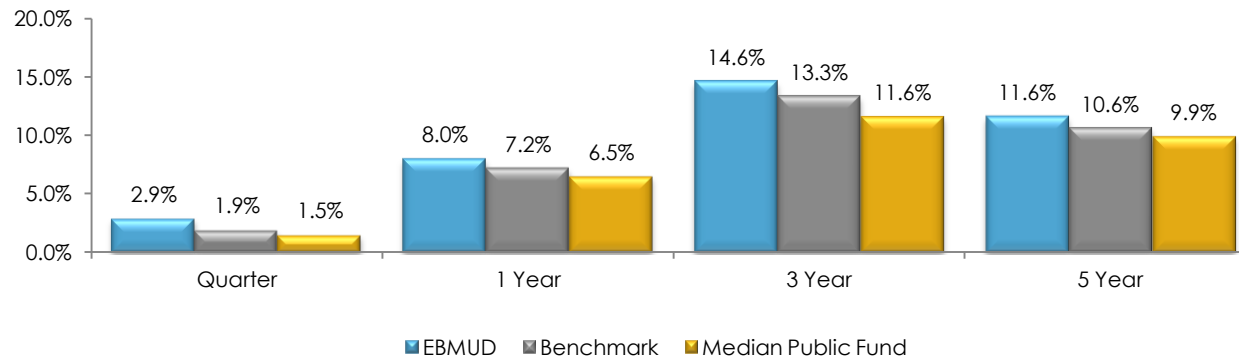
EBMUD PORTFOLIO PERFORMANCE

This section includes an overview of the performance of the EBMUD investment portfolio and a detailed analysis of asset classes and specific mandates.

Portfolio Performance Overview

The EBMUD Total Portfolio's results exceeded both its policy target benchmark⁴ and the Median Public Fund⁵ over each time period measured ending December 31, 2014. Strong results posted in Public Equities and Real Estate contributed to the Total Portfolio's outperformance versus the benchmark for the quarter. Outperformance versus the Median Public Fund can be attributed to overall asset allocation differences, most notably, EBMUD's larger allocation to domestic equity investments (including covered calls).

Periods Ending December 31, 2014 (annualized)

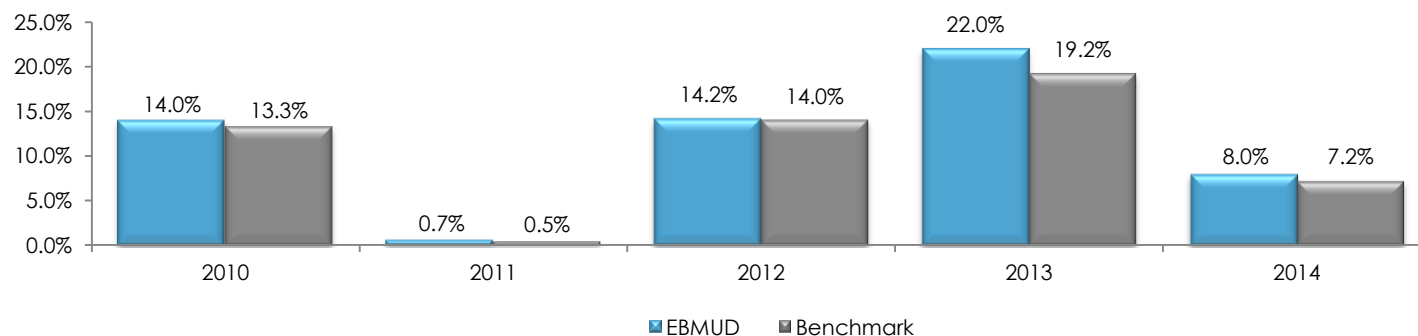


⁴Policy Benchmark consists of 40% Russell 3000 (blend), 15% MSCI ACWxU.S. (blend), 20% CBOE BXM, 10% BC Aggregate, 5% BC US 1-3 Year Government/Credit, 2.5% BC 1-5 Year U.S. High Yield Cash Pay, 2.5% S&P/LSTA Performing Loans, 2.5% NCREIF (lagged), and 2.5% FTSE NAREIT All Equity REITs index 4/1/14-present; see Appendix for historical Policy Benchmark composition.

⁵ Mellon Total Fund Public Universe.

Trailing 12-month absolute results have been positive over each of the last five discrete 12-month periods and the EBMUD Total Portfolio outperformed the policy target benchmark over each of these periods.

12-month Performance – Periods Ending December 31



Portfolio Valuation

The EBMUD Total Portfolio had an aggregate value of \$1.4 billion as of December 31, 2014. During the latest quarter the Total Portfolio increased in value by \$29.3 million, and over the latest year the Total Portfolio increased by \$102.5 million.

Portfolio Valuation as of December 31, 2014

(in millions \$)

	Dec. 31, 2014	Sept. 30, 2014	Quarterly Change	Percentage Change*	Dec. 31, 2013	Annual Change	Percentage Change*
EBMUD	\$1,370.5	\$1,341.2	\$29.3	2.2%	\$1,268.0	\$102.5	8.1%

*Percentage change in value due to both investment results and cash flows.

ASSET ALLOCATION**Actual vs. Target Allocations**

With respect to policy targets, the Total Portfolio ended the latest quarter overweight Domestic Equity and Cash, underweight International Equity and Total Fixed Income, and relatively near target in all other asset classes (variance < 0.5%). Target allocations represent those elected by the Board in September 2013 which took effect in March 2014 upon the funding of the new Covered Calls asset class and Non-Core Bonds allocation within Total Fixed Income.

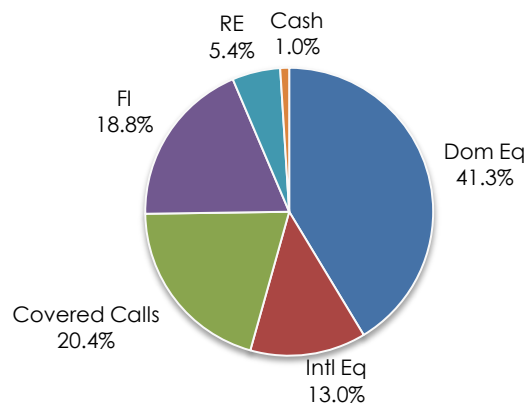
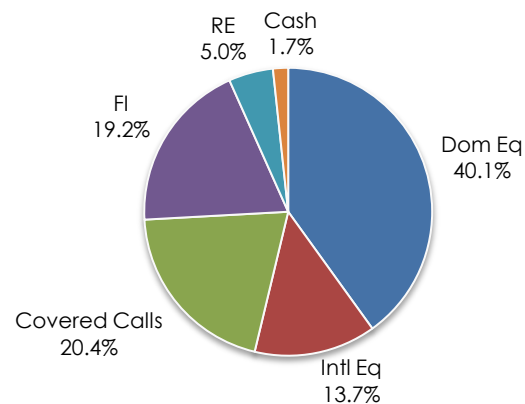
As of December 31, 2014

Segment	Actual \$(000)	Actual %	Target %*	Variance
Total Portfolio	1,370,463	100%	100%	---
Domestic Equity	566,026	41.3%	40.0%	1.3%
International Equity	178,536	13.0%	15.0%	-2.0%
Covered Calls	279,419	20.4%	20.0%	0.4%
Total Fixed Income	257,936	18.8%	20.0%	-1.2%
Real Estate**	74,471	5.4%	5.0%	0.4%
Cash	14,075	1.0%	0.0%	1.0%

**RREEF performance results and allocation are lagged one-quarter.

Actual Asset Allocation Comparison

During the latest quarter, the actual allocation to International Equity and Cash decreased by (0.7%) each, while the allocation to Domestic Equity increased by 1.2%. Allocations to the Plan's other asset classes were relatively unchanged (variance < 0.5%).

December 31, 2014**September 30, 2014**

Asset Class Performance (Gross of Fees)

The Domestic Equity asset class modestly outperformed the Russell 3000 (blend) Index over the recent quarter by 10 basis points, but underperformed the benchmark by (70) basis points over the 1-year period. Over the trailing 3-, 5-, and 10-year periods the portfolio tracked the benchmark return.

The International Equity portfolio exceeded the MSCI ACWI x U.S. (blend) Index by 1.5% over the quarter as one of the Plan's international equity managers outperformed the benchmark for the period. The portfolio trailed the benchmark by (1.7%) during the 1-year period, however, outperformed during the extended time periods measured.

The Total Fixed Income asset class trailed the Custom Fixed Income (blend) benchmark over the quarter and 1-year period by (50) and (40) basis points, respectively, but outperformed over the longer time periods measured. The Fixed Income asset class was restructured into two sub-portfolios, Core and Non-Core Fixed Income, in March 2014 (see page 28).

Periods ending December 31, 2014

Asset Class	Quarter	1 Year	3 Year	5 Year	10 Year	20 Year
Total Portfolio	2.9	8.0	14.6	11.6	7.2	9.1
<i>Policy Benchmark[^]</i>	<i>1.9</i>	<i>7.2</i>	<i>13.3</i>	<i>10.6</i>	<i>6.9</i>	<i>8.7</i>
Domestic Equity	5.3	11.9	20.3	15.5	7.8	9.8
<i>Russell 3000 (blend)*</i>	<i>5.2</i>	<i>12.6</i>	<i>20.5</i>	<i>15.6</i>	<i>8.0</i>	<i>10.4</i>
International Equity	-2.3	-5.1	10.8	6.3	6.1	---
<i>MSCI ACWI x U.S.(blend)**</i>	<i>-3.8</i>	<i>-3.4</i>	<i>9.5</i>	<i>4.9</i>	<i>5.2</i>	<i>---</i>
Covered Calls	2.3	---	---	---	---	---
<i>CBOE BXM</i>	<i>-0.8</i>	<i>---</i>	<i>---</i>	<i>---</i>	<i>---</i>	<i>---</i>
Total Fixed Income	0.2	3.7	3.4	5.6	4.9	6.7
<i>Fixed Income benchmark (blend)***</i>	<i>0.7</i>	<i>4.1</i>	<i>2.7</i>	<i>4.5</i>	<i>4.7</i>	<i>6.2</i>
Real Estate	11.2	24.1	15.6	14.6	---	---
<i>50/50 NCREIF/FTSE NAREIT All Equity****</i>	<i>7.5</i>	<i>19.1</i>	<i>13.9</i>	<i>12.5</i>	<i>---</i>	<i>---</i>
Cash	0.1	0.2	0.3	0.4	2.1	---
<i>Citigroup T-bills</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>	<i>1.5</i>	<i>---</i>

[^] Policy Benchmark consists of 40% Russell 3000 (blend), 15% MSCI ACWIxU.S. (blend), 20% CBOE BXM, 10% BC Aggregate, 5% BC US 1-3 Year Government/Credit, 2.5% BC 1-5 Year U.S. High Yield Cash Pay, 2.5% S&P/LSTA Performing Loans, 2.5% NCREIF (lagged), and 2.5% FTSE NAREIT All Equity REITs index 4/1/14-present; see Appendix for historical Policy Benchmark composition.

*Russell 3000 as of 10/1/05. Prior: 30% S&P500, 10% S&P400, 10% Russell 2000 (4/1/05-9/30/05); 33% S&P500, 10% S&P400, 10% Russell 2000 (9/1/98-3/31/05); 30% S&P500, 15% Wilshire 5000 (4/1/96-8/31/98)

**MSCI ACWIxU.S. as of 1/1/07; MSCI EAFE ND thru 12/31/06

***50% BC Aggregate, 25% BC US 1-3 Year Government/Credit, 12.5% BC 1-5 Year U.S. High Yield Cash Pay, and 12.5% S&P/LSTA Performing Loans index 4/1/14-present; 75% BC Aggregate, 12.5% BC 1-5 Year U.S. High Yield Cash Pay, and 12.5% S&P/LSTA Performing Loans index 3/1/14-3/31/14; BC Universal 1/1/08-2/28/14; BC Aggregate thru 12/31/07

****50% NCREIF (lagged), 50% FTSE NAREIT All Equity REITs Index as of 11/1/11; NCREIF (lagged) thru 10/31/11

MANAGER PERFORMANCE

(Gross of Fees)

Domestic Equity – Periods ending December 31, 2014

Manager	Mkt Value (\$000)	Asset Class	Management Style	Quarter	1 YR	3 YR	5 YR	Estimated Annual Fee (bps) ⁶	Current Monitoring Status
Northern Trust Co.	228,965	Large Cap Core	Passive	4.9	13.1	20.6	15.7	3	---
<i>Russell 1000 Index</i>	---	---	---	4.9	13.2	20.6	15.6	---	---
Intech	65,660	Large Cap Growth	Active	7.7	13.3	21.2	16.9	5 bps + 12.5% on excess returns	Watch
T. Rowe Price	62,539	Large Cap Growth	Active	4.5	9.5	22.4	16.6	49	---
<i>Russell 1000 Growth Index</i>	---	---	---	4.8	13.0	20.3	15.8	---	---
Barrow Hanley	154,555	Large Cap Value	Active	3.9	12.5	19.6	14.3	32	Watch
<i>Russell 1000 Value Index</i>	---	---	---	5.0	13.5	20.9	15.4	---	---
Northern Trust Co.	24,313	Small Cap Growth	Passive	10.2	5.9	20.5	17.1	5	---
<i>Russell 2000 Growth Index</i>	---	---	---	10.1	5.6	20.1	16.8	---	---
Opus	29,993	Small Cap Value	Active	8.8	5.8	15.3	14.0	5 bps + 25% on excess returns	Watch
<i>Russell 2000 Value Index</i>	---	---	---	9.4	4.2	18.3	14.3	---	---

During the latest three-month period ending December 31, 2014, three of EBMUD's six Domestic Equity managers matched or outperformed their respective benchmarks.

Northern Trust, EBMUD's passive large cap manager, performed in-line with its Russell 1000 Index target over all time periods measured and was within tracking error expectations.

Intech, one of EBMUD's two large cap growth managers, outperformed the Russell 1000 Growth Index return by 2.9% over the quarter. The portfolio's overweight to smaller cap stocks, favorable sector positioning, and positive selection effect benefitted performance for the quarter. The portfolio exceeded the benchmark during the 1-, 3-, and 5-year periods by 0.3%, 0.9%, and 1.1%, respectively. The portfolio's outperformance is a demonstration of "positive trending," which, according to Intech, occurs when the proportion of the overweighted stocks with a positive relative return is above that of the underweights. Intech was placed on "Watch" status as of December 2014, as the portfolio's performance fell below EBMUD's performance thresholds.

⁶ Reviewed annually. Last reviewed June 30, 2014.

T. Rowe Price, EBMUD's other large cap growth manager, trailed the Russell 1000 Growth Index by (0.3%) over the quarter and (3.5%) over the 1-year period. Overall stock selection detracted from results for the 1-year period, most notably within Consumer Discretionary, Information Technology, and Energy. The portfolio outperformed the benchmark over the 3- and 5-year periods by 2.1% and 0.8% per annum, respectively. Stock selection in Information Technology and Healthcare benefitted relative 3-year results.

Barrow Hanley, EBMUD's large cap value manager, underperformed the Russell 1000 Value Index over the recent quarter, 1-, 3-, and 5-year periods by (1.1%), (1.0%), (1.3%), and (1.1%), respectively. Overall security selection was a drag on results over each period; specifically, selection in Healthcare and Energy for the quarter, Financials and Energy for the 1-year period, Consumer Discretionary for the 3-year period, and Information Technology and Consumer Discretionary for the 5-year period. Barrow Hanley was placed on "Watch" status as of June 2013, as the portfolio's performance fell below EBMUD's performance thresholds.

Northern Trust, the portfolio's passive small cap growth manager, tracked or slightly outperformed the Russell 2000 Growth Index over each time period measured.

Opus, EBMUD's active small cap value manager, trailed the Russell 2000 Value Index by (0.6%) during the quarter, but outperformed the benchmark by 1.6% over the 1-year period. Relative 1-year results were driven by positive stock selection in Energy, Healthcare, Producer Durables, and Financials. The portfolio underperformed the benchmark by (3.0%) and (0.3%) per annum over the 3- and 5-year periods, respectively. Relative underperformance during the 3-year period was primarily attributable to the portfolio's underweight and stock selection in Consumer Discretionary. The persistent low-quality investment environment has also served as a headwind to the portfolio's high-quality bias for the 3-year period. Opus was placed on "Watch" status as of December 2012, as the portfolio's performance fell below EBMUD's performance thresholds.

International Equity – Periods ending December 31, 2014

Manager	Mkt Value (\$000)	Asset Class	Management Style	Quarter	1 YR	3 YR	5 YR	Estimated Annual Fee (bps) ⁷	Current Monitoring Status
Franklin Templeton ⁸	87,157	ACWI x U.S.	Active	-5.2	-8.2	11.2	5.4	57	---
Fisher Investments	91,380	ACWI x U.S.	Active	0.5	-1.9	10.4	6.9	66	---
MSCI ACWI x U.S. (blend)*	---	---	---	-3.8	-3.4	9.5	4.9	---	---

*As of January 1, 2007, the benchmark changed from MSCI EAFE to MSCI ACWI x U.S.

During the latest three-month period ending December 31, 2014, one of EBMUD's two International Equity managers trailed the MSCI ACWI x U.S. (blend) Index.

The **Franklin Templeton** account trailed the MSCI ACWI x U.S. (blend) Index by (1.4%) over the quarter and (4.8%) over the 1-year period, while outperforming the benchmark by 1.7% over the 3-year period and 0.5% over the 5-year period. From a country perspective, an overweight and poor stock selection in Europe was a drag on performance during the shorter time periods, while conversely, the larger allocation and selection in Europe drove relative 3-year outperformance.

Fisher outperformed the MSCI ACWI x U.S. (blend) Index by 4.3% over the latest quarter, 1.5% over the 1-year period, 0.9% over the 3-year period, and 2.0% over the 5-year period. Security selection in Financials was the largest contributor to relative outperformance for the quarter and 1-year period. Relative 5-year outperformance was driven by an overweight to and selection within Information Technology. Additionally, an underweight to and selection in Energy benefitted performance over each of these time periods.

⁷Reviewed annually. Last reviewed June 30, 2014.

⁸ Franklin Templeton's historical returns are reported net of fees (inception – 6/30/2011). The Franklin Templeton institutional mutual fund account was liquidated in June 2011 and moved to a transition account which later funded the Franklin Templeton new separate account in the same month. The Q2-2011 return is an aggregate of the institutional mutual fund account, Franklin transition account, and new separate account.

Covered Calls – Periods ending December 31, 2014

Manager	Mkt Value (\$000)	Asset Class	Management Style	Quarter	1 YR	3 YR	5 YR	Estimated Annual Fee (bps) ⁹	Current Monitoring Status
Parametric – BXM	91,894	Covered Calls	Replication	1.9	---	---	---	24	---
Parametric – Delta Shift	95,535	Covered Calls	Semi-Active	4.5	---	---	---	31	---
Van Hulzen	91,989	Covered Calls	Fully Active	0.5	---	---	---	25	---
CBOE BXM	---	---	---	-0.8	5.6	8.0	7.1	---	---

Over the latest quarter ending December 31, 2014, all three Covered Calls mandates exceeded the CBOE BXM Index.

The **Parametric BXM** strategy and **Parametric Delta Shift** strategy outperformed the CBOE BXM Index during the quarter by 2.7% and 5.3%, respectively.

EBMUD's other Covered Calls manager, **Van Hulzen**, exceeded the CBOE BXM Index over the quarter by 1.3%.

⁹ Estimated annual fee based on a \$75 million mandate.

Total Fixed Income – Periods ending December 31, 2014

Manager	Mkt Value (\$000)	Asset Class	Management Style	Quarter	1 YR	3 YR	5 YR	Estimated Annual Fee (bps) ¹⁰	Current Monitoring Status
CORE FIXED INCOME									
CS McKee	131,576	Core	Active	1.6	5.6	3.0	---	20	---
<i>BC Aggregate</i>	---	---	---	1.8	6.0	2.7	4.4	---	---
NON-CORE FIXED INCOME									
WAMCO – Short Duration	64,558	Non-Core	Active	0.1	---	---	---	15 ¹¹	---
<i>BC U.S. 1-3 Yr Govt/Credit</i>	---	---	---	0.2	0.8	0.9	1.4	---	---
WAMCO – Short-Term HY	30,341	Non-Core	Active	-4.1	---	---	---	40	---
<i>BC 1-5 Yr U.S. HY Cash Pay</i>	---	---	---	-1.2	0.7	7.9	8.1	---	---
WAMCO – Bank Loans	31,462	Non-Core	Active	-0.9	---	---	---	45	---
<i>S&P/LSTA Performing Loans</i>	---	---	---	-0.3	1.8	5.6	5.7	---	---

Over the latest three-month period ending December 31, 2014, all four of EBMUD's Fixed Income mandates trailed their respective benchmarks.

East Bay's core fixed income manager, **CS McKee**, underperformed the BC Aggregate Index during the quarter and 1-year period by (20) and (40) basis points respectively, but outperformed the benchmark by 30 basis points per annum during the 3-year period.

Within the non-core fixed income aggregate, the **WAMCO Short Duration** portfolio tracked its benchmark, the BC U.S. 1-3 Year Government/Credit Index during the quarter. The **WAMCO Short-Term High Yield** portfolio trailed the BC 1-5 Year U.S. High Yield Cash Pay Index by (2.9%) for the quarter; the worst five performers in the portfolio were Energy holdings. The **WAMCO Bank Loans** portfolio trailed the S&P/LSTA Performing Loans benchmark over the quarter by (60) basis points.

¹⁰ Reviewed annually. Last reviewed June 30, 2014.

¹¹ Assumes \$65 million in other WAMCO assets.

Real Estate – Periods ending December 31, 2014

Manager	Mkt Value (\$000)	Asset Class	Quarter	1 YR	3 YR	5 YR	Estimated Annual Fee (bps) ¹²	Current Monitoring Status
RREEF II*	26,415	Real Estate	4.1	12.4	13.5	13.4	30 ¹³	---
NCREIF*	---	---	2.6	11.3	11.1	11.0	---	---
CenterSquare (formerly Urdang)	48,056	Real Estate	15.5	32.7	17.3	---	27.5 bps + 15% on excess returns	---
FTSE NAREIT All Equity REITs	---	---	12.4	27.2	16.4	16.6	---	---

*Results are lagged one quarter.

East Bay's Real Estate manager, **RREEF II**, outperformed its benchmark, the NCREIF Property Index, during the quarter, 1-, 3-, and 5-year periods by 1.5%, 1.1%, 2.4%, and 2.4%, respectively. During the lagged quarter, RREEF America REIT II operations generated an income return of 1.3% before fees, holding steady from the previous quarter. Same store net operating income for the 1-year period ending September 30, 2014, increased 5% from the prior year. Occupancy at the end of the quarter increased to 93 percent overall.

CenterSquare, East Bay's REIT manager, exceeded the FTSE NAREIT All Equity REITs Index return over the quarter by 3.1%, 1-year period by 5.5%, and 3-year period by 0.9%.

¹² Reviewed annually. Last reviewed June 30, 2014.

¹³ Fees paid from July 1, 2013 – June 30, 2014, included an incentive fee accrual credit received in 3Q2013.

PERFORMANCE MONITORING

Portfolio	Violation Type (Window)*	Date of Initial Violation	Corrective Action(s)	CURRENT STATUS			
				Current Status	Est. Beg. Date of Current Status	Months Since Est. Beg. Date	Performance Since Est. Beg. Date**
Intech	Long-Term	9/30/2014	Placed on Watch (Nov-14)	Watch	12/01/2014	1	-0.2
<i>Russell 1000 Growth</i>				---			<i>1.0</i>
Barrow Hanley	Short-Term	03/31/2013	Placed on Watch (May-13), (Nov-14)	Watch	06/01/2013	19	16.4
<i>Russell 1000 Value</i>				---			<i>17.2</i>
Opus	Short-Term	09/30/2012	Placed on Watch (Nov-12), (Mar-14)	Watch	12/01/2012	25	18.3
<i>Russell 2000 Value</i>				---			<i>20.0</i>

*Defined as: Short-Term (12 months), Medium-Term (36 months), Long-Term (60 months)

**Annualized for periods greater than 12 months

- The Board placed Intech on Watch as of December 2014 due to performance concerns. Since its Watch period began, Intech produced a minus (0.2%) 1-month return, which underperformed the benchmark by (1.2%).
- The Board placed Barrow Hanley on Watch as of June 2013 due to performance concerns. Since its Watch period began, Barrow Hanley produced a 16.4% 19-month return, which trailed the benchmark by (80) basis points.
- The Board placed Opus on Watch as of December 2012 due to performance concerns. Since its Watch period began, Opus produced an 18.3% 25-month return, which was (1.7%) below its benchmark.

Investment Performance Criteria by Asset Class

Asset Class	Short-term (rolling 12-month periods)	Medium-term (rolling 36-month periods)	Long-term (60+ months)
Domestic Equity - Active	Fd return < bench return - 3.5%	Fd annlzd return < bench annlzd return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Domestic Equity - Passive	Tracking error > 0.30%	Tracking error > 0.25% for 6 consecutive months	Fd annlzd return < bench annlzd return -0.40% for 6 consecutive months
International Equity - Active	Fd return < bench return - 4.5%	Fd annlzd return < bench annlzd return -2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Active	Fd return < bench return - 3.5%	Fd annlzd return < bench annlzd return -1.75% for 6 consecutive months	VRR < 0.97 for 6 consecutive months
Covered Calls - Replication	Tracking error > 0.30%	Tracking error > 0.25% for 6 consecutive months	Fd annlzd return < bench annlzd return - 0.40% for 6 consecutive months
Fixed Income - Core – Active	Fd return < bench return - 1.5%	Fd annlzd return < bench annlzd return -1.0% for 6 consecutive months	VRR < 0.98 for 6 consecutive months
Fixed Income - Core – Passive	Tracking error > 0.25%	Tracking error > 0.20% for 6 consecutive months	Fd annlzd return < bench annlzd return - 0.30% for 6 consecutive months
Fixed Income - Non-Core	Fd return < bench return - 4.5%	Fd annlzd return < bench annlzd return - 2.0% for 6 consecutive months	VRR < 0.97 for 6 consecutive months

All criteria are on an annualized basis.

VRR – Value Relative Ratio – is calculated as: manager cumulative return / benchmark cumulative return.

**EBMUD Total Fund Universe Rankings
as of December 31, 2014**

Mellon Total Funds – Public Universe

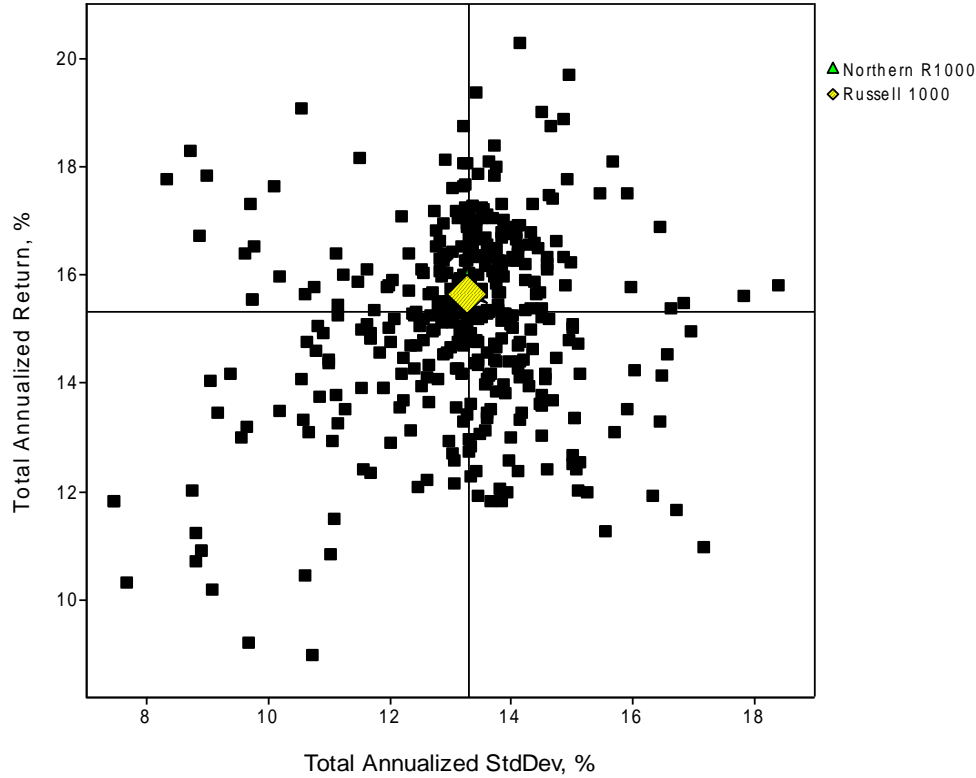
	Quarter	1-Year	3-Year	5-Year	10-Year
Maximum	4.2	11.8	16.2	12.1	8.4
Percentile 25	2.3	7.4	12.9	10.6	7.1
Median	1.5	6.5	11.6	9.9	6.7
Percentile 75	1.0	5.2	10.2	8.9	6.1
Minimum	-0.6	0.1	0.4	1.5	5.1
# of Portfolios	99	94	80	75	66
EBMUD Total					
Return	2.9	8.0	14.6	11.6	7.2
Quartile Rank	1 st	1 st	1 st	1 st	1 st

Notes:

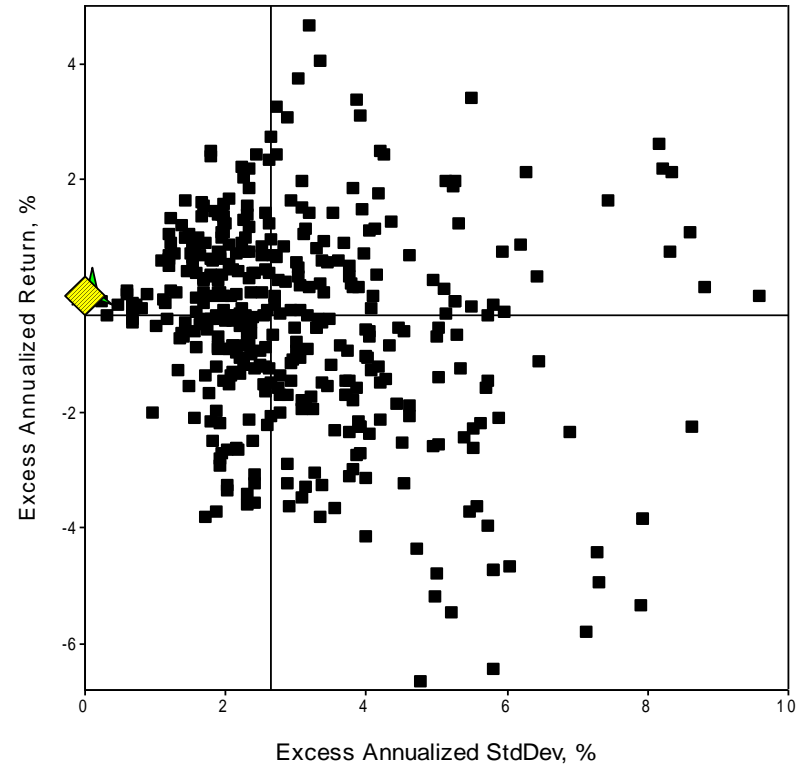
Sources: Universe Information; Mellon Total Public Funds
All performance is shown **gross of fees**.

EBMUD Large Cap Manager Comparisons as of December 31, 2014

5-Year Total Risk/Return



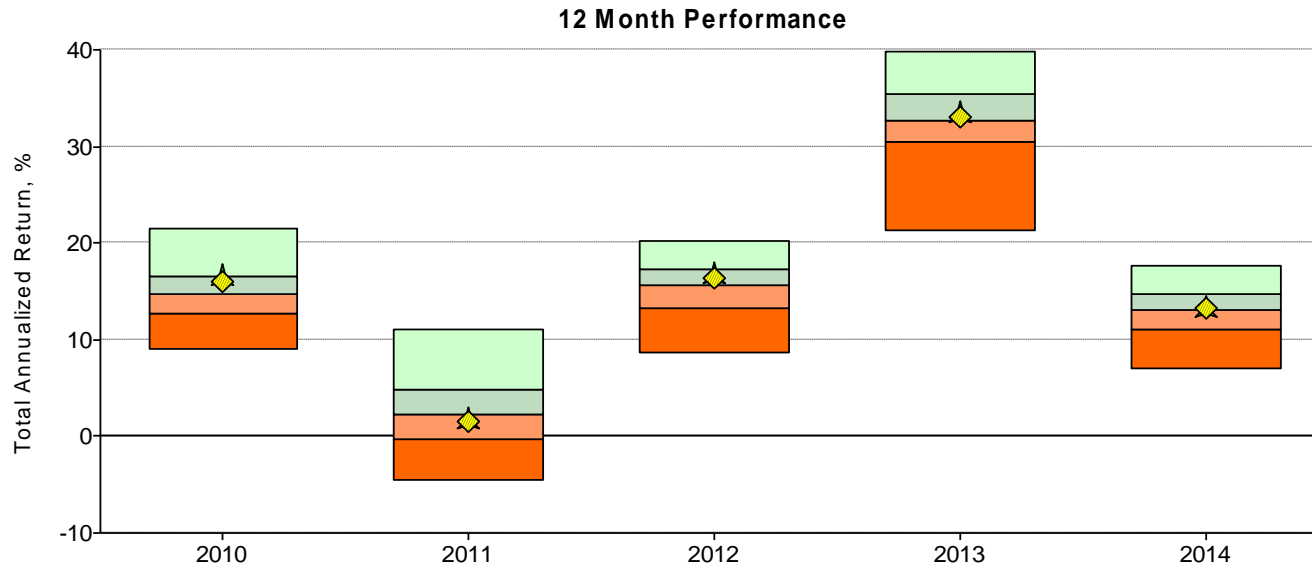
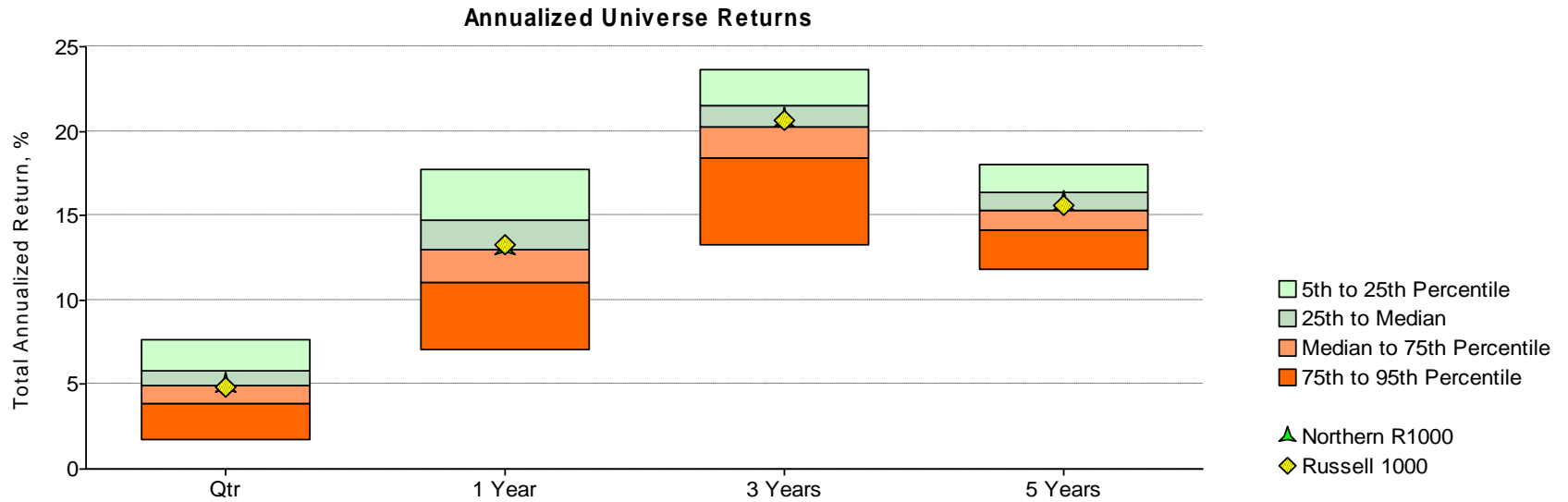
5-Year Excess Risk/Return



	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Northern R1000	15.71	13.27	1.18
Russell 1000	15.64	13.27	1.18
Large Cap Universe Median	15.31	13.30	1.18

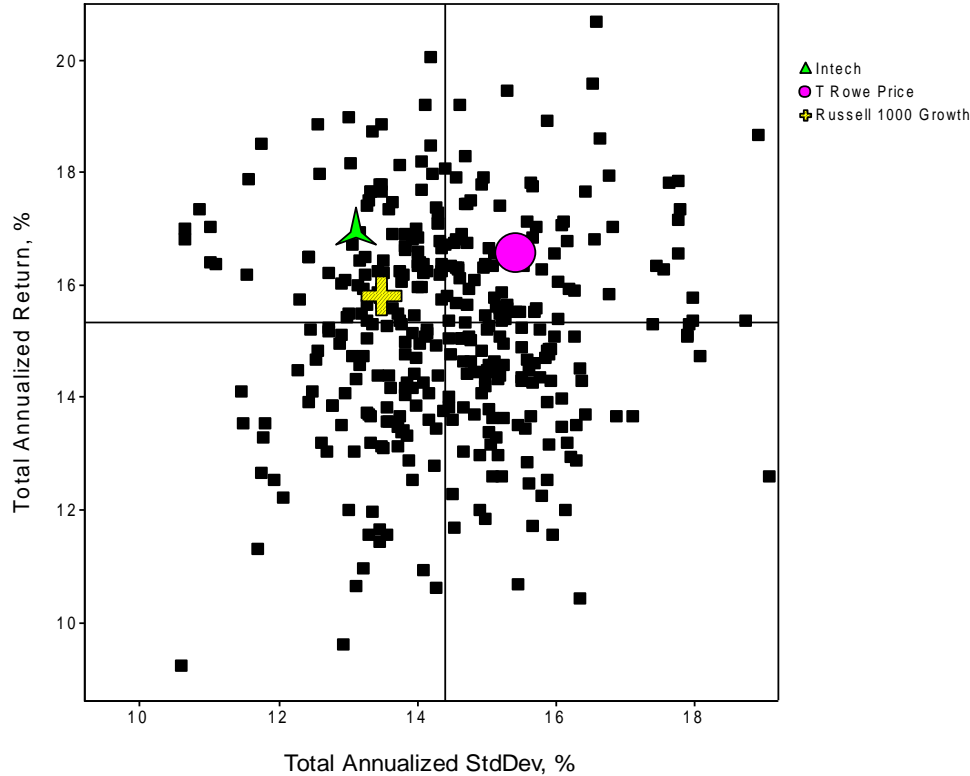
	Annualized Excess Return, %	Annualized Excess StdDev, %	Sharpe Ratio, Excess
Northern R1000	0.07	0.11	0.61
Russell 1000	0.00	0.00	NA
Large Cap Universe Median	-0.33	2.65	-0.15

EBMUD Large Cap Manager Comparisons as of December 31, 2014

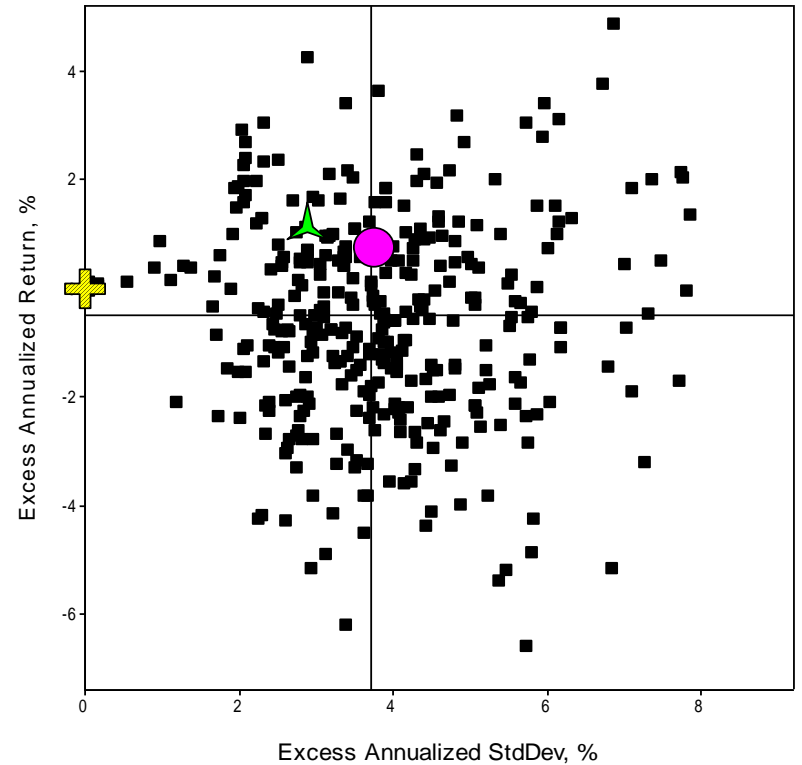


EBMUD Large Cap Growth Manager Comparisons as of December 31, 2014

5-Year Total Risk/Return



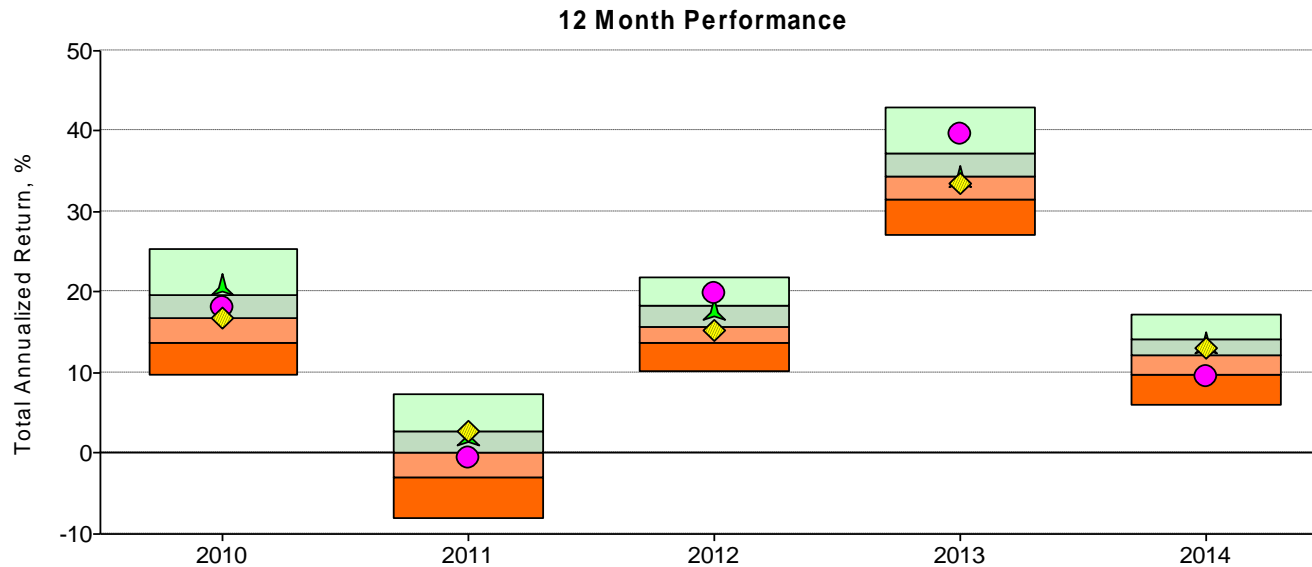
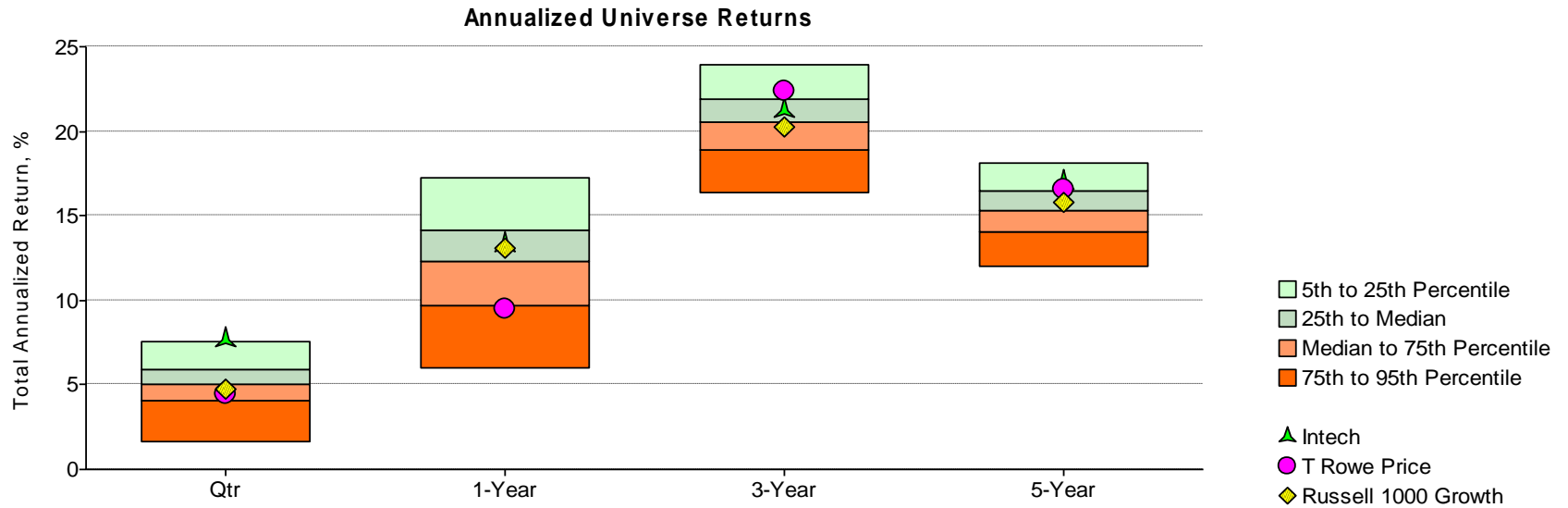
5-Year Excess Risk/Return



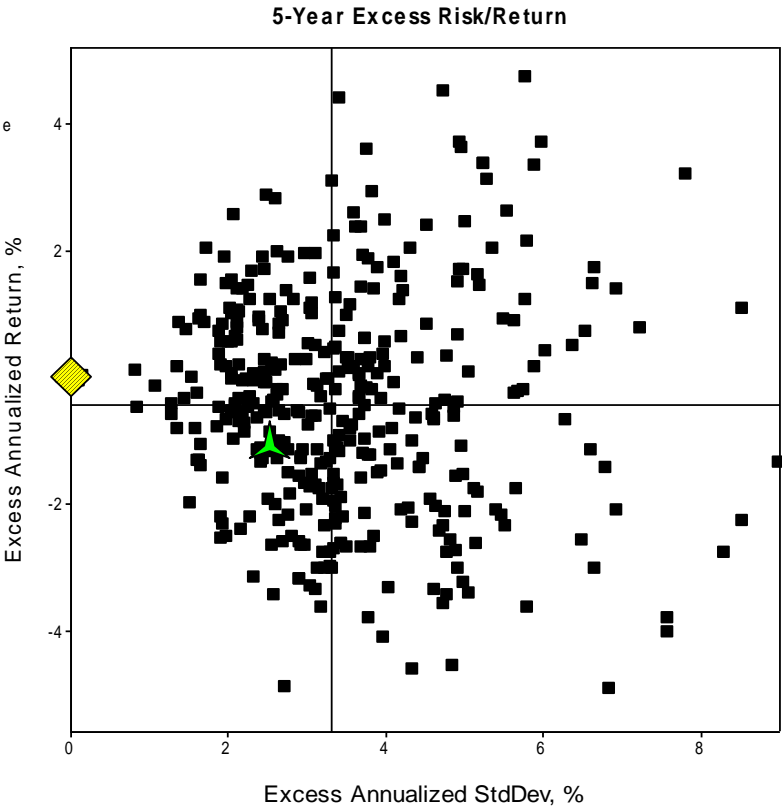
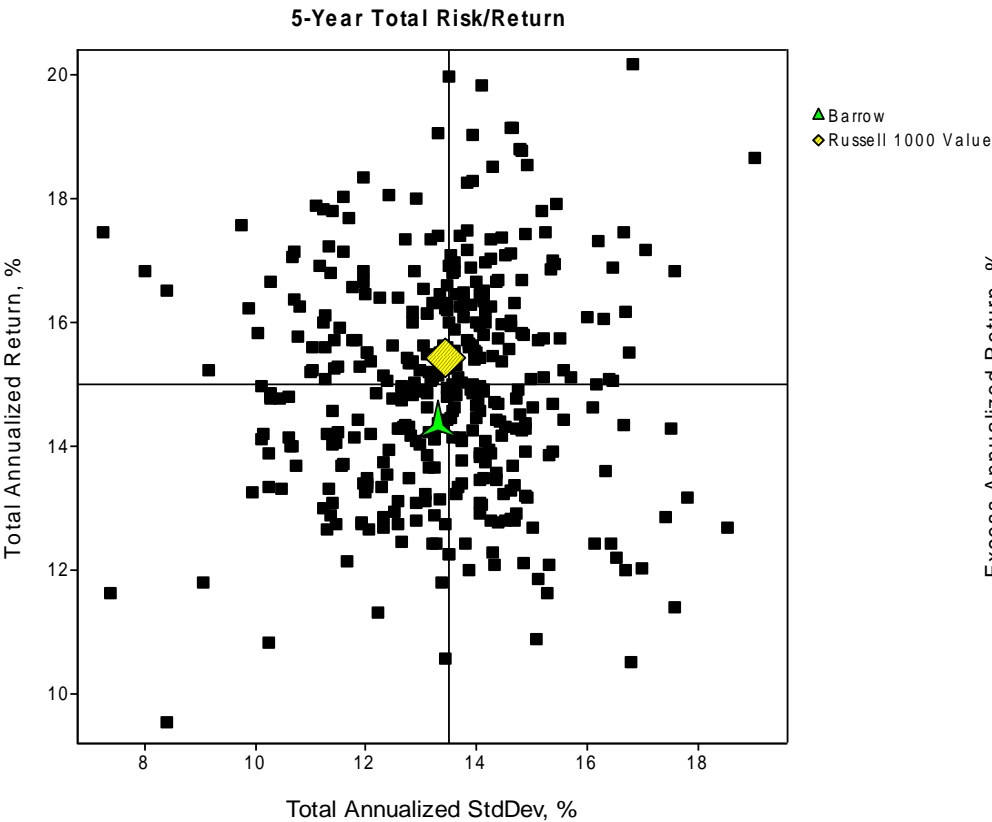
	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Intech	16.94	13.11	1.29
T Rowe Price	16.56	15.41	1.07
Russell 1000 Growth	15.81	13.49	1.17
Large Growth Manager Universe Median	15.33	14.39	1.05

	Annualized Excess Return, %	Annualized Excess StdDev, %	Sharpe Ratio, Excess
Intech	1.12	2.89	0.39
T Rowe Price	0.74	3.75	0.20
Russell 1000 Growth	0.00	0.00	NA
Large Growth Manager Universe Median	-0.49	3.72	-0.13

EBMUD Large Cap Growth Manager Comparisons as of December 31, 2014



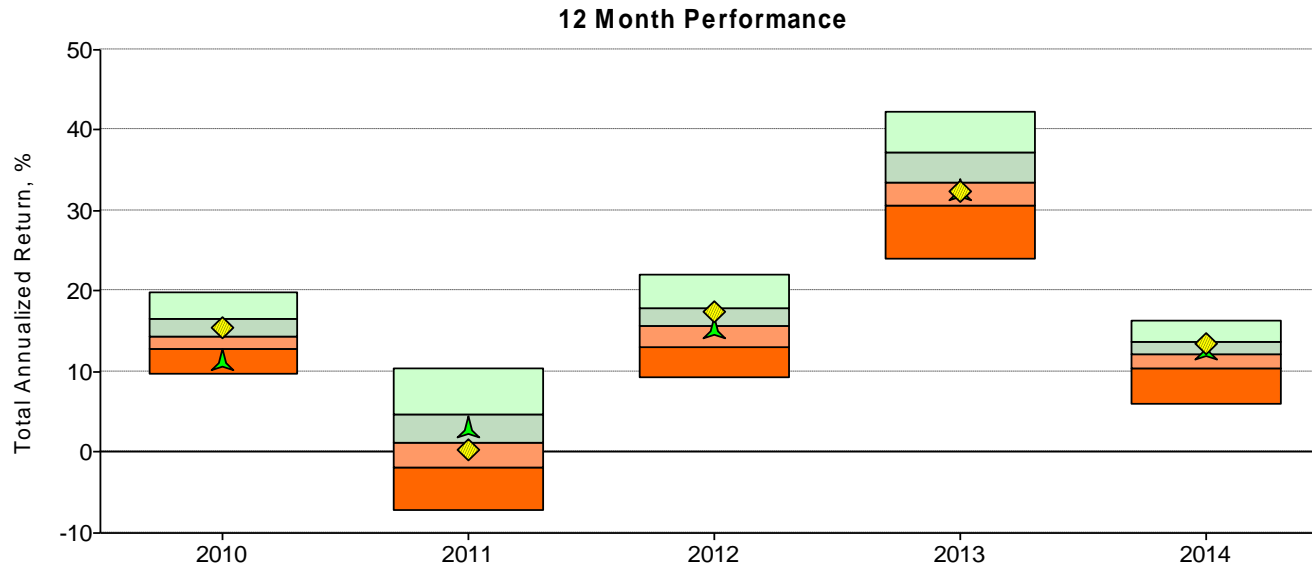
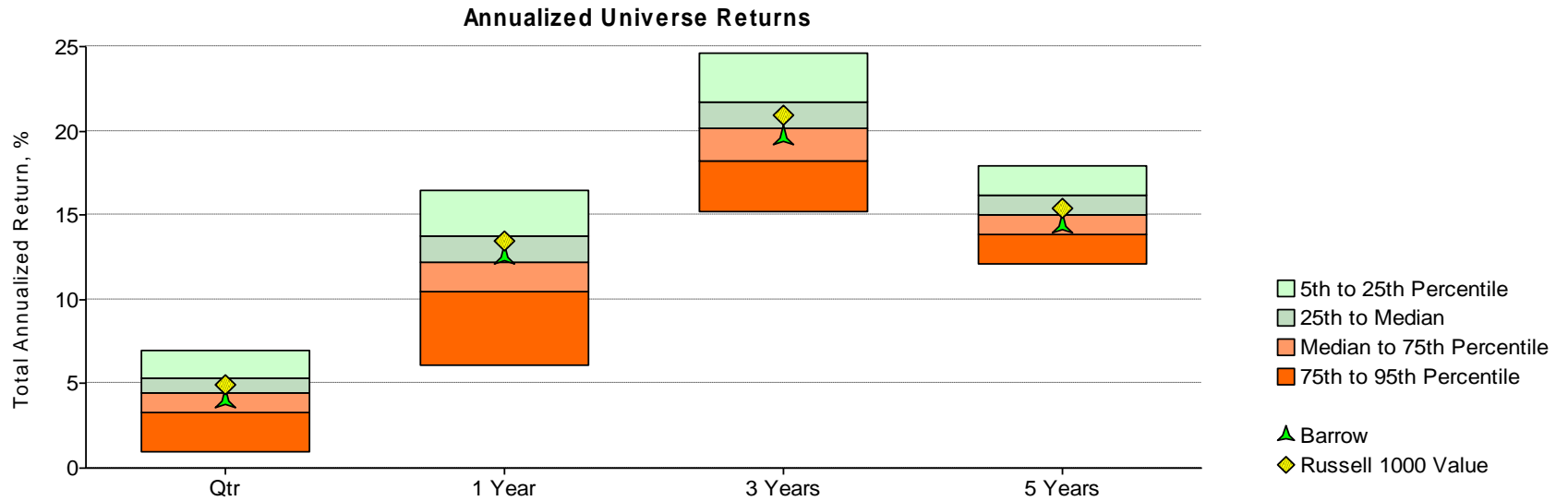
EBMUD Large Cap Value Manager Comparisons as of December 31, 2014



	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Barrow	14.34	13.30	1.08
Russell 1000 Value	15.42	13.44	1.15
Large Cap Value Universe Median	15.00	13.51	1.13

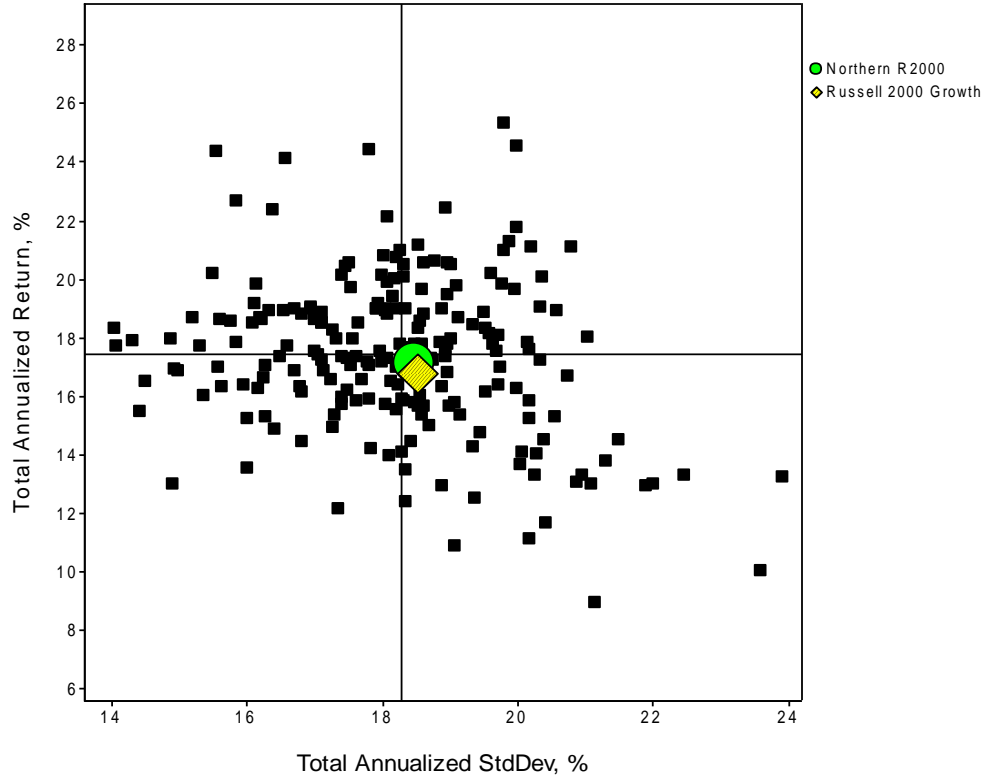
	Annualized Excess Return, %	Annualized Excess StDev, %	Sharpe Ratio, Excess
Barrow	-1.08	2.52	-0.43
Russell 1000 Value	0.00	0.00	NA
Large Cap Value Universe Median	-0.43	3.31	-0.15

EBMUD Large Cap Value Manager Comparisons as of December 31, 2014

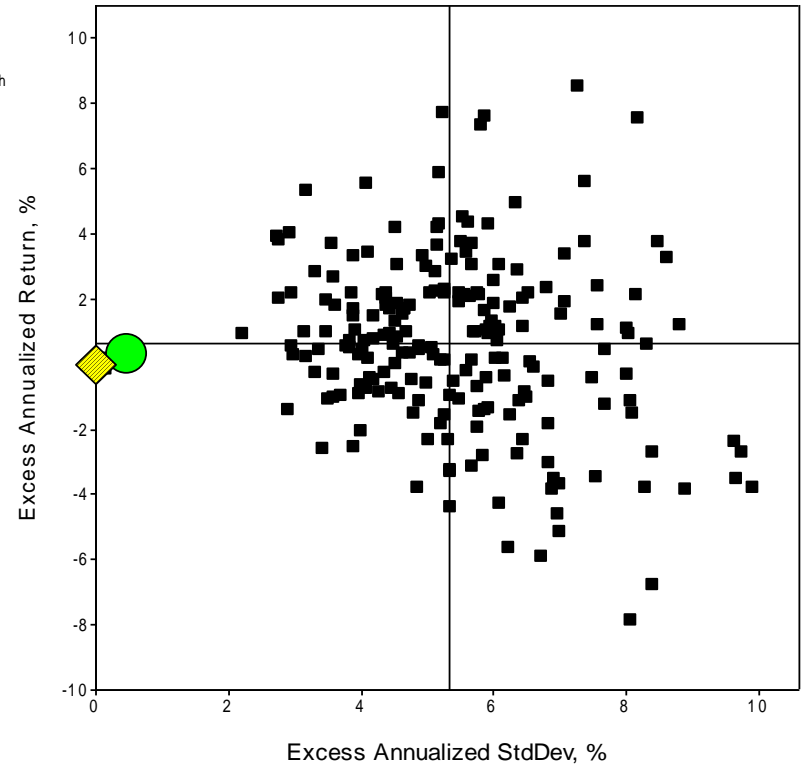


EBMUD Small Cap Growth Manager Comparisons as of December 31, 2014

5-Year Total Risk/Return



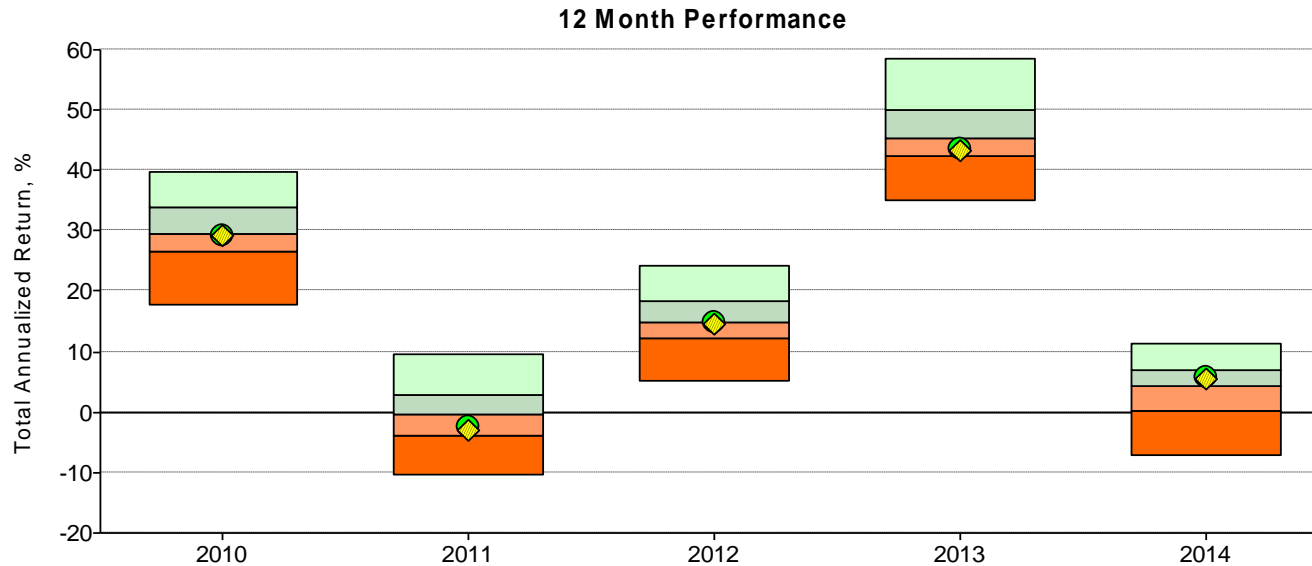
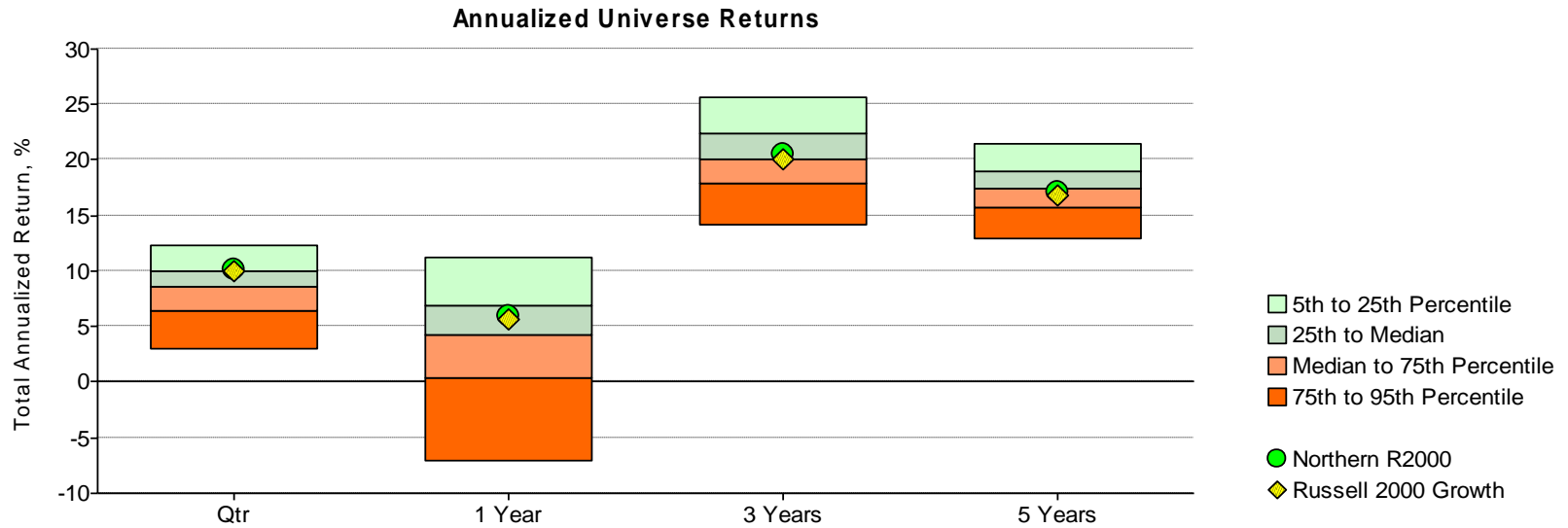
5-Year Excess Risk/Return



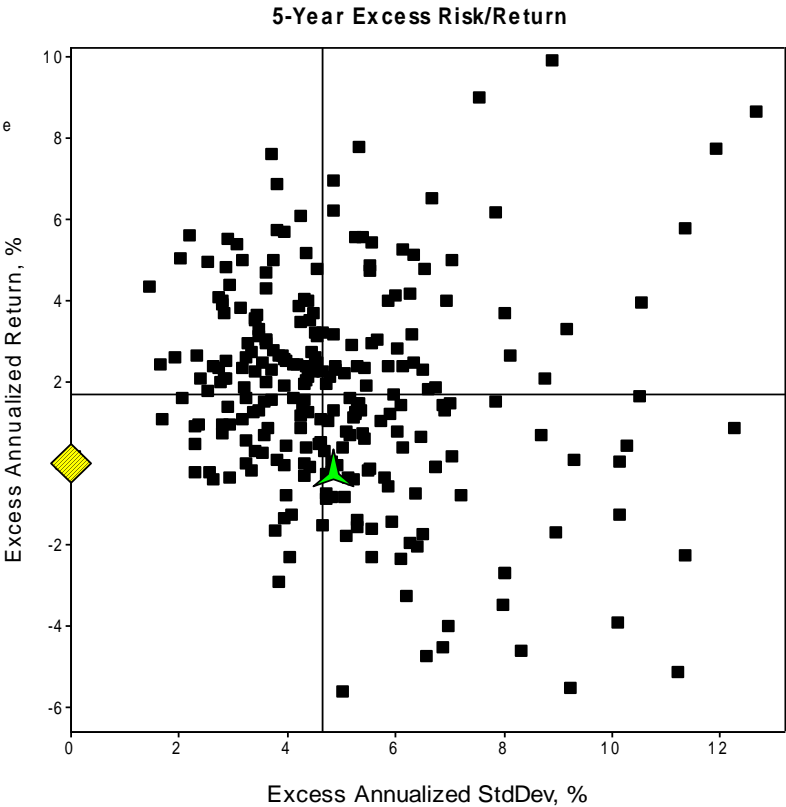
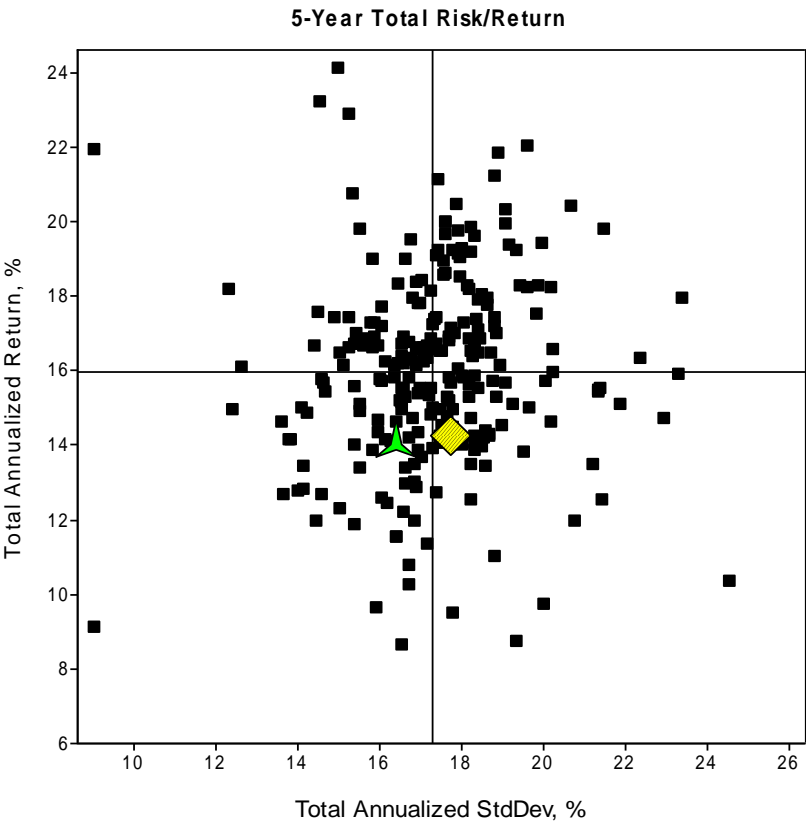
	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Northern R2000	17.13	18.46	0.93
Russell 2000 Growth	16.80	18.52	0.91
Small Cap Growth Manager Universe Median	17.45	18.28	0.98

	Annualized Excess Return, %	Annualized Excess StdDev, %	Sharpe Ratio, Excess
Northern R2000	0.33	0.47	0.70
Russell 2000 Growth	0.00	0.00	NA
Small Cap Growth Manager Universe Median	0.65	5.33	0.15

EBMUD Small Cap Growth Manager Comparisons as of December 31, 2014



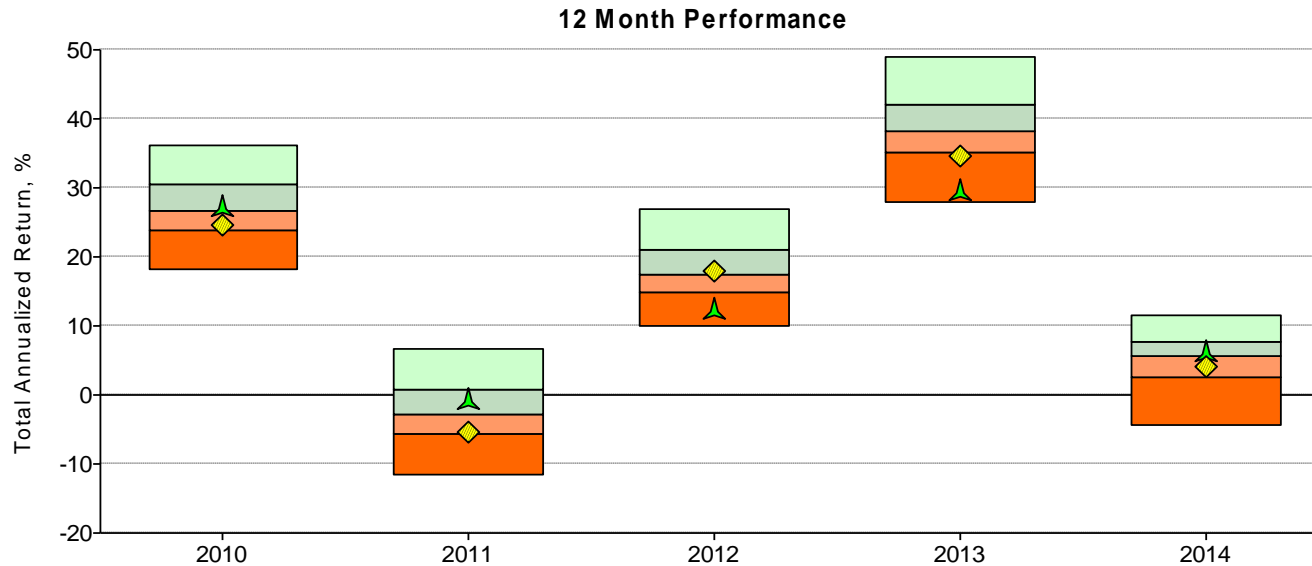
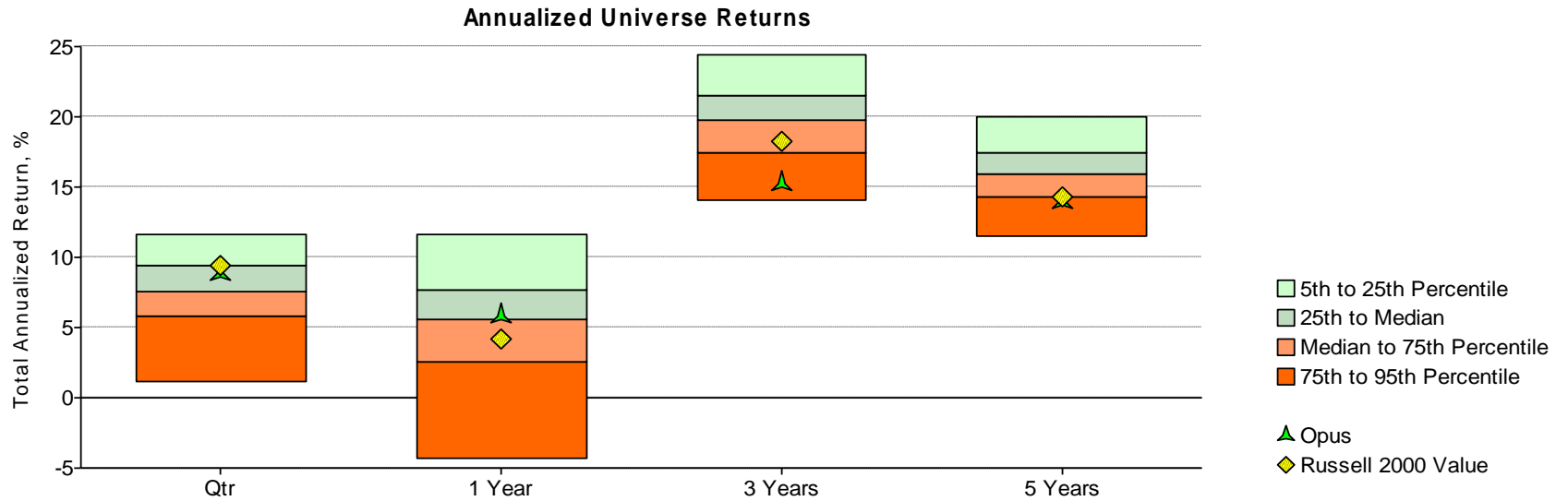
EBMUD Small Cap Value Manager Comparisons as of December 31, 2014



	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Opus	14.00	16.38	0.85
Russell 2000 Value	14.26	17.72	0.80
Small Cap Value Universe Median	15.95	17.29	0.93

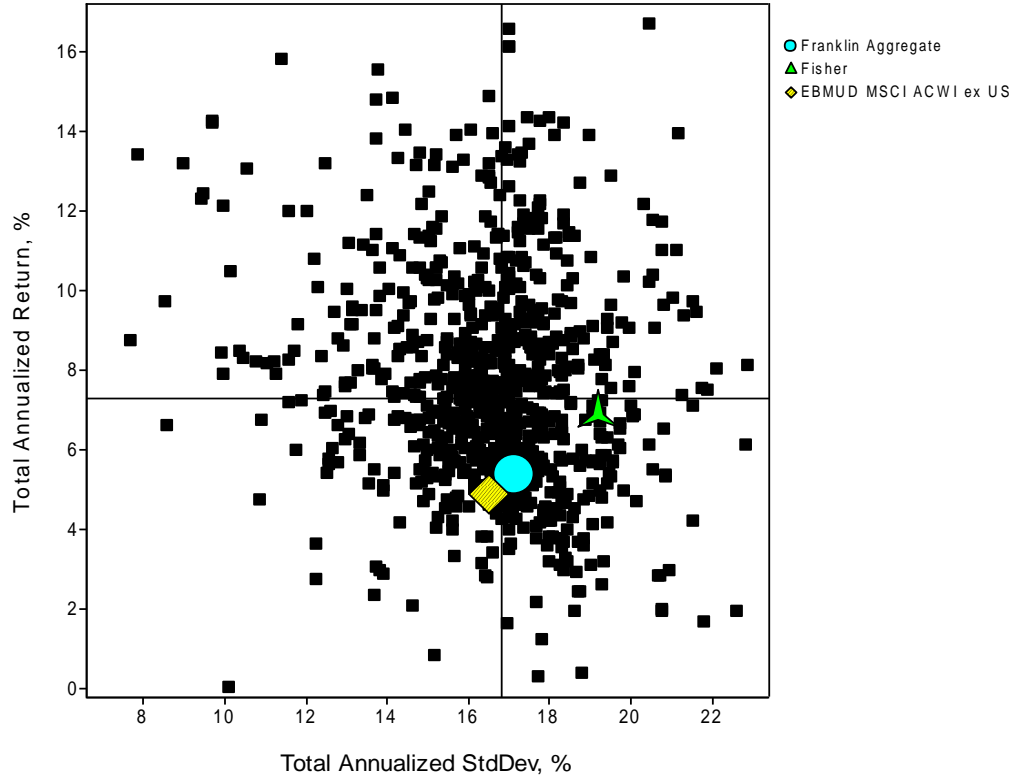
	Annualized Excess Return, %	Annualized Excess StDev, %	Sharpe Ratio, Excess
Opus	-0.26	4.85	-0.05
Russell 2000 Value	0.00	0.00	NA
Small Cap Value Universe Median	1.70	4.64	0.39

EBMUD Small Cap Value Manager Comparisons as of December 31, 2014

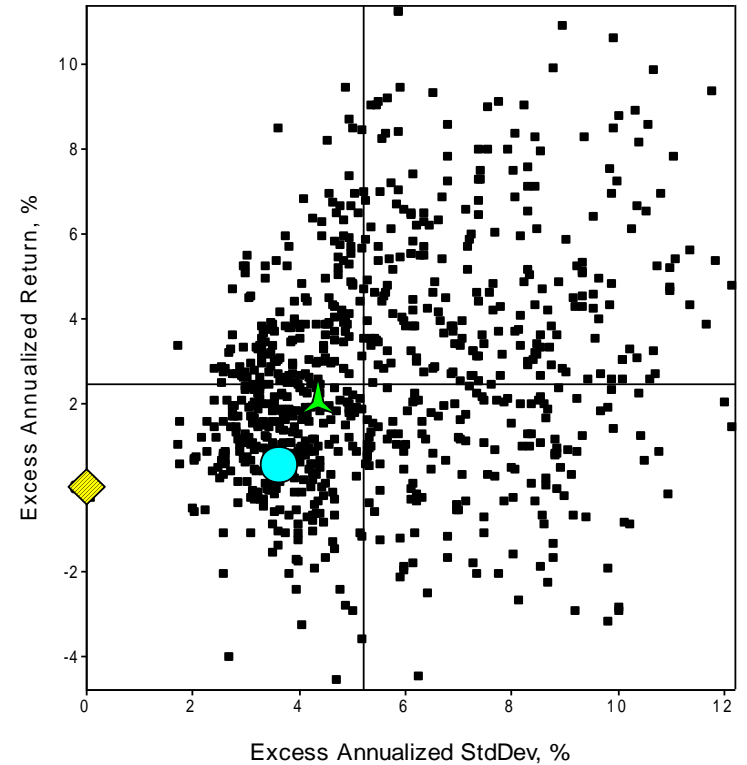


EBMUD International Equity Manager Comparisons as of December 31, 2014

5-Year Total Risk/Return



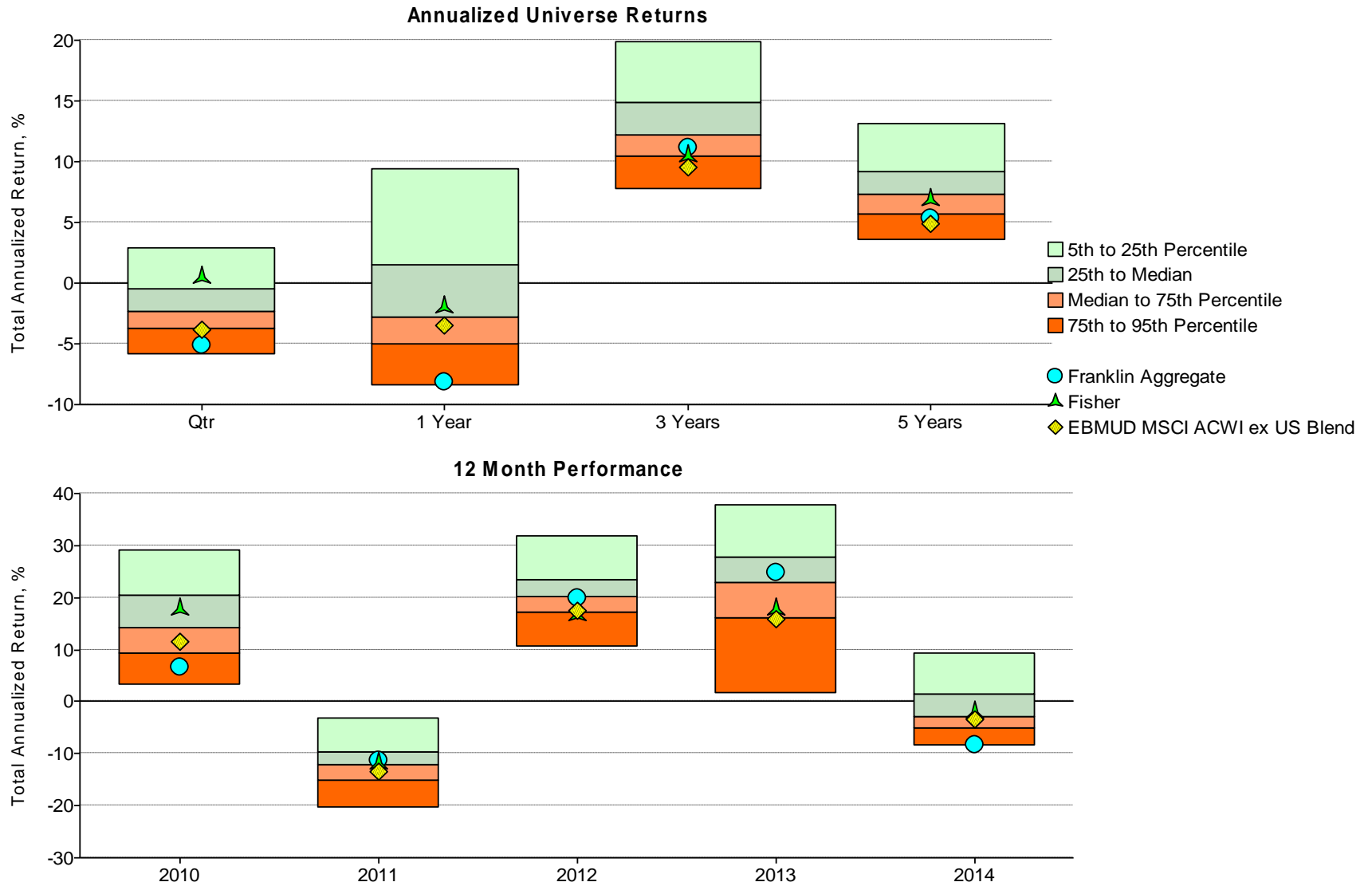
5-Year Excess Risk/Return



	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
Franklin Aggregate	5.40	17.14	0.32
Fisher	6.91	19.21	0.36
MSCI ACWI xUS Blend	4.89	16.48	0.30
International Equity Manager Universe Median	7.32	16.82	0.44

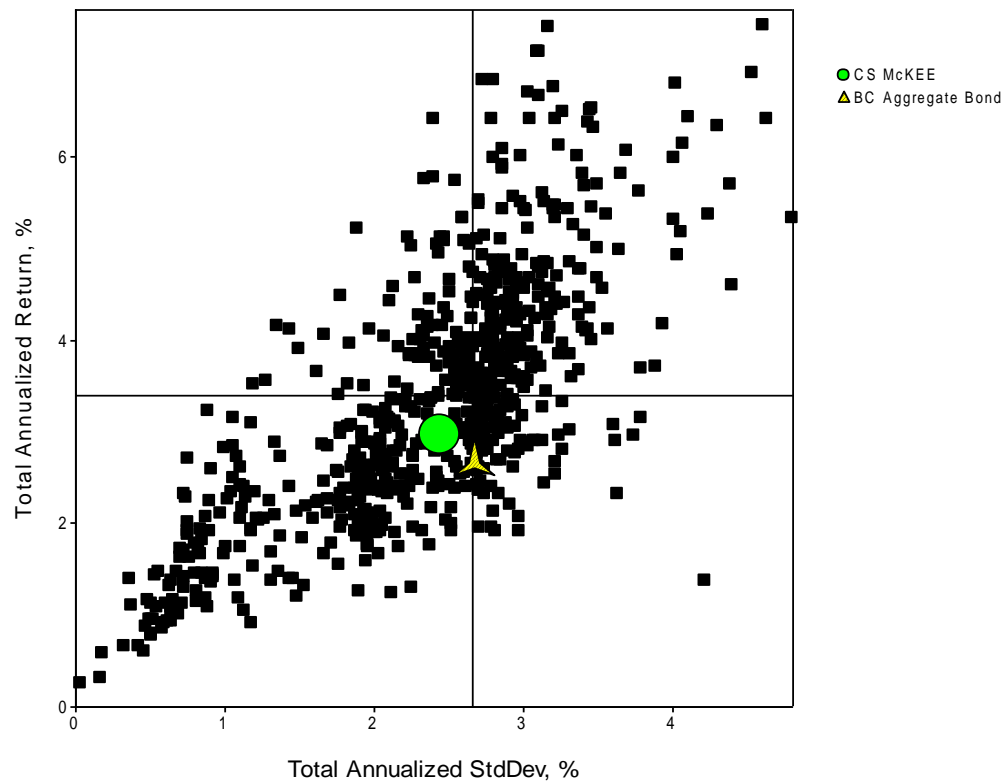
	Annualized Excess Return, %	Annualized Excess StdDev, %	Sharpe Ratio, Excess
Franklin Aggregate	0.51	3.64	0.14
Fisher	2.02	4.36	0.46
ACWI xUS Blend	0.00	0.00	NA
International Equity Manager Universe Median	2.43	5.20	0.44

EBMUD International Equity Manager Comparisons as of December 31, 2014

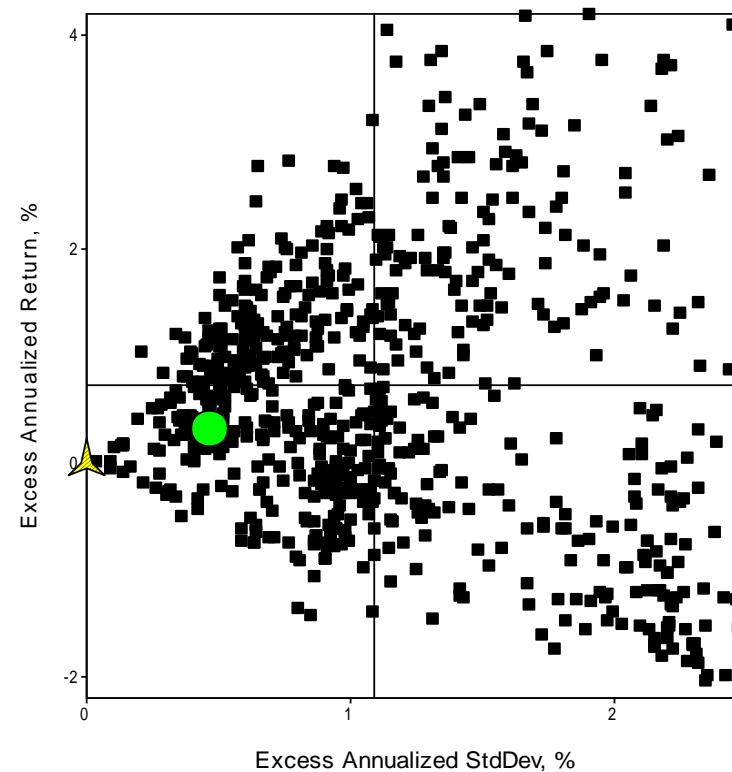


EBMUD Fixed Income Manager Comparisons as of December 31, 2014

3-Year Total Risk/Return



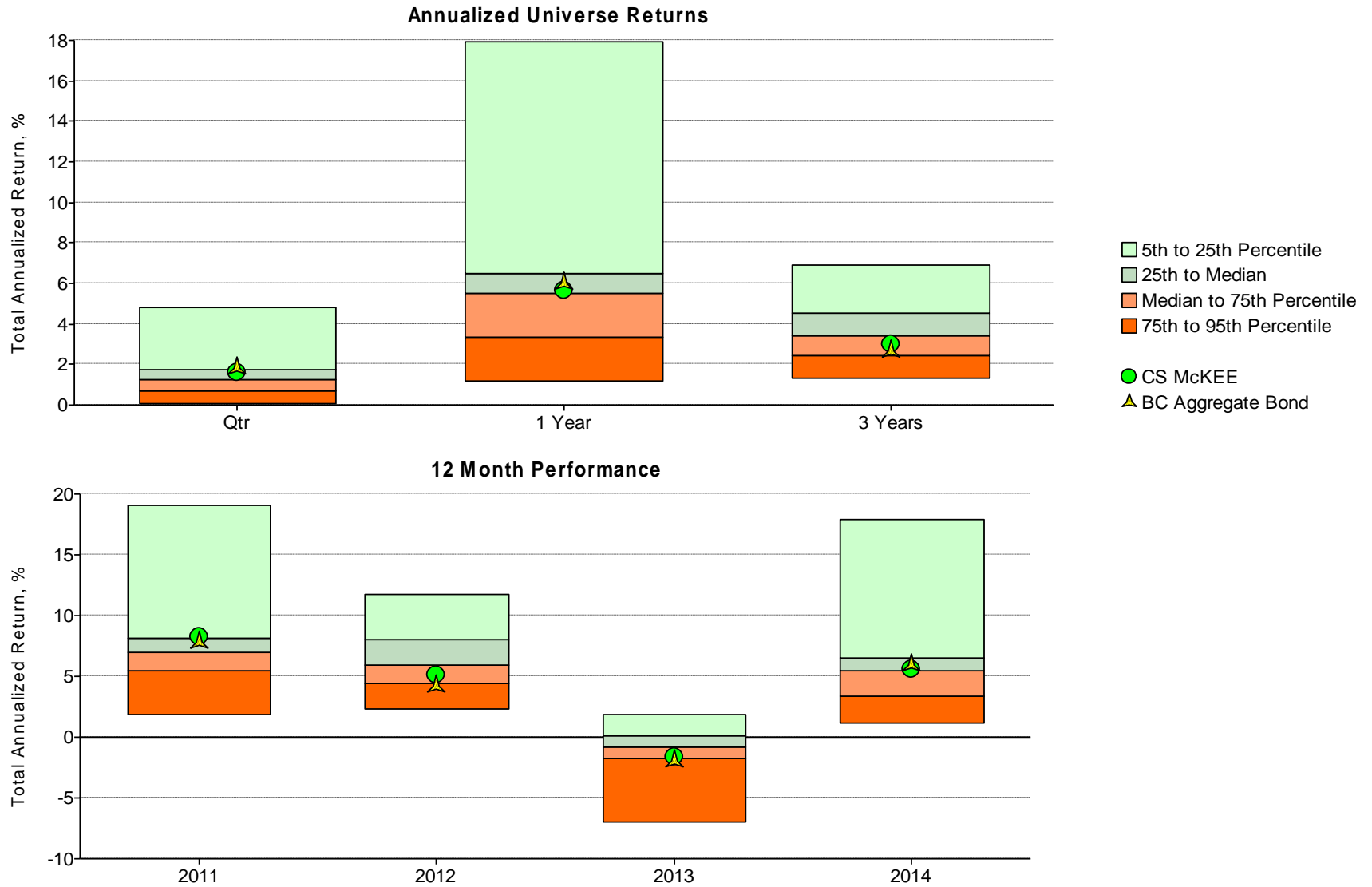
3-Year Excess Risk/Return



	Annualized Return, %	Annualized StdDev, %	Sharpe Ratio
CS McKEE	2.98	2.43	1.22
BC Aggregate Bond	2.66	2.67	1.00
US Fixed Income Univ Median	3.39	2.66	1.36

	Annualized Excess Return, %	Annualized Excess StdDev, %	Sharpe Ratio, Excess
CS McKEE	0.32	0.47	0.68
BC Aggregate Bond	0.00	0.00	NA
US Fixed Income Univ Median	0.73	1.09	0.74

EBMUD Fixed Income Manager Comparisons as of December 31, 2014



APPENDIX

GLOSSARY OF TERMS

Alpha: The premium an investment earns above a set standard. This is usually measured in terms of a common index (i.e., how the stock performs independent of the market). An Alpha is usually generated by regressing a security's excess return on the S&P 500 excess return.

Annualized Performance: The annual rate of return that when compounded t times generates the same t -period holding return as actually occurred from period 1 to period t .

Batting Average: Percentage of periods a portfolio outperforms a given index.

Beta: The measure of an asset's risk in relation to the Market (for example, the S&P 500) or to an alternative benchmark or factors. Roughly speaking, a security with a Beta of 1.5 will have moved, on average, 1.5 times the market return.

Bottom-up: A management style that de-emphasizes the significance of economic and market cycles, focusing instead on the analysis of individual stocks.

Dividend Discount Model: A method to value the common stock of a company that is based on the present value of the expected future dividends.

Growth Stocks: Common stock of a company that has an opportunity to invest money and earn more than the opportunity cost of capital.

Information Ratio: The ratio of annualized expected residual return to residual risk. A central measurement for active management, value added is proportional to the square of the information ratio.

R-Squared: Square of the correlation coefficient. The proportion of the variability in one series that can be explained by the variability of one or more other series a regression model. A measure of the quality of fit. 100% R-square means perfect predictability.

Standard Deviation: The square root of the variance. A measure of dispersion of a set of data from its mean.

Sharpe Ratio: A measure of a portfolio's excess return relative to the total variability of the portfolio.

Style Analysis: A returns-based analysis using a multi-factor attribution model. The model calculates a product's average exposure to particular investment styles over time (i.e., the product's normal style benchmark).

Top-down: Investment style that begins with an assessment of the overall economic environment and makes a general asset allocation decision regarding various sectors of the financial markets and various industries.

Tracking Error: The standard deviation of the difference between the performance of a portfolio and an appropriate benchmark.

Turnover: For mutual funds, a measure of trading activity during the previous year, expressed as a percentage of the average total assets of the fund. A turnover rate of 25% means that the value of trades represented one-fourth of the assets of the fund.

Value Stocks: Stocks with low price/book ratios or price/earnings ratios. Historically, value stocks have enjoyed higher average returns than growth stocks (stocks with high price/book or P/E ratios) in a variety of countries.

EBMUD POLICY BENCHMARK COMPOSITION

Time Period	EBMUD Total Fund Policy Benchmark
4/1/2005 – 9/30/2005	30% S&P 500, 10% S&P Midcap, 10% Russell 2000, 20% MSCI EAFE ND, 25% BC Aggregate, 5% NCREIF (lagged)
10/1/2005 – 12/31/2006	50% Russell 3000, 20% MSCI EAFE ND, 25% BC Aggregate, 5% NCREIF (lagged)
1/1/2007 – 12/31/2007	50% Russell 3000, 20% MSCI ACWI x U.S. GD, 25% BC Aggregate, 5% NCREIF (lagged)
1/1/2008 – 10/31/2011	50% Russell 3000, 20% MSCI ACWI x U.S. GD, 25% BC Universal, 5% NCREIF (lagged)
11/1/2011 – 2/28/2014	50% Russell 3000, 20% MSCI ACWI x U.S. GD, 25% BC Universal, 2.5% NCREIF (lagged), and 2.5% FTSE NAREIT All Equity REITs
3/1/2014 – 3/31/2014	40% Russell 3000, 20% CBOE BXM, 15% MSCI ACWI x U.S. GD, 15% BC Aggregate, 2.5% BC 1-5 Year U.S. High Yield Cash Pay, 2.5% S&P/LSTA Performing Loans, 2.5% NCREIF (lagged), 2.5% FTSE NAREIT All Equity REITs
4/1/2014 – present	40% Russell 3000, 20% CBOE BXM, 15% MSCI ACWI x U.S. GD, 10% BC Aggregate, 5% BC US 1-3 Year Government/Credit, 2.5% BC 1-5 Year U.S. High Yield Cash Pay, 2.5% S&P/LSTA Performing Loans, 2.5% NCREIF (lagged), 2.5% FTSE NAREIT All Equity REITs

DEFINITION OF BENCHMARKS

BC Aggregate: an index comprised of approximately 6,000 publicly traded investment-grade bonds including U.S. Government, mortgage-backed, corporate, and yankee bonds with an approximate average maturity of 10 years.

BC High Yield: covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included. Must be rated high-yield (Ba1/BB+ or lower) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. All issues must have at least one year to final maturity regardless of call features and have at least \$150 million par amount outstanding.

BC Multiverse Non-US Hedged: provides a broad-based measure of the international fixed-income bond market. The index represents the union of the BC Global Aggregate Index and the BC Global High Yield Index. In this sense, the term "Multiverse" refers to the concept of multiple universes in a single macro index.

BC US Credit: includes publicly issued U.S. corporate and foreign debentures and secured notes that which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$250 million. Issues must be publicly issued, dollar-denominated and non-convertible.

BC US Government: includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government).

BC Universal: includes market coverage by the Aggregate Bond Index fixed rate debt issues, which are rated investment grade or higher by Moody's Investor Services, Standard and Poor's Corporation, or Fitch Investor's Service, with all issues having at least one year to maturity and an outstanding par value of at least \$100 million) and includes exposures to high yield CMBS securities. All returns are market value weighted inclusive of accrued interest.

Citigroup 3-Month Treasury Bills (T-bills): tracks the performance of U.S. Treasury bills with 3-month maturity.

MSCI ACWI x US ND: comprises both developed and emerging markets less the United States. As of August 2008, the index consisted of 23 countries classified as developed markets and 25 classified as emerging markets. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EAFE Free (Europe, Australasia, Far East) ND: is a free float-adjusted market capitalization index that is designed to measure developed market equity performance, excluding the US & Canada. This series approximates the minimum possible dividend reinvestment. The dividend is reinvested after deduction of withholding tax, applying the rate to non-resident individuals who do not benefit from double taxation treaties. MSCI Barra uses withholding tax rates applicable to Luxembourg holding companies, as Luxembourg applies the highest rates.

MSCI EM (Emerging Markets) GD: is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. This series approximates the maximum possible dividend reinvestment. The amount reinvested is the entire dividend distributed to individuals resident in the country of the company, but does not include tax credits.

MSCI Europe is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, this index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

MSCI Pacific is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. As of June 2007, this index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

NAREIT Index: consists of all tax-qualified REITs listed on the New York Stock Exchange, American Stock Exchange, and the NASDAQ National Market System. The data is market weighted.

NCREIF Property Index: the NPI contains investment-grade, non-agricultural, income-producing properties which may be financed in excess of 5% gross market value; were acquired on behalf of tax exempt institutions; and are held in a fiduciary environment. Returns are gross of fees; including income, realized gains/losses, and appreciation/depreciation; and are market value weighted. Index is lagged one quarter.

Russell 1000: measures the performance of the 1,000 largest securities in the Russell 3000 Index. Russell 1000 is highly correlated with the S&P 500 Index and capitalization-weighted.

Russell 1000 Growth: measures the performance of those Russell 1000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-earnings ratios, lower dividend yields and higher forecasted growth values than the Value universe.

Russell 1000 Value: measures the performance of those Russell 1000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-earnings ratios, higher dividend yields and lower forecasted growth values than the Growth universe.

Russell 2000: measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Growth: measures the performance of those Russell 2000 securities with a greater-than-average growth orientation. Securities in this index tend to exhibit higher price-to-book and price-to-earnings ratios.

Russell 2000 Value: measures the performance of those Russell 2000 securities with a less-than-average growth orientation. Securities in this index tend to exhibit lower price-to-book and price-to-earnings ratios.

Russell 3000: represents the largest 3,000 US companies based on total market capitalization, representing approximately 98% of the investable US equity market.

RISK METRIC DESCRIPTION – Rationale for selection and calculation methodology**US Equity Markets**

Metric: P/E ratio = Price / “Normalized” earnings for the S&P 500 Index

To represent the price of US equity markets, we have chosen the S&P 500 index. This index has the longest published history of price, is well known, and also has reliable, long-term, published quarterly earnings. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the S&P 500 index). Equity markets are very volatile. Prices fluctuate significantly during normal times and extremely during periods of market stress or euphoria. Therefore, developing a measure of earnings power (E) which is stable is vitally important, if the measure is to provide insight. While equity prices can and do double, or get cut in half, real earnings power does not change nearly as much. Therefore, we have selected a well known measure of real, stable earnings power developed by Yale Professor Robert Shiller known as the Shiller E-10. The calculation of E-10 is simply the average real annual earnings over the past 10 years. Over 10 years, the earnings shenanigans and boom and bust levels of earnings tend to even out (and often times get restated). Therefore, this earnings statistic gives a reasonably stable, slow-to-change estimate of average real earnings power for the index. Professor Shiller's data and calculation of the E-10 are available on his website at <http://www.econ.yale.edu/~shiller/data.htm>. We have used his data as the base for our calculations. Details of the theoretical justification behind the measure can be found in his book *Irrational Exuberance* [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005].

Developed Equity Markets Excluding the US

Metric: P/E ratio = Price / “Normalized” earnings for the MSCI EAFE Index

To represent the price of non-US developed equity markets, we have chosen the MSCI EAFE index. This index has the longest published history of price for non-US developed equities. The price= P of the P/E ratio is the current price of the market index (the average daily price of the most recent full month for the MSCI EAFE index). The price level of this index is available starting in December 1969. Again, for the reasons described above, we elected to use the Shiller E-10 as our measure of earnings (E). Since 12/1972, a monthly price earnings ratio is available from MSCI. Using this quoted ratio, we have backed out the implied trailing-twelve month earnings of the EAFE index for each month from 12/1972 to the present. These annualized earnings are then inflation adjusted using CPI-U to represent real earnings in US dollar terms for each time period. The Shiller E-10 for the EAFE index (10 year average real earnings) is calculated in the same manner as detailed above.

However, we do not believe that the pricing and earnings history of the EAFE markets are long enough to be a reliable representation of pricing history for developed market equities outside of the US. Therefore, in constructing the Long-Term Average Historical P/E for developed ex-US equities for comparison purposes, we have elected to use the US equity market as a developed market proxy, from 1881 to 1982. This lowers the Long-Term Average Historical P/E considerably. We believe this methodology provides a more realistic historical comparison for a market with a relatively short history.

Emerging Market Equity Markets

Metric: Ratio of Emerging Market P/E Ratio to Developed Market P/E Ratio

To represent the Emerging Markets P/E Ratio, we have chosen the MSCI Emerging Market Free Index, which has P/E data back to January 1995 on Bloomberg. To represent the Developed Markets PE Ratio, we have chosen the MSCI World Index, which also has data back to January 1995 on Bloomberg. Although there are issues with published, single time period P/E ratios, in which the denominator effect can cause large movements, we feel that the information contained in such movements will alert investors to market activity that they will want to interpret.

US Private Equity Markets

Metrics: S&P LCD Average EBITDA Multiples Paid in LBOs and US Quarterly Deal Volume

The Average Purchase Price to EBITDA multiples paid in LBOs is published quarterly by S&P in their LCD study. This is the total price paid (both equity and debt) over the trailing-twelve month EBITDA (earnings before interest, taxes, depreciation and amortization) as calculated by S&P LCD. This is the relevant, high-level pricing metric that private equity managers use in assessing deals. Data is published monthly.

US quarterly deal volume for private equity is the total deal volume in \$ billions (both equity and debt) reported in the quarter by Thomson Reuters Buyouts. This metric gives a measure of the level of activity in the market. Data is published quarterly.

US Private Real Estate Markets

Metrics: US Cap Rates, Cap Rate Spreads, and Transactions as a % of Market Value

Real estate cap rates are a measure of the price paid in the market to acquire properties versus their annualized income generation before financing costs (NOI=net operating income). The data, published by NCREIF, describes completed and leased properties (core) on an unleveraged basis. We chose to use current value cap rates. These are capitalization rates from properties that were revalued during the quarter. This data relies on estimates of value and therefore tends to be lagging (estimated prices are slower to rise and slower to fall than transaction prices). The data is published quarterly.

Spreads between the cap rate (described above) and the 10-year nominal Treasury yield, indicate a measure of the cost of properties versus a current measure of the cost of financing.

Transactions as a % of Market Value Trailing-Four Quarters is a measure of property turnover activity in the NCREIF Universe. This quarterly metric is a measure of activity in the market.

Credit Markets Fixed Income

Metric: Spreads

The absolute level of spreads over treasuries and spread trends (widening / narrowing) are good indicators of credit risk in the fixed income markets. Spreads incorporate estimates of future default, but can also be driven by technical dislocations in the fixed income markets. Abnormally narrow spreads (relative to historical levels) indicate higher levels of valuation risk, wide spreads indicate lower levels of valuation risk and / or elevated default fears. Investment grade bond spreads are represented by the Barclays Capital US Corporate Investment Grade Index Intermediate Component. The high yield corporate bond spreads are represented by the Barclays Capital US Corporate High Yield Index.

Measure of Equity Market Fear / Uncertainty

Metric: VIX – Measure of implied option volatility for US equity markets

The VIX is a key measure of near-term volatility conveyed by implied volatility of S&P 500 index option prices. VIX increases with uncertainty and fear. Stocks and the VIX are negatively correlated. Volatility tends to spike when equity markets fall.

Measure of Monetary Policy

Metric: Yield Curve Slope

We calculate the yield curve slope as the 10 year treasury yield minus the 1 year treasury yield. When the yield curve slope is zero or negative, this is a signal to pay attention. A negative yield curve slope signals lower rates in the future, caused by a contraction in economic activity. Recessions are typically preceded by an inverted (negatively sloped) yield curve. A very steep yield curve (2 or greater) indicates a large difference between shorter-term interest rates (the 1 year rate) and longer-term rates (the 10 year rate). This can signal expansion in economic activity in the future, or merely higher future interest rates.

Measures of US Inflation Expectations

Metrics: Breakeven Inflation and Inflation Adjusted Commodity Prices

Inflation is a very important indicator impacting all assets and financial instruments. Breakeven inflation is calculated as the 10 year nominal treasury yield minus the 10 year real yield on US TIPS (treasury inflation protected securities). Abnormally low long-term inflation expectations are indicative of deflationary fears. A rapid rise in breakeven inflation indicates an acceleration in inflationary expectations as market participants sell nominal treasuries and buy TIPS. If breakeven inflation continues to rise quarter over quarter, this is a signal of inflationary worries rising, which may cause Fed action and / or dollar decline.

Commodity price movement (above the rate of inflation) is an indication of anticipated inflation caused by real global economic activity putting pressure on resource prices. We calculate this metric by adjusted in the Dow Jones UBS Commodity Index (formerly Dow Jones AIG Commodity Index) by US CPI-U. While rising commodity prices will not necessarily translate to higher US inflation, higher US inflation will likely show up in higher commodity prices, particularly if world economic activity is robust.

These two measures of anticipated inflation can, and often are, conflicting.

Measures of US Treasury Bond Interest Rate Risk

Metrics: 10-Year Treasury Forward-Looking Real Yield and 10-Year Treasury Duration

The expected annualized real yield of the 10 year US Treasury Bond is a measure of valuation risk for US Treasuries. A low real yield means investors will accept a low rate of expected return for the certainty of receiving their nominal cash flows. PCA estimates the expected annualized real yield by subtracting an estimate of expected 10 year inflation (produced by the Survey of Professional Forecasters as collected by the Federal Reserve Bank of Philadelphia), from the 10 year Treasury constant maturity interest rate.

Duration for the 10-Year Treasury Bond is calculated based on the current yield and a price of 100. This is a measure of expected percentage movements in the price of the bond based on small movements in percentage yield. We make no attempt to account for convexity.

Definition of “Extreme” Metric Readings

A metric reading is defined as “extreme” if the metric reading is in the top or bottom decile of its historical readings. These “extreme” reading should cause the reader to pay attention. These metrics have reverted toward their mean values in the past.

RISK METRICS DESCRIPTION – PCA Market Sentiment Indicator**What is the PCA Market Sentiment Indicator (PMSI)?**

The PMSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets, and is the largest risk exposure that most portfolios bear. The PMSI takes into account the momentum¹⁴ (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How do I read the PCA Market Sentiment Indicator (PMSI) graph?

Simply put, the PMSI is a color coded indicator that signals the market's sentiment regarding economic growth risk. It is read left to right chronologically. A green indicator on the PMSI indicates that the market's sentiment towards growth risk is positive. A gray indicator indicates that the market's sentiment towards growth risk is neutral or inconclusive. A red indicator indicates that the market's sentiment towards growth risk is negative. The black line on the graph is the level of the PMSI. The degree of the signal above or below the neutral reading is an indication the signal's current strength.

How is the PCA Market Sentiment Indicator (PMSI) Constructed?

The PMSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

1. Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months)
2. Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration U.S. Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight). The scale of this measure is adjusted to match that of the stock return momentum measure.

The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure. The color reading on the graph is determined as follows:

1. If both stock return momentum and bond spread momentum are positive = GREEN (positive)
2. If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive)
3. If both stock return momentum and bond spread momentum are negative = RED (negative)

What does the PCA Market Sentiment Indicator (PMSI) mean? Why might it be useful?

There is strong evidence that time series momentum is significant and persistent.¹⁵ In particular, across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12 month period. The PMSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.

¹⁴ Momentum is defined as the persistence of relative performance. There is a significant amount of academic evidence indicating that positive momentum (e.g., strong performing stocks over the recent past continue to post strong performance into the near future) exists over near-to-intermediate holding periods. See, for example, "Understanding Momentum," *Financial Analysts Journal*, Scowcroft, Sefton, March, 2005.

¹⁵ "Time Series Momentum" Moskowitz, Ooi, Pedersen, August 2010 <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

DISCLOSURES: This document is provided for informational purposes only. It does not constitute an offer of securities of any of the issuers that may be described herein. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified. The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the investment in question will achieve comparable results or that the Firm will be able to implement its investment strategy or achieve its investment objectives. The actual realized value of currently unrealized investments (if any) will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which any current unrealized valuations are based.

Neither PCA nor PCA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated herefrom, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. PCA and PCA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither PCA nor any of PCA's officers, employees or agents, make any representation of warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change.

The information contained in this report may include forward-looking statements. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the Firm, which may result in material differences in actual results, performance or other expectations. The opinions, estimates and analyses reflect PCA's current judgment, which may change in the future.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate investment performance for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

All trademarks or product names mentioned herein are the property of their respective owners. Indices are unmanaged and one cannot invest directly in an index. The index data provided is on an "as is" basis. In no event shall the index providers or its affiliates have any liability of any kind in connection with the index data or the portfolio described herein. Copying or redistributing the index data is strictly prohibited.

The Russell indices are either registered trademarks or tradenames of Frank Russell Company in the U.S. and/or other countries.

The MSCI indices are trademarks and service marks of MSCI or its subsidiaries.

Standard and Poor's (S&P) is a division of The McGraw-Hill Companies, Inc. S&P indices, including the S&P 500, are a registered trademark of The McGraw-Hill Companies, Inc.

CBOE, not S&P, calculates and disseminates the BXM Index. The CBOE has a business relationship with Standard & Poor's on the BXM. CBOE and Chicago Board Options Exchange are registered trademarks of the CBOE, and SPX, and CBOE S&P 500 BuyWrite Index BXM are servicemarks of the CBOE. The methodology of the CBOE S&P 500 BuyWrite Index is owned by CBOE and may be covered by one or more patents or pending patent applications.

FTSE is a trademark of the London Stock Exchange Group companies and is used by FTSE under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. No further distribution of FTSE data is permitted with FTSE's express written consent.

The Barclays Capital indices (formerly known as the Lehman indices) are trademarks of Barclays Capital, Inc.

The Citigroup indices are trademarks of Citicorp or its affiliates.

The Merrill Lynch indices are trademarks of Merrill Lynch & Co. or its affiliates.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015
MEMO TO: Members of the Retirement Board
FROM: Eric L. Sandler, Director of Finance
SUBJECT: Actuarial Funding Policy Update



RECOMMENDATION

Approve the attached draft Actuarial Funding Policy.

SUMMARY

Attached is a recommended draft Actuarial Funding Policy for the Retirement Board's discussion and consideration. The policy covers both the Pension plan and the Health Insurance Benefit plan. The purpose of the policy is to record the funding objectives and policies set by the Board, which in turn are designed to ensure future benefit payments for members of the retirement system. The policy also provides guidelines which assist in administering the retirement system in a consistent and efficient manner. Adoption of a comprehensive policy also simplifies compliance with GASB Statements 67 and 68.

The draft policy was prepared by Segal Consulting to incorporate previous Board decisions, and was reviewed by staff. Mr. Andy Yeung from Segal will be at the Board meeting to discuss the draft policy.

BACKGROUND

In 2012 the Board undertook a comprehensive review of the individual elements which comprise a funding policy. As a result of that review the Board approved more conservative elements than those in effect at that time. The Board did not, however, incorporate the new elements into a single, written adopted policy. The attached draft policy accomplishes that objective.

Adoption of a formal funding policy is emerging as a best practice following implementation of GASB Statements 67 and 68. GASB requires plan sponsors to identify the "actuarially determined (employer) contributions" using the funding policy adopted by the governing body. Adoption of elements individually is not inconsistent with GASB, but adoption of a comprehensive funding policy simplifies compliance with those statements.

DISCUSSION

The proposed policy consists primarily of elements previously approved by the Board. In conjunction with its quadrennial study in 2012 the Board undertook a review of the key factors in actuarial analysis: the Actuarial Cost Method, the Asset Smoothing Method, and the Amortization Policy.

The proposed policy establishes the Entry Age Cost Method as the Actuarial Cost Method. This is the industry standard for governmental defined benefit plans and is consistent with the Board's decision in 2012. The Board also approved, and the policy incorporates, 5 years as the Asset Smoothing period for purposes of determining the Actuarial Value of Assets. In addition the policy includes language allowing for Board approved adjustments to the Asset Smoothing method under specified circumstances. The intent is to capture the need for ad hoc adjustments to address unforeseen circumstances.

The Amortization Policy was discussed over the course of two meetings in 2012, with the Board ultimately approving a more conservative policy than had been the case in the past:

Amortization Policy (years)	Prior Policy	Adopted Nov. 2012
Actuarial Gains or Losses	30	20
Assumption or Method Changes	30	25
Plan Amendments	30	15
Early Retirement Incentive Programs	30	5
Actuarial Surplus	30	30

The draft policy incorporates the elements adopted in 2012. It also includes new language that has been added to ensure consistency with the requirements of CalPEPRA.

The draft policy also contains a section entitled Other Policy Considerations. This section is intended to capture practical implementation issues and to clarify the need for forward-looking analyses in development of actuarial assumptions.

Attachments

ESL: SS: DB

East Bay Municipal Utility District Employees' Retirement System

Actuarial Funding Policy

Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policies set by the Retirement Board (Board) for the East Bay Municipal Utility District Employees' Retirement System (EBMUDERS) including both the Pension plan and Health Insurance Benefit (HIB) plan. The Board establishes this Actuarial Funding Policy to help ensure future benefit payments for members of EBMUDERS. In addition, this document records certain policy guidelines established by the Board to assist in administering EBMUDERS in a consistent and efficient manner. It is a working document and may be modified as the Board deems necessary.

Goals of Actuarial Funding Policy

1. To achieve long-term full funding of the cost of benefits provided by EBMUDERS;
2. To seek reasonable and equitable allocation of the cost of benefits over time; and,
3. To minimize volatility of the plan sponsor's contribution to the extent reasonably possible, consistent with other policy goals.

Funding Policy Components

EBMUDERS' annual funding requirement is comprised of a payment of the Normal Cost¹ and a payment on the Unfunded Actuarial Accrued Liability (UAAL). The Normal Cost and the amount of payment on the UAAL are determined based upon the following three components of this funding policy:

- I. Actuarial Cost Method: the technique used to allocate the cost/liability of the retirement benefit to a given period;
- II. Asset Smoothing Method: the technique used to spread the recognition of investment gains or losses over a period of time for purposes of determining the Actuarial Value of Assets used in the actuarial valuation process; and
- III. Amortization Policy: the decisions on how, in terms of duration and pattern, to reduce the difference between the Actuarial Accrued Liability and the Valuation Value of Assets in a systematic manner.

I. Actuarial Cost Method:

The Entry Age Actuarial Cost Method (individual basis) shall be applied to the projected retirement benefits in determining the Normal Cost and the Actuarial Accrued Liability.

¹Capitalized terms are defined in the Glossary of Terms at the end of this policy.

II. Asset Smoothing Method:

The investment gains or losses of each valuation period, resulting from comparison of the actual market return and the expected return on Market Value of Assets, shall be recognized in level amount over 5 years in calculating the Actuarial Value of Assets. Deferred investment gains or losses cannot exceed 30% of the Market Value of Assets.

This policy anticipates that future circumstances may warrant adjustments to change the pattern of recognition of the net deferred investment gains or losses after a period of significant market change followed by a period of market correction. Such adjustments would be considered by the Board upon receiving an appropriate analysis from EBMUDERS' actuary. Such adjustments would be appropriate for consideration when the net deferred investment gains or losses are relatively small (i.e., the actuarial and market values are very close together), but the recognition of that net deferred amount is markedly non-level. Any such adjustment would be made subject to the following conditions:

- The net deferred investment gains or losses are unchanged as of the date of the adjustment; and,
- The period over which the net deferred investment gains and losses are fully recognized is unchanged as of the date of the adjustment.

III. Amortization Policy:

- The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2011 shall continue to be amortized over its current multiple layers schedule;
- Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 20 years;
- Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 25 years;
- For the Health Insurance Benefit (HIB) plan, any new UAAL with respect to changes in assumptions and plan elements (such as medical trend rate and annual premium rates) will be considered similar to actuarial gains or losses and amortized accordingly.
- Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:
 - a. with the exception noted in b. below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
 - b. the increase in UAAL resulting from a temporary retirement incentive will be funded over 5 years;

- UAAL shall be amortized over Closed Amortization Periods so that the amortization period for each layer decreases by one year with each actuarial valuation;
- UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase; and
- If EBMUD becomes overfunded (i.e., the total of all UAAL becomes negative so that EBMUD has a “surplus”), such surplus and any subsequent surpluses will be amortized over an Open Amortization Period of 30 years. However, due to the passage of the California Public Employees’ Pension Reform Act of 2013 (CalPEPRA), if the surplus exceeds 20% of the Actuarial Accrued Liability (AAL) per Section 7522.52 of the Government Code, then the amount of surplus in excess of 20% of the AAL (and any subsequent surpluses in excess of that amount) will be amortized over an Open Amortization Period of 30 years, but only if the other conditions of Section 7522.52 have also been met. If those conditions are not met, then the surplus will not be amortized and the full Normal Cost will be contributed.

If an overfunding or surplus exists, so that the total of all UAAL amortization layers becomes negative, any prior UAAL amortization layers will be considered fully amortized. Any subsequent UAAL will be amortized over 20 years as the first of a new series of amortization layers.

Other Policy Considerations

A. Lag between Date of Actuarial Valuation and Date of Contribution Rate Implementation

In order to allow the employer to more accurately budget for pension contributions and other practical considerations, the contribution rates determined in each valuation (as of June 30) will apply to the fiscal year beginning 12 months after the valuation date. Any shortfall or excess contributions as a result of the implementation lag will be amortized as part of EBMUDERS’ UAAL in the following valuation.

Any change in contribution rate requirement that results from plan amendment will generally be implemented as of the effective date of the plan amendment or as soon as administratively feasible.

B. Actuarial Assumptions Guidelines

The actuarial assumptions directly affect only the timing of contributions; the ultimate contribution level is determined by the benefits and the expenses actually paid offset by actual investment returns. To the extent that actual experience deviates from the assumptions, experience gains and losses will occur. These gains (or losses) then serve to reduce (or increase) the future contribution requirements.

Actuarial assumptions are generally grouped into two major categories:

- Demographic assumptions – including rates of withdrawal, service retirement, disability retirement, mortality, etc.
- Economic assumptions – including price inflation, wage inflation, investment return, salary increase, etc.

The actuarial assumptions represent the Board's best estimate of anticipated experience under EBMUDERS and are intended to be long term in nature. Therefore, in developing the actuarial assumptions, the Board considers not only past experience but also trends, external forces and future expectations.

Glossary of Terms

Actuarial Accrued Liability – The portion of the present value of projected benefits that is attributed to past service by the actuarial funding method.

Actuarial Funding Method – A technique to allocate present value of projected benefits among past and future periods of service.

Actuarial Value of Assets – The market value of assets less the deferred investment gains or losses not yet recognized by the asset smoothing method.

Closed Amortization Period – An amortization period that decreases by one year with each annual actuarial valuation.

Entry Age Actuarial Cost Method – A funding method that calculates EBMUDERS' Normal Cost based on a level percentage of pay over the working lifetime of the plan's members.

Non-valuation Reserves – At the adoption date of this policy, in the case of the EBMUDERS Pension plan the non-valuation reserves are the HIB plan reserves, and in the case of the EBMUDERS HIB plan the non-valuation reserves are the Pension plan reserves.

Normal Cost – The portion of the present value of projected benefits that is attributed to current service by the actuarial funding method.

Open Amortization Period – An amortization period that remains unchanged with each annual actuarial valuation.

Unfunded Actuarial Accrued Liability – The portion of the Actuarial Accrued Liability that is not currently covered by plan assets. It is calculated by subtracting the Actuarial Accrued Liability from the Valuation Value of Assets.


Valuation Date – June 30 of every year.

Valuation Value of Assets – The value of assets used in the actuarial valuation to determine contribution rate requirements. It is equal to the Actuarial Value of Assets reduced by the value of any non-valuation reserves.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 19, 2015

MEMO TO: Members of the Retirement Board

FROM: Elizabeth Grasseti, Sr. Human Resources Analyst 

SUBJECT: Review of Proposed Board of Directors Vesting Change

DISCUSSION

Recently the Board of Directors requested that the Retirement Board review the impacts that a change in the Board of Directors pension vesting period from five to ten years would have on the Employees Retirement System.

Staff reviewed the proposed change and has identified the following considerations and impacts:

CONSIDERATIONS

While the MUD Act provides that the Board of Directors has the authority to prescribe the terms and conditions upon which officers and employees shall be entitled to benefits, the enactment of the California Public Employee Pension Reform Act (“PEPRA”) may have a limiting effect on the board’s authority.

PEPRA provides: “Each retirement system that offers a defined benefit plan for nonsafety members of the system shall use the formula prescribed by this section.”¹ PEPRA provides for a five-year vesting period before a member is entitled to benefits.² Additionally, while PEPRA allows a public employer to change the benefit formula, to do so would require: (1) that the new formula conform to the requirements of PEPRA; (2) a certification and determination by the retirement system’s actuary and the retirement board that the changes have no greater risk and no greater cost to the employer than that required under PEPRA; and (3) legislative approval.³ Thus, new board members who would be subject to PEPRA would be subject to the five-year vesting period unless the requirements for changing the PEPRA benefit formula are satisfied.

¹ Cal.Govt.Code Section 7522.20(a)

² Id.

³ Cal. Govt. Code Section 7522.02(d)

For new board members who would not be subject to PEPRA, there is nothing that would preclude the District from extending the vesting period, as long as the new requirement is applied prospectively and only to those who join the retirement system after the change is effective.

For either PEPRA or non-PEPRA members, the extended vesting period must be reconciled with other benefits and provisions in the Retirement Ordinance. For example, the minimum years of service required to be entitled to the HIB would need to be extended to 10 years for new board members.

ADMINISTRATIVE IMPACTS:

The financial cost benefit of the proposed vesting change is expected to be very small and may be offset by the administration costs. The District's average Board Member tenure is nearly 10 years of service at 9.45 years.

Assuming that a Board member is in the PEPRA tier, the possibility for cost savings would come from Board members for whom the District has contributed the 50% of normal cost required by PEPRA (currently 8.07% in Fiscal Year 2015/2016 for the Pension Plan and 0.77% in Fiscal Year 2015/2016 for the HIB Plan) and who leave service prior to vesting. If such a Board member would terminate between the 5th and 10th year of service, based on the current average Board member compensation of around \$1,200/month, the savings over the current 5 year vesting would be about \$1,270 for each year that the Board member served between the 5th and 10th year of service

The administrative costs associated with the proposed change include additional costs for the annual actuarial review and additional work required to develop rates for the new tier. Additionally, significant systems changes to the PeopleSoft HR System, payroll systems, and retirement tools would be required.

The retirement system communications would also need to be updated to reflect the new tier. The retirement handbook, contribution statements, and forms would need to be revised and documents such as the Retirement Board Ordinance and Rules would also need to be revised to maintain compliance.

REVIEW OF THE SMALL CAP EQUITY ASSET CLASS

EBMUD Employees' Retirement System

March 2015



Agenda Items

<u>Section</u>	<u>Tab</u>
Small Cap Equity Asset Class	1
EBMUD Small Cap Equity Allocation	2

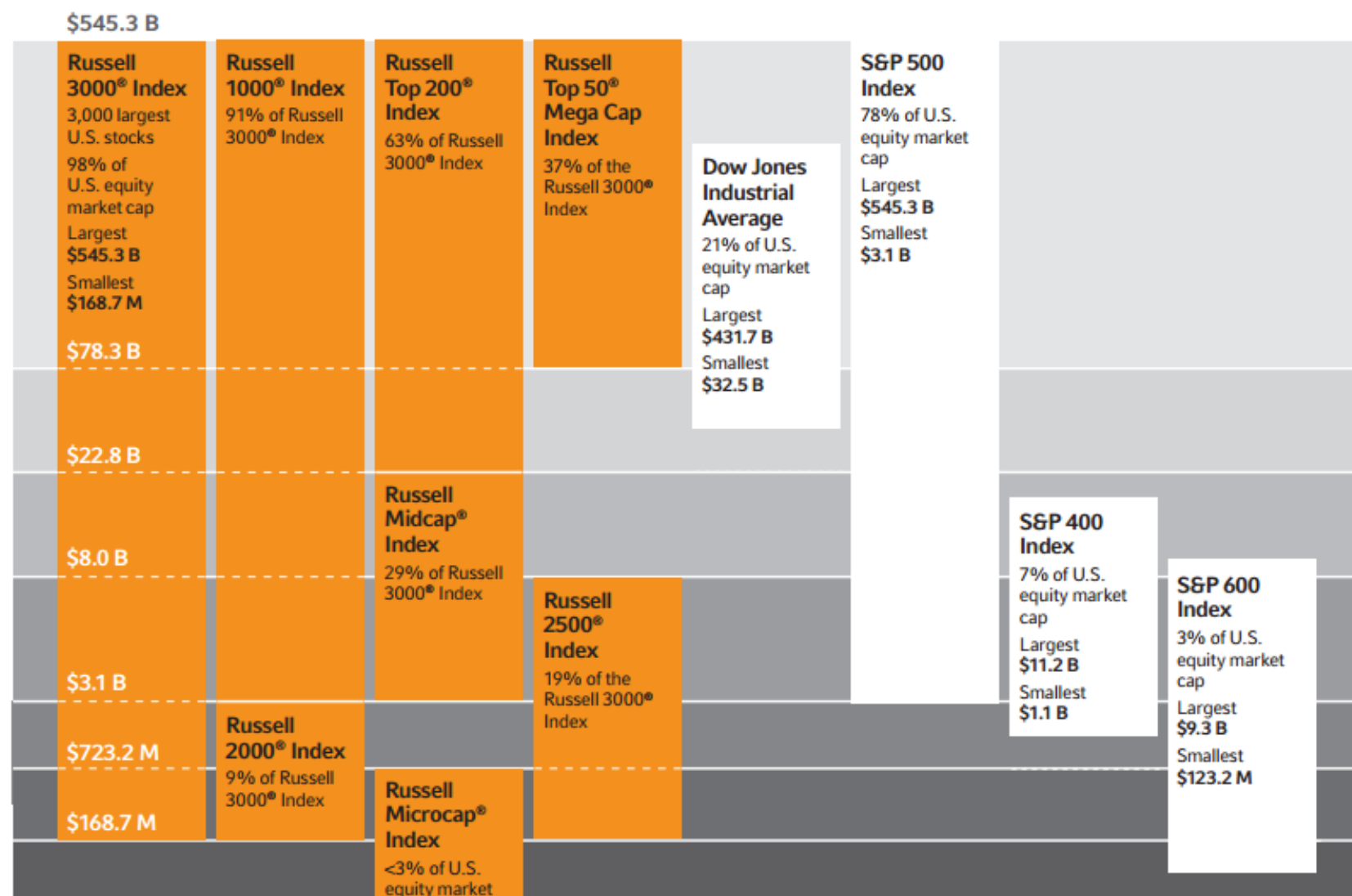
Section 1: Small Cap Equity Asset Class

Small Cap Equity Asset Class

- The Small Cap Equity asset class (small caps) is composed of stocks issued by U.S. corporations that have a market capitalization between \$250 million and \$3 billion
- Market Capitalization = Shares Outstanding X Price Per Share
 - i.e. how valuable the company is
- The total US market capitalization is highly skewed towards large caps

	% of Total Stock Market Capitalization	Number of Companies	Market Cap Range
Large Cap	63%	200	\$22+ billion
Mid Cap	28%	800	\$3 - \$22 billion
Small Cap	9%	2019	\$250 million - \$3 billion

Small Cap Equity Asset Class



Data as of May 31, 2014.

Small Cap Equity Asset Class

Rationale for investing in Small Caps

- Higher Growth/Nimble Operations
 - Small companies grow from a smaller arithmetic base. It is easier to double sales of a \$10 million company than sales of a \$10 billion company
 - Small companies are often in growing industries and find it easier to change their strategy in response to market conditions
- Greater universe of opportunities
 - 2000+ companies versus a couple hundred for large cap
 - The 80-20 rule of investing: 80% of Wall Street research is focused on under 20% of publicly traded companies
 - This leaves a large number of companies with limited analyst coverage

Small Cap Equity Asset Class

Rationale for investing in Small Caps - Continued

- Inefficient market
 - Many small companies have relatively few shares actively traded which creates a liquidity issue
 - This liquidity problem creates capacity constraint – limit size of small cap portfolios
 - Reduces the number of buyers – can cause undervaluation and slow price revaluation
- Greater chance of added value
 - In-depth research can make a difference
 - Active portfolio managers have had more success in adding value in small caps than in large caps
 - More companies + less analyst research + liquidity constraints = greater opportunity
 - Management is often more open about business conditions

Small Cap Equity Asset Class

Risk Associated with Small Caps

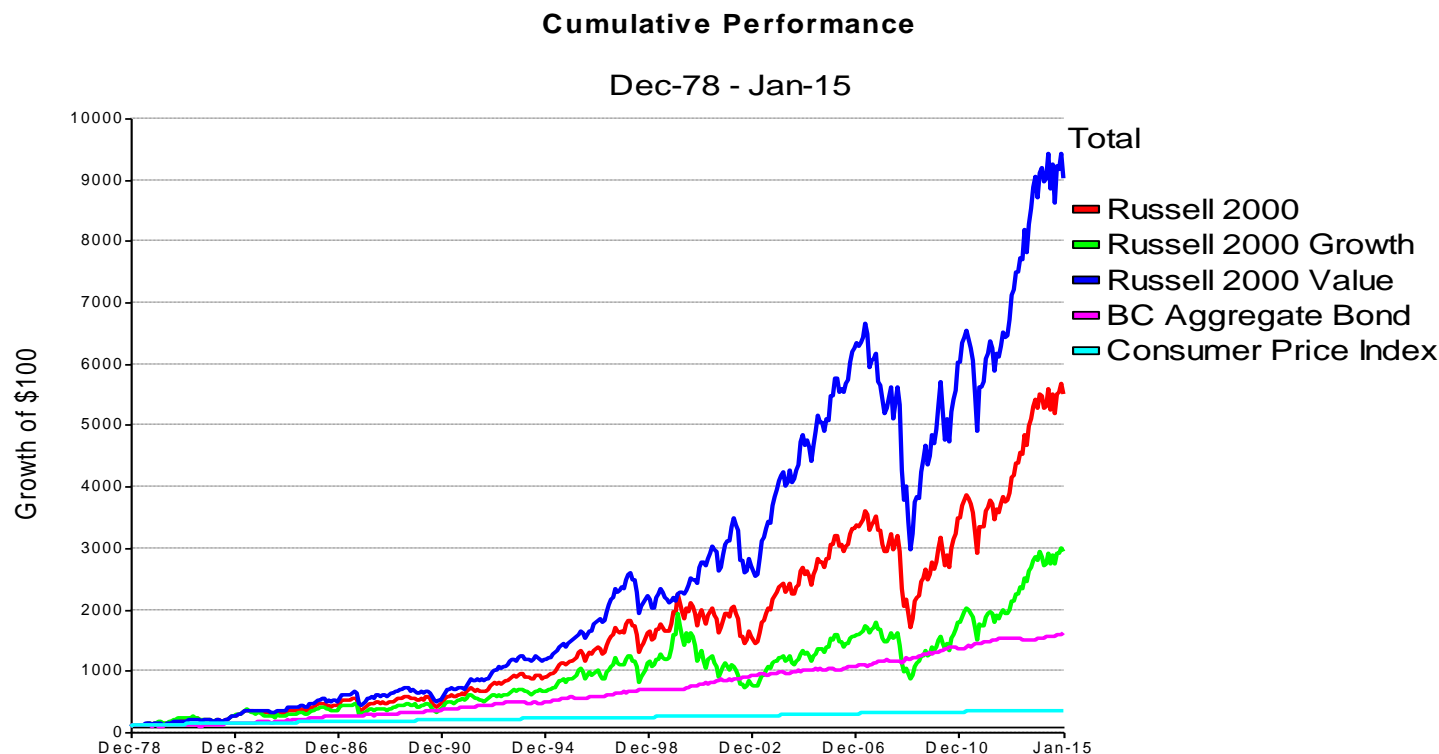
- Small caps tend to get the majority of their earnings from within the US which leads to stronger exposure to the US economic environment
- Small caps, on average, are more volatile than large caps
- This is due to:
 - Operationally being less diversified than large cap companies often focused around one product or service
 - Having less access to capital markets
 - Often having fewer suppliers and large/fewer customers
 - Shorter operating histories or unproven business models
 - Less liquidity for their stocks
 - Less public information

Small Cap Equity Asset Class

- In order to make the large universe of small company stocks more manageable the investment industry has divided the universe in half based on common characteristics – or Styles
- The two common styles are Growth and Value
- Growth Stocks:
 - Above average anticipated sales and earnings growth rates
 - Pay no or small dividends – reinvests earnings
 - Often have high return on equity
 - Stock sells at above average prices – High P/E
- Value Stocks:
 - Average to below average anticipated sales and earnings growth rates
 - Usually pays dividends
 - Often have more stable earnings
 - Stocks sell at below average prices – Low P/E

Small Cap Equity Asset Class

- The Small Cap Equity asset class' role within a diversified portfolio is to provide high long-term returns



	Annualized Return through 1/30/15				
	3 Years	5 Years	10 Years	20 Years	30 Years
Russell 2000	15.27	15.66	7.87	9.52	9.69
Russell 2000 Growth	16.39	17.33	8.79	7.81	8.01
Russell 2000 Value	14.15	13.97	6.86	10.74	10.97
BC Aggregate Bond	3.07	4.57	4.86	6.21	7.44
Consumer Price Index	1.1	1.57	2.08	2.24	2.69

Section 2: EBMUD Small Cap Equity Allocation

EBMUD Small Cap Equity Allocation

- EBMUD currently gains exposure to Small Cap equities through two investment managers
 - Active Small Cap Value Manager – Opus
 - Passive Small Cap Growth Manager – Northern Trust
- EBMUD currently has \$30 million managed by Opus and \$24 million managed by Northern Trust
- Northern Trust replaced Mazama in 2008
- Opus was hired in 2006 to replace TCW

EBMUD Small Cap Equity Allocation

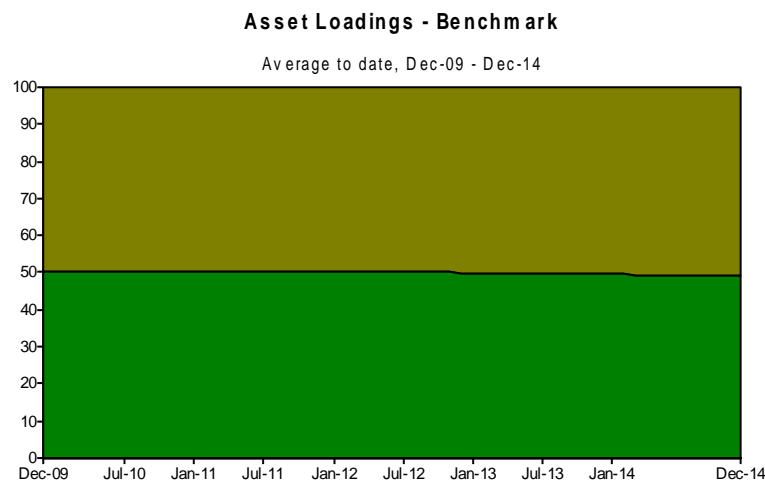
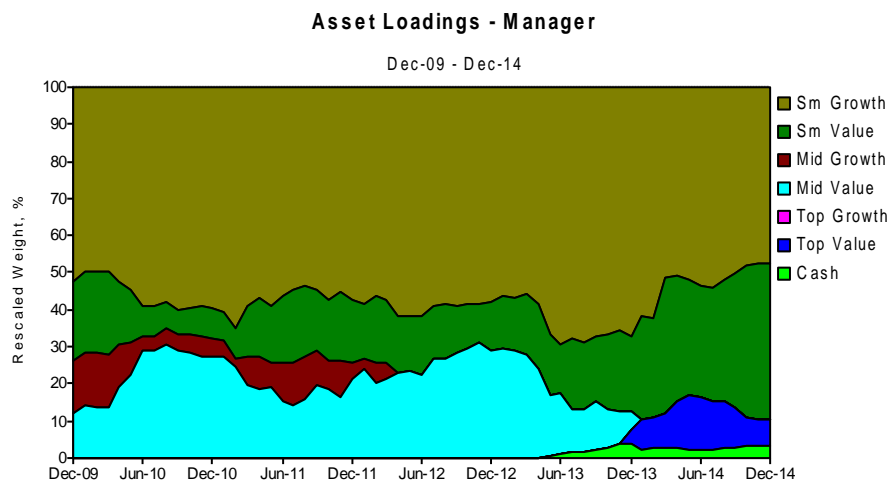
On a regular basis, it is important to review the structure and performance of the different asset classes that comprise the EBMUD portfolio.

This review should focus on the three factors listed below in order to determine if the asset class under review is accomplishing its role within the greater EBMUD portfolio.

1. **Market Exposure:** Are the managers providing the desired capital market exposure (e.g. to small cap equities) that they were hired to provide?
2. **Diversification:** Are the managers complementary to the other asset classes and to one another (exhibiting low correlation)?
3. **Performance:** Has the asset class produced satisfactory returns and have active managers outperformed their benchmarks?

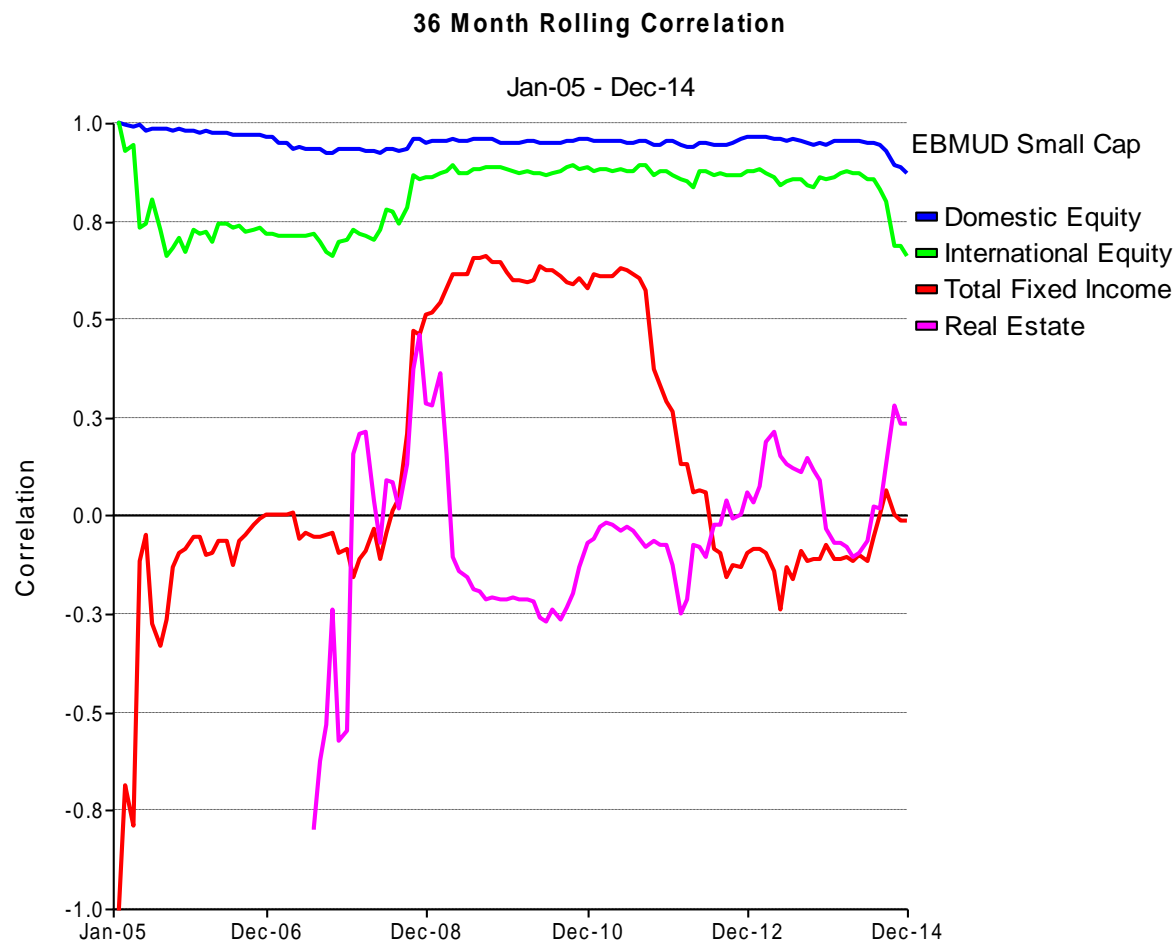
EBMUD Small Cap Equity Allocation

- EBMUD's Small Cap equity managers have consistently provided the desired capital market exposure
 - This is the most important characteristic due to the asset allocation process
 - Through the asset liability study process the Board determined an asset allocation that is best able to meet the liabilities of the System given the Plan's unique characteristics
 - As such, managers are hired to provide specific capital market exposure
 - If managers do not provide the desired exposure then the asset allocation will deviate from the policy allocation



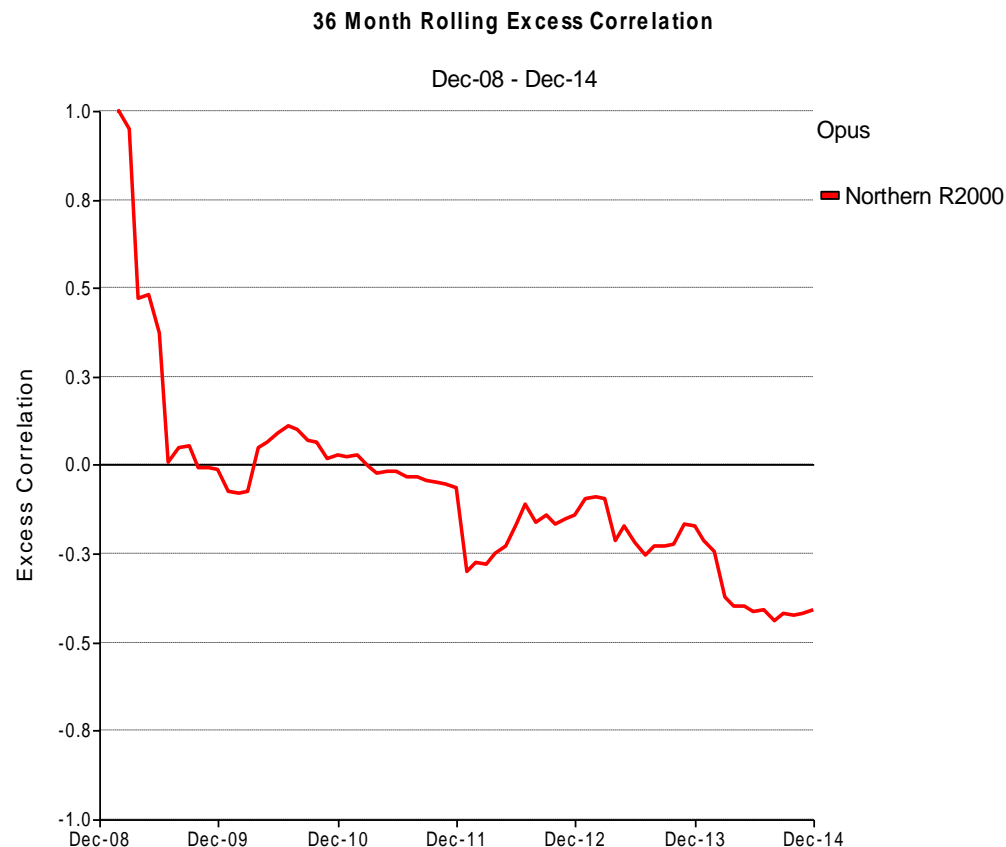
EBMUD Small Cap Equity Allocation

- EBMUD's Small Cap equity asset class exhibits low correlation to other asset classes within the portfolio – providing diversification



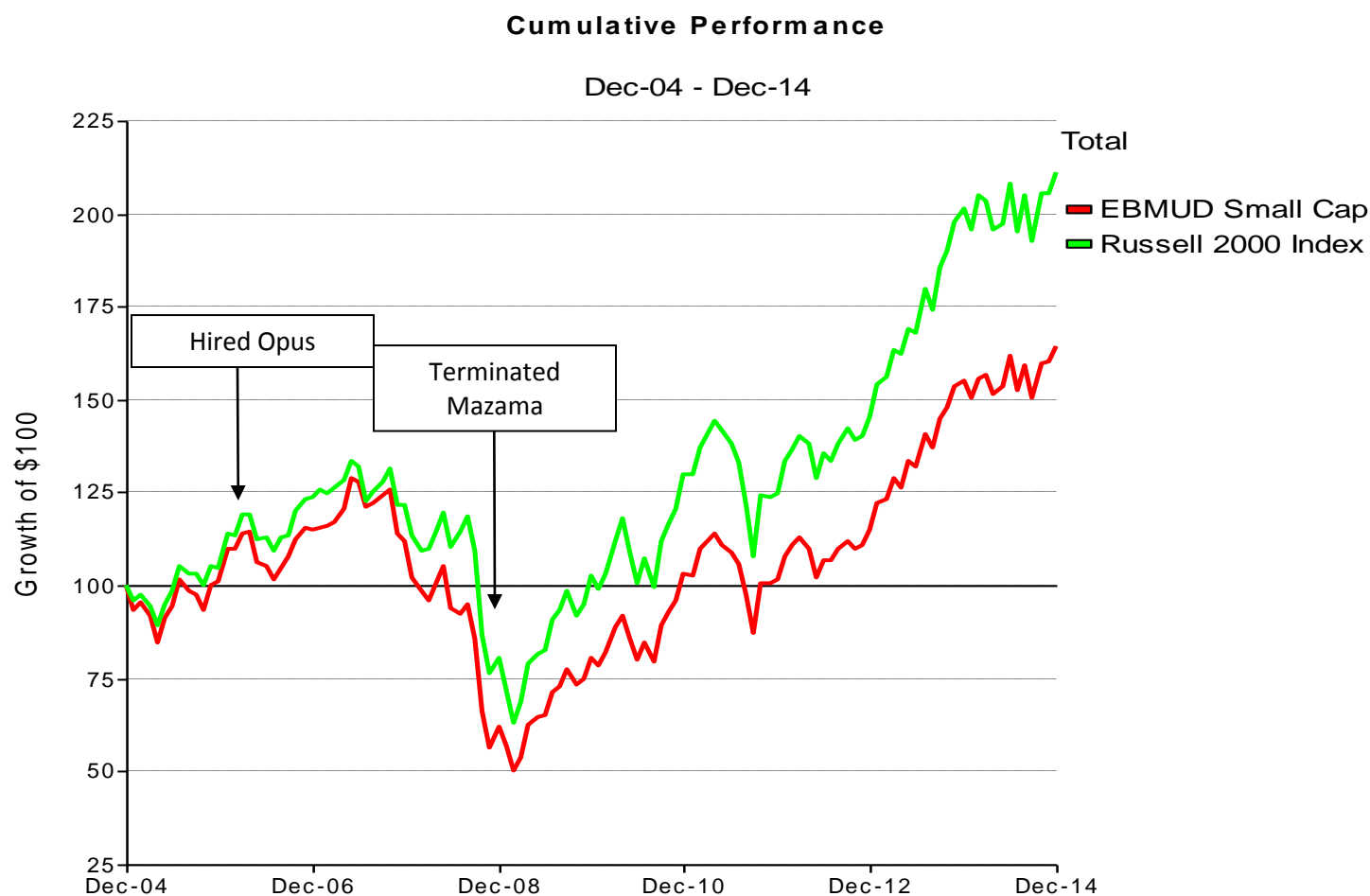
EBMUD Small Cap Equity Allocation

- Opus and Northern Trust have low active correlation to one another providing enhanced diversification benefit



EBMUD Small Cap Equity Allocation

- The EBMUD portfolio has generated high returns over time but active management of the portfolio has not added value
 - Value bias has detracted from returns over past 5 years



DISCLOSURES: This document is provided for informational purposes only. It does not constitute an offer of securities of any of the issuers that may be described herein. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified. The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the investment in question will achieve comparable results or that the Firm will be able to implement its investment strategy or achieve its investment objectives. The actual realized value of currently unrealized investments (if any) will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which any current unrealized valuations are based.

Neither PCA nor PCA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated herefrom, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. PCA and PCA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither PCA nor any of PCA's officers, employees or agents, make any representation of warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change.

The information contained in this report may include forward-looking statements. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the Firm, which may result in material differences in actual results, performance or other expectations. The opinions, estimates and analyses reflect PCA's current judgment, which may change in the future.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate investment performance for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

All trademarks or product names mentioned herein are the property of their respective owners. Indices are unmanaged and one cannot invest directly in an index. The index data provided is on an "as is" basis. In no event shall the index providers or its affiliates have any liability of any kind in connection with the index data or the portfolio described herein. Copying or redistributing the index data is strictly prohibited.

The Russell indices are either registered trademarks or trade names of Frank Russell Company in the U.S. and/or other countries.

The MSCI indices are trademarks and service marks of MSCI or its subsidiaries.

Standard and Poor's (S&P) is a division of The McGraw-Hill Companies, Inc. S&P indices, including the S&P 500, are a registered trademark of The McGraw-Hill Companies, Inc.

CBOE, not S&P, calculates and disseminates the BXM Index. The CBOE has a business relationship with Standard & Poor's on the BXM. CBOE and Chicago Board Options Exchange are registered trademarks of the CBOE, and SPX, and CBOE S&P 500 BuyWrite Index BXM are servicemarks of the CBOE. The methodology of the CBOE S&P 500 BuyWrite Index is owned by CBOE and may be covered by one or more patents or pending patent applications.

The Barclays Capital indices (formerly known as the Lehman indices) are trademarks of Barclays Capital, Inc.

The Citigroup indices are trademarks of Citicorp or its affiliates.

The Merrill Lynch indices are trademarks of Merrill Lynch & Co. or its affiliates.

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 20, 2015

MEMO TO: Members of the Retirement Board

THROUGH: Lisa Sorani, Manager of Employee Services

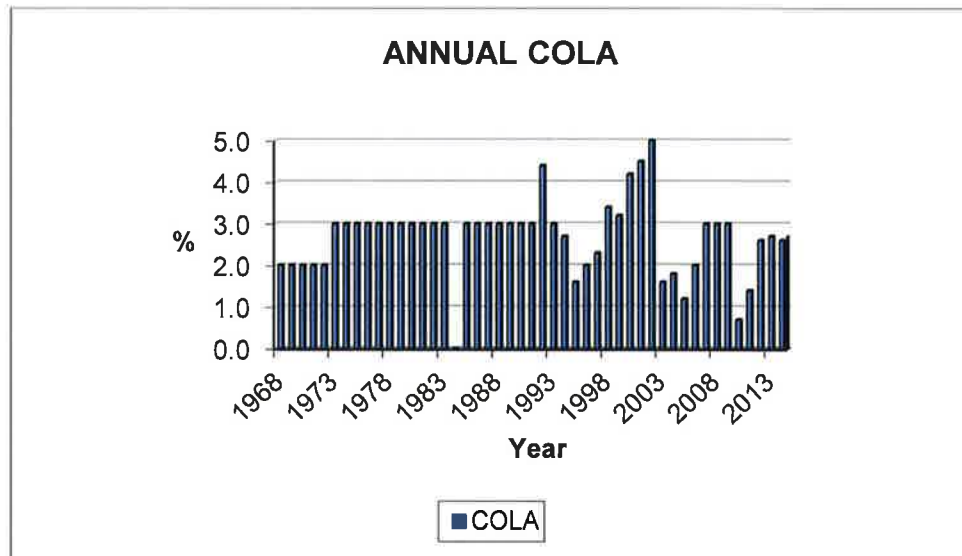
FROM: Elizabeth Grasseti, Senior Human Resources Analyst *EG*

SUBJECT: Annual Information on Retiree COLA and the Health Insurance Benefit

This memo provides annual information regarding retiree Cost of Living Adjustments (COLAs) and Health Insurance Benefits (HIB).

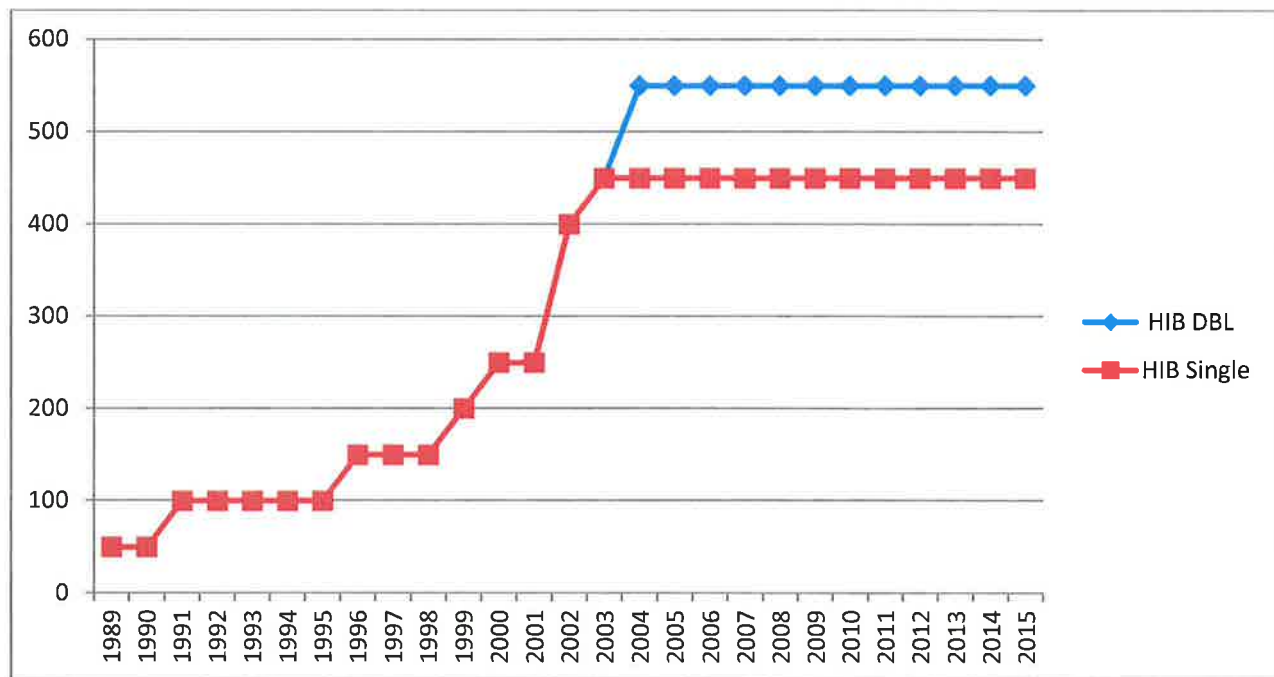
COST OF LIVING ADJUSTMENTS

Retirees receive a Cost of Living Adjustment (COLA) to help maintain their purchasing power in retirement. The COLA in 2015 will be 2.7%, and retirees with COLA banks will receive the maximum 3%. COLA's are paid every July and are based on the annual CPI-U for the San Francisco Bay Area. Over the past 20 years the COLA has averaged 2.6%. In 2002, 2007, 2008 and 2009 retirees COLA's were capped and the additional amount banked because CPI was higher than limit provided for in the Ordinance. In the other years the reverse occurred and retirees COLA banks were paid down. There are 59 retirees who have COLA Banks and of those the highest bank is 10.3%.



HEALTH INSURANCE BENEFITS

EBMUD retirees are responsible for paying the full costs of their health insurance, however the District provides a Health Insurance Benefit (HIB) to use as a credit to offset premium costs. The District's Health Insurance Benefit was implemented on January 1, 1989 at up to \$50 per month for each retiree. It has been increased seven times since that date. The HIB was last changed in 2004 to \$550 for a retiree and spouse and \$450 for single retiree.



COMBINED COLA AND HIB BENEFITS

The graph below shows the growth of the average District retiree's total monthly benefit, including pension and HIB, while the accompanying table provides related details on changes to retiree compensation components since 1998. The average pension benefit is as of June 30 each year and is calculated as part of the actuarial report.

PENSION/HIB DETAILS

Year	Average Monthly Pension Amount	Annual COLA %	COLA Draw %	Maximum Monthly HIB Amount
1998	\$1,899	3.4%	0%	\$150
1999	\$2,302	3.2%	0%	\$200
2000	\$2,519	4.2%	0%	\$250
2001	\$2,658	4.5%	0%	\$250
2002	\$2,791	5.%+	0%	\$400
2003	\$2,891	1.6%	1.4%	\$450
2004	\$3,096	1.8%	1.2%	\$550
2005	\$3,233	1.2%	1.8%	\$550
2006	\$3,455	2.0%	1.0%	\$550
2007	\$3,650	3.0%+	0%	\$550
2008	\$3,779	3.0%+	0%	\$550
2009	\$3,956	3.0%+	0%	\$550
2010	\$4,019	.07%	2.3%	\$550
2011	\$4,159	1.4%	1.6%	\$550
2012	\$4,326	2.6%	0.4%	\$550
2013	\$4,519	2.7%	0.3%	\$550
2014	\$4,704	2.6	0.4%	\$550

+ Capped due to Ordinance limit.

Election Schedule for Employee Member to the EBMUD Retirement Board

The Retirement Board term of employee representative Douglas Higashi will expire on June 23, 2015. In anticipation of this vacancy the following dates have been set for the upcoming election schedule.

Wednesday	April 1	Notice of election is announced
Monday	April 6	Candidate nomination period opens
Monday	April 20	Candidate nomination period closes
Friday	April 24	Notice of candidates running for the position is posted
Friday	May 1	Ballots mailed to all Retirement System members
Friday	May 29	Deadline for receipt of marked ballots
Thursday	June 4	Tally of ballots and election results announced
Tuesday	June 23	Election results certified to Board of Directors
Wednesday	June 24	Elected member takes office for a two-year term