

# STATE OF DELAWARE

06.30.2018 - Fiduciary Due Diligence Report

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## Due Diligence Begins with Careful Oversight

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# INTRODUCTION

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For most plan sponsors, concern over the fulfillment of fiduciary responsibilities continues to be a primary focus for the Retirement Plan Committee. Because of enhanced scrutiny, regulatory changes and the outcomes of highly publicized participant lawsuits, plan sponsor committees have worked to incorporate due diligence procedures and to implement best practices for the development, administration and oversight of their plans.

Cammack Retirement Group is dedicated to assisting you in meeting your fiduciary obligations, and in adopting and maintaining an ongoing process for review and management of your retirement program. We anticipate the potential problems for your plan and provide you with relevant, timely information to enable your committee to make decisions and take action.

Within the pages of the following comprehensive report, we have an analysis of the most salient issues confronting your plan related to: plan investments, fees and expenses, plan design, industry trends and regulations, participant communication, compliance and/or other topics that are vital to maintaining a plan to foster positive retirement outcomes for your participants.

Cammack Retirement Group also continues to improve its technological capabilities to bring you critical data in a clear and concise manner. We have invested in enhanced analytical tools and report-building technology to deliver more timely and robust information. In addition to better data reporting, this innovative technology will allow you to maintain a secure online file to capture and store the documents that are important to the fulfillment of your fiduciary responsibilities.

We appreciate your business, and we look forward to continuing to strengthen our relationship as your trusted partner in serving your retirement plan.

# CAMMACK RETIREMENT GROUP

## CONTACTS

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# EXECUTIVE SUMMARY

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## Plan Review

- As of June 30, 2018, the State of Delaware Deferred Compensation Plans held approximately \$763.4 million in total assets, representing an increase of approximately \$16.1 million (2.16% change) over total assets as of March 31, 2018. Quarterly contributions to the Plan were approximately \$14.4 million.
  - \$647.7 million was invested in the State of Delaware 457(b) Deferred Compensation Plan
  - \$93.8 million was invested in the State of Delaware 403(b) Plan <sup>1</sup>
  - \$21.9 million was invested in the State of Delaware 401(a) Match Plan
- The weighted average expense ratio of the funds (excluding the Voya Fixed Plus Account) is 0.35%, as compared to the 2017 NAGDCA Perspectives in Practice Survey average of 0.32% for similarly sized Plans (\$700 million-\$2 billion).
- There is an asset-based fee of eight basis points (0.08%)<sup>2</sup> charged to each participant; this fee pays for Voya recordkeeping and administrative services. There is an asset-based fee of five basis points (0.05%) (not to exceed \$200.00 annually) charged to each participant; this fee pays the State of Delaware's administrative fee.<sup>3</sup> In the 2017 NAGDCA Perspectives in Practice Survey, the average net administrative fee for similarly sized Plans (\$700 million-\$2 billion) was 0.14%.
- The Plan Expense Reimbursement Account balances as of June 30, 2018 were as follows:
  - \$55,597 in the State of Delaware 457(b) Deferred Compensation Plan
  - \$19,555 in the State of Delaware 403(b) Plan
  - \$4,572 in the State of Delaware 401(a) Match Plan

<sup>1</sup> Does not include assets held in individual accounts at previous/legacy providers/contracts: valued at approximately \$311.6m.

<sup>2</sup> For 2018, there is an asset-based fee of 0.076% charged to each participant, reduced temporarily from 0.08% in light of performance guarantees.

<sup>3</sup> Effective June 2018 (Q2 2018), the administrative fee will not be charged to 457 Plan participants for four quarters. This fee will be paid using legacy plan-level assets, and the process will be re-evaluated by the Plans Management Board in June 2019.

## EXECUTIVE SUMMARY (CONTINUED)

### Investment Highlights

- Based on the analysis of funds under the Plans, using the criteria outlined in the Investment Policy Statement, the following fund recommendation is being made for consideration by the Committee:
  - ClearBridge Mid Cap Growth IS: Recommend for Watch (Placed on Watch February 2018).  
*We recommend continuing this fund on watch due to its relative underperformance to the benchmark over the near term. The fund's approach of investing in high-quality growth companies has protected capital in challenging markets, but it also has participated in strong markets. However, the fund's recent underperformance is worth monitoring. The fund underperformed the Russell Midcap Growth Index in the second quarter due to stock selection, particularly in the industrials, real estate, and financials sectors. The leading contributor to returns was the IT sector, while the primary detractors from returns were the industrials and financials sectors.*
- The remainder of the funds in the array are recommended to be maintained (Not for Watch).
- Additional commentary is provided for the following funds: *Templeton Global Bond R6* and *Lazard International Equity R6*
  - Templeton Global Bond R6: Recommend to maintain (Not for Watch).  
*This fund differentiates itself by investing in high real-yielding sovereign markets and currencies and limiting exposure to the low- and negative-yielding developed market countries (i.e., Europe and Japan), which make up a significant portion of global bond indices. While the fund lists its benchmark as the Citigroup World Government Bond Index - unhedged, the manager follows a more unconstrained approach and has significant leeway in the strategy's portfolio composition and investments. The fund's performance improved in the second quarter as Fed policy actions caused the dollar to strengthen relative to the euro and Japanese yen, which was beneficial, as the manager maintained short positions in these currencies. Weakness in emerging markets currencies and rising interest rates in select regions, such as Argentina, Brazil, and Mexico, modestly offset the fund's gains in developed market currencies.*

## EXECUTIVE SUMMARY (CONTINUED)

### Investment Highlights (continued)

- Additional commentary (continued)
  - Lazard International Equity R6: Recommend to maintain (Not for Watch).

*The strategy focuses on companies where the cash flow or assets of the firm are undervalued. The fund has captured less downside in down markets; it also performs well in fundamentally driven markets, but lags in low quality, rapidly rising markets. Examples of downside protection from the fund include the financial crisis (2007-09), and in the European debt crisis in 2011 in which the fund declined only 7.2% versus the 14.0% loss for the category and the 13.7% loss for the MSCI ACWI ex USA. The fund's trailing returns have been hurt by underperformance in 2016 and the first half of 2017 due to the rally in low-quality stocks as well as an overweight to the UK. The fund was hurt by the Brexit result as it captured a lot of downside, but their positions did rally afterward. They also missed the rebound in many European banks which don't meet the fund's definition of quality. Emerging markets stocks rallied from 2017 onward, the fund has a small allocation to that space relative to their international equity peers and benchmark.*

### Tier One Highlights (Target Date Suite)

- Approximately \$592.4 million was invested in the American Funds Target Date Retirement Fund series (represents 77.6% of assets). The target date series is designated as the Plans' default investment, which is to be used in the event a participant does not make an investment election.
  - 93% of unique Plan participants (across all plans) were invested in the target date series (19,215 unique participants).
  - The target date series received approximately 79.4% (\$11.5 million) of new contributions within the quarter.
  - Across the target date series, the average annualized returns (with the exception of the 10-year period for the 2015 fund) rank in the top quartile for the 3-year, 5-year, and 10-year performance periods for all vintages.<sup>4</sup> The 2015 fund is close to the top quartile, ranking in the 26<sup>th</sup> percentile for the 10-year performance period.
  - Across the target date series, the average Sharpe Ratio ranks in the top quartile for the 3-year, 5-year, and 10-year performance periods for all vintages.<sup>4</sup>

<sup>4</sup> The 2055 vintage is excluded from 10-year rankings (introduced 2/1/2010), and the 2060 vintage is excluded from 5- and 10-year rankings (introduced 3/27/2015).

## EXECUTIVE SUMMARY (CONTINUED)

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### Investment Highlights (continued)

#### *Tier Two Highlights (Core Fund Array)*

- \$155.2 million was invested in Tier Two (represents 20.3% of assets).
  - Tier Two received approximately 20.6% (\$3.0 million) of new contributions within the quarter.
- Approximately \$15.8 million was invested in the Voya Fixed Plus Account III (across all Plans)
  - In the 403(b) Plan, the crediting rate for the Voya Fixed Plus Account is 2.50%. The minimum guaranteed crediting rate is 2.50%.
  - In the 401(a) and the 457(b) Plans, the crediting rate for the Voya Fixed Plus Account is 1.75%. The minimum guaranteed crediting rate is 1.00%.
- Approximately \$139.4 million was invested in the Tier Two mutual fund options (excluding the Voya Fixed Plus Account)
  - For the 3-year period, 69% of the funds (9 of 13 funds) rank above the median; 46% (6 of 13 funds) rank in the top-quartile; 15% (2 of 13 funds) rank in the bottom quartile
  - For the 5-year period, 85% of the funds (11 of 13 funds) rank above the median; 54% (7 of 13 funds) rank in the top-quartile; no funds rank in the bottom quartile
  - For the 10-year period, 100% of the funds (12 of 12 funds) rank above the median; 83% (10 of 12 funds) rank in the top-quartile; no funds rank in the bottom quartile
- As of June 30, 2018, there were approximately \$4.4 million (0.58% of total Plan assets) invested in the Managed Account feature, representing 201 participant accounts.

#### *Tier Three Highlights (Self Directed Brokerage Account)*

- The TD Ameritrade Self Directed Brokerage Account held approximately \$15.9 million (represents 2.1% of assets), across 365 participant accounts.



## Fiduciary Best Practices

- Annual review of Investment Policy Statement (IPS)
- Annual Fiduciary Training

Ongoing

*To be completed with tax counsel*

## Ongoing Review of Plan Investments

- Annual target date suite review
- Annual investment structure review

August 2018 Meeting

August 2018 Meeting

# Plan Allocation And Economic Review

# PLAN FINANCIALS: ASSETS AND CONTRIBUTIONS

Fund Name	Ticker	Quarterly Contribution		Assets			
		04/01/2018 - 06/30/2018		06/30/2018		03/31/2018	
<b>Fixed Account</b>							
Voya Fixed Plus Account III		\$254,114	2%	\$15,776,027	2%	\$15,403,506	2%
<b>Subtotal</b>		<b>\$254,114</b>	<b>2%</b>	<b>\$15,776,027</b>	<b>2%</b>	<b>\$15,403,506</b>	<b>2%</b>
<b>Money Market</b>							
Vanguard Federal Money Market Investor	VMFXX	\$132,737	<1%	\$11,274,290	1%	\$10,301,435	1%
<b>Subtotal</b>		<b>\$132,737</b>	<b>&lt;1%</b>	<b>\$11,274,290</b>	<b>1%</b>	<b>\$10,301,435</b>	<b>1%</b>
<b>Bond</b>							
PIMCO Total Return Instl	PTTRX	\$78,661	<1%	\$4,065,584	<1%	\$3,973,680	<1%
Vanguard Interm-Term Bond Index I	VBIMX	\$196,424	1%	\$10,715,053	1%	\$10,096,822	1%
Templeton Global Bond R6	FBNRX	\$65,269	<1%	\$2,422,097	<1%	\$2,278,903	<1%
<b>Subtotal</b>		<b>\$340,354</b>	<b>2%</b>	<b>\$17,202,734</b>	<b>2%</b>	<b>\$16,349,405</b>	<b>2%</b>
<b>Large Cap Equity U.S.</b>							
American Funds Washington Mutual R6	RWMGX	\$162,009	1%	\$7,806,720	1%	\$7,904,438	1%
Vanguard Institutional Index I	VINIX	\$893,576	6%	\$49,797,787	7%	\$47,625,253	6%
T. Rowe Price Blue Chip Growth I	TBCIX	\$361,362	3%	\$16,703,700	2%	\$15,248,494	2%
<b>Subtotal</b>		<b>\$1,416,947</b>	<b>10%</b>	<b>\$74,308,207</b>	<b>10%</b>	<b>\$70,778,185</b>	<b>9%</b>
<b>Mid Cap Equity U.S.</b>							
Vanguard Extended Market Index Instl	VIEIX	\$278,613	2%	\$14,141,154	2%	\$12,876,137	2%
ClearBridge Mid Cap Growth IS	LCMIX	\$60,298	<1%	\$2,534,243	<1%	\$2,297,057	<1%
<b>Subtotal</b>		<b>\$338,911</b>	<b>2%</b>	<b>\$16,675,397</b>	<b>2%</b>	<b>\$15,173,194</b>	<b>2%</b>
<b>Small Cap Equity U.S.</b>							
JPMorgan US Small Company R6	JUSMX	\$117,907	<1%	\$5,287,316	<1%	\$4,629,808	<1%
<b>Subtotal</b>		<b>\$117,907</b>	<b>&lt;1%</b>	<b>\$5,287,316</b>	<b>&lt;1%</b>	<b>\$4,629,808</b>	<b>&lt;1%</b>
<b>International Equity</b>							
Lazard International Equity R6	RLIEX	\$69,482	<1%	\$2,473,234	<1%	\$2,314,225	<1%

# PLAN FINANCIALS: ASSETS AND CONTRIBUTIONS

Fund Name	Ticker	Quarterly Contribution		Assets			
		04/01/2018 - 06/30/2018		06/30/2018		03/31/2018	
Vanguard Total Intl Stock Index I	VTSNX	\$245,566	2%	\$9,217,648	1%	\$9,430,720	1%
<b>Subtotal</b>		<b>\$315,048</b>	<b>2%</b>	<b>\$11,690,882</b>	<b>2%</b>	<b>\$11,744,945</b>	<b>2%</b>
<b>Specialty</b>							
TIAA-CREF Real Estate Sec Instl	TIREX	\$54,925	<1%	\$2,939,962	<1%	\$2,759,720	<1%
<b>Subtotal</b>		<b>\$54,925</b>	<b>&lt;1%</b>	<b>\$2,939,962</b>	<b>&lt;1%</b>	<b>\$2,759,720</b>	<b>&lt;1%</b>
<b>Target Dates</b>							
American Funds 2010 Trgt Date Retire R6	RFTTX	\$173,743	1%	\$29,730,138	4%	\$30,374,079	4%
American Funds 2015 Trgt Date Retire R6	RFJTX	\$417,901	3%	\$47,539,993	6%	\$49,408,618	7%
American Funds 2020 Trgt Date Retire R6	RRCTX	\$1,436,900	10%	\$106,632,113	14%	\$107,519,654	14%
American Funds 2025 Trgt Date Retire R6	RFDTX	\$1,705,013	12%	\$108,462,175	14%	\$107,610,286	14%
American Funds 2030 Trgt Date Retire R6	RFETX	\$2,341,556	16%	\$99,887,639	13%	\$96,999,614	13%
American Funds 2035 Trgt Date Retire R6	RFFTX	\$1,836,958	13%	\$89,020,066	12%	\$86,845,736	12%
American Funds 2040 Trgt Date Retire R6	RFGTX	\$1,271,442	9%	\$53,902,817	7%	\$52,220,236	7%
American Funds 2045 Trgt Date Retire R6	RFHTX	\$1,075,837	7%	\$34,557,163	5%	\$33,188,466	4%
American Funds 2050 Trgt Date Retire R6	RFITX	\$765,401	5%	\$15,650,252	2%	\$14,705,444	2%
American Funds 2055 Trgt Date Retire R6	RFKTX	\$360,270	2%	\$5,264,477	<1%	\$4,834,089	<1%
American Funds 2060 Trgt Date Retire R6	RFUTX	\$76,753	<1%	\$1,704,134	<1%	\$1,578,761	<1%
<b>Subtotal</b>		<b>\$11,461,773</b>	<b>79%</b>	<b>\$592,350,966</b>	<b>78%</b>	<b>\$585,284,983</b>	<b>78%</b>
<b>Other</b>							
Self-Directed Brokerage		\$0	0%	\$15,888,182	2%	\$14,826,233	2%
<b>Subtotal</b>		<b>\$0</b>	<b>0%</b>	<b>\$15,888,182</b>	<b>2%</b>	<b>\$14,826,233</b>	<b>2%</b>
<b>Totals</b>		<b>\$14,432,715</b>	<b>100%</b>	<b>\$763,393,961</b>	<b>100%</b>	<b>\$747,251,414</b>	<b>100%</b>

# Investment Analysis

# INVESTMENT ANALYSIS: ANNUAL INVESTMENT STRUCTURE REVIEW

## TIER 1 – TARGET DATE, RISK ALLOCATION, MANAGED ACCOUNTS

American Funds Target Date Retirement

## TIER 2 – CORE INVESTMENT FUNDS

### CAPITAL PRESERVATION

#### FIXED/STABLE

Voya Fixed Plus

#### MONEY MARKET

Vanguard Federal Money Market

#### SHORT-TERM BOND

### CORE AND DIVERSIFYING FIXED INCOME

#### INTERMEDIATE

PIMCO Total Return  
Vanguard Interm-Term Bond Index

#### LONG-TERM BOND

#### HIGH YIELD

#### WORLD BOND

Templeton Global Bond

### DOMESTIC EQUITY

#### LARGE VALUE

American Funds Washington Mutual

#### LARGE BLEND

Vanguard Institutional Index

#### LARGE GROWTH

T. Rowe Price Blue Chip Growth

#### SOCIALLY RESPONSIBLE EQUITY

#### MID VALUE

#### MID BLEND

Vanguard Extended Market Index

#### MID GROWTH

ClearBridge Mid Cap Growth

#### HYBRID

#### SMALL VALUE

#### SMALL BLEND

JPMorgan US Small Company

#### SMALL GROWTH

### INTERNATIONAL/GLOBAL EQUITY

#### FOREIGN LARGE CAP

Lazard International Equity  
Vanguard Total Intl Stock Index

#### FOREIGN SMID

#### EMERGING MARKETS STOCK

#### WORLD STOCK

### INFLATION HEDGE

#### INFLATION PROTECTED BOND

#### REAL ESTATE/REIT

TIAA-CREF Real Estate Sec

#### COMMODITY

## TIER 3 – SELF –DIRECTED BROKERAGE

TD Ameritrade Self Directed Brokerage Account

# INVESTMENT ANALYSIS:

## VOYA FIXED PLUS ACCOUNT III - 403(b) PLAN

### RECOMMENDATION:

Not on Watch

### OBJECTIVE

- Stability of principal is the primary objective of this investment option

### LIQUIDITY

- Employer: If a full withdrawal is requested, the Voya Fixed Plus Account III will pay amounts with interest, in five annual payments
- Employee: No charges or restrictions for benefit sensitive withdrawals

### RESTRICTIONS

- Equity wash rules may apply if plan offers competing funds (money market, short-term high quality bond or brokerage window)
- Liquidity - restricts transfer of assets to outside providers

### Basic Characteristics

Product Type	General Account
Manager	Voya Retirement Insurance and Annuity Company
Guarantor	Voya Retirement Insurance and Annuity Company
Crediting Rate as of 6.30.2018	2.50%
Minimum Guarantee	2.50% for 2018

### Financial Strength – Ratings

	Ratings	
AM Best	A	(3 <sup>rd</sup> of 16)
Fitch	A	(6 <sup>th</sup> of 19)
Moody's	A2	(6 <sup>th</sup> of 21)
S&P	A	(6 <sup>th</sup> of 22)

## INVESTMENT ANALYSIS:

### VOYA FIXED PLUS ACCOUNT III - 457(b) and 401(a) PLANS

#### RECOMMENDATION:

Not on Watch

#### OBJECTIVE

- Stability of principal is the primary objective of this investment option

#### LIQUIDITY

- Employer: If a full withdrawal is requested, the Voya Fixed Plus Account III will pay amounts with interest, in five annual payments
- Employee: No charges or restrictions for benefit sensitive withdrawals

#### RESTRICTIONS

- Equity wash rules may apply if plan offers competing funds (money market, short-term high quality bond or brokerage window)
- Liquidity - restricts transfer of assets to outside providers

#### Basic Characteristics

Product Type	General Account
Manager	Voya Retirement Insurance and Annuity Company
Guarantor	Voya Retirement Insurance and Annuity Company
Crediting Rate as of 6.30.2018	1.75%
Minimum Guarantee	1.00%

#### Financial Strength – Ratings

	Ratings	
AM Best	A	(3 <sup>rd</sup> of 16)
Fitch	A	(6 <sup>th</sup> of 19)
Moody's	A2	(6 <sup>th</sup> of 21)
S&P	A	(6 <sup>th</sup> of 22)



# INVESTMENT ANALYSIS: MONEY MARKET

## Vanguard Federal Money Market Investor

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return(% rank in peergroup)						Risk	Risk Adj Return	R-Squared	Expense Ratio Vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
Money Market-Taxable													
Vanguard Federal Money Market Investor	VMFXX	10.50	0.42	0.75	1.26(6)	0.63(4)	0.38(3)	0.34(6)	0.15	-1.11	86.57	0.11	-
Category Average		14.25	0.34	0.58	0.92	0.39	0.24	0.20	0.12	-4.26	47.92	0.49	-
FTSE Treasury Bill 3 Mon USD		-	0.44	0.79	1.33	0.64	0.39	0.31	0.16	-0.97	100	-	-

**Manager:** Vanguard Group, Inc.

**Market Value:** \$95.4 Billion

**Current Yield:** 1.85%

**Q2 2018 Recommendation:** Not on Watch

### Strategy

The fund seeks to provide current income while maintaining liquidity and a stable share price of \$1. The fund invests primarily in high-quality, short-term money market instruments issued by the U.S. government and its agencies and instrumentalities. The fund generally invests 100% of its assets in government securities and therefore, will satisfy the 99.5% requirement for designation as a government money market fund.

### Liquidity

By law, money market fund investments must mature within 397 days from the date of acquisition. Average weighted maturity must be 90 days or less. The "cost" of a money market fund is its expense ratio. Returns shown are "total returns", which are net of fees.

### Restrictions

If there is a fixed account also in the array, transfers between the fixed and money market accounts may be subject to an "equity wash" provision. Monies may not be able to move directly between the fixed and money market funds but must pass through an equity fund. Money market funds may also be the medium by which transfers to a brokerage account may be made.

# INVESTMENT ANALYSIS: SCORECARD

Fund Category	Fund Name	Ticker	Manager Tenure	Performance vs. Index			Category Ranking			Risk	Risk Adj Return	R-Squared	Expense Ratio vs. Peers	Overall Mstar Rating	Recommendation
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr						
Intermediate-Term Bond	PIMCO Total Return Instl	PTTRX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	****	Not on Watch	
Intermediate-Term Bond	Vanguard Interm-Term Bond Index I	VBIMX	✓	✓	✓	NA	✓	✓	✓	✓	✓	✓	****	Not on Watch	
World Bond	Templeton Global Bond R6	FBNRX	✓	✗	✓	✓	✗	✓	✓	✗	✗	✗	✓	***	Not on Watch
Large Value	American Funds Washington Mutual R6	RWMGX	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	****	Not on Watch
Large Blend	Vanguard Institutional Index I	VINIX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	****	Not on Watch
Large Growth	T. Rowe Price Blue Chip Growth I	TBCIX	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	****	Not on Watch
Mid-Cap Blend	Vanguard Extended Market Index Instl	VIEIX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	***	Not on Watch
Mid-Cap Growth	ClearBridge Mid Cap Growth IS	LCMIX	✓	✗	✗	NA	✗	✗	NA	✗	✗	✓	✓	**	Watch
Small Blend	JPMorgan US Small Company R6	JUSMX	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	****	Not on Watch
Foreign Large Blend	Lazard International Equity R6	RLIEX	✓	✗	✓	✓	✗	✗	✓	✓	✗	✓	✓	**	Not on Watch
Foreign Large Blend	Vanguard Total Intl Stock Index I	VTSNX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	***	Not on Watch
Real Estate	TIAA-CREF Real Estate Sec Instl	TIREX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	****	Not on Watch

The following funds are not included in this scorecard, but are shown on separate individual pages within the report: Voya Fixed Plus Account III, Vanguard Federal Money Market, and the American Funds Target Date Retirement Suite.

# INVESTMENT ANALYSIS: COMMENTARY

## ClearBridge Mid Cap Growth IS - Watch

Fund Name	Ticker	Manager Tenure	Performance vs. Index			Category Ranking			Risk	Risk Adj Return	R-Squared	Expense Ratio vs.Peers	Overall Mstar Rating
			3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr					
ClearBridge Mid Cap Growth IS	LCMIX	✓	✗	✗	NA	✗	✗	NA	✗	✗	✓	✓	**

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return(% rank in peergroup)						Risk	Risk Adj Return	R-Squared	Expense Ratio Vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
Mid-Cap Growth													
ClearBridge Mid Cap Growth IS	LCMIX	7.83	0.94	4.25	16.54(57)	8.03(73)	11.75(63)	-	13.15	0.60	93.71	0.75	2
Category Average		10.12	4.16	6.38	18.06	9.68	12.31	9.45	11.96	0.79	84.64	1.18	3
Russell Mid Cap Growth TR USD		-	3.16	5.40	18.52	10.73	13.37	10.45	11.04	0.92	100	-	-

### Q2 2018 Recommendation

We recommend continuing this fund on watch due to its relative underperformance to the benchmark over the near term. The fund's approach of investing in a different spectrum of growth companies has protected capital in challenging markets, but it also has participated in strong markets. However, the fund's recent underperformance is worth monitoring. The fund underperformed the Russell Midcap Growth Index in the second quarter due to stock selection, particularly in the industrials, real estate, and financials sectors. We would like to see the fund achieve better performance should quality companies come back in to favor relative to companies whose stock prices are inflated due to momentum-driven sentiment.

### Sector review, securities selection, and risk management

The fund is a high-quality growth fund that invests in companies with sustainable competitive advantages and tends to avoid momentum stocks. The fund tries to diversify the end market, business model and growth profile of its investments by investing in a wide range of growth companies. The fund invests in steady growers (45-50%), middle growers (30-35%), and hyper-growth (20-25%). The fund underperformed the Russell Midcap Growth Index in Q2 2018. On an absolute basis, the fund had gains in four of the nine sectors in which it was invested for the second quarter (out of 11 sectors total). The leading contributor to returns was the IT sector, while the primary detractors from returns were the industrials and financials sectors. Stock selection was a detractor overall. Conversely, stock selection in the IT sector aided relative returns during the second quarter. The team points to volatility and tightening financial conditions as catalysts that could create attractive entry points for them to upgrade their portfolio exposures.

### Management and additional details

The team consists of four portfolio managers. The focus on cash and valuation leads to the exclusion of momentum-driven stocks that have performed well in the past two years. The fund's inception date is 08/31/2010.

# INVESTMENT ANALYSIS:

## TARGET DATE SUMMARY: AMERICAN FUNDS TARGET DATE RETIREMENT

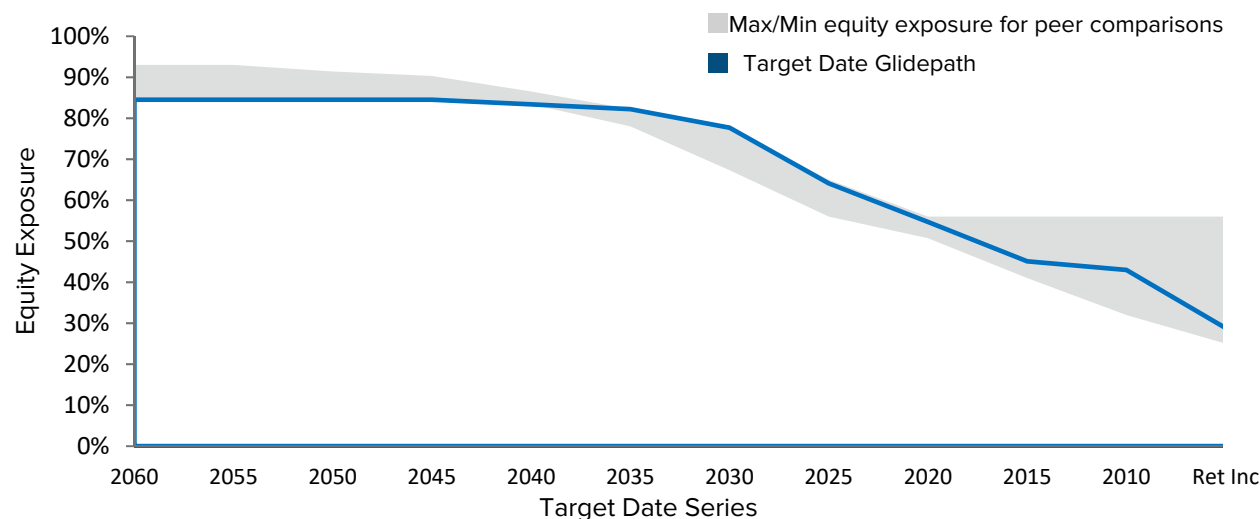
**RECOMMENDATION :** Not on watch

**FUND STRATEGY :** To help participants balance goals of building and preserving wealth while effectively managing market-risk and longevity risk using low cost active management. The managers employ a “glidepath-within-a-glidepath” approach.

### CAMMACK RETIREMENT CLASSIFICATION

PRESERVATION OF CAPITAL			EXTENSION OF CAPITAL		
Target date series are managed more conservatively to provide downside protection			Target date series are managed more aggressively to address longevity risk		
Most Conservative	Conservative	Moderately Conservative	Moderately Aggressive	Aggressive	Most Aggressive

### EQUITY GLIDEPATH



### ASSET ALLOCATION

#### Equity

U.S. Large Cap	A
U.S. Mid Cap	A
U.S. Small Cap	A
International Equity	A
Emerging Markets Equity	A

#### Fixed Income

U.S. Fixed Income	A
U.S. TIPs	A
High Yield	A
Emerging Markets Debt	A
International Fixed Income	A

#### Alternative

Commodities	
Real Estate	A

### GLIDEPATH NOTES

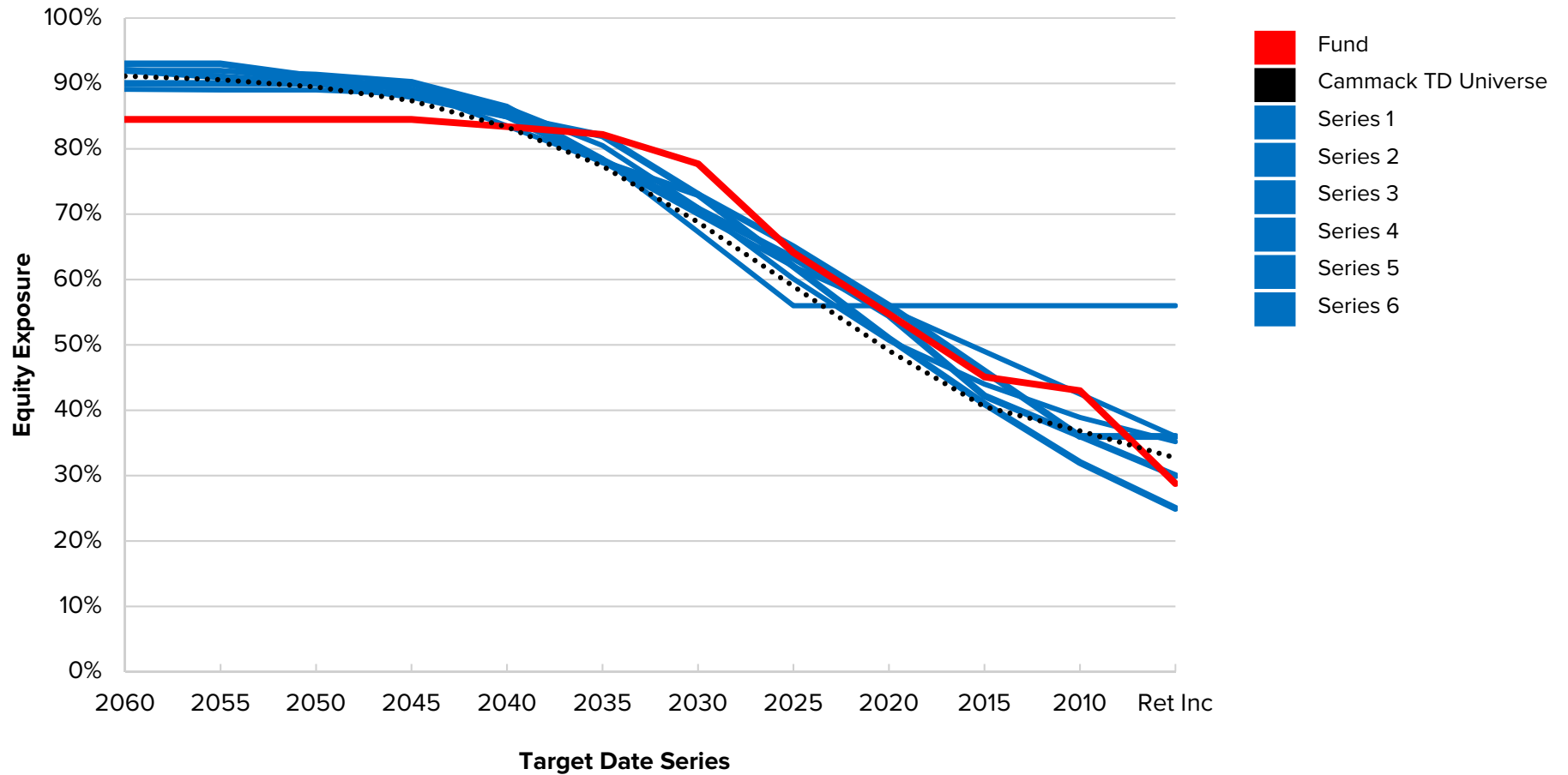
- Equity at retirement (age 65) is 45% and Equity at landing point (age 95) is 30
- Glidepath-within-a-Glidepath: glidepath distinguishes between the types of equity or fixed income investments in terms of the role they can play in a portfolio
- Diversifies the type of equity throughout the glide-path by shifting over time from growth-oriented to dividend-focused funds. Equity gradually shifts to higher yielding funds with a history of lower volatility
- Deploys different types of bonds at various stages in the glide-path to mitigate risk but provide meaningful equity exposure approaching and throughout retirement without increasing volatility

A = Active Management  
P = Passive Management

# INVESTMENT ANALYSIS:

## TARGET DATE SUMMARY: AMERICAN FUNDS TARGET DATE RETIREMENT

### EXTENSION OF CAPITAL – MODERATELY AGGRESSIVE



## INVESTMENT ANALYSIS DETAILS: PERFORMANCE VS. BENCHMARKS

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return						Risk	Risk Adj Return	R-Squared	Expense Ratio vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
Target-Date 2000-2010													
American Funds 2010 Trgt Date Retire R6	RFTTX	11.34	0.55	-0.46	4.37	5.27	6.18	5.56	4.78	0.96	69.47	0.34	4
Category Average			0.84	-0.21	4.20	4.61	5.61	4.92	4.39	0.90	65.91	0.65	3
DJ Target 2010 TR USD			-0.17	0.02	2.80	2.91	3.32	3.97	2.72	0.82	100	-	-
Target-Date 2015													
American Funds 2015 Trgt Date Retire R6	RFJTX	11.34	0.70	-0.26	5.04	5.61	6.78	5.87	5.00	0.98	72.65	0.33	4
Category Average			0.69	-0.08	5.23	5.23	6.24	5.47	5.15	0.89	66.38	0.63	3
DJ Target 2015 TR USD			-0.28	-0.13	3.28	3.64	4.06	4.36	3.48	0.85	100	-	-
Target-Date 2020													
American Funds 2020 Trgt Date Retire R6	RRCTX	11.34	0.96	0.32	6.28	6.23	7.60	6.33	5.59	0.99	81.41	0.35	5
Category Average			0.87	0.12	6.18	5.80	7.05	6.08	5.83	0.88	77.59	0.58	4
DJ Target 2020 TR USD			-0.45	-0.35	4.13	4.35	5.04	4.91	4.17	0.88	100	-	-
Target-Date 2025													
American Funds 2025 Trgt Date Retire R6	RFDTX	11.34	1.12	0.82	8.08	7.14	8.75	7.16	6.46	1.00	90.61	0.37	5
Category Average			0.89	0.22	7.07	6.36	7.65	6.50	6.66	0.86	89.53	0.64	3
DJ Target 2025 TR USD			-0.13	-0.02	5.62	5.25	6.18	5.60	5.15	0.89	100	-	-
Target-Date 2030													
American Funds 2030 Trgt Date Retire R6	RFETX	11.34	1.38	1.38	10.03	8.16	9.86	7.86	7.81	0.96	94.83	0.39	5
Category Average			1.23	0.53	8.35	7.09	8.62	7.14	7.54	0.86	93.77	0.59	4
DJ Target 2030 TR USD			0.27	0.33	7.35	6.27	7.40	6.30	6.41	0.88	100	-	-

## INVESTMENT ANALYSIS DETAILS: PERFORMANCE VS. BENCHMARKS

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return						Risk	Risk Adj Return	R-Squared	Expense Ratio vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
<b>Target-Date 2035</b>													
American Funds 2035 Trgt Date Retire R6	RFFTX	11.34	1.67	2.02	11.94	9.19	10.61	8.18	8.58	0.99	96.30	0.40	5
Category Average			1.19	0.67	9.40	7.64	9.06	7.14	8.51	0.83	96.30	0.66	3
DJ Target 2035 TR USD			0.63	0.63	8.89	7.07	8.40	6.88	7.65	0.85	100	-	-
<b>Target-Date 2040</b>													
American Funds 2040 Trgt Date Retire R6	RFGTX	11.34	1.83	2.23	12.67	9.56	10.91	8.37	8.87	1.00	96.72	0.41	5
Category Average			1.39	0.85	10.12	8.17	9.69	7.59	8.87	0.86	96.50	0.61	4
DJ Target 2040 TR USD			0.93	0.88	10.19	7.74	9.19	7.36	8.68	0.83	100	-	-
<b>Target-Date 2045</b>													
American Funds 2045 Trgt Date Retire R6	RFHTX	11.34	1.86	2.32	13.01	9.76	11.06	8.43	9.03	1.01	96.84	0.41	5
Category Average			1.33	0.89	10.57	8.26	9.59	7.38	9.34	0.83	97.13	0.67	3
DJ Target 2045 TR USD			1.15	1.06	11.11	8.23	9.71	7.69	9.37	0.82	100	-	-
<b>Target-Date 2050</b>													
American Funds 2050 Trgt Date Retire R6	RFITX	11.34	1.90	2.44	13.28	9.88	11.15	8.45	9.07	1.01	96.84	0.42	5
Category Average			1.38	0.88	10.60	8.45	9.92	7.43	9.28	0.85	96.76	0.61	3
DJ Target 2050 TR USD			1.27	1.14	11.56	8.48	9.91	7.79	9.63	0.83	100	-	-
<b>Target-Date 2055</b>													
American Funds 2055 Trgt Date Retire R6	RFKTX	8.33	1.94	2.48	13.28	9.90	11.12	-	9.08	1.01	96.77	0.42	5
Category Average			1.06	0.80	10.82	8.34	9.53	-	9.49	0.82	97.79	0.73	3
DJ Target 2055 TR USD			1.28	1.15	11.60	8.50	9.92	7.80	9.64	0.83	100	-	-
<b>Target-Date 2060+</b>													
American Funds 2060 Trgt Date Retire R6	RFUTX	3.25	1.92	2.50	13.26	9.89	-	-	9.00	1.02	96.83	0.45	5
Category Average			1.35	1.02	11.02	8.54	9.92	-	9.29	0.86	97.40	0.61	3
DJ Target 2060 TR USD			1.28	1.15	11.60	8.50	9.91	7.80	9.63	0.83	100	-	-

# Investment Analysis Details



# INVESTMENT ANALYSIS DETAILS: PERFORMANCE VS. BENCHMARKS

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return(% rank in peergroup)						Risk	Risk Adj Return	R-Squared	Expense Ratio vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
<b>Intermediate-Term Bond</b>													
PIMCO Total Return Instl	PTTRX	3.75	-0.44	-1.71	-0.12(31)	2.10(28)	2.49(34)	4.85(13)	2.84	0.50	71.66	0.46	4
Category Average			-0.24	-1.55	-0.36	1.69	2.21	3.89	2.58	0.40	84.36	0.75	3
BBgBarc US Agg Bond TR USD			-0.16	-1.62	-0.40	1.72	2.27	3.72	2.65	0.40	100	-	-
Vanguard Interm-Term Bond Index I	VBIMX	10.17	-0.28	-2.25	-1.37(92)	1.72(46)	2.55(30)	4.68(16)	3.60	0.30	99.34	0.05	4
Category Average			-0.24	-1.55	-0.36	1.69	2.21	3.89	2.58	0.40	82.05	0.75	3
BBgBarc US 5-10Y GovCredit FIAAdj TR USD			-0.32	-2.19	-1.30	1.78	2.58	-	3.47	0.33	100	-	-
<b>World Bond</b>													
Templeton Global Bond R6	FBNRX	16.50	-2.54	-1.19	-1.74(93)	1.38(77)	2.00(32)	5.61(3)	6.72	0.14	5.63	0.56	3
Category Average			-2.57	-1.51	0.64	2.25	1.48	2.99	5.00	0.42	55.86	0.90	3
FTSE WGBI USD			-3.35	-0.94	1.90	2.81	1.11	2.07	5.83	0.39	100	-	-
<b>Large Value</b>													
American Funds Washington Mutual R6	RWMGX	20.92	2.69	1.33	14.05(8)	11.93(5)	12.30(3)	9.90(13)	9.71	1.14	95.88	0.30	5
Category Average			1.63	-0.95	9.04	8.35	9.94	8.29	10.73	0.75	84.14	0.96	3
S&P 500 TR USD			3.43	2.65	14.37	11.93	13.42	10.17	10.16	1.10	100	-	-
<b>Large Blend</b>													
Vanguard Institutional Index I	VINIX	17.50	3.42	2.63	14.33(28)	11.90(11)	13.39(11)	10.17(18)	10.16	1.09	100.00	0.04	4
Category Average			2.69	1.59	12.58	9.92	11.74	9.08	10.47	0.90	91.94	0.90	3
S&P 500 TR USD			3.43	2.65	14.37	11.93	13.42	10.17	10.16	1.10	100	-	-
<b>Large Growth</b>													
T. Rowe Price Blue Chip Growth	TBCIX	25.00	5.73	11.80	28.00(11)	17.29(5)	18.84(4)	13.06(8)	13.36	1.22	89.23	0.57	5
Category Average			5.14	7.52	20.57	12.17	14.36	10.23	11.80	0.98	88.04	1.07	3
Russell 1000 Growth TR USD			5.76	7.25	22.51	14.98	16.36	11.83	11.06	1.26	100	-	-

# INVESTMENT ANALYSIS DETAILS: PERFORMANCE VS. BENCHMARKS

Peergroup/ Investment Name	Ticker	Manager Tenure	Total Return(% rank in peergroup)						Risk	Risk Adj Return	R-Squared	Expense Ratio vs-Peers	Overall Mstar Rating
			Qtr	YTD	1 Year	3 Year	5 Year	10 Year					
<b>Mid-Cap Blend</b>													
Vanguard Extended Market Index Instl	VIEIX	20.50	5.99	6.15	16.79(7)	10.36(21)	12.65(10)	10.80(12)	12.28	0.81	100.00	0.06	4
Category Average			2.96	1.95	11.33	8.03	10.66	8.96	11.36	0.69	84.91	1.01	2
S&P Completion TR USD			5.94	6.07	16.72	10.23	12.53	10.66	12.27	0.80	100	-	-
<b>Mid-Cap Growth</b>													
ClearBridge Mid Cap Growth IS	LCMIX	7.83	0.94	4.25	16.54(57)	8.03(73)	11.75(63)	-	13.15	0.60	93.71	0.75	2
Category Average			4.16	6.38	18.06	9.68	12.31	9.45	11.96	0.79	84.64	1.18	3
Russell Mid Cap Growth TR USD			3.16	5.40	18.52	10.73	13.37	10.45	11.04	0.92	100	-	-
<b>Small Blend</b>													
JPMorgan US Small Company R6	JUSMX	13.83	7.85	7.28	15.94(42)	9.40(56)	12.45(25)	11.58(14)	14.34	0.65	97.76	0.72	4
Category Average			6.33	5.29	14.70	9.42	11.04	9.75	13.47	0.69	90.01	1.13	3
Russell 2000 TR USD			7.75	7.66	17.57	10.96	12.46	10.60	14.06	0.76	100	-	-
<b>Foreign Large Blend</b>													
Lazard International Equity R6	RLIEX	26.41	-2.51	-2.71	6.55(46)	2.55(89)	5.54(67)	4.06(15)	10.71	0.22	88.73	0.80	2
Category Average			-2.14	-3.06	6.08	4.56	5.92	2.61	11.50	0.39	89.68	1.00	3
MSCI EAFE NR USD			-1.24	-2.75	6.84	4.90	6.44	2.84	12.09	0.40	100	-	-
Vanguard Total Intl Stock Index I	VTSNX	9.83	-3.17	-3.61	7.12(33)	5.35(30)	6.44(36)	2.75(45)	11.43	0.45	97.94	0.09	3
Category Average			-2.14	-3.06	6.08	4.56	5.92	2.61	11.50	0.39	89.66	1.00	3
FTSE Global All Cap ex US TR USD			-2.45	-3.51	7.89	5.77	6.84	3.42	12.03	0.47	100	-	-
<b>Real Estate</b>													
TIAA-CREF Real Estate Sec Instl	TIREX	12.50	7.33	1.59	6.99(6)	9.28(8)	9.43(4)	8.13(26)	12.42	0.72	97.24	0.51	5
Category Average			7.99	0.54	3.40	7.23	7.71	7.28	12.59	0.58	91.04	1.11	3
FTSE NAREIT All Equity REITs TR USD			8.50	1.27	4.93	9.14	8.88	8.30	12.78	0.70	100	-	-

# Appendices

# Investment Fund Fact Sheets

# CLEARBRIDGE MID CAP GROWTH IS

JUNE 2018 ASSET VALUE: \$2,534,242.73

## Overview

Ticker	LCMIX
Net Assets (M)	\$89.04
Category/Universe	Morningstar Mid-Cap Growth
Benchmark	Russell Mid Cap Growth TR USD

Asset Allocation	Fund(%)	Category(%)
Domestic Stock	99.00	92.15
Foreign Stock	2.56	4.24
Domestic Bond	0.00	0.28
Foreign Bond	0.00	0.07
Preferred Bond	0.00	0.07
Convertible Bond	0.00	0.00
Cash	-1.57	2.70
Other	0.00	0.48

## Capitalization

Giant	0.00	2.79
Large	33.06	29.88
Mid	66.94	58.10
Small	0.00	8.64
Micro	0.00	0.59

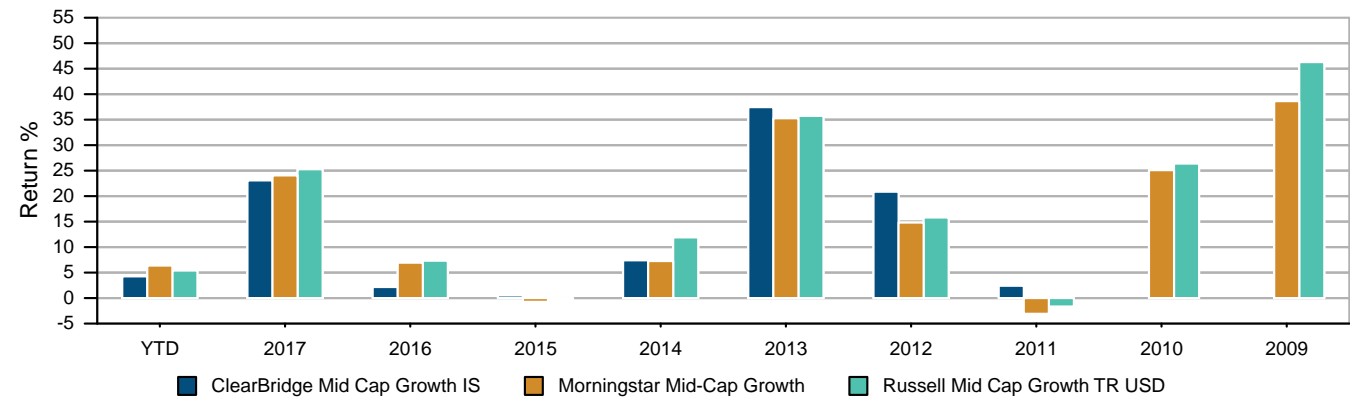
## Sector Exposure

Cyclicals Total	36.73	35.23
Basic Materials	2.64	3.54
Cons. Cyclicals	23.12	16.55
Financials	8.53	11.25
Real Estate	2.44	3.89
Defensive Total	18.16	18.24
Cons. Defensive	2.27	3.82
Health Care	15.89	14.01
Utilities	0.00	0.42
Sensitive Total	45.12	46.53
Communications	3.12	1.16
Energy	2.52	2.51
Industrials	11.98	17.46
Technology	27.50	25.39

## Sub-Regional Exposure

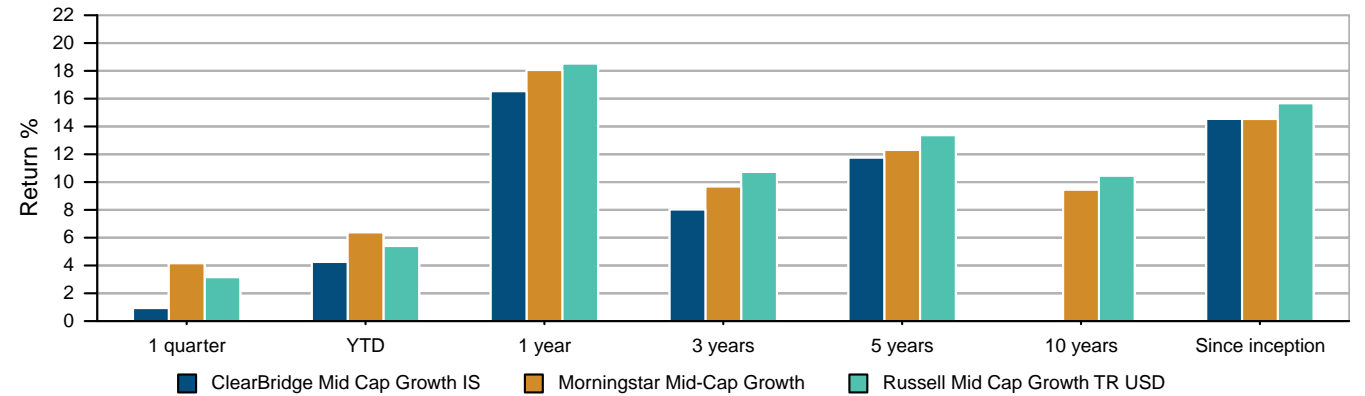
U.S.	99.00	92.04
Canada	0.00	1.42
Latin America	2.56	0.30
U.K.	0.00	0.43
EuroZone	0.00	0.36
Europe ex-EuroZone	0.00	0.21
Developed Asia	0.00	0.07
Emerging Asia	0.00	0.93
Emerging Europe	0.00	0.05
Africa	0.00	0.02
Middle East	0.00	0.30
Japan	0.00	0.11
Australasia	0.00	0.05

## Calendar Year Returns



	YTD	2017	2016	2015	2014	2013	2012	2011	2010	2009
ClearBridge Mid Cap Growth IS	4.25	23.08	2.17	0.51	7.40	37.45	20.86	2.41	-	-
Morningstar Mid-Cap Growth	6.38	24.06	6.94	-0.73	7.26	35.27	14.81	-3.08	25.09	38.63
Russell Mid Cap Growth TR USD	5.40	25.27	7.33	-0.20	11.90	35.74	15.81	-1.65	26.38	46.29
% Rank in Category	73	59	80	41	51	29	6	12	-	-

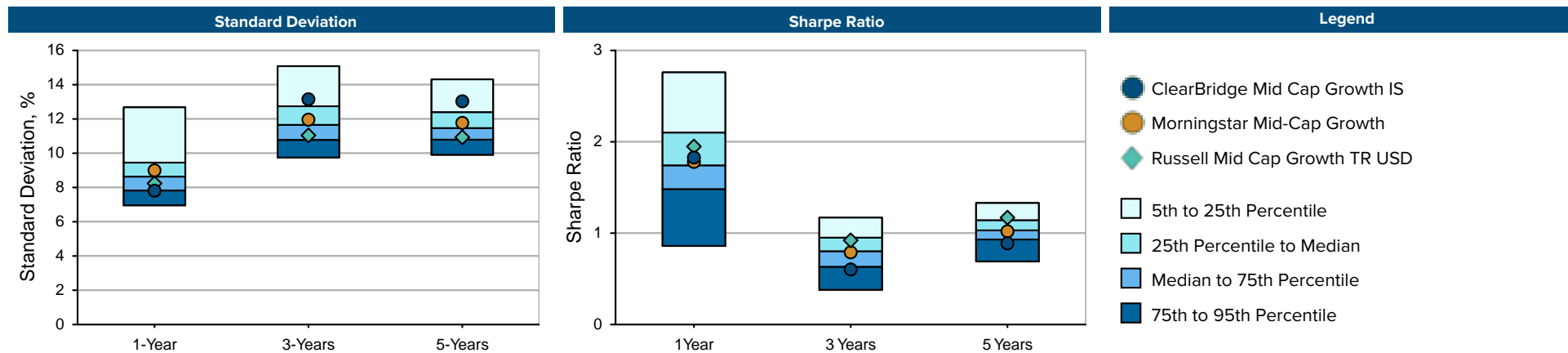
## Annualized Returns



	1 quarter	YTD	1 year	3 years	5 years	10 years	Since inception
ClearBridge Mid Cap Growth IS	0.94	4.25	16.54	8.03	11.75	-	14.54
Morningstar Mid-Cap Growth	4.16	6.38	18.06	9.68	12.31	9.45	14.54
Russell Mid Cap Growth TR USD	3.16	5.40	18.52	10.73	13.37	10.45	15.67
% Rank in Category	92	73	57	73	63	-	50

# CLEARBRIDGE MID CAP GROWTH IS

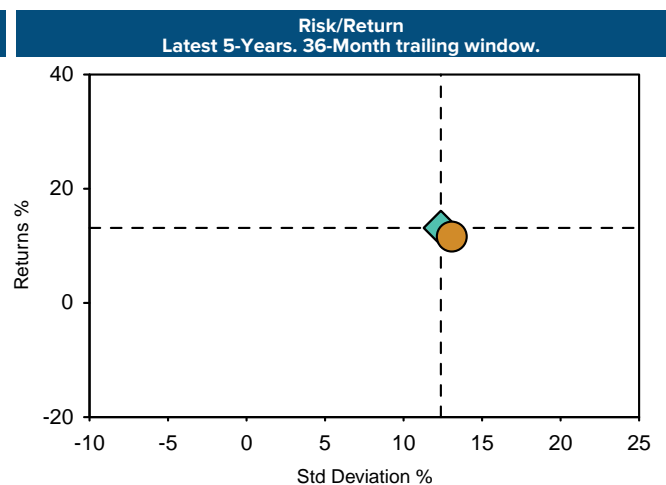
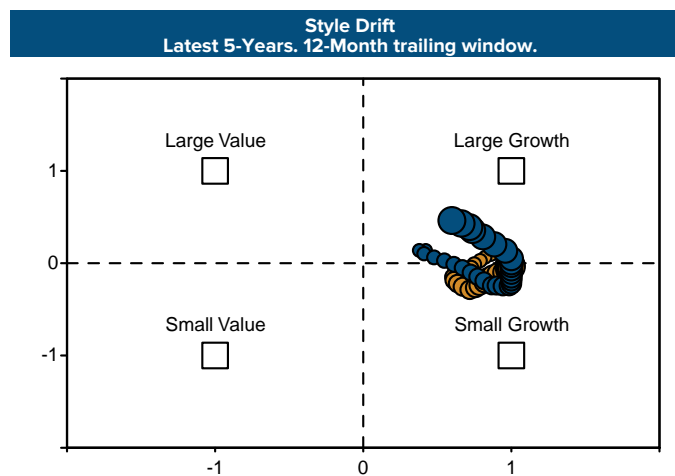
JUNE 2018 ASSET VALUE: \$2,534,242.73



	YTD	1-Year	3-Years	5-Years
ClearBridge Mid Cap Growth IS	10.10	7.81	13.15	13.03
Morningstar Mid-Cap Growth	11.60	9.00	11.96	11.77
Russell Mid Cap Growth TR USD	11.15	8.24	11.04	10.93
Managers	621	608	541	480

	YTD	1-Year	3-Years	5-Years
ClearBridge Mid Cap Growth IS	0.71	1.83	0.60	0.89
Morningstar Mid-Cap Growth	1.00	1.78	0.79	1.02
Russell Mid Cap Growth TR USD	0.85	1.95	0.92	1.17
Managers	621	608	541	480

Metrics	Fund	Category
Prospectus Net. Exp.	0.75	1.18
Overall Morningstar Rating	2	3
Manager Tenure Longest	7.83	10.12
Turnover Ratio	27	61
Price/Earnings	25.43	26.02
Price/Book	3.66	3.89
Holdings	55	108



Metrics 3-Years	Fund	Category
Alpha (%)	-3.80	-0.76
Beta (%)	1.15	0.99
R-Squared (%)	93.71	84.64
Up Capture (%)	99.42	95.63
Down Capture (%)	123.07	101.47
Information Ratio	-0.73	-0.37

# Due Diligence Methodology and Process

# PLAN FINANCIALS: ASSET CLASSES

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This chart is based on current best practices for defined contribution plans and is designed to offer investors the ability to build a well diversified portfolio

## Categories

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1. Cash and/or Fixed Account	✓
2. Multisector and/or Intermediate-Term Bond	✓
3. Inflation-Protected Securities	
4. International Bond	✓
5. High Yield Bond	
6. Large Value Equity	✓
7. Large Blend Equity	✓
8. Large Growth Equity	✓
9. Mid-Cap Equity	✓
10. Small-Cap Equity	✓
11. International-Equity	✓
12. Emerging Markets Equity	
13. Real Estate	✓
14. Risk/Time-Based Allocation Models	✓

## Other Categories

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a. Bond Index	✓
b. Large Cap Index	✓
c. Mid Cap Index	✓
d. Small Cap Index	
e. International Index	✓
f. Brokerage Account	✓

To satisfy fiduciary guidelines, Plan Sponsors should have three broadly-defined asset classes in their participant array:

- Money market/fixed account
- Bond or fixed income fund
- Stock or equity fund

Most Plan Sponsors have many asset categories in their array to improve diversification opportunities; however the exclusion of certain asset categories is sometimes warranted and is not necessarily indicative of any issues with construction of a plan's investment array.

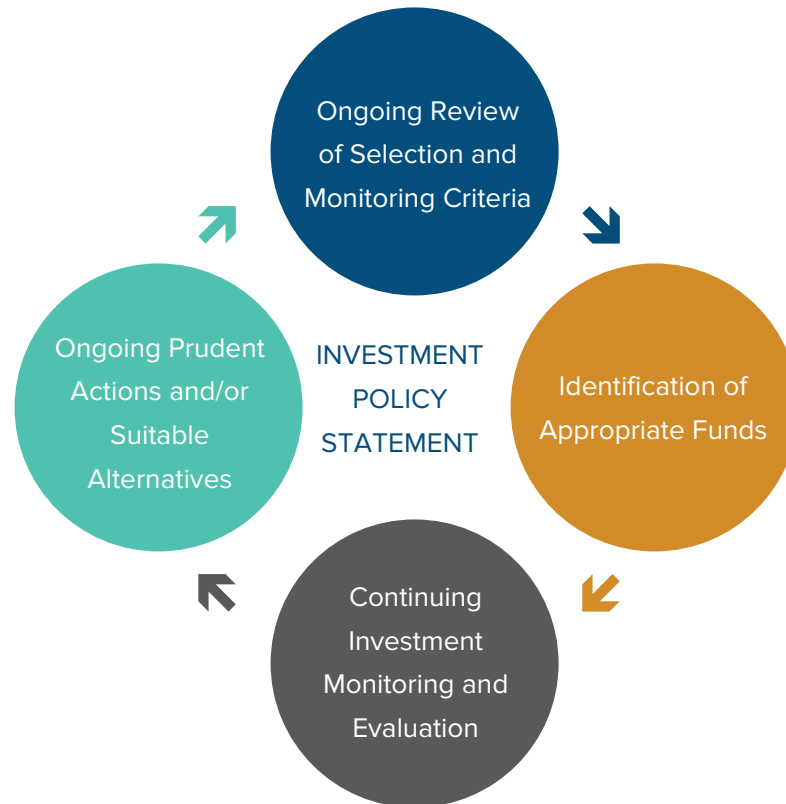


# INVESTMENT ANALYSIS: MONITORING CRITERIA

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In evaluating investments, the process is driven by your Investment Policy Statement. We review:

- Performance vs. Peers (Category)
- Performance vs. Indexes
- Risk Characteristics
- Expenses vs. Peers
- Style Purity
- Investment Objectives
- Manager Tenure
- Management Team



# INVESTMENT ANALYSIS: SCORECARD METHODOLOGY

## SCORECARD

Tests	Requirement to Pass Screen
Manager Tenure	Lead Manager with greater than two years of experience with fund or similar asset class.
Performance vs.Benchmark Index:3-,5- and 10-Year	Returns no worse than 100 bps below the respective index over 3-,5- and 10- year periods
Category Ranking:3-,5- and 10-Year	Ranking of less than or equal to 60th percentile over 3-,5- and 10- year periods(the lower the category rank percentile, the better)
Risk(3-Year Standard Deviation)	Standard Deviation less than or equal to 1.1x the respective benchmark
Risk-Adjusted Return(3-Year Sharpe)	Returns greater than or equal to 0.9x the respective benchmark
R-Squared	Greater than or equal to R-Squared value of 70 when compared to respective index
Expense Ratio(Prospectus Net)	Expense ratio below the Morningstar peer group average
Morningstar Rating(Overall)	Rating greater than or equal to 3 Stars.

# Glossary and Standard Disclosures

## CREATING CAMMACK LARHETTE ADVISORS' PROPRIETARY TARGET DATE ANALYSIS

- STEP 1:** Break down each TDF suite using Morningstar asset classes, based on equity exposure.
- 
- STEP 2:** Take the average equity exposure for each Morningstar category & calculate the deviation from that average for each fund.
- 
- STEP 3:** Weight the deviations based on the position within the glide path (e.g., weighting the age 45–65 age period more heavily than deviations at younger ages).
- 
- STEP 4:** Calculate a score for each target date series based on the individual asset weighting scores (standard deviation x weighting) for each fund within the target date series. The Cammack Target Date Universe is the average of 47 Target Date fund families.
- 
- Assign each TDF to one of the six categories, based on their relative scores.
- Preservation – Most Conservative: American Century One Choice, Great-West Lifetime Conservative, Harbor Target Retirement, Invesco Balanced Risk Retirement ,JHancock Multi-Index Preservation, Manning & Napier, Putnam Retirement Ready, USAA Target Retirement
- Preservation – Conservative: AllianzGI Retirement, Franklin Life Smart Retire Target, MFS Lifetime, T. Rowe Price Target, Voya Index Solution Portfolio, Voya Solution, Wells Fargo Target Date
- Preservation – Moderately Conservative: AB Multi Manager Select, JPMorgan SmartRetirement®, JPMorgan SmartRetirement® Blend,, Main Stay Retirement, PIMCO RealPath™, PIMCO RealPath Blend, Principal Lifetime Hybrid, Principal LifeTime, Schwab Target, Schwab Target Index
- STEP 5:**
- Extension – Moderately Aggressive: American Funds Target Date, Great-West Lifetime Fund, Great-West Secure Foundation, GuideStone Funds MyDestination,, Mutual of America Retirement, Nationwide Destination, Vanguard Target Retirement Inv
- Extension – Aggressive: BlackRock® LifePath Dynamic, BlackRock® Lifepath Index, BlackRock® LifePath Smartbeta, JHancock Multimanager Lifetime, TIAA Lifecycle Retirement, TIAA Lifecycle Index Retire
- Extension – Most Aggressive: BMO Target Retirement, Fidelity Freedom®, Fidelity Freedom® Index,, MassMutual RetireSMART, State Farm LifePath, T. Rowe Price Retirement, Wells Fargo Dynamic Target Date

## TARGET DATE ANALYSIS DEFINITIONS

Terms	Definition & Application
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**Target Date Index**

Dow Jones S&P Target Date Indices are designed to measure the performance of multi-asset-class portfolios. The indices were designed as benchmarks for the growing category of "lifecycle" funds, which are typically used to plan for retirement or other long-term savings goals. The indices automatically adjust their asset allocations over time to reflect reductions in potential risk as an investor's target date approaches.

**Target Date Index Asset Allocation**

	Equity	Fixed Income
Dow Jones Target Today Index	20.00%	80.00%
Dow Jones Target 2005	20.00%	80.00%
Dow Jones Target 2010	22.11%	77.89%
Dow Jones Target 2015	28.19%	71.81%
Dow Jones Target 2020	37.50%	62.50%
Dow Jones Target 2025	48.92%	51.08%
Dow Jones Target 2030	61.08%	38.92%
Dow Jones Target 2035	72.50%	27.50%
Dow Jones Target 2040	81.81%	18.19%
Dow Jones Target 2045	87.89%	12.11%
Dow Jones Target 2050	90.00%	10.00%
Dow Jones Target 2055	90.00%	10.00%
Dow Jones Target 2060	90.00%	10.00%

## DEFINITIONS

Terms	Definition and Application
Alpha	Alpha is a measure of a manager's effectiveness. It is the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. Positive alpha indicates that the fund has performed better than its beta would predict. Negative alpha indicates the fund underperformed given the expectations established by the fund's beta.
Beta	Beta is a measure of the volatility of a security compared to the market as a whole. The market holds a beta of 1. When beta is greater than 1, the fund will move ahead of its indexed market when the market is moving up, ultimately performing better than the market; however, when the market moves down, the fund will underperform the market. When beta is less than 1 the opposite is true. The higher the beta, the greater the volatility. The lower the beta, the lower the volatility.
Down Capture	Calculated by taking the fund's monthly return during the periods of negative benchmark performance and dividing it by the benchmark return. A ratio of less than 100 indicates that a fund has lost less than its benchmark in periods when the benchmark has been in the red.
Up Capture	Calculated by taking the fund's monthly return during the periods of positive benchmark performance and dividing it by the benchmark return. A ratio higher than 100 indicates the fund has outperformed the benchmark during periods of positive returns for the benchmark.
Effective Duration	Duration adjusted for embedded options. A measure of a bond's price sensitivity to interest rate movement.
Effective Maturity	Maturity adjusted for embedded options.
Information ratio	Information Ratio is a benchmark related statistic and measures a fund's outperformance and consistency. The information ratio should be positive. A range between 0.40 and 0.60 equates to a good value while a value of 1.00 is exceptional and rare. This metric is a measure of relative risk and not absolute risk.
Net Expense Ratio	Represents the percentage of a fund's assets that are used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund. Brokerage costs and sales charges are not included. Value should be lower than the fund's respective Morningstar peer group.
Overall Morningstar Rating	Proprietary Morningstar data point. Values are from 1 (lowest) to 5 (highest) and are based on how well the fund has performed, after adjusting for risk and accounting sales charges, in comparison to similar funds.

## DEFINITIONS(cont.)

Terms	Definition and Application
Risk/Return	Graph that charts risk (as defined by standard deviation) on the X-axis and return on the Y-axis. It shows the fund's return per unit of risk taken. The higher and to left on the graph depicts higher returns for less risk.
R-Squared	Reflects the percentage of a fund's movements that can be explained by movements in its benchmark index. A value near 100 indicates all movements can be explained by movements in the benchmark index. An index fund will be close to 100. A low value indicates that very few of the fund's movements can be explained by movements in the benchmark index.
Sharpe Ratio	Also known as risk-adjusted return. This is a risk-adjusted measure that is calculated by using standard deviation and excess return to determine reward per unit of risk. Calculated for a past 36-month period by dividing a fund's annualized excess returns (excess returns are defined by the fund's actual returns minus a risk-free rate) by the standard deviation of a fund's annualized excess returns. The higher the value, the better the fund's historical risk-adjusted performance. The lower the value, the worse the fund's historical risk-adjusted performance.
Standard Deviation	Statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time. This metric is used to try and predict the range of returns for a given fund. A high value signifies greater volatility, as the predicted range of performance is wide. A low value signifies lower volatility, as the predicted range of performance is more focused.
Style Drift	The movement of a mutual fund from one asset category into another. This graph charts inconsistency with style, as defined by a fund's stated category. The smaller dots on the graph represent the starting point for the time period shown and the larger dots represent the most recent time periods.
Turnover Ratio	A measure of a fund's trading activity, calculated by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by the average monthly net assets. A ratio of 100% or higher represents considerable buying and selling of securities. A low ratio indicates a buy-and-hold strategy.

## GLOSSARY AND STANDARD DISCLOSURES

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Morningstar information was obtained from "Morningstar, Inc."

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The asset information included in this report is provided by the plan vendor(s) based on raw data. It has not been subjected to a validation process or any manual controls. There may be variances between the raw data reports and the comparative financials that are subjected to the processes detailed in an SSAE 16 (formerly SAS 70 report). The information should be used for the purposes of this report alone, and cannot be relied upon for other usages.



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