



State of Wisconsin  
 Department of Employee Trust Funds  
 Robert J. Conlin  
 SECRETARY

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## Correspondence Memorandum

**Date:** February 15, 2017  
**To:** Deferred Compensation Board  
**From:** Shelly Schueller, Director  
 Wisconsin Deferred Compensation Program  
**Subject:** Large Cap Value Fund Selection

**Staff requests the Board make a decision with respect to the addition of a large cap value investment fund to the core investment options.**

At the Board's direction, in 2016 the Investment Committee worked with Bill Thornton of Great-West Financial on a large cap value fund search that yielded 10 funds that met both the Board's criteria as stated in the Investment Policy Statement and screening criteria recommended by Mr. Thornton. The additional criteria included data such as manager tenure, standard deviation, total assets and total return. In November 2016, the Board discussed the selection criteria, reviewed the funds that met the requirements, and agreed to hear presentations from three "finalist" firms. These firms are:

Fund	Ticker Symbol	Inception Date	Fund Size Date	Fund Size	Expense Ratio (%)
• American Beacon Bridgeway Large Cap Value	BRLVX	10/31/2003	2/3/2017	\$4,125,518,456	0.79
• JP Morgan Equity Income	OIEJX	2/28/2011	2/3/2017	\$14,145,284,054	0.50
• Vanguard Equity-Income	VEIRX	8/13/2001	1/31/2017	\$25,874,143,087	0.17

Staff recommends that, if the Board wishes to add a large cap value investment fund, it select one of the three options listed above. A large cap value fund would complement

Reviewed and approved by Matt Stohr, Administrator  
 Division of Retirement Services  
 Electronically Signed 2/20/17

Board	Mtg Date	Item #
DC	3.9.17	5

the existing large cap index and actively managed large cap growth funds currently offered to participants.

If the Board decides to add a large cap value fund, then staff recommends:

- 1) delegating final review and approval of the contract to the Board Chair; and
- 2) directing ETF to work with the fund provider and Empower to determine when the fund can be officially opened to participants. A participant communications plan would be developed and carried out via in-person meetings, online and in the quarterly newsletter.

Staff will be available at the meeting to discuss this memo with the Board.

Attachment: Large Cap Value Search – Finalist Statistics (Data as of 12/31/16)

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State of Wisconsin



# Large Cap Value Search – Finalist Statistics

Data as of December 31, 2016

**Bill Thornton**

Investment Strategist

513-322-3967

[william.thornton@greatwest.com](mailto:william.thornton@greatwest.com)

# Fund Analytics - Active Mutual Funds

Fund Facts									
	Ticker	Morningstar Category	Morningstar Institutional Category	Primary Prospectus Benchmark	Manager Name	Manager Tenure (Longest)	Fund Size	Fund Size Date	Inception Date
American Beacon Bridgeway Lg Cp Val Inst	BRLVX	US Fund Large Value	Large Deep Value	Russell 1000 Value TR USD	Multiple	13.33	4,125,518,456	2/3/2017	10/31/2003
JPMorgan Equity Income R5	OIERX	US Fund Large Value	Large Core Value	Russell 1000 Value TR USD	Multiple	12.50	14,145,284,054	2/3/2017	2/28/2011
Vanguard Equity-Income Adm	VEIRX	US Fund Large Value	Giant Value	Russell 1000 Value TR USD	Multiple	13.17	25,874,143,087	1/31/2017	8/13/2001
US Fund Large Value		Large Value							5/1/1931

	# of Holdings	% Asset in Top 10 Holdings	Market Cap Giant %	Market Cap Large %	Market Cap Mid %	Market Cap Small %	Market Cap Micro %
American Beacon Bridgeway Lg Cp Val Inst	103	14.53	12.52	42.70	43.07	0.00	0.00
JPMorgan Equity Income R5	99	24.51	38.63	45.28	14.75	0.00	0.00
Vanguard Equity-Income Adm	224	28.03	59.63	21.21	9.55	2.96	0.48
US Fund Large Value	504	33.74	57.76	18.14	17.18	2.95	0.04

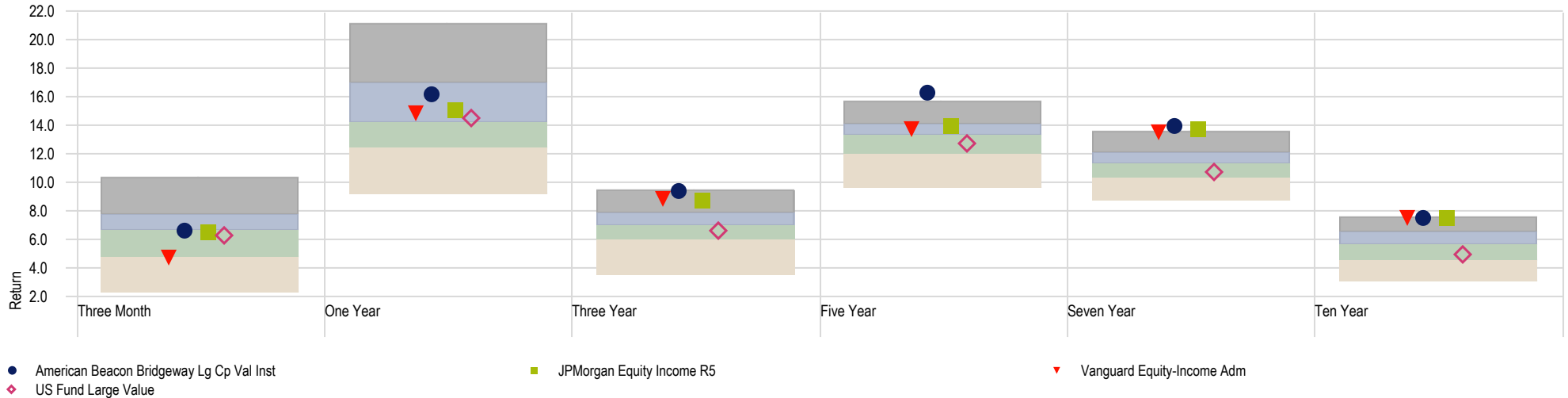
	Asset Alloc Cash %	Asset Alloc US Equity %	Asset Alloc Non-US Equity %	Asset Alloc US Bond %	Asset Alloc Non-US Bond %	Asset Alloc Other %	Portfolio Date
American Beacon Bridgeway Lg Cp Val Inst	0.88	98.28	0.00	0.00	0.00	0.84	9/30/2016
JPMorgan Equity Income R5	1.33	97.83	0.84	0.00	0.00	0.00	12/31/2016
Vanguard Equity-Income Adm	3.35	85.40	9.71	0.00	0.00	1.54	9/30/2016
US Fund Large Value	2.41	92.24	4.77	0.25	0.06	0.27	12/31/2016

# Fund Analytics - Active Mutual Funds

## Trailing Returns

Peer Group (5-95%): Open End Funds - U.S. - Large Value

■ Top Quartile ■ 2nd Quartile ■ 3rd Quartile ■ Bottom Quartile



## Trailing Returns

As of Date: 12/31/2016 Source Data: Monthly Return Peer Group: Open End Funds - U.S. - Large Value

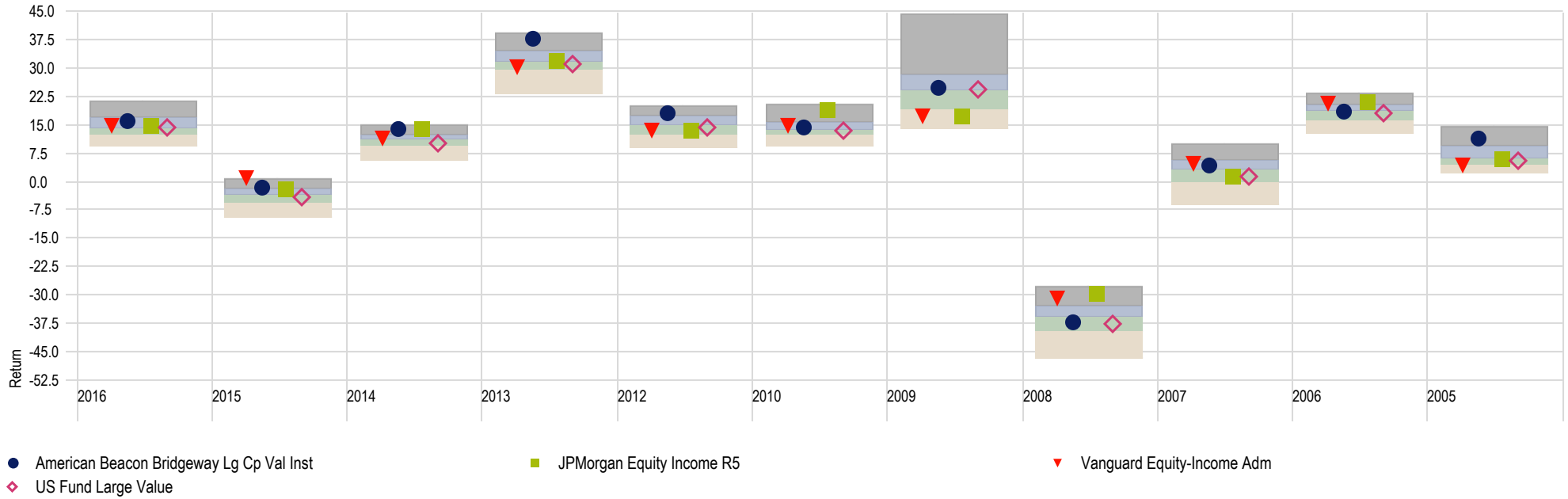
	Three Month	% rank	One Year	% rank	Three Year	% rank	Five Year	% rank	Seven Year	% rank	Ten Year	% rank
American Beacon Bridgeway Lg Cp Val Inst	6.68	46	16.24	29	9.44	6	16.35	3	13.97	3	7.49	6
JPMorgan Equity Income R5	6.57	51	15.06	40	8.71	10	13.99	29	13.77	4	7.55	5
Vanguard Equity-Income Adm	4.79	74	14.82	43	8.85	9	13.78	35	13.51	6	7.53	6
Russell 1000 Value TR USD	6.68	47	17.34	22	8.59	11	14.80	12	12.72	14	5.72	47
US Fund Large Value	6.31	56	14.59	46	6.58	60	12.71	61	10.79	65	4.92	66
25th Percentile	7.69		16.94		7.88		14.13		12.09		6.54	
50th Percentile	6.60		14.24		6.94		13.28		11.28		5.62	
75th Percentile	4.77		12.41		5.93		12.03		10.34		4.55	

# Fund Analytics - Active Mutual Funds

## Calendar Year Returns

Peer Group (5-95%): Open End Funds - U.S. - Large Value

■ Top Quartile ■ 2nd Quartile ■ 3rd Quartile ■ Bottom Quartile



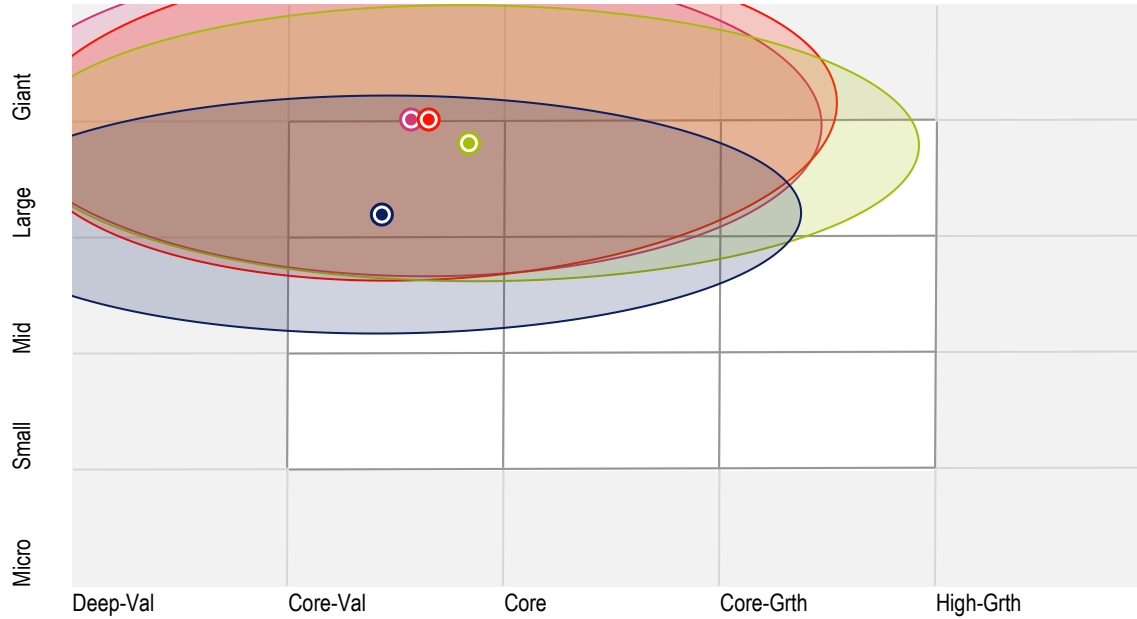
## Calendar Year Returns

Peer Group: Open End Funds - U.S. - Large Value

	2016	2015	2014	2013	2012	2010	2009	2008	2007	2006	2005
American Beacon Bridgeway Lg Cp Val Inst	16.24	-1.24	14.17	37.77	18.06	14.51	24.92	-36.83	4.49	18.52	11.62
JPMorgan Equity Income R5	15.06	-2.05	13.97	31.85	13.65	18.92	17.50	-29.67	1.60	21.00	6.13
Vanguard Equity-Income Adm	14.82	0.86	11.38	30.19	13.58	14.99	17.26	-30.86	4.99	20.77	4.52
Russell 1000 Value TR USD	17.34	-3.83	13.45	32.53	17.51	15.51	19.69	-36.85	-0.17	22.25	7.05
US Fund Large Value	14.59	-4.08	10.15	31.15	14.55	13.59	24.34	-37.38	1.30	18.05	5.86
25th Percentile	16.94	-1.96	12.32	34.49	17.21	15.88	28.25	-32.83	5.66	20.43	9.46
50th Percentile	14.24	-3.55	10.90	31.68	14.96	13.67	23.95	-35.92	3.04	18.50	6.18
75th Percentile	12.41	-5.42	9.38	29.51	12.47	12.17	19.07	-39.73	-0.37	16.06	4.31

# Fund Analytics - Active Mutual Funds

## Holdings-Based Style Map



- American Beacon Bridgeway Lg Cp Val Inst 9/30/2016
- JPMorgan Equity Income R5 12/31/2016
- Vanguard Equity-Income Adm 9/30/2016
- Russell 1000 Value TR USD 1/31/2017
- US Fund Large Value 12/31/2016

## Returns-Based Style Map

Time Period: 1/1/2012 to 12/31/2016



- American Beacon Bridgeway Lg Cp Val Inst
- JPMorgan Equity Income R5
- Vanguard Equity-Income Adm
- Russell 1000 Value TR USD
- US Fund Large Value

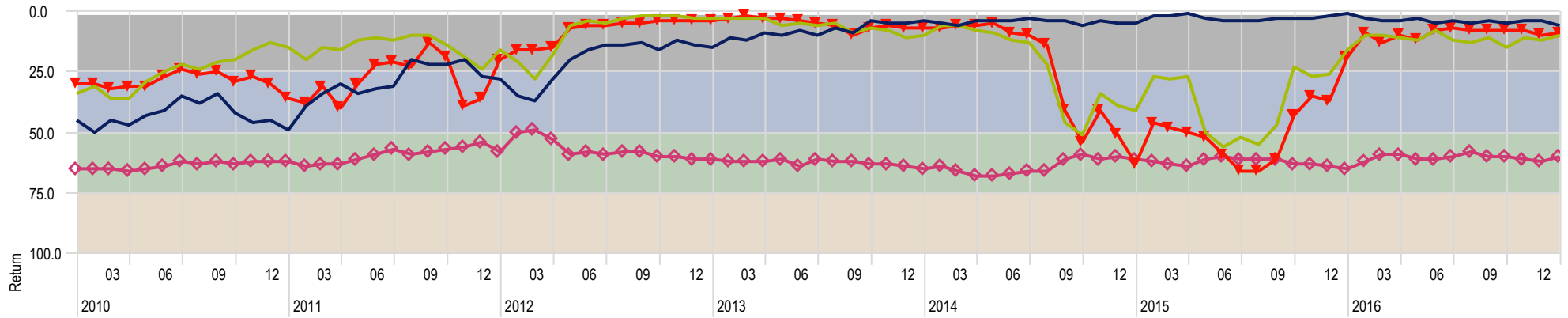
# Fund Analytics - Active Mutual Funds

## 3 Year Rolling Returns

Time Period: 1/1/2007 to 12/31/2016

Peer Group (5-95%): Open End Funds - U.S. - Large Value Rolling Window: 3 Years 1 Month shift

1st to 25th Percentile 26th to Median 51st to 75th Percentile 76th to 100th Percentile



American Beacon Bridgeway Lg Cp Val Inst

JPMorgan Equity Income R5

Vanguard Equity-Income Adm

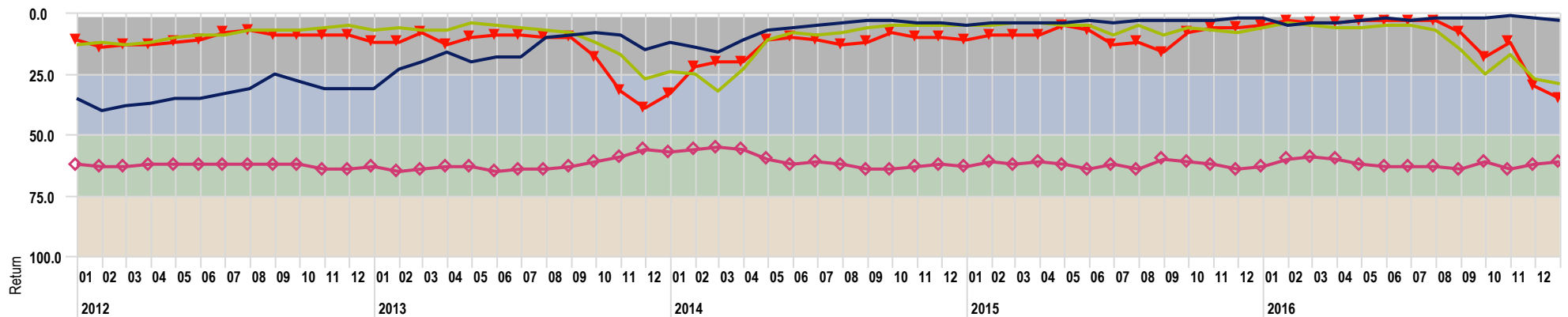
US Fund Large Value

## 5 Year Rolling Returns

Time Period: 1/1/2007 to 12/31/2016

Peer Group (5-95%): Open End Funds - U.S. - Large Value Rolling Window: 5 Years 1 Month shift

1st to 25th Percentile 26th to Median 51st to 75th Percentile 76th to 100th Percentile



American Beacon Bridgeway Lg Cp Val Inst

JPMorgan Equity Income R5

Vanguard Equity-Income Adm

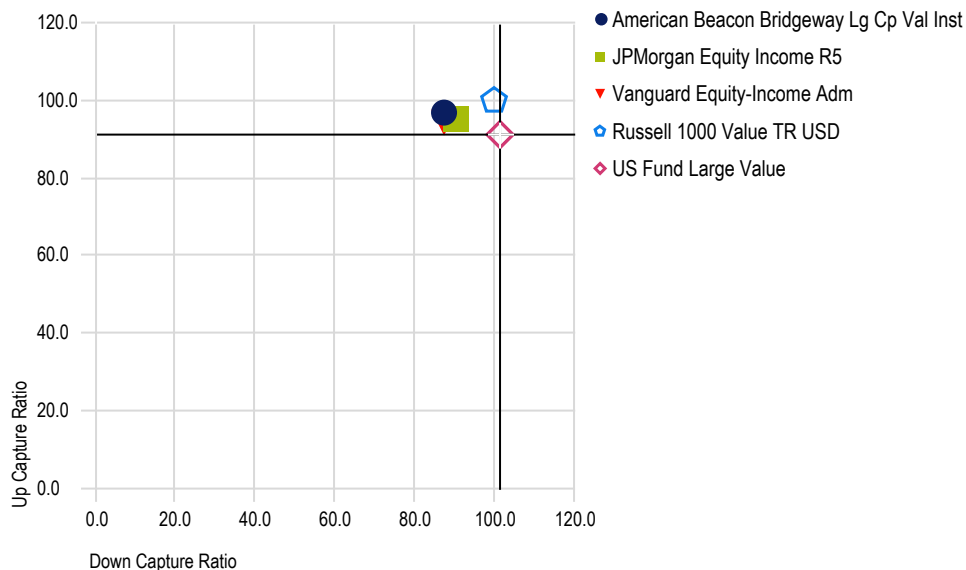
US Fund Large Value



# Fund Analytics - Active Mutual Funds

## 3 Year Upside-Downside Capture

Time Period: 1/1/2014 to 12/31/2016



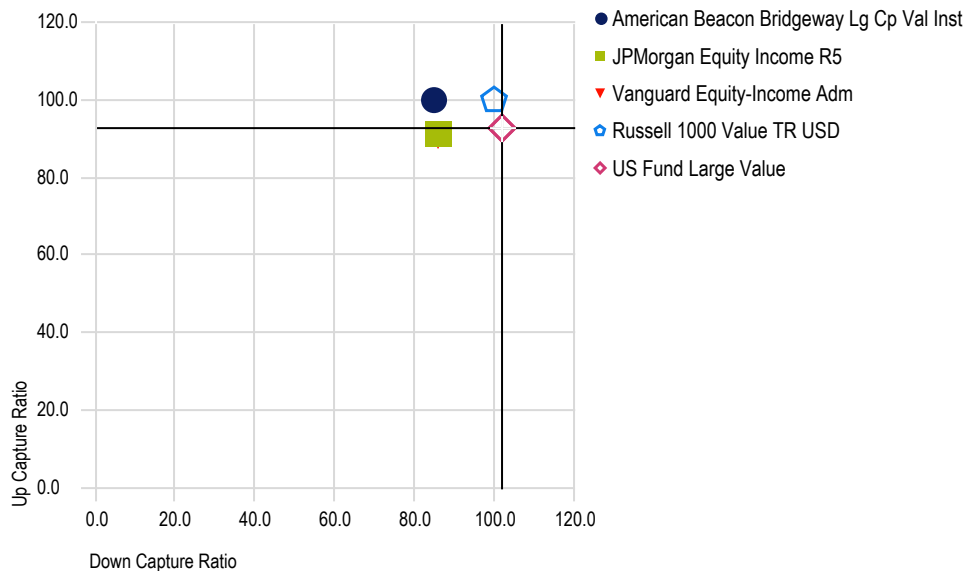
## 3 Year Upside-Downside Statistics

Time Period: 12/1/2013 to 12/31/2016 Calculation Benchmark: Russell 1000 Value TR USD

	Up Period Percent	Down Period Percent	Up Capture Ratio	Down Capture Ratio
American Beacon Bridgeway Lg Cp Val Inst	67.57	32.43	97.10	87.81
JPMorgan Equity Income R5	64.86	35.14	94.45	90.73
Vanguard Equity-Income Adm	62.16	37.84	93.98	87.81
Russell 1000 Value TR USD	64.86	35.14	100.00	100.00
US Fund Large Value	64.86	35.14	91.16	101.74
25th Percentile	51.35	54.05	48.97	119.10
50th Percentile	48.65	51.35	44.31	110.55
75th Percentile	45.95	48.65	37.51	101.64

## 5 Year Upside-Downside Capture

Time Period: 1/1/2012 to 12/31/2016



## 5 Year Upside-Downside Statistics

Time Period: 12/1/2011 to 12/31/2016 Calculation Benchmark: Russell 1000 Value TR USD

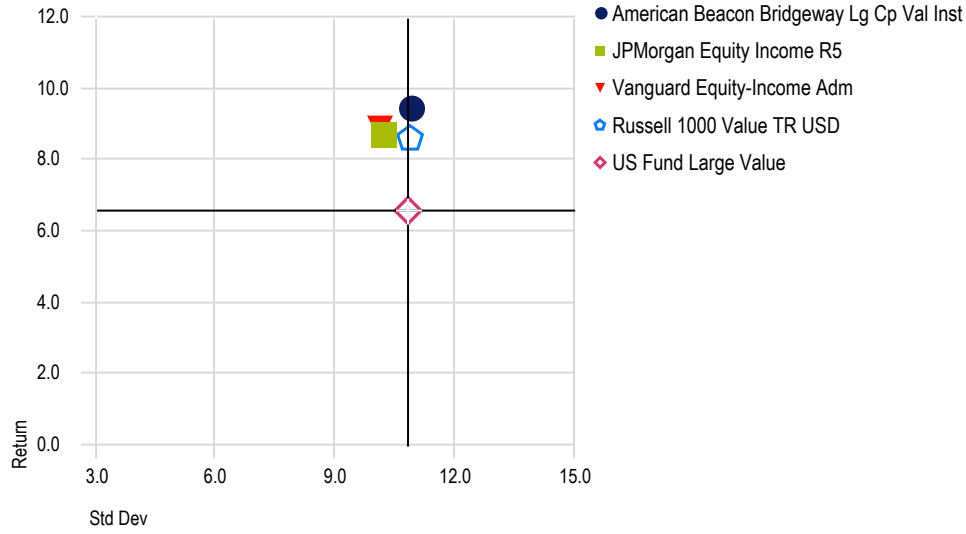
	Up Period Percent	Down Period Percent	Up Capture Ratio	Down Capture Ratio
American Beacon Bridgeway Lg Cp Val Inst	72.13	27.87	99.37	85.19
JPMorgan Equity Income R5	72.13	27.87	91.63	86.24
Vanguard Equity-Income Adm	70.49	29.51	91.38	85.93
Russell 1000 Value TR USD	68.85	31.15	100.00	100.00
US Fund Large Value	70.49	29.51	92.26	102.18
25th Percentile	55.74	50.82	57.39	135.47
50th Percentile	52.46	47.54	53.51	126.83
75th Percentile	49.18	44.26	48.64	115.20

# Fund Analytics - Active Mutual Funds

## 3 Year Risk-Reward

Time Period: 1/1/2014 to 12/31/2016

Peer Group (5-95%): Open End Funds - U.S. - Large Value



## 3 Year Risk Statistics

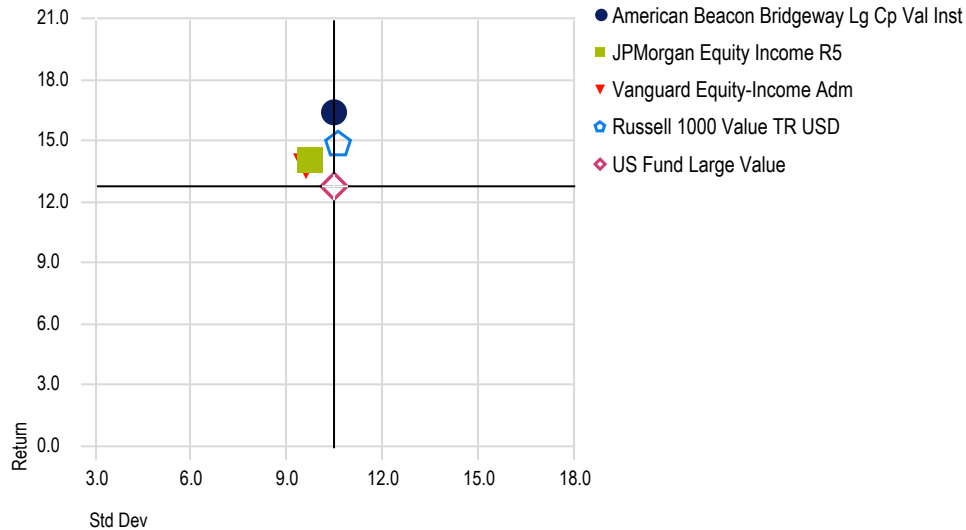
Time Period: 12/1/2013 to 12/31/2016 Peer Group: Open End Funds - U.S. - Large Value

	Return	Std Dev	Alpha	Beta	Sharpe Ratio	Tracking Error
American Beacon Bridgeway Lg Cp Val Inst	10.07	10.85	0.98	0.98	0.93	2.40
JPMorgan Equity Income R5	9.16	10.14	0.62	0.92	0.90	2.15
Vanguard Equity-Income Adm	9.41	10.03	1.04	0.90	0.93	2.76
Russell 1000 Value TR USD	9.23	10.82	0.00	1.00	0.86	0.00
US Fund Large Value	7.16	10.72	-1.80	0.99	0.69	1.06
25th Percentile	8.47	12.10	-0.40	1.07	0.79	4.11
50th Percentile	7.52	11.09	-1.52	1.00	0.69	2.94
75th Percentile	6.57	10.34	-2.79	0.93	0.59	2.23

## 5 Year Risk-Reward

Time Period: 1/1/2012 to 12/31/2016

Peer Group (5-95%): Open End Funds - U.S. - Large Value



## 5 Year Risk Statistics

Time Period: 1/1/2012 to 12/31/2016 Peer Group: Open End Funds - U.S. - Large Value

	Return	Std Dev	Alpha	Beta	Sharpe Ratio	Tracking Error
American Beacon Bridgeway Lg Cp Val Inst	16.35	10.51	1.81	0.97	1.49	2.30
JPMorgan Equity Income R5	13.99	9.74	0.72	0.89	1.39	2.48
Vanguard Equity-Income Adm	13.78	9.63	0.77	0.88	1.38	2.82
Russell 1000 Value TR USD	14.80	10.61	0.00	1.00	1.35	0.00
US Fund Large Value	12.71	10.50	-1.63	0.98	1.19	1.17
25th Percentile	14.13	11.74	-0.39	1.07	1.27	3.93
50th Percentile	13.28	10.87	-1.34	1.00	1.18	2.96
75th Percentile	12.03	10.16	-2.34	0.92	1.09	2.26

# Disclosures

Funds may impose redemption fees and/or transfer restrictions if assets are held for less than the published holding period. For more information, see the fund's prospectus and/or disclosure documents.

Putnam funds are managed by Putnam Investment Management. Putnam mutual funds are distributed by Putnam Retail Management. Putnam is affiliated with GWL&A and GWL&A of NY and its subsidiaries.

The net expense ratio is the expense ratio after the application of any waivers or reimbursement. Please note the expenses take into consideration a voluntary or contractual waiver that expires as disclosed by the fund prospectus.

Morningstar rankings are based on total return and do not reflect of sales charges, which, if reflected, would reduce returns.

The date in a target date fund's name represents an approximate date when an investor is expected to retire (which is assumed to be at age 65) and/or begins withdrawing money. The principal value of the funds is not guaranteed at any time, including the target date. For more information, please refer to the fund prospectus and/or disclosure document. A target date fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date (which is the assumed retirement date for an investor).

Asset allocation and balanced investment options and models are subject to the risks of the underlying funds, which can be a mix of stocks/stock funds and bonds/bond funds. For more information, see the prospectus and/or disclosure documents.

The value of commodity-linked investments may be affected by financial factors, political developments and natural disasters. As such, investment options that invest primarily in commodities may experience greater volatility than investments in traditional securities.

Equity securities of small and mid-sized companies may be more volatile than securities of larger, more established companies.

Real estate securities and trusts involve greater risks than other non-diversified investments, including but not limited to: declining property values, varying economic conditions, changes in zoning laws, or losses from casualty. Real estate securities that invest in foreign real estate involve additional risk, including currency fluctuations and political developments.

Investment return and principal value of a variable investment will fluctuate so that an investor's shares when redeemed, may be worth more or less than the original cost.

There is no guarantee that companies that can issue dividends will declare, continue to pay, or increase dividends.

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The Trustee of the JPMCB SmartRetirement Funds agrees to reimburse the Fund for such fund operating expenses, and/or to waive a portion of the Trustee's management fee, to the extent that the fund's total annual operating expenses (excluding management fees, service fees, underlying fund fees attributable to dividend and interest expenses on short sales, interest, expenses related to litigation and potential litigation, and extraordinary expenses not incurred in the ordinary course of the Fund's business) exceeds 0.04% of the Fund's average daily new assets through the expense cap expiration date.

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