## American Funds American Balanced R6 RLBGX

Morningstar Category Allocation--50% to 70% Morningstar Index

Fauity

Morningstar Mod Tgt Risk TR USD

Turnover %

Expense Ratio

### Portfolio Manager(s)

John Smet since 01-1997
Hilda Applbaum since 01-1999
Gregory Johnson since 03-2003
James Mulally since 03-2006
Alan Berro since 03-2006
Jeffrey Lager since 03-2011
Michael Kerr since 03-2014
Paul Benjamin since 07-2014
Alan Wilson since 01-2016
John Queen since 07-2016
Pramod Atluri since 03-2018

### **Quantitative Screens**

Performance: The fund has finished in the Allocation--50% to 70% Equity category's top three quartiles in 9 of the 9 years it's been in existence.

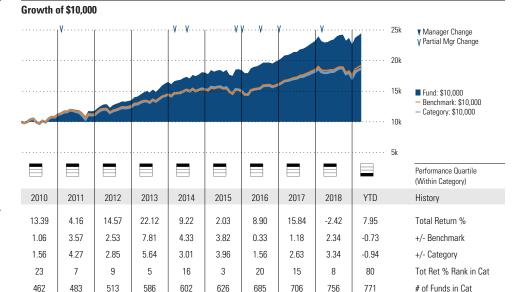
Management: The fund's management has been in place for 22.26 years.

 $\times$  *Style:* The fund has landed in its primary style box — Large Blend — 63.64 % of the time over the past three years.

✓ Net Expense: The fund's expense ratio of 0.28 is
74.31% lower than the Allocation--50% to 70% Equity
category average.

### **Morningstar Investment Management LLC Analysis**

This fund fails our current style screen. However, as an allocation fund it is not expected to adhere to a strict style discipline, so the screen failure does not concern us and we are still comfortable using this fund.





79

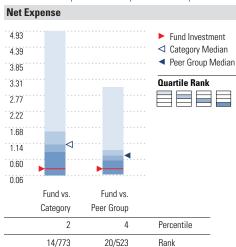
0.29

95

0.28

72

0.28



Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	1.36	-	-1.16
Beta	0.97	-	1.07
R-Squared	93.30	-	89.99
Standard Deviation	6.16	6.11	6.95
Sharpe Ratio	1.26	1.08	0.88
Tracking Error	1.60	-	2.27
Information Ratio	0.77	-	-0.39
Up Capture Ratio	107.19	-	100.12
Down Capture Ratio	94.35	-	113.93

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.53	17.25	17.99
Price/Book Ratio	2.62	2.05	2.31
Avg Eff Duration	5.99	5.24	4.79



37

47

54

0.30

55

0.29

68

0.29

82

0.29



# American Funds American Balanced R6 RLBGX

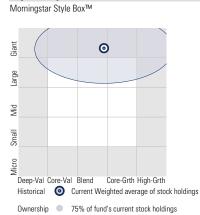
Morningstar Category Allocation--50% to 70%

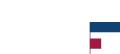
Morningstar Index

Morningstar Mod Tgt Risk TR USD

Equity

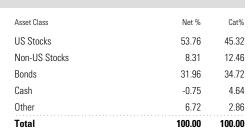
Style Analysis as of 03-31-2019





-50

Asset Allocation as of 03-31-2019



### Style Breakdown

Equity Large 28 Mid2 2 3 0 0 0



Weight %					

Value



Blend Growth

		Fund	Bmark	Cat	Fun	d '	Bench	mark	Cate	gory Ave	erage	
Դ	Cyclical	32.68	41.10	34.89								
A.	Basic Materials	5.14	5.06	3.76								
A	Consumer Cyclical	10.53	11.34	11.04								
	Financial Services	12.90	16.91	16.77		-						
命	Real Estate	4.11	7.79	3.32			•					
W	Sensitive	42.83	36.27	39.54								
	Communication Services	3.46	3.43	3.39		•						
ð	Energy	9.57	5.65	5.90								
Ф	Industrials	7.49	11.06	11.02								
	Technology	22.31	16.13	19.23						L.		
<b>—</b>	Defensive	24.48	22.63	25.59								
Ħ	Consumer Defensive	8.12	7.99	7.67			0					
+	Healthcare	15.35	10.89	14.55								
•	Utilities	1.01	3.75	3.37		[						

100

50

<b>Top 10 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	_	6.51	6.51	_	_
⊕ Microsoft Corp	_	4.09	10.61	16.57	Technology
⊕ UnitedHealth Group Inc	_	2.57	13.18	-0.39	Healthcare
⊕ The Home Depot Inc	_	2.07	15.25	12.47	Consumer Cyclical
⊖ Berkshire Hathaway Inc A	-	1.78	17.03	-1.56	Financial Services
→ Philip Morris International Inc	_	1.49	18.52	34.11	Consumer Defensive
⊕ Nike Inc B	_	1.46	19.98	13.88	Consumer Cyclical
⊕ Intel Corp	_	1.43	21.40	15.10	Technology
⇒ Broadcom Inc	_	1.35	22.76	19.30	Technology
⊕ DowDuPont Inc	_	1.33	24.09	0.39	Basic Materials

### **Total Holdings** 1675



# American Funds Intl Gr and Inc R6 RIGGX

**Morningstar Category** Foreign Large Blend

Morningstar Index MSCI ACWI Ex USA NR USD

### Portfolio Manager(s)

Andrew Suzman since 10-2008 Steven Watson since 10-2008 Patrice Collette since 09-2010 Leo Hee since 07-2015 Michael Cohen since 07-2018

### **Quantitative Screens**

- Performance: The fund has finished in the Foreign Large Blend category's top three quartiles in 8 of the 9 years it's been in existence.
- Management: The fund's management has been in place for 10.5 years.
- Style: The fund has landed in its primary style box Large Blend — 100 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.57 is 43% lower than the Foreign Large Blend category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change Fund: \$10,000 - Benchmark: \$10,000 10k - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 8.92 -7.25 19.30 18.47 -2.92 -7.97 2.54 26.50 -14.10 11.21 Total Return % 6.46 0.10 -2.23 2.47 3.18 0.95 -2.31 -1.96 -0.69 0.90 +/- Benchmark -6.38 2.06 0.49 -1.32 6.72 1.01 -0.97 1.75 1.38 0.97 +/- Category

28

637

37

0.58

33

688

37

0.58

43

739

27

0.57

19

795

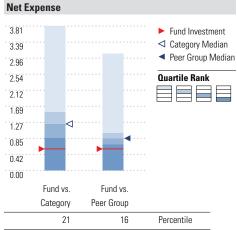
Tot Ret % Rank in Cat

# of Funds in Cat

Turnover %

Expense Ratio





60/381 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-0.16	_	-1.34
Beta	0.95	_	0.98
R-Squared	95.49	_	90.48
Standard Deviation	10.22	10.56	10.83
Sharpe Ratio	0.63	0.67	0.51
Tracking Error	2.24	_	3.31
Information Ratio	-0.27	_	-0.51
Up Capture Ratio	93.60	_	91.56
Down Capture Ratio	94.45	-	99.97

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	14.26	15.22	15.82
Price/Book Ratio	1.62	1.58	1.72
Geom Avg Mkt Cap \$B	28.99	30.69	38.15
ROE	14.33	15.65	17.00



157/770

31

405

16

3

425

31

29

463

24

0.61

61

495

37

0.61

20

507

0.59

90

548

25

0.58

## American Funds Intl Gr and Inc R6 RIGGX

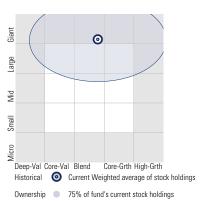
### **Morningstar Category** Foreign Large Blend

Morningstar Index

MSCI ACWI Ex USA NR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

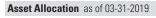
Fauity

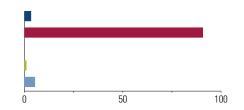
Lquity			
23	36	28	Large
4	4	5	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

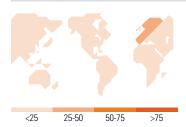




Total	100.00	100.00
Other	5.22	0.61
Cash	0.88	-0.48
Bonds	0.00	2.01
Non-US Stocks	90.67	93.72
US Stocks	3.23	4.14
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark [] Category Average
ሁ	Cyclical	39.86	44.07	41.94	
A	Basic Materials	6.49	7.90	7.84	
A	Consumer Cyclical	11.05	11.01	11.64	
<b>F</b>	Financial Services	18.99	21.61	19.58	
命	Real Estate	3.33	3.55	2.88	
W	Sensitive	36.42	34.15	33.65	
d	Communication Services	4.29	4.08	3.70	
•	Energy	9.04	7.42	6.25	
Ф	Industrials	9.38	10.74	12.94	
	Technology	13.71	11.91	10.76	
<b>→</b>	Defensive	23.73	21.78	24.41	
Ħ	Consumer Defensive	10.96	10.08	11.23	
٠	Healthcare	8.15	8.40	10.35	
•	Utilities	4.62	3.30	2.83	
					0% 5 10 15 20 25 30 35 40 45

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 33.24	Cat % 36.57	,
Japan	6.67	19.45	1
Australasia	0.91	4.72	(
Asia-4 Tigers	15.91	6.73	
Asia-ex 4 Tigers	9.75	5.67	
Not Classified	0.00	0.00	

Americas	Fund % 13.16	Cat % 8.21	Greater Europe	Fund % 53.60	Cat % 55.22	Market Maturity	Fund %
North America	8.09	7.18	United Kingdom	18.07	15.10	Developed Markets	81.97
Central/Latin	5.07	1.03	W euro-ex UK	32.09	39.00	Emerging Markets	18.03
			Emrgng Europe	2.40	0.38	Not Available	0.00
			Africa	1.04	0.74		

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cap Grp Cent Fd Ser	5.22	5.22	_	_
☐ Taiwan Semiconductor Manufacturing Co Ltd	3.16	8.38	8.87	Technology
⊕ AstraZeneca PLC	2.43	10.81	6.96	Healthcare
Royal Dutch Shell PLC B	2.28	13.09	5.30	Energy
Airbus SE	2.07	15.16	40.69	Industrials
Nestle SA	1.93	17.09	22.84	Consumer Defensive
AIA Group Ltd	1.91	19.00	20.23	Financial Services
⊕ British American Tobacco PLC	1.78	20.78	29.79	Consumer Defensive
DBS Group Holdings Ltd	1.45	22.22	_	Financial Services
⊕ Wynn Macau Ltd	1.42	23.64	8.31	Consumer Cyclical

### Total Holdings 229

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:property}$  New to Portfolio



# **Baird Aggregate Bond Inst** BAGIX

### Morningstar Category Intermediate Core Bond

Morningstar Index

BBgBarc US Agg Bond TR USD

### Portfolio Manager(s)

Charles Groeschell since 09-2000
Daniel Tranchita since 09-2000
Warren Pierson since 09-2000
Mary Stanek since 09-2000
M. deGuzman since 09-2000
Gary Elfe since 09-2000

### **Quantitative Screens**

Performance: The fund has finished in the Intermediate-Term Bond category's top three quartiles in 10 of the 10 years it's been in existence.

Management: The fund's management has been in place for 18.51 years.

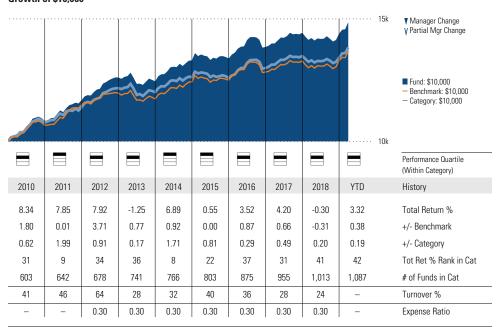
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.3 is 60% lower than the Intermediate-Term Bond category average.

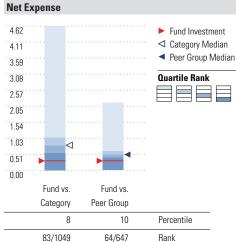
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	0.52	-	-0.02
Beta	0.99	_	0.92
R-Squared	99.09	_	95.52
Standard Deviation	2.97	2.97	2.78
Sharpe Ratio	0.43	0.26	0.20
Tracking Error	0.28	_	0.62
Information Ratio	1.84	_	-0.55
Up Capture Ratio	106.29	_	90.84
Down Capture Ratio	92.84	_	91.14

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	5.87	4.43	5.35
Avg Eff Maturity	8.09	_	7.45



Duration

# **Baird Aggregate Bond Inst** BAGIX

	J	3 3	
Style Ana	lysis as	s of 03-31-2019	
Style Break	down		
Fixed Income		Quality	
		High	
		Mid	
		Low	
Ltd Mod	Ext	J	

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	55.60	3.53	45.77
AA	4.70	74.59	9.32
A	17.70	10.82	20.99
BBB	21.60	8.32	18.62
BB	0.40	0.28	3.17
В	0.00	0.00	0.91
Below B	0.00	0.00	0.42
Not Rated	0.00	2.46	0.81

#### Asset Allocation as of 03-31-2019 Asset Class Net % Cat% US Stocks 0.00 0.04 Non-US Stocks 0.00 0.00 Bonds 92.55 105.23 Cash 6.14 -6.85 Other 1.31 1.59 50 100 Total 100.00 100.00

**Morningstar Category** 

Intermediate Core Bond

Morningstar Index

BBgBarc US Agg Bond TR USD

Other	0.00	0.00	1.57	į I	-		-	- :	- 1			
Cash & Equivalents	6.14	5.48	5.23	, ,								
Municipal	0.68	0.76	0.57	•	,							
Covered Bond	0.00	0.00	0.04	Ú,								
Asset-Backed	3.08	0.02	6.87									
Commercial MBS	4.37	1.61	5.01	<u> </u>								
Non-Agency Residential MBS	1.15	0.42	1.08									
Agency MBS CMO	3.31	0.00	1.45									
Agency MBS ARM	0.00	0.19	0.14	ĺ								
Agency MBS Pass-Through	20.61	27.43	21.73	_						1		
Securitized	32.52	29.67	36.32									
Preferred	0.00	0.02	0.04	ĺ						<u>:</u>		
Convertible	0.67	0.00	0.28	Ö								
Bank Loan	0.00	0.64	0.04									
Corporate Bond	38.75	19.42	25.56					<b>T</b>				
Corporate	39.42	20.08	25.92									
Other Government Related	0.03	1.16	10.72	*		0						
Agency/Quasi Agency	0.22	8.36	1.48	1 [		۲						
Inflation – Protected	0.00	0.00	1.44	í []								
Treasury	20.98	34.51	16.74								•	
Government	21.23	44.03	30.38							1		
	Fund	Bmark	Cat	Fund	•	Bench	mark	Cate	gory Ave	erage		

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
	, 22.2			
⊕ First American Government Obligs U	_	4.64	4.64	_
⊕ United States Treasury Bonds 2.88%	_	3.84	8.48	-
⊕ United States Treasury Notes 1.88%	03-2022	3.40	11.88	_
⊕ United States Treasury Notes 2.5%	05-2024	3.28	15.16	-
⊕ United States Treasury Notes 2.25%	11-2025	3.25	18.41	_
	_	2.22	20.63	_
⊕ United States Treasury Bonds 2.5%	_	2.11	22.74	_
⊕ United States Treasury Notes 2%	11-2026	1.57	24.31	_
⇒ Fidelity® Inv MM Fds Government Instl	_	1.28	25.60	_
United States Treasury Notes 2.25%	11-2027	0.82	26.42	_

Total Holdings 1151



## **DFA US Small Cap Value I** DFSVX

**Morningstar Category** 

Morningstar Index

## Russell 2000 Value TR USD

### Portfolio Manager(s)

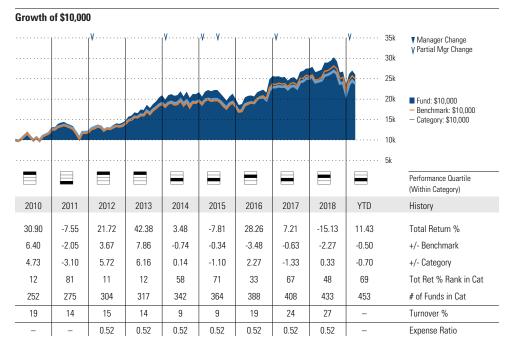
Jed Foodall since 02-2012 Joel Schneider since 07-2015

### Quantitative Screens

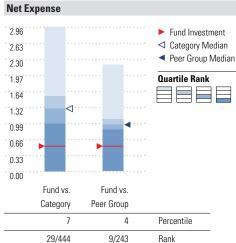
- Performance: The fund has finished in the Small Value category's top three quartiles in 9 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 7.09 years.
- Style: The fund has landed in its primary style box Small Value — 100 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.52 is 56.3% lower than the Small Value category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-2.74	_	-1.88
Beta	1.05	_	0.96
R-Squared	98.23	_	92.76
Standard Deviation	17.14	16.12	16.10
Sharpe Ratio	0.48	0.64	0.50
Tracking Error	2.44	_	4.31
Information Ratio	-1.01	_	-0.68
Up Capture Ratio	93.56	_	88.84
Down Capture Ratio	104.35	_	97.04

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	15.87	18.52	18.01
Price/Book Ratio	1.27	1.45	1.65
Geom Avg Mkt Cap \$B	1.30	1.34	2.55
ROE	6.52	6.22	9.71



# **DFA US Small Cap Value I** DFSVX

# Morningstar Category Small Value

Morningstar Index

Russell 2000 Value TR USD

Style Analysis as of 03-31-2019





### Style Breakdown

Equity

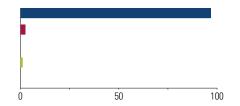
Lquity			
1	0	0	Large
10	5	1	Mid
45	28	10	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	0.04
Cash	0.96	2.75
Bonds	0.00	-0.06
Non-US Stocks	2.32	2.51
US Stocks	96.72	94.77
Asset Class	Net %	Cat%

	Fund	Bmark	Cat	Fund	▼ Be	enchmark	[] Ca	tegory	y Aver	age	
<b>⊌</b> Cyclical	48.62	55.33	55.67								
Basic Materials	7.80	4.61	7.13	· ·	)						
Consumer Cyclical	13.66	9.92	13.38		7	0					
Financial Services	26.74	25.96	25.72								
Real Estate	0.42	14.84	9.44	i i		1 :					
Sensitive	43.51	30.07	33.19					- !			
Communication Services	1.73	1.15	0.59	0							
Energy	10.64	4.49	4.92								
Industrials	19.79	12.46	16.01								
Technology	11.35	11.97	11.67								
→ Defensive	7.86	14.60	11.14								
Consumer Defensive	4.11	3.36	3.64								
Healthcare	3.62	3.91	3.44								
Utilities	0.13	7.33	4.06	i [i	'						

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Ssc Government Mm Gvmxx	0.94	0.94	_	_
→ Darling Ingredients Inc	0.85	1.79	12.53	Industrials
→ S+p500 Emini Fut Jun19 Xcme 20190621	0.81	2.60	_	-
Tech Data Corp	0.80	3.40	25.18	Technology
→ Kemper Corp	0.78	4.18	15.08	Financial Services
Domtar Corp	0.77	4.95	41.33	Basic Materials
CACI International Inc Class A	0.72	5.67	26.38	Technology
→ Aaron's Inc	0.72	6.39	25.17	Industrials
GATX Corp	0.70	7.09	8.50	Industrials
Telephone and Data Systems Inc	0.68	7.77	-5.06	Communication Svc
Bed Bath & Beyond Inc	0.68	8.45	51.50	Consumer Cyclical
SkyWest Inc	0.65	9.09	22.35	Industrials
⊕ Associated Banc-Corp	0.63	9.72	8.74	Financial Services
American Equity Investment Life Holding Co	0.60	10.32	-3.29	Financial Services
Adtalem Global Education Inc	0.60	10.92	-2.11	Consumer Defensive

Total Holdings 994



## Federated Government Ultrashrt Dur R6 FGULX

**Morningstar Category** Ultrashort Bond

Morningstar Index BBgBarc US Agg Bond TR USD

### Portfolio Manager(s)

Susan Hill since 07-1997 Liam O'Connell since 11-2010

### **Quantitative Screens**

The Performance screen is not applicable for funds with less than three years of data.

Management: The fund's management has been in place for 21.74 years.

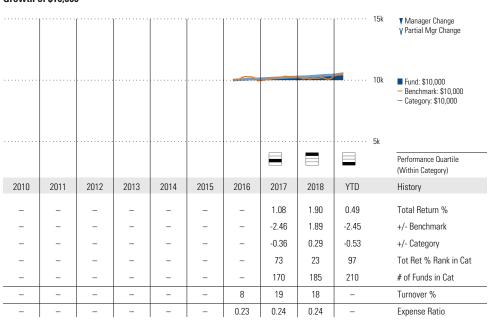
Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.24 is 50% lower than the Ultrashort Bond category average.

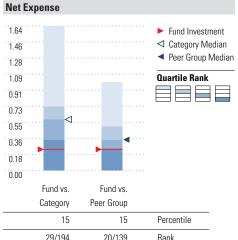
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

20/139

Rank

Fund	Bmark	Cat
1.31	-	1.69
0.02	_	0.03
5.90	_	16.89
0.24	2.97	0.45
0.31	0.26	0.89
2.92	_	2.91
-0.23	_	-0.10
16.64	_	23.48
-18.92	_	-21.26
	1.31 0.02 5.90 0.24 0.31 2.92 -0.23 16.64	1.31 - 0.02 - 5.90 - 0.24 2.97 0.31 0.26 2.920.23 - 16.64 -

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	0.29	4.43	0.83
Avg Eff Maturity	1.99	-	1.55



## Federated Government Ultrashrt Dur R6 FGULX

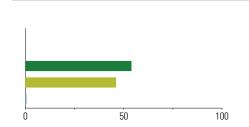
Morningstar Category
Ultrashort Bond

Morningstar Index BBgBarc US Agg Bond TR USD

**Style Analysis** as of 03-31-2019 **Style Breakdown** 

Duration





Asset Allocation as of 03-31-2019

0.00 0.00 53.72 45.98 0.30	0.01 0.00 71.17 27.58 1.22
0.00	0.00 71.17
0.00	0.00
0.00	0.01
Net %	Cat%
	Net %

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	100.00	3.53	50.22
AA	0.00	74.59	10.73
A	0.00	10.82	19.78
BBB	0.00	8.32	14.86
BB	0.00	0.28	0.82
В	0.00	0.00	0.26
Below B	0.00	0.00	0.15
Not Rated	0.00	2.46	3.18

Sector Weighting as of 03-											
	Fund	Bmark	Cat	Fund	▼ Bench	mark    C	ategory A	Averag	je	,	
Government	17.12	44.03	13.34						į		
Treasury	1.69	34.51	3.23								
Inflation – Protected	0.00	0.00	0.25	Ó							
Agency/Quasi Agency	10.25	8.36	2.52								
Other Government Related	5.18	1.16	7.34	•							
Corporate	0.00	20.08	31.35	1 1							
Corporate Bond	0.00	19.42	30.52	<u> </u>		•					
Bank Loan	0.00	0.64	0.46	<u></u>							
Convertible	0.00	0.00	0.37	į							
Preferred	0.00	0.02	0.00	ĺ							
Securitized	36.77	29.67	26.11								
Agency MBS Pass-Through	0.12	27.43	0.97	<u>[</u> ]							
Agency MBS ARM	3.60	0.19	0.67								
Agency MBS CMO	33.05	0.00	1.02								
Non-Agency Residential MBS	0.00	0.42	0.87	i]							
Commercial MBS	0.00	1.61	3.97	[ 10							
Asset-Backed	0.00	0.02	18.58	<u>I</u>							
Covered Bond	0.00	0.00	0.03	<u> </u>							
Municipal	0.00	0.76	1.73								
Cash & Equivalents	46.12	5.48	27.11								
Other	0.00	0.00	0.31	h :							

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
⊕ Bmo Capital Markets Corp., 3.000%, Dated 12/31/2018, Due 1/2/2019	01-2019	20.90	20.90	_
⊕ Hsbc Securities (Usa), Inc., 3.010%, Dated 12/31/2018, Due 1/2/2019	01-2019	18.13	39.03	_
	01-2065	3.23	42.26	_
⊕ Government National Mortgage Association 2.96%	02-2065	3.22	45.48	_
→ Federal National Mortgage Association 3%	01-2037	2.85	48.33	_
⊖ Government National Mortgage Association 2.69%	09-2062	2.83	51.16	_
⊖ Government National Mortgage Association 2.81%	06-2062	2.63	53.79	_
	11-2062	2.34	56.13	_
⊕ Federal National Mortgage Association Remic, Series 2012-116, Class Fa, 2.8	10-2042	2.33	58.46	_
⊖ Government National Mortgage Association 2.65%	02-2062	2.04	60.50	_

Total Holdings 194



# Invesco Diversified Dividend R6 LCEFX

Morningstar Category Large Value

Morningstar Index Russell 1000 Value TR USD

### Portfolio Manager(s)

Meggan Walsh since 12-2002 Kristina Bradshaw since 02-2014 Robert Botard since 02-2014 Christopher McMeans since 02-2016

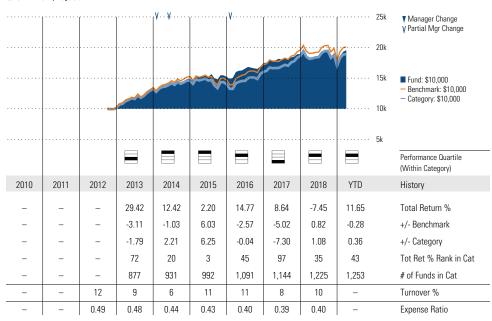
### **Quantitative Screens**

- Performance: The fund has finished in the Large Value category's top three quartiles in 5 of the 6 years it's been in existence.
- Management: The fund's management has been in place for 16.26 years.
- Style: The fund has landed in its primary style box Large Value — 100 % of the time over the past three years.
- Net Expense: The fund's expense ratio of 0.4 is 58.33% lower than the Large Value category average.

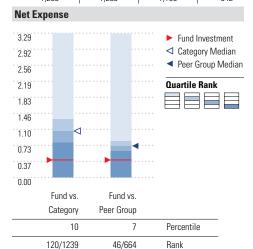
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

### Growth of \$10,000







46/664 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-0.73	_	-0.34
Beta	0.74	_	0.99
R-Squared	88.25	_	90.71
Standard Deviation	8.39	10.63	11.11
Sharpe Ratio	0.69	0.87	0.80
Tracking Error	3.98	-	3.38
Information Ratio	-0.88	-	-0.18
Up Capture Ratio	68.69	-	96.39
Down Capture Ratio	70.64	-	97.63

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	19.09	16.59	16.45
Price/Book Ratio	2.20	1.83	2.17
Geom Avg Mkt Cap \$B	28.04	53.25	87.27
ROE	19.51	13.49	19.10



## Invesco Diversified Dividend R6 LCEFX

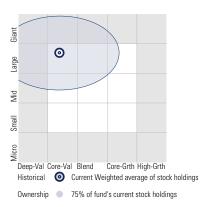
### **Morningstar Category** Large Value

Morningstar Index

Russell 1000 Value TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

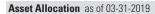
Equity

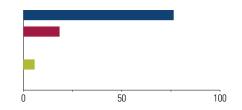
	24	9	Large
13	4	1	MIG
1	0	0	Small

Value Blend Growth

### Weight %

>50 25-50 10-25 0-10







		Fund	Bmark	Cat	Fun	h	▼ Be	nchma	ark [	Cated	iorv Av	verage			
Դ	Cyclical	22.34	37.04	36.61	T GIT			110111111		Julios		rorago	-		
A.	Basic Materials	2.46	3.69	3.24		0									
A	Consumer Cyclical	5.83	6.66	8.23		· ·									
	Financial Services	14.05	21.39	22.13					[						
<b>fi</b>	Real Estate	0.00	5.30	3.01	į [	] [									
W	Sensitive	23.34	33.05	34.32											
	Communication Services	5.39	5.53	5.26			į								
ð	Energy	6.59	9.78	9.59											
Ф	Industrials	11.25	8.11	7.69											
	Technology	0.11	9.63	11.78	į		[								
<b>—</b>	Defensive	54.32	29.92	29.06											
Ħ	Consumer Defensive	26.83	8.44	9.62				-							
+	Healthcare	8.18	15.10	14.26											
•	Utilities	19.31	6.38	5.18											

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
General Mills Inc	3.27	3.27	34.16	Consumer Defensive
Entergy Corp	2.85	6.12	12.16	Utilities
The Hartford Financial Services Group Inc	2.81	8.93	12.53	Financial Services
Procter & Gamble Co	2.70	11.63	13.98	Consumer Defensive
⊖ Coca-Cola Co	2.69	14.32	-0.19	Consumer Defensive
⊖ AT&T Inc	2.64	16.97	11.67	Communication Svc
	2.52	19.49	11.96	Utilities
→ PPL Corp	2.45	21.94	13.49	Utilities
⇒ Dominion Energy Inc	2.39	24.33	8.56	Utilities
	2.10	26.43	-	-
⊕ M&T Bank Corp	1.97	28.40	10.40	Financial Services
→ Heineken NV	1.95	30.35	23.20	Consumer Defensive
Kimberly-Clark Corp	1.95	32.30	9.65	Consumer Defensive
Consolidated Edison Inc	1.95	34.25	11.89	Utilities
∋ Eli Lilly and Co	1.92	36.16	12.69	Healthcare

### **Total Holdings 85**



## MFS Growth R6 MFEKX

### Portfolio Manager(s)

Eric Fischman since 04-2002 Paul Gordon since 07-2017

### **Quantitative Screens**

Performance: The fund has finished in the Large Growth category's top three quartiles in 7 of the 7 years it's been in existence.

Management: The fund's management has been in place for 17.01 years.

Style: The fund has landed in its primary style box — Large Growth — 100 % of the time over the past three

Net Expense: The fund's expense ratio of 0.57 is 45.19% lower than the Large Growth category average.

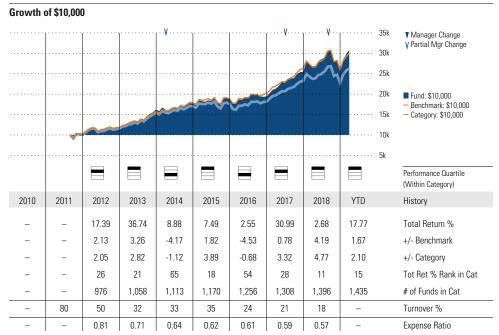
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

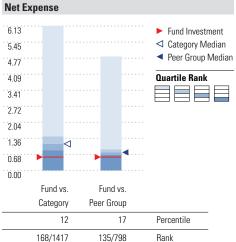
## **Morningstar Category**

Morningstar Index

Large Growth Russell 1000 Growth TR USD







135/798 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year Kisk Metrics			
	Fund	Bmark	Cat
Alpha	1.54	_	-0.67
Beta	0.99	_	0.99
R-Squared	93.80	_	89.81
Standard Deviation	12.49	12.19	12.79
Sharpe Ratio	1.30	1.22	1.10
Tracking Error	3.11	_	4.11
Information Ratio	0.52	_	-0.38
Up Capture Ratio	102.71	_	95.28
Down Capture Ratio	92.55	_	97.60

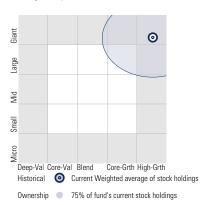
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	26.50	21.82	23.08
Price/Book Ratio	4.50	5.15	4.39
Geom Avg Mkt Cap \$B	50.98	55.71	72.96
ROE	20.27	27.80	23.94



## MFS Growth R6 MFEKX

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

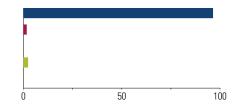
4	10		Large
0	0	4	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.00	0.73
Cash	2.19	1.81
Bonds	0.00	0.04
Non-US Stocks	1.50	5.33
US Stocks	96.31	92.09
Asset Class	Net %	Cat%

Morningstar Index

Russell 1000 Growth TR USD

**Morningstar Category** 

Large Growth

Sec	ctor Weighting as of 03-	31-2019														
		Fund	Bmark	Cat	Fun	d	▼ Be	nchma	rk [	Cate	gory Av	/erage				
Դ	Cyclical	31.05	29.87	32.64	Ţ						į					
A	Basic Materials	2.71	1.66	1.79												
A	Consumer Cyclical	14.19	17.44	17.05												
<b>P</b>	Financial Services	14.04	9.04	12.75			V:	[]								
命	Real Estate	0.11	1.73	1.05	i []											
W	Sensitive	48.08	51.01	45.93											• "	
	Communication Services	2.91	1.26	2.28												
•	Energy	0.42	0.74	1.59	1											
Ф	Industrials	13.39	12.92	9.56				<b>'</b>								
	Technology	31.36	36.09	32.50								] [				
<b>-</b>	Defensive	20.87	19.12	21.43												
Ħ	Consumer Defensive	5.26	6.12	5.03												
٠	Healthcare	15.61	13.00	15.87												
•	Utilities	0.00	0.00	0.53												
					0%	5	10	15	20	25	30	35	40	45	50	55

N	0/ 11 . 1	0 1 1 6	\/TD D	M :
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Microsoft Corp	6.65	6.65	16.57	Technology
Amazon.com Inc	6.02	12.67	18.56	Consumer Cyclical
Visa Inc Class A	4.65	17.33	18.57	Financial Services
Adobe Inc	4.14	21.47	17.79	Technology
⊕ Alphabet Inc A	4.08	25.55	12.63	Technology
Mastercard Inc A	3.83	29.38	24.98	Financial Services
Thermo Fisher Scientific Inc	2.69	32.07	22.40	Healthcare
Salesforce.com Inc	2.64	34.71	15.62	Technology
⊖ Facebook Inc A	2.61	37.32	27.16	Technology
Alphabet Inc Class C	2.30	39.62	-	Technology
Fiserv Inc	2.27	41.89	20.13	Industrials
Netflix Inc	2.18	44.07	33.21	Consumer Cyclical
⊕ Cash Cash	2.17	46.24	_	-
Danaher Corp	2.14	48.38	28.19	Healthcare
Intuit Inc	1.99	50.37	33.04	Technology

**Total Holdings 83** 



## Oppenheimer Developing Markets I ODVIX

# Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

### Portfolio Manager(s)

Justin Leverenz since 05-2007

### **Quantitative Screens**

Performance: The fund has finished in the Diversified Emerging Mkts category's top three quartiles in 7 of the 7 years it's been in existence.

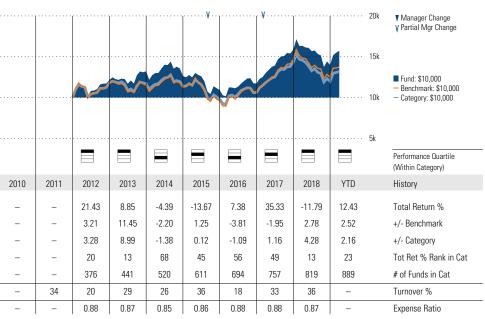
Management: The fund's management has been in place for 11.92 years.

✓ Net Expense: The fund's expense ratio of 0.87 is
33.08% lower than the Diversified Emerging Mkts category average.

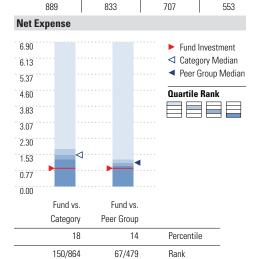
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	2.13	_	-0.58
Beta	0.89	_	0.93
R-Squared	89.46	_	86.10
Standard Deviation	12.27	13.02	13.02
Sharpe Ratio	0.87	0.74	0.64
Tracking Error	4.23	_	4.84
Information Ratio	0.27	_	-0.31
Up Capture Ratio	93.47	_	92.48
Down Capture Ratio	80.94	_	97.54

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	19.11	12.62	13.55
Price/Book Ratio	2.39	1.49	1.87
Geom Avg Mkt Cap \$B	18.22	19.61	20.39
ROE	18.04	17.14	20.22



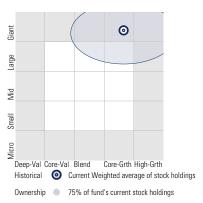
# of Funds in Category

# Oppenheimer Developing Markets I ODVIX

## Morningstar CategoryMorningstar IndexDiversified Emerging MktsMSCI EM NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

9	28		Large
1	2	8	Mid
0	0	0	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



50

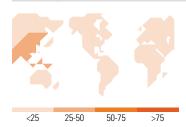
Asset Allocation as of 03-31-2019

Total	100.00	100.00
Other	4.45	0.53
Cash	2.57	-0.32
Bonds	0.00	1.02
Non-US Stocks	92.37	96.05
US Stocks	0.61	2.72
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark 🛛 Category Average
<sub>Մ</sub>	Cyclical	63.27	46.59	46.79	
å.	Basic Materials	8.03	7.59	6.26	
A	Consumer Cyclical	27.87	11.57	12.64	
<b>,</b>	Financial Services	24.94	24.14	25.38	
<b>fi</b>	Real Estate	2.43	3.29	2.51	
M	Sensitive	25.00	41.79	39.12	
ď	Communication Services	0.00	4.57	3.91	
ð	Energy	5.22	7.88	6.64	
Ċ.	Industrials	3.60	4.97	5.46	
	Technology	16.18	24.37	23.11	
<b>→</b>	Defensive	11.73	11.62	14.09	
=	Consumer Defensive	7.34	6.64	9.26	
٠	Healthcare	4.39	2.50	2.86	
•	Utilities	0.00	2.48	1.97	
					0% 5 10 15 20 25 30 35 40 45 50 55 60

100

### World Regions % Equity 03-31-2019



Greater Asia	Fund % 57.46	Cat % 69.31	
Japan	0.00	0.08	
Australasia	0.00	0.02	
Asia-4 Tigers	16.50	23.14	
Asia-ex 4 Tigers	40.96	46.07	
Not Classified	0.00	0.00	

Americas	Fund % 16.80	Cat % 15.52	Greater Europe	Fund % 25.74	Cat % 15.19	Market Maturity	Fund %
North America	0.66	1.38	United Kingdom	0.00	0.69	Developed Markets	30.33
Central/Latin	16.14	14.14	W euro-ex UK	12.14	1.33	Emerging Markets	69.67
			Emrgng Europe	9.66	6.69	Not Available	0.00
			Africa	3.94	6.48		

<b>Fop 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Alibaba Group Holding Ltd ADR	6.64	6.64	_	Consumer Cyclical
Taiwan Semiconductor Manufacturing Co Ltd	5.05	11.69	8.87	Technology
Kering SA	4.11	15.80	33.53	Consumer Cyclical
NOVATEK PJSC GDR	3.84	19.64	0.23	Energy
Tencent Holdings Ltd	3.78	23.42	14.97	Technology
Glencore PLC	3.63	27.05	11.98	Basic Materials
Housing Development Finance Corp Ltd	3.58	30.63	0.17	Financial Services
Kotak Mahindra Bank Ltd	3.15	33.78	6.46	Financial Services
AIA Group Ltd	3.01	36.79	20.23	Financial Services
Master China Series 1	2.74	39.53	_	_

### Total Holdings 96

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:property}$  New to Portfolio



## **PGIM Jennison Small Company R6** PJSQX

**Morningstar Category** Small Growth

Morningstar Index

Russell 2000 Growth TR USD

### Portfolio Manager(s)

John Mullman since 05-2000 Jason Swiatek since 11-2013 Jonathan Shapiro since 07-2018

### **Quantitative Screens**

Performance: The fund has finished in the Small Growth category's top three quartiles in 6 of the 8 years it's been in

Management: The fund's management has been in place for 18.92 years.

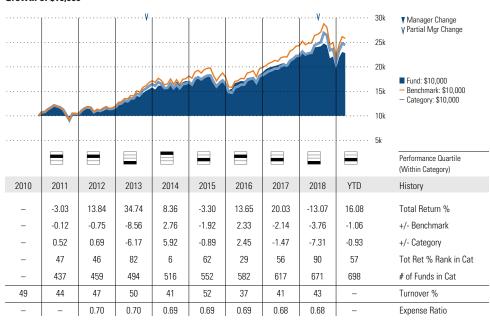
× Style: The fund has landed in its primary style box — Small Growth — 62.86 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.68 is 44.26% lower than the Small Growth category average.

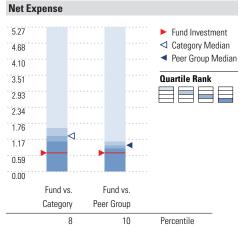
### **Morningstar Investment Management LLC Analysis**

This fund fails our style screen but its portfolio positioning is consistent with the overall investment strategy.

### Growth of \$10,000







41/417 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

Fund	Bmark	Cat
-1.23	_	1.95
0.83	_	0.94
93.48	-	91.31
13.98	16.27	16.11
0.72	0.86	0.94
4.51	-	4.79
-0.86	-	0.26
79.58	_	97.36
84.84	-	86.74
	-1.23 0.83 93.48 13.98 0.72 4.51 -0.86 79.58	-1.23

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	20.87	24.72	25.39
Price/Book Ratio	2.12	3.88	3.65
Geom Avg Mkt Cap \$B	2.55	1.66	2.80
ROE	10.83	10.22	9.63



52/685

# **PGIM Jennison Small Company R6** PJSQX

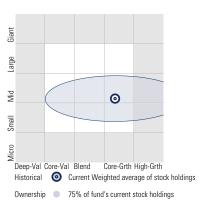
# Morningstar Category Small Growth

Morningstar Index

Russell 2000 Growth TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

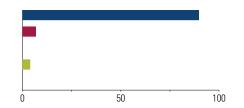
,			
0	0	3	Large
14	12	34	Mid
11	14	13	Small

Value Blend Growth

Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.00	0.40
Cash	3.80	2.22
Bonds	0.00	0.00
Non-US Stocks	6.62	3.37
US Stocks	89.57	94.01
Asset Class	Net %	Cat%

UCL	ctor Weighting as of 03-3														
		Fund	Bmark	Cat	Fun	d	▼ Ben	chmarl	Ca Ca	ategory	Avera	ge			
	Cyclical	45.71	30.89	29.93											
A	Basic Materials	7.08	5.49	4.41											
A	Consumer Cyclical	12.45	15.27	12.90				0							
	Financial Services	14.46	6.95	9.55		- '									
<b>fi</b>	Real Estate	11.72	3.18	3.07											
W	Sensitive	35.57	40.52	45.56									- 1		
	Communication Services	0.00	1.50	0.95											
•	Energy	4.30	1.77	1.90											
Ф	Industrials	13.46	15.14	16.09			-	<b>-</b> [							
	Technology	17.81	22.11	26.62											
<b>—</b>	Defensive	18.71	28.58	24.50							1				
Ħ	Consumer Defensive	4.40	3.69	4.63											
+	Healthcare	10.84	24.37	18.94						7.					
•	Utilities	3.47	0.52	0.93											
					0%	5	10	15	20	25	30	35	40	45	5(

#### Top 15 Holdings as of 03-31-2019 YTD Return % Name % Net Asset Cumulative % Morningstar Sector Pgim Core Ultra Short Bond Fund 3.80 3.80 CDW Corp 2.59 6.40 19.27 Technology 2.47 Pinnacle Financial Partners Inc 8.87 19.00 Financial Services East West Bancorp Inc 2.42 11.29 10.73 Financial Services The Howard Hughes Corp Real Estate 2.14 13.43 12.68 WPX Energy Inc Class A 2.09 15.52 15.51 Energy Performance Food Group Co 1.97 17.48 Consumer Defensive Technology CyberArk Software Ltd 1.93 19.42 BankUnited Inc 1.91 21.32 12.26 Financial Services HubSpot Inc 1.90 23.22 Technology Ulta Beauty Inc 1.78 25.00 42.43 Consumer Cyclical Gaming and Leisure Properties Inc 1.74 26.74 Real Estate Summit Materials Inc A 1.61 28.35 Basic Materials Planet Fitness Inc A 1.61 29.96 Consumer Cyclical Vail Resorts Inc 1.46 31.42 3.91 Consumer Cyclical

**Total Holdings** 121



## PIMCO Income Instl PIMIX

### Portfolio Manager(s)

Daniel Ivascyn since 03-2007 Alfred Murata since 03-2013 Joshua Anderson since 07-2018

### **Quantitative Screens**

Performance: The fund has finished in the Multisector Bond category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 12.01 years.

Style Consistency is not calculated for Fixed Income funds.

Net Expense: The fund's expense ratio of 0.72 is 32.08% lower than the Multisector Bond category average.

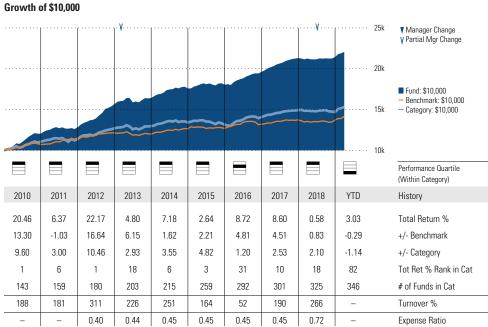
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

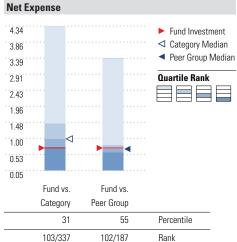
### **Morningstar Category** Multisector Bond

Morningstar Index BBgBarc US Universal TR USD









Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-1 car bisk interics			
	Fund	Bmark	Cat
Alpha	5.12	_	2.90
Beta	0.39	-	0.61
R-Squared	41.18	_	36.40
Standard Deviation	1.74	2.83	3.07
Sharpe Ratio	2.67	0.49	1.09
Tracking Error	2.17	-	2.77
Information Ratio	1.70	-	0.66
Up Capture Ratio	110.61	-	104.11
Down Capture Ratio	-18.31	-	35.35

Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	1.96	4.55	4.04
Avg Eff Maturity	3.80	7.69	7.46



# PIMCO Income Insti PIMIX

Style Analysis as of 03-31-2019
Style Breakdown
Fixed Income

Quality

G

C

Ltd Mod Ext

Duration

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	56.00	67.64	20.16
AA	7.00	3.23	4.70
A	4.00	10.03	12.02
BBB	14.00	10.89	24.41
BB	6.00	3.19	18.10
В	7.00	3.64	11.89
Below B	6.00	1.38	3.98
Not Rated	0.00	0.00	4.74

#### Multisector Bond BBgBarc US Universal TR USD Asset Allocation as of 03-31-2019 Asset Class Cat% Net % US Stocks 0.28 1.17 Non-US Stocks 0.14 0.15 Bonds 136.83 92.13 Cash -41.65 2.55 Other 4.38 4.00 Ó 50 100 150 Total 100.00 100.00

**Morningstar Category** 

Morningstar Index

Sector Weighting as of 03-	31-2019									
	Fund	Bmark	Cat	Fund	▼ Benchm	ark [] Cate	gory Average	)		
Government	27.99	_	25.29							
Treasury	6.35	_	9.99							
Inflation - Protected	0.87	_	1.63							
Agency/Quasi Agency	0.10	_	1.02	i []						
Other Government Related	20.67	_	12.65							
Corporate	9.35	-	30.63						[	
Corporate Bond	6.43	_	27.77							
Bank Loan	1.53	_	0.45							
Convertible	1.38	_	1.41							
Preferred	0.01	_	1.00							
Securitized	27.44	-	30.48							
Agency MBS Pass-Through	8.66	_	9.08							
Agency MBS ARM	0.00	_	0.04							
Agency MBS CMO	0.80	_	5.38							
Non-Agency Residential MBS	4.24	_	5.80							
Commercial MBS	1.73	_	0.55							
Asset-Backed	11.84	_	9.54							
Covered Bond	0.17	_	0.09							
Municipal	0.08	_	0.89	i [						
Cash & Equivalents	17.62	_	8.71							
Other	17.03	-	3.63							
				0%	5 10	15	20	25	30	35

Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
☆ CashOffSet	_	21.79	21.79	_
⊕ Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	16.25	38.04	_
☐ Irs Usd 2.75000 12/19/18-5y Cme	12-2023	16.08	54.12	_
⊕ Irs Usd 2.75000 12/19/18-5y Cme	12-2023	15.96	70.08	_
⊕ Irs Jpy 0.45000 03/20/19-10y Lch	03-2029	15.84	85.92	-
⊕ Irs Usd 3.14000 07/19/18-5y* Cme	10-2023	9.42	95.34	_
Cirs Usd 4y Mat 3.85/2.00% M 7/2020 Dub	07-2022	9.23	104.58	_
Cirs Usd 4y Mat 3.82/2.00% M 7/2020 Glm	07-2022	9.23	113.80	_
Cirs Usd 4y Mat 3.82/2.00% M 6/2020 Myc	06-2022	9.22	123.02	_
⊕ Cirs Usd 4y Mat 3.85/2.00% M 7/2020 Dub	07-2022	9.19	132.22	_

Total Holdings 7182



# Vanguard 500 Index Admiral VFIAX

# Morningstar Category Large Blend

Morningstar Index S&P 500 TR USD

### Portfolio Manager(s)

Donald Butler since 04-2016 Michelle Louie since 11-2017

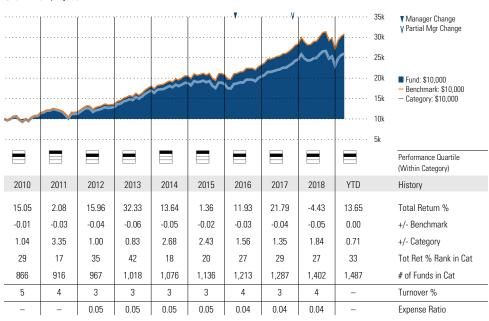
### **Quantitative Screens**

- ❷ Performance: The fund has finished in the Large Blend category's top three quartiles in 10 of the 10 years it's been in existence.
- × *Management:* The fund's management team has been in place for less than three years.
- Net Expense: The fund's expense ratio of 0.04 is 95.6% lower than the Large Blend category average.

### **Morningstar Investment Management LLC Analysis**

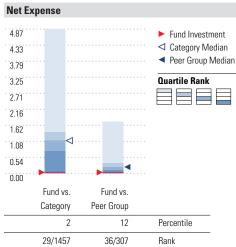
This fund fails our manager tenure screen; however, since it is an index fund, we are not overly concerned about the manager change.

### Growth of \$10,000





3-Year Risk Metrics



Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

•			
	Fund	Bmark	Cat
Alpha	-0.04	_	-1.27
Beta	1.00	_	0.97
R-Squared	100.00	_	91.55
Standard Deviation	10.73	10.73	10.83
Sharpe Ratio	1.11	1.12	0.96
Tracking Error	0.01	_	2.93
Information Ratio	-4.37	_	-1.32
Up Capture Ratio	99.86	_	90.88
Down Capture Ratio	100.08	_	97.96

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	18.64	18.71	17.87
Price/Book Ratio	2.69	2.74	2.65
Geom Avg Mkt Cap \$B	71.43	73.09	97.84
ROE	21.19	21.80	22.01



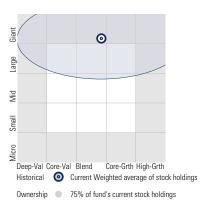
# Vanguard 500 Index Admiral VFIAX

### **Morningstar Category** Large Blend

Morningstar Index S&P 500 TR USD

Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

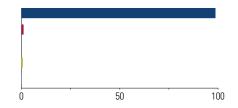
Equity

29	30	31	Laige
4	4	2	MIN
0	0	0	JIIdii
Value	Blend	Growth	

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.05	1.08
Cash	0.49	-2.54
Bonds	0.00	4.19
Non-US Stocks	0.91	3.15
US Stocks	98.55	94.10
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019												
		Fund	Bmark	Cat	Fund	i	▼ Bench	mark	[] Cateo	jory Ave	erage	_		
<b>Դ</b>	Cyclical	32.19	32.26	37.60								· :		
A.	Basic Materials	2.40	2.46	2.78										
<b>A</b>	Consumer Cyclical	11.90	11.90	11.68										
<del>,</del>	Financial Services	15.39	15.40	20.85			- :	ľ						
<b>fi</b>	Real Estate	2.50	2.50	2.29										
W	Sensitive	42.18	42.16	37.07										İ
	Communication Services	3.57	3.56	3.37		(								
ð	Energy	5.43	5.43	5.15										
Ф	Industrials	10.23	10.23	7.03										
	Technology	22.95	22.94	21.52						ľ į				
<b>→</b>	Defensive	25.62	25.59	25.35										
=	Consumer Defensive	7.77	7.77	7.92										
+	Healthcare	14.51	14.49	14.68										
•	Utilities	3.34	3.33	2.75		)								
					0%	5	10	15	20	25	30	35	40	45

Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Name	% INET Y2261	Guillulative %	TTD neturn 76	Widillingstal Sector
⊕ Microsoft Corp	3.81	3.81	16.57	Technology
⊕ Apple Inc	3.59	7.40	20.88	Technology
⊕ Amazon.com Inc	3.10	10.49	18.56	Consumer Cyclical
⊕ Facebook Inc A	1.68	12.17	27.16	Technology
⊕ Berkshire Hathaway Inc B	1.59	13.76	-1.61	Financial Services
⊕ Johnson & Johnson	1.57	15.33	9.02	Healthcare
⊕ Alphabet Inc Class C	1.52	16.85	_	Technology
⊕ Alphabet Inc A	1.49	18.34	12.63	Technology
⊕ Exxon Mobil Corp	1.44	19.78	19.69	Energy
	1.40	21.17	4.52	Financial Services
⊕ Visa Inc Class A	1.15	22.33	18.57	Financial Services
⊕ Procter & Gamble Co	1.10	23.42	13.98	Consumer Defensive
⇒ Bank of America Corporation	1.04	24.47	12.58	Financial Services
→ Verizon Communications Inc	1.03	25.50	6.25	Communication Svc
⊕ Intel Corp	1.02	26.51	15.10	Technology

Total Holdings 516



# Vanguard Developed Markets Index Admiral VTMGX

**Morningstar Category** Foreign Large Blend

Morningstar Index MSCI ACWI Ex USA NR USD

### Portfolio Manager(s)

Christine Franquin since 02-2013 Michael Perre since 11-2017

### **Quantitative Screens**

Performance: The fund has finished in the Foreign Large Blend category's top three quartiles in 10 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.07 is 93% lower than the Foreign Large Blend category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 8.36 -12.51 18.56 22.06 -5.66 -0.18 2.45 26.40 -14.46 10.16 Total Return % -2.79 1.20 1.73 6.77 -1.79 5.48 -2.05 -0.79-0.26 -0.15 +/- Benchmark -1.88 1.46

1.66

29

637

11

0.07

1.28

35

688

3

0.07

0.13

51

739

3

0.07

-0.08

47

795

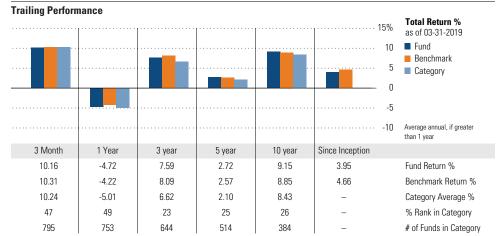
+/- Category

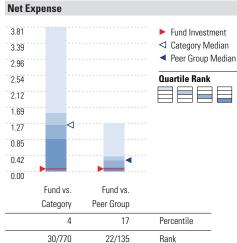
Turnover %

Expense Ratio

Tot Ret % Rank in Cat

# of Funds in Cat





0.27

42

463

7

0.10

68

405

6

30

425

5

2.62

24

495

13

0.09

-0.68

54

507

4

0.09

1.41

36

548

3

0.09

Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	-0.28	_	-1.34
Beta	0.98	_	0.98
R-Squared	96.82	_	90.48
Standard Deviation	10.50	10.56	10.83
Sharpe Ratio	0.63	0.67	0.51
Tracking Error	1.89	_	3.31
Information Ratio	-0.26	_	-0.51
Up Capture Ratio	95.38	_	91.56
Down Capture Ratio	96.41	-	99.97

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	15.41	15.22	15.82
Price/Book Ratio	1.50	1.58	1.72
Geom Avg Mkt Cap \$B	30.79	30.69	38.15
ROE	15.01	15.65	17.00



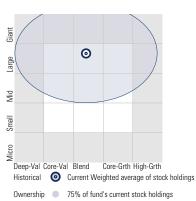
# Vanguard Developed Markets Index Admiral VTMGX

## **Morningstar Category**Foreign Large Blend

### **Morningstar Index** MSCI ACWI Ex USA NR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

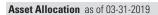
Equity

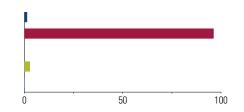
. ,			
27	26	22	Large
7	6	7	Mid
2	2	2	Small

Value Blend Growth

### Weight %

>50 25-50 10-25 0-10

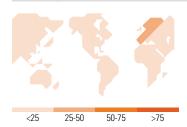




Total	100.00	100.00
Other	0.06	0.61
Cash	2.59	-0.48
Bonds	0.00	2.01
Non-US Stocks	96.14	93.72
US Stocks	1.21	4.14
Asset Class	Net %	Cat%

-	ctor Weighting as of 03-3													
		Fund	Bmark	Cat	Fun	i .	Bench	mark	Categ	jory Ave	erage			
<u></u>	Cyclical	43.22	44.07	41.94										
æ.	Basic Materials	8.46	7.90	7.84			Ú.							
A	Consumer Cyclical	11.18	11.01	11.64										
<del>,</del>	Financial Services	19.49	21.61	19.58										
<b>fi</b>	Real Estate	4.09	3.55	2.88										
W	Sensitive	33.06	34.15	33.65								<b>■</b> []		
	Communication Services	3.39	4.08	3.70		•[								
ð	Energy	6.65	7.42	6.25										
Ф	Industrials	13.70	10.74	12.94				0						
	Technology	9.32	11.91	10.76										
<b>→</b>	Defensive	23.73	21.78	24.41										
=	Consumer Defensive	10.60	10.08	11.23										
+	Healthcare	9.77	8.40	10.35										
•	Utilities	3.36	3.30	2.83		)								
					0%	5	10	15	20	25	30	35	40	4

### World Regions % Equity 03-31-2019



	Fund %	Cat %	
Greater Asia	36.95	36.57	Am
Japan	21.87	19.45	No
Australasia	6.09	4.72	Cer
Asia-4 Tigers	8.37	6.73	
Asia-ex 4 Tigers	0.62	5.67	
Not Classified	0.00	0.00	

Americas	Fund % 9.77	Cat % 8.21	Greater Europe	Fund % 53.28	Cat % 55.22	Market Maturity	Fund %
North America	9.74	7.18	United Kingdom	14.48	15.10	Developed Markets	98.61
Central/Latin	0.03	1.03	W euro-ex UK	37.60	39.00	<b>Emerging Markets</b>	1.39
			Emrgng Europe	0.72	0.38	Not Available	0.00
			Africa	0.48	0.74		

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
○ Cmt Market Liquidity Rate	2.52	2.52	_	_
⊕ Nestle SA	1.54	4.05	19.02	Consumer Defensive
① Novartis AG	1.12	5.18	18.69	Healthcare
Roche Holding AG Dividend Right Cert.	1.02	6.20	17.25	Healthcare
Samsung Electronics Co Ltd	0.91	7.10	_	Technology
⊕ HSBC Holdings PLC	0.88	7.98	4.51	Financial Services
○ Toyota Motor Corp	0.79	8.77	3.90	Consumer Cyclical
⊕ BP PLC	0.77	9.54	17.22	Energy
⊕ Royal Dutch Shell PLC Class A	0.75	10.29	_	Energy
⊕ Total SA	0.75	11.04	10.08	Energy

### Total Holdings 3956

 $\oplus$  Increase  $\ominus$  Decrease  $\ref{eq:property}$  New to Portfolio



## Vanguard Inflation-Protected Secs Adm VAIPX

Morningstar Category Inflation-Protected Bond Morningstar Index

BBgBarc US Treasury US TIPS TR USD

### Portfolio Manager(s)

Gemma Wright-Casparius since 08-2011

### **Quantitative Screens**

❷ Performance: The fund has finished in the InflationProtected Bond category's top three quartiles in 10 of the 10 years it's been in existence.

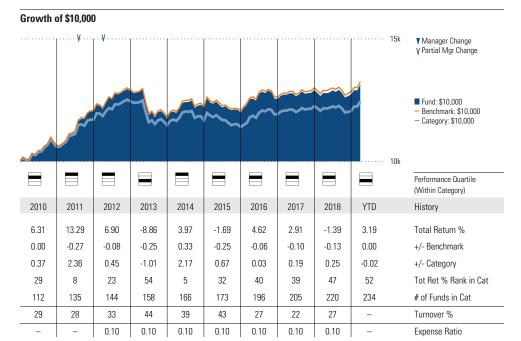
Management: The fund's management has been in place for 7.62 years.

Style Consistency is not calculated for Fixed Income funds.

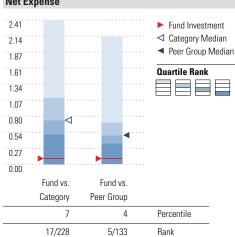
Net Expense: The fund's expense ratio of 0.1 is 87.01% lower than the Inflation-Protected Bond category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.16	_	0.18
Beta	1.02	_	0.82
R-Squared	98.72	_	83.66
Standard Deviation	3.12	3.04	2.80
Sharpe Ratio	0.10	0.15	0.10
Tracking Error	0.36	_	1.25
Information Ratio	-0.37	_	-0.48
Up Capture Ratio	99.73	_	82.46
Down Capture Ratio	103.44	_	77.43

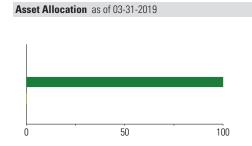
Portfolio Metrics			
	Fund	Bmark	Cat
Avg Eff Duration	7.58	4.52	6.19
Avg Eff Maturity	8.20	_	7.38



# Vanguard Inflation-Protected Secs Adm VAIPX

Morningstar Category Inflation-Protected Bond Morningstar Index BBgBarc US Treasury US TIPS TR USD





Asset Class	Net %	Cat%
US Stocks	0.00	0.01
Non-US Stocks	0.00	0.01
Bonds	99.94	99.27
Cash	0.06	0.35
Other	0.00	0.36
Total	100.00	100.00

Credit Rating Breakdown	Fund	Bmark	Cat
AAA	100.00	0.00	91.95
AA	0.00	99.60	1.66
А	0.00	0.00	1.99
BBB	0.00	0.00	2.70
BB	0.00	0.00	0.72
В	0.00	0.00	0.66
Below B	0.00	0.00	0.08
Not Rated	0.00	0.40	0.24

			_				По						
	Fund	Bmark	Cat	Fund	▼ Bencl	nmark	[] C	atego	ry Av	erage	Э		
Government	99.94	99.20	85.26										
Treasury	0.00	0.00	1.03	Ü									
Inflation – Protected	99.94	99.20	76.92										
Agency/Quasi Agency	0.00	0.00	0.11	Ò									
Other Government Related	0.00	0.00	7.20	<u> </u>									
Corporate	0.00	0.00	2.62	i D									
Corporate Bond	0.00	0.00	2.54	ĬD.									
Bank Loan	0.00	0.00	0.01	i i i i									
Convertible	0.00	0.00	0.07	ĺ									
Preferred	0.00	0.00	0.00										
Securitized	0.00	0.00	5.33										
Agency MBS Pass-Through	0.00	0.00	2.06										
Agency MBS ARM	0.00	0.00	0.01										
Agency MBS CMO	0.00	0.00	0.78	Ó									
Non-Agency Residential MBS	0.00	0.00	0.23										
Commercial MBS	0.00	0.00	0.39	Ď									
Asset-Backed	0.00	0.00	1.84	10 1 1									
Covered Bond	0.00	0.00	0.02	i									
Municipal	0.00	0.00	0.00	d i									
Cash & Equivalents	0.06	0.80	5.98										
Other	0.00	0.00	0.80	0									

<b>Top 10 Holdings</b> as of 03-31-2019				
Name	Maturity Date	% Net Asset	Cumulative %	Fixed Income Sector
United States Treasury Notes 0.12%	04-2021	5.21	5.21	_
United States Treasury Notes 0.12%	01-2023	3.85	9.07	_
	04-2023	3.81	12.87	-
United States Treasury Notes 0.12%	01-2022	3.78	16.66	-
⊕ United States Treasury Notes 0.62%	01-2024	3.67	20.33	_
United States Treasury Notes 0.38%	07-2023	3.64	23.97	_
⊕ United States Treasury Notes 0.12%	04-2022	3.61	27.58	-
€ United States Treasury Notes 0.38%	07-2025	3.59	31.17	_
€ United States Treasury Notes 0.12%	07-2024	3.57	34.74	_
United States Treasury Notes 0.12%	04-2020	3.48	38.23	_



## Vanguard Mid Cap Index Admiral VIMAX

### **Morningstar Category** Mid-Cap Blend

Morningstar Index Russell Mid Cap TR USD

### Portfolio Manager(s)

Donald Butler since 05-1998 Michael Johnson since 04-2016

### **Quantitative Screens**

Performance: The fund has finished in the Mid-Cap Blend category's top three quartiles in 10 of the 10 years it's been in existence.

Management: The fund's management has been in place for 20.87 years.

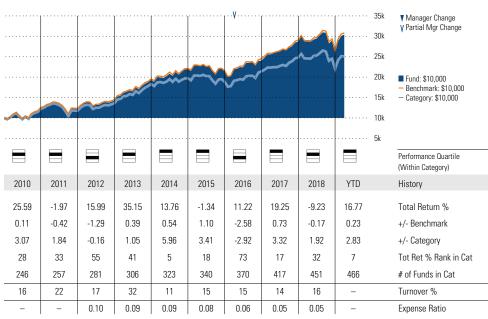
Style: The fund has landed in its primary style box — Mid-Cap Blend — 100 % of the time over the past three

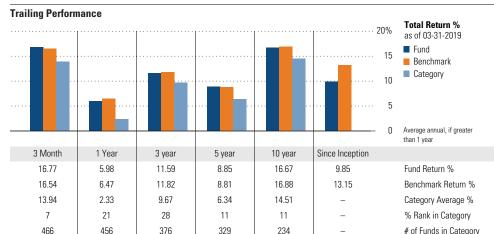
Net Expense: The fund's expense ratio of 0.05 is 95.05% lower than the Mid-Cap Blend category average.

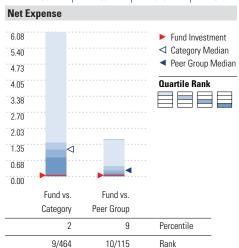
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.









Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year hisk wetrics			
	Fund	Bmark	Cat
Alpha	-0.02	-	-2.37
Beta	0.98	_	1.01
R-Squared	99.08	_	89.36
Standard Deviation	12.05	12.19	13.11
Sharpe Ratio	0.87	0.87	0.65
Tracking Error	1.17	_	4.26
Information Ratio	-0.19	_	-0.67
Up Capture Ratio	97.23	_	89.83
Down Capture Ratio	96.23	_	102.31

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	21.74	21.36	19.51
Price/Book Ratio	2.64	2.65	2.36
Geom Avg Mkt Cap \$B	10.75	10.69	8.27
ROE	16.95	16.39	15.17



# Vanguard Mid Cap Index Admiral VIMAX

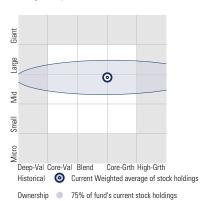
**Morningstar Category** Mid-Cap Blend

Morningstar Index

Russell Mid Cap TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity

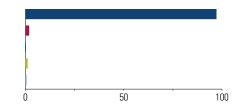
. ,			
5	11	20	Large
23	23	19	MIG
0	0	0	Small

Value Blend Growth

### Weight %

>50 25-50 10-25 0-10





Total	100.00	100.00
Other	0.32	0.20
Cash	0.96	2.86
Bonds	0.01	0.11
Non-US Stocks	1.73	2.21
US Stocks	96.98	94.63
Asset Class	Net %	Cat%

Sec	ctor Weighting as of 03-	31-2019				
		Fund	Bmark	Cat	Fund Benchmark Category Average	
<u></u>	Cyclical	39.00	40.32	43.59		
A.	Basic Materials	3.83	4.16	5.45		
A	Consumer Cyclical	14.95	14.24	14.46		
<del>,</del>	Financial Services	12.48	12.42	15.65		
<b>fi</b>	Real Estate	7.74	9.50	8.03		
W	Sensitive	40.06	38.48	38.27		
	Communication Services	1.54	0.95	1.37		
•	Energy	5.07	4.24	4.35		
Ф	Industrials	14.76	15.37	15.37		
	Technology	18.69	17.92	17.18		
<b>→</b>	Defensive	20.93	21.21	18.13		
Ħ	Consumer Defensive	4.22	5.20	4.28		
٠	Healthcare	10.13	9.57	9.97		
•	Utilities	6.58	6.44	3.88		
					0% 5 10 15 20 25 30 35 40	45

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Cmt Market Liquidity Rate	0.94	0.94	_	_
⊕ Roper Technologies Inc	0.84	1.78	28.48	Industrials
→ Fiserv Inc	0.83	2.61	20.13	Industrials
Worldpay Inc Class A	0.81	3.42	48.50	Industrials
→ Xilinx Inc	0.76	4.18	49.29	Technology
	0.73	4.91	4.02	Technology
Moody's Corporation	0.70	5.61	29.67	Financial Services
ONEOK Inc	0.68	6.29	31.05	Energy
⊕ Amphenol Corp Class A	0.67	6.95	16.85	Technology
⊕ WEC Energy Group Inc	0.59	7.54	15.03	Utilities
⊕ Digital Realty Trust Inc	0.58	8.12	12.70	Real Estate
⊇ IQVIA Holdings Inc	0.57	8.70	23.83	Healthcare
	0.57	9.26	_	Technology
⊃ Dollar Tree Inc	0.56	9.82	16.30	Consumer Defensive
Waste Connections Inc	0.55	10.38	19.53	Industrials

**Total Holdings 373** 



# Vanguard Real Estate Index Admiral VGSLX

Morningstar Category Real Estate Morningstar Index

S&P United States REIT TR USD

### Portfolio Manager(s)

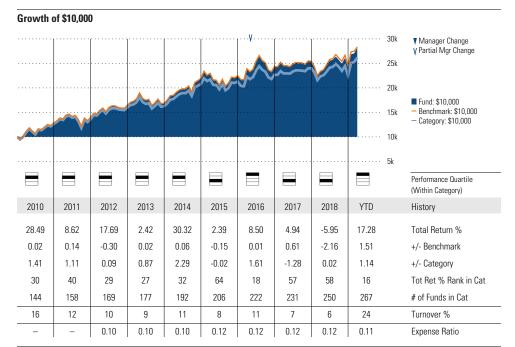
Gerard O'Reilly since 05-1996 Walter Nejman since 05-2016

### **Quantitative Screens**

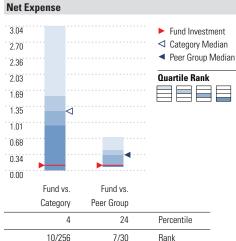
- Performance: The fund has finished in the Real Estate category's top three quartiles in 10 of the 10 years it's been in existence.
- Management: The fund's management has been in place for 22.9 years.
- Net Expense: The fund's expense ratio of 0.11 is
   90.43% lower than the Real Estate category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year KISK Wetrics			
	Fund	Bmark	Cat
Alpha	-0.03	_	0.30
Beta	0.98	_	0.90
R-Squared	99.39	_	94.22
Standard Deviation	13.82	14.01	13.05
Sharpe Ratio	0.38	0.38	0.40
Tracking Error	1.11	-	3.11
Information Ratio	-0.11	-	-0.25
Up Capture Ratio	97.64	-	89.13
Down Capture Ratio	97.61	-	87.03

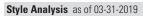
Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	40.39	38.46	36.08
Price/Book Ratio	2.39	2.42	2.60
Geom Avg Mkt Cap \$B	9.32	9.35	11.72
ROE	8.61	9.56	11.65



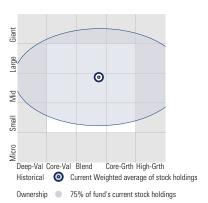
# Vanguard Real Estate Index Admiral VGSLX

#### **Morningstar Category** Morningstar Index Real Estate

S&P United States REIT TR USD



Morningstar Style Box™



### Style Breakdown

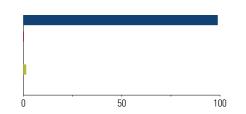
Equity

17 arge	2	2 mal
29	27	6
2	9	5

Value Blend Growth

Weight %

>50 25-50 10-25 0-10



Asset Allocation as of 03-31-2019

Total	100.00	100.00
Other	0.00	4.56
Cash	1.25	3.86
Bonds	0.00	3.52
Non-US Stocks	0.04	0.78
US Stocks	98.71	87.30
Asset Class	Net %	Cat%

	Fund	Bmark	Cat	Fund	•	Bench	mark	[] C	atego	ry A	verag	е		
Cyclical	89.63	99.13	94.62											
Basic Materials	2.08	0.00	0.58	()										
Consumer Cyclical	0.00	0.13	0.84	Ö										
Financial Services	0.00	0.00	0.10	Ŏ										
Real Estate	87.55	99.00	93.10											- [
✓ Sensitive	10.37	0.87	5.29											
Communication Services	9.47	0.00	4.45											
Energy	0.00	0.00	0.02	<u> </u>										
Industrials	0.90	0.87	0.50	Ŭ i										
Technology	0.00	0.00	0.32	İ										
→ Defensive	0.00	0.00	0.08	İ										
Consumer Defensive	0.00	0.00	0.00	ĺ										
Healthcare	0.00	0.00	0.03	<u> </u>										
Utilities	0.00	0.00	0.05	i i										

<b>Top 15 Holdings</b> as of 03-31-2019				
Name	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Real Estate II Index	11.00	11.00	_	_
⊕ American Tower Corp	6.65	17.65	24.57	Communication Svc
⊕ Simon Property Group Inc	4.32	21.97	9.69	Real Estate
⊕ Crown Castle International Corp	4.07	26.04	18.87	Real Estate
→ Prologis Inc	3.47	29.51	23.43	Real Estate
⊕ Equinix Inc	2.79	32.30	29.23	Real Estate
⊕ Public Storage	2.62	34.91	8.58	Real Estate
⊕ Welltower Inc	2.23	37.15	13.05	Real Estate
⊕ Equity Residential	2.12	39.27	14.96	Real Estate
AvalonBay Communities Inc	2.12	41.40	16.20	Real Estate
⊕ Digital Realty Trust Inc	1.88	43.28	12.70	Real Estate
	1.74	45.02	10.26	Real Estate
◆ SBA Communications Corp	1.73	46.75	23.33	Communication Svc
⊕ Realty Income Corp	1.66	48.41	17.76	Real Estate
Boston Properties Inc	1.59	50.00	19.80	Real Estate

Total Holdings 190



## **Vanguard Target Retirement 2015 Inv** VTXVX

**Morningstar Category** Target-Date 2015

Morningstar Index Morningstar Lifetime Mod 2015 TR USD

### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

### **Quantitative Screens**

Performance: The fund has finished in the Target-Date 2015 category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

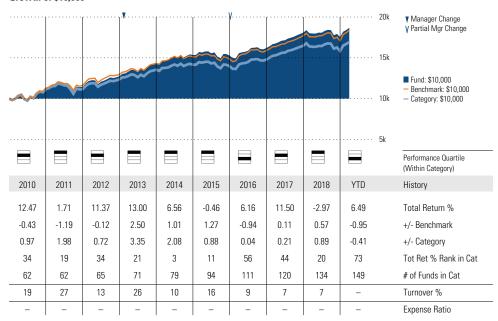
Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.13 is 81.94% lower than the Target-Date 2015 category average.

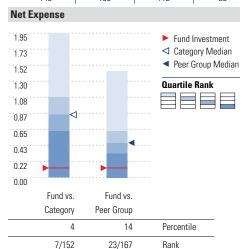
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3- Tear hisk wietrics			
	Fund	Bmark	Cat
Alpha	0.55	_	-0.06
Beta	0.89	_	0.97
R-Squared	97.99	_	94.17
Standard Deviation	4.39	4.89	4.90
Sharpe Ratio	1.11	1.03	0.98
Tracking Error	0.83	_	1.24
Information Ratio	-0.17	_	-0.19
Up Capture Ratio	93.25	_	94.97
Down Capture Ratio	85.71	_	93.14

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.82	18.03
Price/Book Ratio	2.19	2.17	2.27
Avg Eff Duration	5.78	7.24	4.31

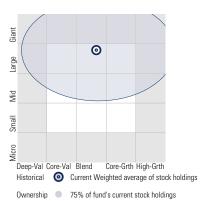


# Vanguard Target Retirement 2015 Inv VTXVX

Morningstar Index Morningstar Lifetime Mod 2015 TR USD **Morningstar Category** Target-Date 2015

## Style Analysis as of 03-31-2019

Morningstar Style Box™



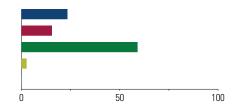
### Style Breakdown

Equity				Fixed Ir	ncome		Quality
26	25	25	Large				High
6	6	6	Mid				Mid
2	2	2	Small				Low
Value	Blend	Growth		Ltd Duratio	Mod	Ext	

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.13	3.00
Cash	2.46	4.78
Bonds	58.93	50.87
Non-US Stocks	15.27	14.73
US Stocks	23.21	26.63
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund ▼ Benchmark [] Category Average
وا	Cyclical	38.58	41.29	37.11	
ì.	Basic Materials	5.08	4.78	4.59	
•	Consumer Cyclical	11.72	10.87	11.31	
<u></u>	Financial Services	17.87	16.15	17.23	
à	Real Estate	3.91	9.49	3.98	
ŲF	Sensitive	38.50	35.89	38.56	
	Communication Services	3.41	3.76	3.27	
)	Energy	5.83	5.49	6.38	
Þ	Industrials	11.49	11.04	10.46	
1	Technology	17.77	15.60	18.45	
+	Defensive	22.92	22.81	24.32	
7	Consumer Defensive	7.84	7.90	8.04	
ř	Healthcare	11.88	11.20	12.98	
1	Utilities	3.20	3.71	3.30	

<b>Top 6 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Bond Market II ldx Inv	_	33.85	33.85	_	_
─ Vanguard Total Stock Mkt Idx Inv	_	23.46	57.31	_	-
─ Vanguard Total Intl Stock Index Inv	_	15.65	72.96	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	14.39	87.36	_	_
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	-	12.61	99.96	-	_
— ⊝ Cmt Market Liquidity Rate	-	0.04	100.00	_	_

### Total Holdings 6



## Vanguard Target Retirement 2020 Inv VTWNX

Morningstar Category Target-Date 2020 Morningstar Index Morningstar Lifetime Mod 2020 TR USD

### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

### **Quantitative Screens**

❷ Performance: The fund has finished in the Target-Date
2020 category's top three quartiles in 10 of the 10 years it's
been in existence.

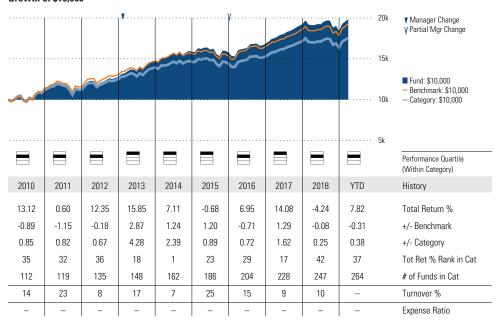
Management: The fund's management has been in place for 6.1 years.

Net Expense: The fund's expense ratio of 0.13 is 83.33% lower than the Target-Date 2020 category average.

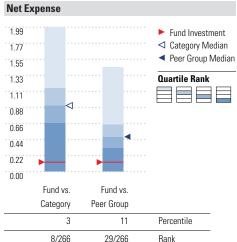
### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	0.21	_	-0.19
Beta	1.01	_	0.93
R-Squared	97.39	_	92.47
Standard Deviation	5.58	5.44	5.28
Sharpe Ratio	1.07	1.05	0.95
Tracking Error	0.90	-	1.51
Information Ratio	0.34	-	-0.40
Up Capture Ratio	103.04	-	91.98
Down Capture Ratio	101.02	-	94.25

Fund	Bmark	Cat
17.76	17.75	17.87
2.19	2.15	2.22
6.09	7.97	5.46
	17.76 2.19	17.76 17.75 2.19 2.15



# Vanguard Target Retirement 2020 Inv VTWNX

Quality High MidLow

**Morningstar Category** Target-Date 2020

**Morningstar Index** Morningstar Lifetime Mod 2020 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



## Style Breakdown

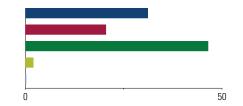
Equity				Fixed Income
26	25	25	Large	
6	6	6	Mid	
2	2	2	Small	
1/ 1	DI .	0 1		Let MA I

Value Blend Growth

Mod I td Duration Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.12	2.95
Cash	1.94	4.48
Bonds	46.43	49.67
Non-US Stocks	20.43	13.79
US Stocks	31.08	29.11
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund Benchmark Category Average
ŀ	Cyclical	38.60	41.32	38.49	
ė.	Basic Materials	5.08	4.87	4.31	
<b>A</b>	Consumer Cyclical	11.74	10.94	11.93	
÷	Financial Services	17.87	16.27	17.63	
À	Real Estate	3.91	9.24	4.62	T T
M	Sensitive	38.50	35.93	38.20	
₫	Communication Services	3.41	3.70	3.11	
ð	Energy	5.82	5.52	5.45	
Ф	Industrials	11.50	11.11	10.66	
	Technology	17.77	15.60	18.98	
<b>→</b>	Defensive	22.90	22.77	23.31	
=	Consumer Defensive	7.84	7.92	7.64	
٠	Healthcare	11.87	11.13	12.56	
•	Utilities	3.19	3.72	3.11	

Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
O Vanguard Total Stock Mkt Idx Inv	_	31.41	31.41	_	_
○ Vanguard Total Bond Market II Idx Inv	_	29.32	60.73	_	_
─ Vanguard Total Intl Stock Index Inv	_	20.94	81.67	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	12.37	94.04	_	_
⊕ Vanguard Shrt-Term Infl-Prot Sec ldx Inv	-	5.96	100.00	-	-
	_	0.00	100.00	_	_

Total Holdings 6



## Vanguard Target Retirement 2025 Inv VTTVX

**Morningstar Category** Target-Date 2025

Morningstar Index Morningstar Lifetime Mod 2025 TR USD

Turnover %

Expense Ratio

### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

### Quantitative Screens

Performance: The fund has finished in the Target-Date 2025 category's top three quartiles in 9 of the 10 years it's been in existence.

Management: The fund's management has been in place for 6.1 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

Net Expense: The fund's expense ratio of 0.13 is 83.12% lower than the Target-Date 2025 category average.

### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.

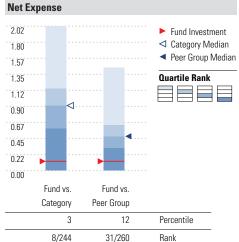
#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change 20k ■ Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 13.84 -0.37 13.29 18.14 7.17 -0.85 7.48 15.94 -5.15 8.82 Total Return % -0.61 -0.38 1.86 1.21 -0.91 1.40 -0.25 -0.14 -1.31 1.13 +/- Benchmark 2.84 2.10 0.55 1.69 0.26 0.74 0.75 1.27 0.19 0.38 +/- Category 37 16 43 24 4 24 23 21 42 27 Tot Ret % Rank in Cat 88 98 134 144 187 # of Funds in Cat 109 167 206 223 242



15

10

8



31/260 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-Year hisk ivietrics			
	Fund	Bmark	Cat
Alpha	-0.02	-	-0.41
Beta	1.04	-	0.99
R-Squared	98.06	-	95.81
Standard Deviation	6.44	6.16	6.23
Sharpe Ratio	1.05	1.06	0.97
Tracking Error	0.92	-	1.38
Information Ratio	0.28	-	-0.40
Up Capture Ratio	104.20	-	96.63
Down Capture Ratio	105.90	-	101.88

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.78	17.67	17.99
Price/Book Ratio	2.19	2.12	2.26
Avg Eff Duration	6.56	8.54	5.45



11

23

9

16

7

24

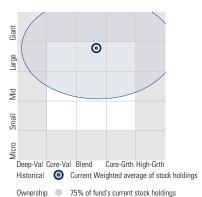
# Vanguard Target Retirement 2025 Inv VTTVX

Quality

**Morningstar Index** Morningstar Lifetime Mod 2025 TR USD **Morningstar Category** Target-Date 2025

Style Analysis as of 03-31-2019

Morningstar Style Box™

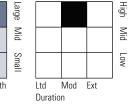




Equity 26



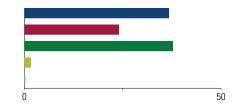
Value Blend Growth



Fixed Income

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100 00	100 00
Other	0.12	3.82
Cash	1.54	3.74
Bonds	37.66	38.46
Non-US Stocks	23.97	18.57
US Stocks	36.71	35.41
Asset Class	Net %	Cat%

				_	
		Fund	Bmark	Cat	Fund   Benchmark Category Average
<sub>Մ</sub>	Cyclical	38.56	41.27	39.14	
A.	Basic Materials	5.07	4.97	4.42	
A	Consumer Cyclical	11.73	11.03	11.81	
<del>,</del>	Financial Services	17.86	16.43	17.35	
ŵ	Real Estate	3.90	8.84	5.56	
Ma.	Sensitive	38.52	35.98	37.83	
	Communication Services	3.40	3.67	3.12	
ð	Energy	5.82	5.55	5.43	
Ф	Industrials	11.50	11.16	10.89	
	Technology	17.80	15.60	18.39	
<b>→</b>	Defensive	22.90	22.74	23.02	
=	Consumer Defensive	7.83	7.94	7.61	
+	Healthcare	11.88	11.08	12.31	
•	Utilities	3.19	3.72	3.10	

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
○ Vanguard Total Stock Mkt Idx Inv	_	37.10	37.10	_	_
⊕ Vanguard Total Bond Market II ldx Inv	-	26.87	63.98	_	-
⊕ Vanguard Total Intl Stock Index Inv	-	24.56	88.54	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	11.43	99.97	_	_
	_	0.03	100.00	_	_

### Total Holdings 5



# Vanguard Target Retirement 2030 Inv VTHRX

Morningstar Category Target-Date 2030 Morningstar Index Morningstar Lifetime Mod 2030 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

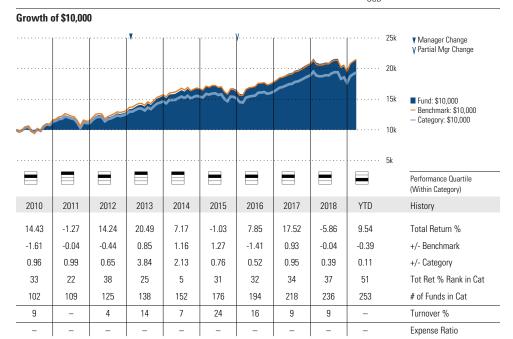
❷ Performance: The fund has finished in the Target-Date
2030 category's top three quartiles in 10 of the 10 years it's
been in existence.

Management: The fund's management has been in place for 6.1 years.

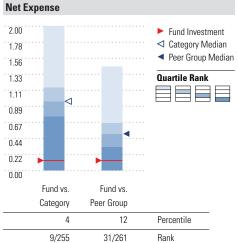
Net Expense: The fund's expense ratio of 0.14 is
 82.72% lower than the Target-Date 2030 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







2-1 cai mor memos			
	Fund	Bmark	Cat
Alpha	-0.13	_	-0.57
Beta	1.01	_	0.99
R-Squared	98.69	_	94.78
Standard Deviation	7.18	7.09	7.22
Sharpe Ratio	1.04	1.06	0.95
Tracking Error	0.82	_	1.53
Information Ratio	-0.11	_	-0.47
Up Capture Ratio	100.61	_	96.71
Down Capture Ratio	103.10	_	103.57

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.78	17.60	17.87
Price/Book Ratio	2.19	2.10	2.20
Avg Eff Duration	6.56	8.89	5.54



# Vanguard Target Retirement 2030 Inv VTHRX

**Morningstar Category** Target-Date 2030

**Morningstar Index** Morningstar Lifetime Mod 2030 TR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™



Style Breakdown

Equity

26	25	25	Large
6	6	6	Mid
2	2	2	Small

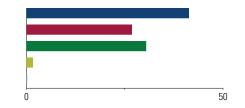
Value Blend Growth

Quality High MidLow Ltd Mod Duration

Fixed Income

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Asset Class Net % Cat% US Stocks 42.34 41.28 Non-US Stocks 26.72 22.87 Bonds 30.38 28.51 Cash 1.53 3.22 Other 0.10 3.08 100.00 Total 100.00

		Fund	Bmark	Cat	Fund Benchmark Category Average	
b	Cyclical	38.57	41.23	39.71		
i.	Basic Materials	5.06	5.07	4.48	<u> </u>	
<b>-</b>	Consumer Cyclical	11.74	11.11	11.78		
₽	Financial Services	17.86	16.60	17.35		
b	Real Estate	3.91	8.45	6.10	T	<u> </u>
NI	Sensitive	38.53	36.03	37.57		
	Communication Services	3.41	3.60	3.11		
•	Energy	5.82	5.58	5.42		
\$	Industrials	11.49	11.23	10.92		
2	Technology	17.81	15.62	18.12		
+	Defensive	22.91	22.73	22.73		
=	Consumer Defensive	7.83	7.96	7.49		
۲	Healthcare	11.90	11.03	12.13		
?	Utilities	3.18	3.74	3.11		

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Stock Mkt Idx Inv	_	41.72	41.72	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	27.37	69.10	_	_
⊕ Vanguard Total Bond Market II Idx Inv	-	21.70	90.80	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	9.19	99.99	_	_
	_	0.01	100.00	_	_

### Total Holdings 5



# Vanguard Target Retirement 2035 Inv VTTHX

Morningstar Category Target-Date 2035 Morningstar Index Morningstar Lifetime Mod 2035 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

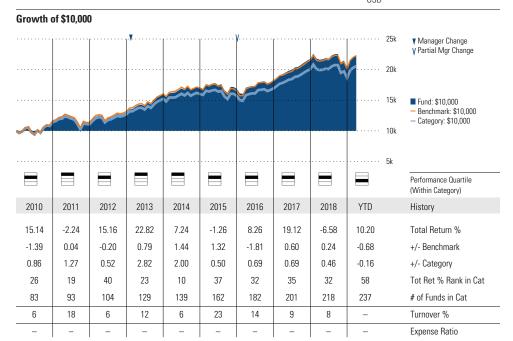
❷ Performance: The fund has finished in the Target-Date
2035 category's top three quartiles in 10 of the 10 years it's
been in existence.

Management: The fund's management has been in place for 6.1 years.

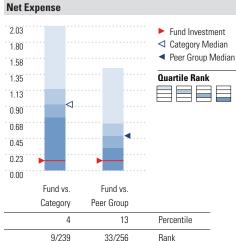
Net Expense: The fund's expense ratio of 0.14 is 82.05% lower than the Target-Date 2035 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







2-1 cai mor memos			
	Fund	Bmark	Cat
Alpha	-0.09	_	-0.63
Beta	0.98	_	0.99
R-Squared	98.98	_	97.56
Standard Deviation	7.92	8.07	8.11
Sharpe Ratio	1.02	1.05	0.95
Tracking Error	0.82	_	1.33
Information Ratio	-0.42	_	-0.60
Up Capture Ratio	97.77	_	96.27
Down Capture Ratio	99.54	_	102.04

Fund	Bmark	Cat
17.77	17.52	18.00
2.19	2.08	2.24
6.56	8.97	5.73
	17.77	17.77 17.52 2.19 2.08



# Vanguard Target Retirement 2035 Inv VTTHX

**Morningstar Category** Target-Date 2035

**Morningstar Index** Morningstar Lifetime Mod 2035 TR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™





Equity				Fixed Income
26	25	25	Large	
6	6	6	Mid	
2	2	2	Small	
	DI .	0 1		Lil MA L

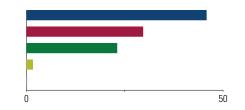
Value Blend Growth

Quality High MidLow Mod

I td Duration Weight %

>50 25-50 10-25 0-10

# Asset Allocation as of 03-31-2019





Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund Benchmark Category Average
<u></u>	Cyclical	38.55	41.22	39.92	
A.	Basic Materials	5.06	5.16	4.46	
A	Consumer Cyclical	11.73	11.18	11.80	
æ	Financial Services	17.85	16.75	17.35	<u> </u>
<b>fi</b>	Real Estate	3.91	8.13	6.31	
W	Sensitive	38.52	36.08	37.51	
d	Communication Services	3.41	3.57	3.08	
•	Energy	5.81	5.61	5.38	<b></b> j
Ф	Industrials	11.49	11.28	10.88	
	Technology	17.81	15.62	18.17	
<b>→</b>	Defensive	22.92	22.70	22.56	
Ħ	Consumer Defensive	7.84	7.99	7.57	
٠	Healthcare	11.89	10.97	11.91	
•	Utilities	3.19	3.74	3.08	
					0% 5 10 15 20 25 30 35 40 45

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
① Vanguard Total Stock Mkt ldx Inv	_	46.25	46.25	_	_
Vanguard Total Intl Stock Index Inv	_	30.33	76.58	-	-
① Vanguard Total Bond Market II ldx Inv	-	16.46	93.05	_	_
	-	6.94	99.98	_	_
○ Cmt Market Liquidity Rate	-	0.02	100.00	_	-

#### Total Holdings 5



# Vanguard Target Retirement 2040 Inv VFORX

Morningstar Category Target-Date 2040 Morningstar Index Morningstar Lifetime Mod 2040 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

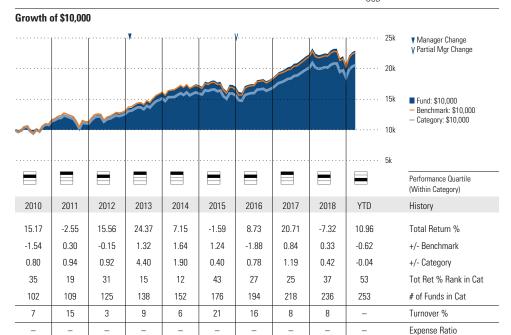
❷ Performance: The fund has finished in the Target-Date
2040 category's top three quartiles in 9 of the 10 years it's
been in existence.

Management: The fund's management has been in place for 6.1 years.

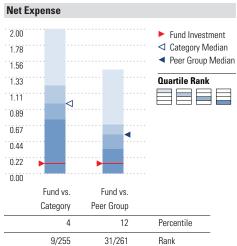
Net Expense: The fund's expense ratio of 0.14 is 82.93% lower than the Target-Date 2040 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.







3-Year KISK Wietrics			
	Fund	Bmark	Cat
Alpha	0.00	_	-0.56
Beta	0.98	_	0.96
R-Squared	99.08	_	95.35
Standard Deviation	8.66	8.82	8.71
Sharpe Ratio	1.02	1.02	0.93
Tracking Error	0.85	_	1.60
Information Ratio	-0.27	_	-0.67
Up Capture Ratio	98.44	_	94.39
Down Capture Ratio	99.32	_	99.69

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.44	17.85
Price/Book Ratio	2.19	2.06	2.20
Avg Eff Duration	6.55	9.04	5.69



# Vanguard Target Retirement 2040 Inv VFORX

Quality High MidLow

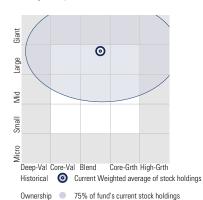
Duration

**Morningstar Category** Target-Date 2040

**Morningstar Index** Morningstar Lifetime Mod 2040 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



# Style Breakdown

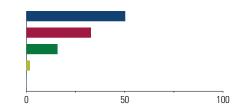
Equity				Fixed	Income
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod

Value Blend Growth

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Total	100.00	100.00
Other	0.07	2.83
Cash	1.54	2.72
Bonds	15.66	12.94
Non-US Stocks	32.61	29.16
US Stocks	50.11	52.37
Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund	d t	Bench	mark	Categ	ory Ave	erage		
Ն	Cyclical	38.57	41.30	40.24								<b>-</b> [	
A.	Basic Materials	5.07	5.25	4.46									
<b>A</b>	Consumer Cyclical	11.73	11.22	11.78									
<del>,</del>	Financial Services	17.87	16.85	17.07			- :						
<b>fi</b>	Real Estate	3.90	7.98	6.93			<b>'</b>						
M	Sensitive	38.51	36.10	37.30					- :	- :	- :		
	Communication Services	3.41	3.57	3.03		0							
•	Energy	5.82	5.64	5.31									
Ф	Industrials	11.49	11.29	10.94									
	Technology	17.79	15.60	18.02						_ :			
<b>→</b>	Defensive	22.92	22.60	22.45						)			
=	Consumer Defensive	7.84	7.99	7.42			0						
٠	Healthcare	11.89	10.88	11.96									
•	Utilities	3.19	3.73	3.07		ſ							

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	50.64	50.64	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	33.42	84.06	_	_
⊕ Vanguard Total Bond Market II Idx Inv	-	11.25	95.31	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	4.69	99.99	-	_
	_	0.01	100.00	_	_

### Total Holdings 5



# Vanguard Target Retirement 2045 Inv VTIVX

**Morningstar Category** Target-Date 2045

Morningstar Index Morningstar Lifetime Mod 2045 TR USD

Expense Ratio

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### Quantitative Screens

Performance: The fund has finished in the Target-Date 2045 category's top three quartiles in 9 of the 10 years it's been in existence.

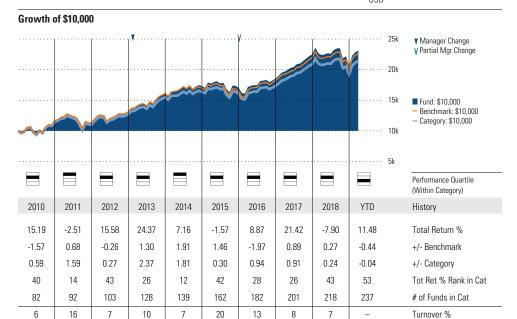
Management: The fund's management has been in place for 6.1 years.

Style: The fund has landed in its primary style box — Large Blend — 100 % of the time over the past three years.

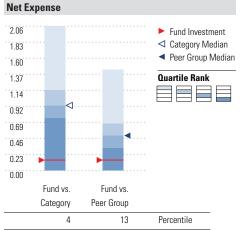
Net Expense: The fund's expense ratio of 0.15 is 81.01% lower than the Target-Date 2045 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment Management's quantitative screens. Morningstar Investment Management has also assessed the fund from a qualitative perspective and, as a fiduciary, is comfortable recommending the fund's use in retirement plans.







33/256 Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

Rank

3-1 cai mok memes			
	Fund	Bmark	Cat
Alpha	-0.09	_	-0.57
Beta	0.99	_	0.98
R-Squared	99.14	_	97.88
Standard Deviation	9.14	9.19	9.14
Sharpe Ratio	0.99	1.01	0.93
Tracking Error	0.85	_	1.36
Information Ratio	-0.25	_	-0.62
Up Capture Ratio	98.99	_	96.00
Down Capture Ratio	100.30	_	100.70

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.36	18.17
Price/Book Ratio	2.19	2.04	2.23
Avg Eff Duration	6.54	-	5.80



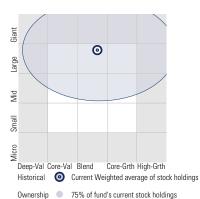
10/239

# Vanguard Target Retirement 2045 Inv VTIVX

Morningstar Category Target-Date 2045 **Morningstar Index** Morningstar Lifetime Mod 2045 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



# Style Breakdown

Equity

Weight %

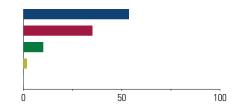
Lquity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small

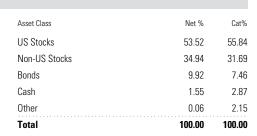


Value Blend Growth

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019





Sec	ctor Weighting as of 03-3	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark [] Category Average
<u></u>	Cyclical	38.57	41.53	40.67	
æ.	Basic Materials	5.07	5.33	4.27	
A	Consumer Cyclical	11.73	11.25	11.45	
<del>,</del>	Financial Services	17.86	16.94	16.27	
ŵ	Real Estate	3.91	8.01	8.68	
W	Sensitive	38.52	36.03	36.63	
	Communication Services	3.41	3.55	2.90	<b>⊨</b> 0' .
•	Energy	5.83	5.65	5.30	
Ф	Industrials	11.49	11.29	10.21	
	Technology	17.79	15.54	18.22	
<b>→</b>	Defensive	22.92	22.45	22.70	
Ħ	Consumer Defensive	7.84	7.97	7.42	
+	Healthcare	11.88	10.76	12.24	
•	Utilities	3.20	3.72	3.04	
					0% 5 10 15 20 25 30 35 40 4

<b>Top 5 Holdings</b> as of 03-31-2019									
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector				
⊕ Vanguard Total Stock Mkt ldx Inv	_	54.09	54.09	_	_				
⊕ Vanguard Total Intl Stock Index Inv	-	35.81	89.90	_	_				
⊕ Vanguard Total Bond Market II ldx Inv	-	7.18	97.08	_	_				
⊕ Vanguard Total Intl Bd Idx Investor	_	2.91	99.99	_	_				
	_	0.01	100.00	_	_				

### Total Holdings 5



# Vanguard Target Retirement 2050 Inv VFIFX

Morningstar Category Target-Date 2050 Morningstar Index Morningstar Lifetime Mod 2050 TR USD

Expense Ratio

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date
 2050 category's top three quartiles in 9 of the 10 years it's
 been in existence.

Management: The fund's management has been in place for 6.1 years.

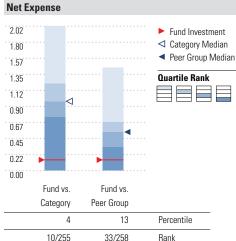
Net Expense: The fund's expense ratio of 0.15 is
 81.93% lower than the Target-Date 2050 category average.

#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000 ▼ Manager Change V Partial Mgr Change ■ Fund: \$10,000 - Benchmark: \$10,000 - Category: \$10,000 Performance Quartile (Within Category) 2010 2011 2012 2013 2014 2015 2016 2017 2018 YTD History 15.20 -2.54 15.58 24.34 7.18 -1.58 8.85 21.39 -7.90 11.50 Total Return % -1.58 0.93 -0.36 1.51 2.18 1.61 -2.04 0.61 0.51 -0.50 +/- Benchmark 0.67 3.32 1.76 0.43 1.28 0.51 0.63 0.72 0.51 -0.16 +/- Category 37 14 44 30 16 45 29 38 37 59 Tot Ret % Rank in Cat 84 98 137 152 176 194 # of Funds in Cat 116 218 236 253 10 15 4 9 7 18 12 6 7 Turnover %





	Fund	Bmark	Cat
Alpha	-0.02	_	-0.48
Beta	0.98	_	0.97
R-Squared	99.14	_	95.37
Standard Deviation	9.15	9.30	9.27
Sharpe Ratio	0.99	1.00	0.92
Tracking Error	0.87	_	1.67
Information Ratio	-0.27	_	-0.55
Up Capture Ratio	98.45	_	95.78
Down Capture Ratio	99.28	_	100.37

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	17.28	18.03
Price/Book Ratio	2.19	2.02	2.21
Avg Eff Duration	6.55	_	5.63



# Vanguard Target Retirement 2050 Inv VFIFX Asset Allocation as of 03-31-2019



**Morningstar Index** Morningstar Lifetime Mod 2050 TR USD

Net %

53.58

34.99

9.82

1.54

0.06

100.00

Cat%

56.31

31.68

6.57

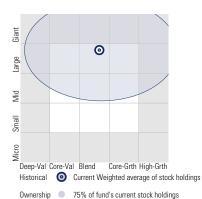
2.53

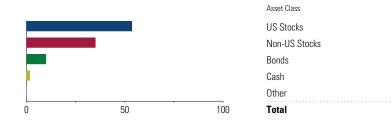
2.91

100.00

# Style Analysis as of 03-31-2019

Morningstar Style Box™





### Style Breakdown

Equity				rixeu	IIICOII
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod



### Weight %

>50 25-50 10-25 0-10

		Fund	Bmark	Cat	Fund	•	Bench	mark	Cateo	ory Ave	erage	
b	Cyclical	38.58	41.77	40.15								
à.	Basic Materials	5.07	5.41	4.37								
)	Consumer Cyclical	11.73	11.25	11.44								
	Financial Services	17.87	16.99	15.87								
b	Real Estate	3.91	8.12	8.47								
Ų.	Sensitive	38.51	35.95	37.10								
	Communication Services	3.41	3.55	2.92								
•	Energy	5.82	5.65	5.46								
ř	Industrials	11.49	11.28	10.34								
1	Technology	17.79	15.47	18.38					<b>I</b> []	. :		
<b>→</b>	Defensive	22.92	22.29	22.75						0		
Ę	Consumer Defensive	7.85	7.95	7.35			)					
1	Healthcare	11.88	10.64	12.39								
1	Utilities	3.19	3.70	3.01		<b>'</b>						

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Stock Mkt Idx Inv	_	54.15	54.15	_	_
Vanguard Total Intl Stock Index Inv	_	35.85	90.00	_	_
① Vanguard Total Bond Market II ldx Inv	_	7.08	97.09	_	_
Vanguard Total Intl Bd Idx Investor	_	2.91	100.00	_	_
○ Cmt Market Liquidity Rate	_	0.00	100.00	_	_

#### Total Holdings 5



# Vanguard Target Retirement 2055 Inv VFFVX

Morningstar Category Target-Date 2055 Morningstar Index Morningstar Lifetime Mod 2055 TR USD

#### Portfolio Manager(s)

William Coleman since 02-2013 Walter Neiman since 02-2013

#### **Quantitative Screens**

❷ Performance: The fund has finished in the Target-Date
2055 category's top three quartiles in 8 of the 8 years it's
been in existence.

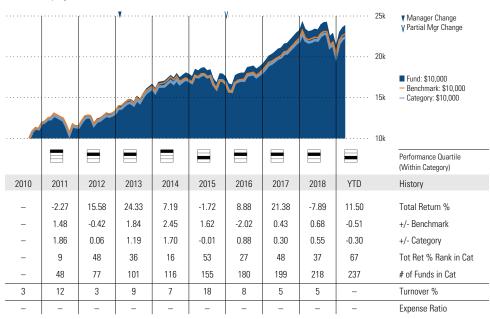
Management: The fund's management has been in place for 6.1 years.

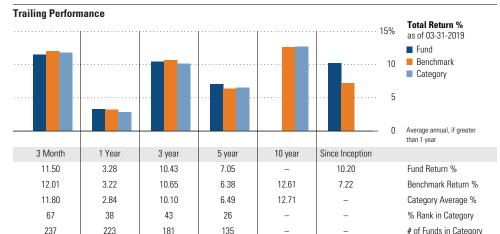
Net Expense: The fund's expense ratio of 0.15 is
 81.25% lower than the Target-Date 2055 category average.

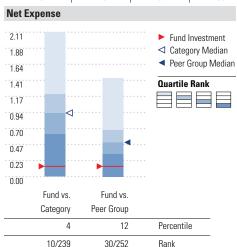
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

### Growth of \$10,000







3-Year Risk Metrics			
	Fund	Bmark	Cat
Alpha	0.05	_	-0.51
Beta	0.97	-	0.99
R-Squared	99.17	_	97.75
Standard Deviation	9.13	9.33	9.36
Sharpe Ratio	0.99	0.99	0.93
Tracking Error	0.87	_	1.43
Information Ratio	-0.25	_	-0.48
Up Capture Ratio	98.25	_	97.15
Down Capture Ratio	98.58	_	101.39

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.75	17.19	17.92
Price/Book Ratio	2.19	2.00	2.19
Avg Eff Duration	6.54	_	5.94



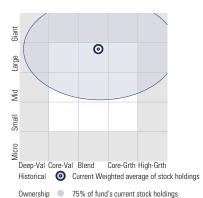
# Vanguard Target Retirement 2055 Inv VFFVX Asset Allocation as of 03-31-2019

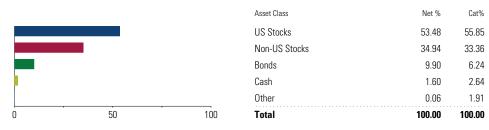
**Morningstar Category** Target-Date 2055

**Morningstar Index** Morningstar Lifetime Mod 2055 TR USD

# Style Analysis as of 03-31-2019

Morningstar Style Box™





### Style Breakdown

Equity				Fixed	Inco
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	М



Weight %

>50 25-50 10-25 0-10

	ctor Weighting as of 03-3			_	n
		Fund	Bmark	Cat	Fund   Benchmark Category Average
b	Cyclical	38.58	42.02	40.52	
ė.	Basic Materials	5.07	5.48	4.34	
<b>A</b>	Consumer Cyclical	11.73	11.25	11.38	
	Financial Services	17.87	17.05	16.34	
æ	Real Estate	3.91	8.24	8.46	
M	Sensitive	38.53	35.86	36.93	
	Communication Services	3.41	3.54	2.93	
ð	Energy	5.83	5.65	5.48	
Ф	Industrials	11.50	11.26	10.22	
	Technology	17.79	15.41	18.30	
<b>→</b>	Defensive	22.90	22.11	22.56	
=	Consumer Defensive	7.83	7.92	7.44	
٠	Healthcare	11.88	10.51	12.16	
•	Utilities	3.19	3.68	2.96	

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
◆ Vanguard Total Stock Mkt Idx Inv	_	54.06	54.06	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.80	89.86	_	_
⊕ Vanguard Total Bond Market II Idx Inv	-	7.17	97.03	_	_
⊕ Vanguard Total Intl Bd ldx Investor	_	2.91	99.93	-	_
	_	0.07	100.00	_	_

Total Holdings 5



# Vanguard Target Retirement 2060 Inv VTTSX

Morningstar Category Target-Date 2060+ Morningstar Index Morningstar Lifetime Mod 2060 TR USD

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date
 2060+ category's top three quartiles in 6 of the 6 years it's
 been in existence.

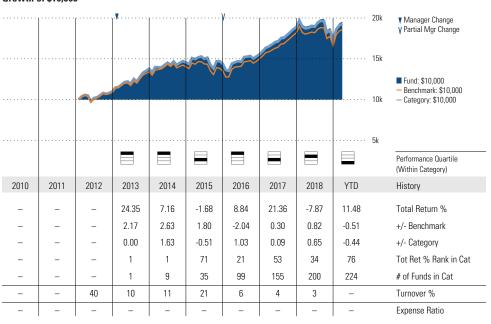
Management: The fund's management has been in place for 6.1 years.

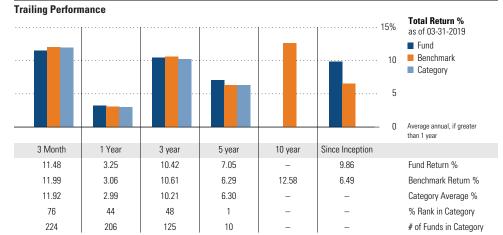
Q Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

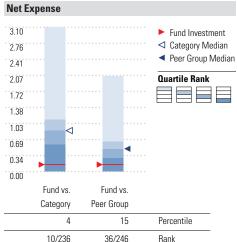
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

#### Growth of \$10,000







3-Year RISK Wietrics			
	Fund	Bmark	Cat
Alpha	0.08	_	-0.45
Beta	0.97	_	1.00
R-Squared	99.08	_	97.54
Standard Deviation	9.14	9.33	9.48
Sharpe Ratio	0.99	0.99	0.93
Tracking Error	0.91	_	1.52
Information Ratio	-0.21	-	-0.34
Up Capture Ratio	98.37	-	98.55
Down Capture Ratio	98.53	-	102.45

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.75	17.12	-
Price/Book Ratio	2.18	1.99	-
Avg Eff Duration	6.54	_	5.86



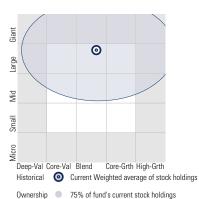
# Vanguard Target Retirement 2060 Inv VTTSX

**Morningstar Category** Target-Date 2060+

**Morningstar Index** Morningstar Lifetime Mod 2060 TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



### Style Breakdown

Equity				Fixed	Income
26	25	25	Large		
6	6	6	Mid		
2	2	2	Small		
Value	Blend	Growth		Ltd	Mod

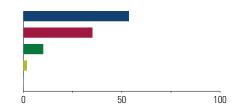
High MidLow Mod I td Duration

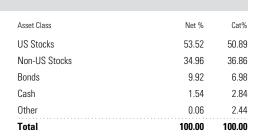
Quality

Weight %

>50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019





		Fund	Bmark	Cat	Fund	ı t	Bench	mark	Categ	jory Ave	erage			_
<sub>Մ</sub>	Cyclical	38.58	42.29	39.57										'
å.	Basic Materials	5.07	5.55	4.92		<b>—</b> ['								
<b>A</b>	Consumer Cyclical	11.73	11.26	11.57		-								
<del>,</del>	Financial Services	17.87	17.10	16.76										
<b>fi</b>	Real Estate	3.91	8.38	6.32			•							
W	Sensitive	38.51	35.77	37.74								- 1	0	
	Communication Services	3.41	3.54	3.21		0								
ð	Energy	5.82	5.65	5.84										
Ф	Industrials	11.49	11.23	10.81										
	Technology	17.79	15.35	17.88				- '						
<b>→</b>	Defensive	22.92	21.93	22.70						0				
=	Consumer Defensive	7.84	7.90	7.78			(							
+	Healthcare	11.88	10.37	11.88										
•	Utilities	3.20	3.66	3.04		<b>n</b> ' i								

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	54.09	54.09	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.82	89.91	_	_
◆ Vanguard Total Bond Market II Idx Inv	-	7.18	97.09	_	-
	_	2.91	100.00	-	_
Cmt Market Liquidity Rate	_	0.00	100.00	_	_

#### Total Holdings 5



# Vanguard Target Retirement 2065 Inv VLXVX

Morningstar Category Target-Date 2060+ Morningstar Index Morningstar Lifetime Mod 2060 TR USD

#### Portfolio Manager(s)

William Coleman since 07-2017 Walter Nejman since 07-2017

#### **Quantitative Screens**

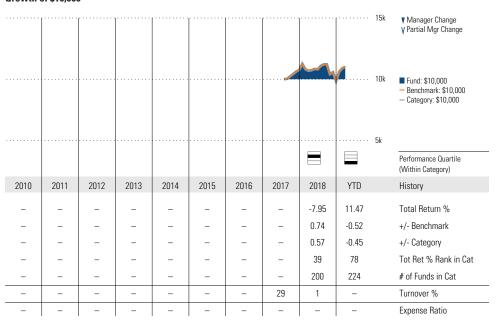
The Performance screen is not applicable for funds with less than three years of data.

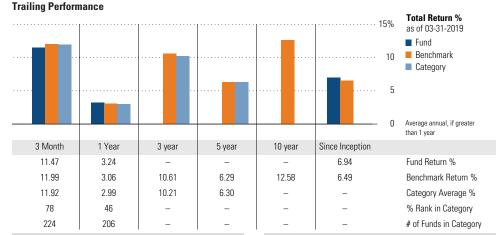
- × Management: The fund's management team has been in place for less than three years.
- Net Expense: The fund's expense ratio of 0.15 is 81.93% lower than the Target-Date 2060+ category average.

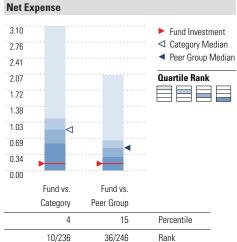
#### **Morningstar Investment Management LLC Analysis**

This fund fails our management tenure screen due to the inception of the new 2065 target date fund. This fund is managed by the same team as the full target date series, so we are comfortable with this screen failure.

#### Growth of \$10,000







3-1 cai nisk wietlics			
	Fund	Bmark	Cat
Alpha	-	_	-0.45
Beta	-	_	1.00
R-Squared	-	_	97.54
Standard Deviation	-	9.33	9.48
Sharpe Ratio	-	0.99	0.93
Tracking Error	-	_	1.52
Information Ratio	-	_	-0.34
Up Capture Ratio	-	_	98.55
Down Capture Ratio	_	-	102.45

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	_	17.12	_
Price/Book Ratio	_	1.99	_
Avg Eff Duration	6.55	_	5.86



# Vanguard Target Retirement 2065 Inv VLXVX

Asset Allocation as of 03-31-2019

**Morningstar Category** Target-Date 2060+

**Morningstar Index** Morningstar Lifetime Mod 2060 TR USD

## Style Analysis as of 03-31-2019

Morningstar Style Box™

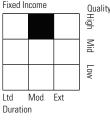




25 26 6 6 6

Large Mid 2 2 2

Growth



### Equity



end

Weight %

>50 25-50 10-25 0-10

j	50	100	Total	100.00	100.00
			Other	0.06	2.44
			Cash	1.54	2.84
			Bonds	9.77	6.98
			Non-US Stocks	35.02	36.86
			US Stocks	53.60	50.89
			Asset Class	Net %	Cat%

		Fund	Bmark	Cat	Fund		Bench	mark	Cated	gory Ave	rane			
l.	Cyclical	38.57	42.29	39.57	Turic		Donon	inark	ll oato	301 y 7 W C	nago			1
	Basic Materials	5.07	5.55	4.92		<b>"</b>								
<b>£</b>	Consumer Cyclical	11.73	11.26	11.57										
	Financial Services	17.87	17.10	16.76										
à	Real Estate	3.90	8.38	6.32			•							
JF.	Sensitive	38.53	35.77	37.74					- :	:	- :	- 1	0	
	Communication Services	3.41	3.54	3.21		0								
)	Energy	5.83	5.65	5.84										
<b>}</b>	Industrials	11.50	11.23	10.81										
3	Technology	17.79	15.35	17.88					0					
+	Defensive	22.91	21.93	22.70						0				
Ę	Consumer Defensive	7.84	7.90	7.78			0							
1	Healthcare	11.88	10.37	11.88										
1	Utilities	3.19	3.66	3.04		]								

<b>Top 5 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
⊕ Vanguard Total Stock Mkt Idx Inv	_	54.17	54.17	_	_
⊕ Vanguard Total Intl Stock Index Inv	-	35.88	90.05	_	_
⊕ Vanguard Total Bond Market II ldx Inv	_	7.05	97.10	_	_
⊕ Vanguard Total Intl Bd Idx Investor	_	2.90	100.00	_	_
○ Cmt Market Liquidity Rate	_	0.00	100.00	_	_

### Total Holdings 5



# Vanguard Target Retirement Income Inv VTINX

Morningstar Category
Target-Date Retirement

Morningstar Index Morningstar Lifetime Mod Incm TR USD

#### Portfolio Manager(s)

Walter Nejman since 02-2013 William Coleman since 02-2013

#### **Quantitative Screens**

Performance: The fund has finished in the Target-Date Retirement category's top three quartiles in 9 of the 10 years it's been in existence.

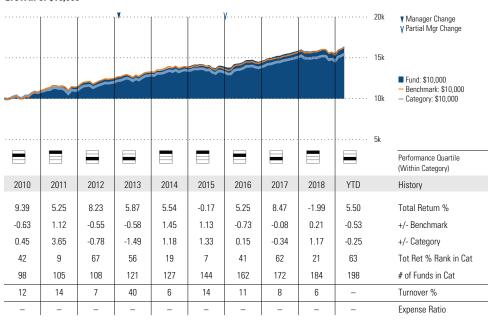
Management: The fund's management has been in place for 6.1 years.

Net Expense: The fund's expense ratio of 0.12 is
 84.62% lower than the Target-Date Retirement category average.

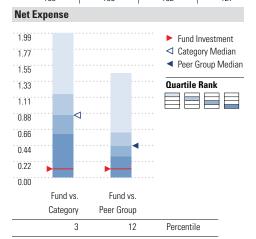
#### **Morningstar Investment Management LLC Analysis**

This fund passes all of Morningstar Investment
Management's quantitative screens. Morningstar
Investment Management has also assessed the fund from a
qualitative perspective and, as a fiduciary, is comfortable
recommending the fund's use in retirement plans.

## Growth of \$10,000







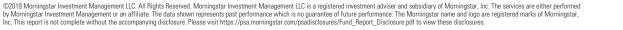
Peer group is a subset of the category and includes funds with the same management style (active vs. passive) and similar share class characteristics.

27/226

7/200

3-1 cai nisk ivicuits			
	Fund	Bmark	Cat
Alpha	0.33	-	-0.27
Beta	0.87	-	0.96
R-Squared	95.23	-	90.42
Standard Deviation	3.45	3.86	3.89
Sharpe Ratio	1.02	1.00	0.86
Tracking Error	0.90	-	1.30
Information Ratio	-0.37	-	-0.40
Up Capture Ratio	92.80	-	93.20
Down Capture Ratio	91.25	_	97.91

Portfolio Metrics			
	Fund	Bmark	Cat
Price/Earnings Ratio	17.76	18.03	17.72
Price/Book Ratio	2.19	2.24	2.19
Avg Eff Duration	5.66	4.69	5.45



Rank



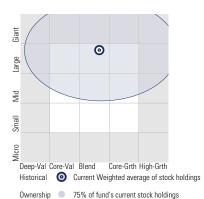
# Vanguard Target Retirement Income Inv VTINX

Morningstar Category
Target-Date Retirement

**Morningstar Index** Morningstar Lifetime Mod Incm TR USD

### Style Analysis as of 03-31-2019

Morningstar Style Box™



# Style Breakdown

Equity

Lquity			
26	25	25	Large
6	6	6	Mid
2	2	2	Small

Value Blend Growth

Fixed Income

Quality

High

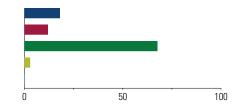
Mid

Ltd Mod Ext

Duration

Weight % >50 25-50 10-25 0-10

### Asset Allocation as of 03-31-2019



Asset Class Net % Cat% US Stocks 17.89 20.10 Non-US Stocks 11.73 10.78 Bonds 67.51 60.15 Cash 2.75 6.41 Other 2.55 0.13 Total 100.00 100.00

Sec	ctor Weighting as of 03-	31-2019			
		Fund	Bmark	Cat	Fund • Benchmark   Category Average
<sub>Մ</sub>	Cyclical	38.58	41.05	39.11	
Å.	Basic Materials	5.08	4.56	4.61	
A	Consumer Cyclical	11.74	10.77	11.76	
æ	Financial Services	17.87	15.92	17.02	
<b>fi</b>	Real Estate	3.89	9.80	5.72	
W	Sensitive	38.52	35.92	37.89	
	Communication Services	3.42	3.80	3.20	
ð	Energy	5.82	5.44	5.55	
Ф	Industrials	11.51	10.94	10.94	
	Technology	17.77	15.74	18.20	
<b>→</b>	Defensive	22.91	23.04	23.00	
Ħ	Consumer Defensive	7.85	7.88	7.68	
+	Healthcare	11.88	11.42	12.12	
•	Utilities	3.18	3.74	3.20	
					0% 5 10 15 20 25 30 35 40 45

<b>Top 6 Holdings</b> as of 03-31-2019					
Name	Maturity Date	% Net Asset	Cumulative %	YTD Return %	Morningstar Sector
Vanguard Total Bond Market II Idx Inv	_	37.44	37.44	_	_
─ Vanguard Total Stock Mkt Idx Inv	_	18.08	55.52	_	-
⊕ Vanguard Shrt-Term Infl-Prot Sec Idx Inv	_	16.63	72.15	_	-
⊕ Vanguard Total Intl Bd Idx Investor	_	15.80	87.95	_	-
○ Vanguard Total Intl Stock Index Inv	_	12.02	99.96	_	_
	_	0.04	100.00	_	_

### Total Holdings 6

