COUNTY OF SAN MATEO HUMAN RESOURCES DEPARTMENT

Rocio Kiryczun Director

County Government Center 455 County Center, 5th Floor Redwood City, CA 94063 650-363-4321 T 650-363-4822 F http://hr.smcgov.org http://jobs.smcgov.org

SAN MATEO COUNTY DEFERRED COMPENSATION ADVISORY COMMITTEE THURSDAY, NOVEMBER 3, 2022 (9:00 AM- 12:30 PM)

455 County Center, Room 405 Redwood City, CA 94063

AGENDA

Committee Members	Appointed As
Lisa Okada, Chair	Human Resources Director Designee
Tiffany Htwe	Tax Collector-Treasurer Designee
Laurel Finnegan	Non-Management Appointee
Lilibeth Dames	Non-Management Appointee
Robert Raw	Non-Management Appointee
Steve Perry	Non-Management Appointee
Bridget Love	Management Appointee
Gina Wilson	Management Appointee
Michael Wentworth	Management Appointee

Staff	Empower	Innovest
Kim Pearson	Bob Gleason	Rick Rodgers
Marife Viola	Armando Llanes	Brett Minnick
Jay Castellano	Patrick Washington	

CALL TO ORDER

ROLL CALL

ORDERS OF THE DAY

PUBLIC COMMENTS





CONSENT ITEMS

1. Approve Minutes: August 25, 2022 (Jay Castellano)

OLD BUSINESS

- 2. Oral Update on Q4 Transition to Empower Recordkeeping Platform (Bob Gleason)
- 3. Oral Update on Implementation of New Empower Contract and Migration of ICMA-RC Assets to Empower (Bob Gleason)
- 4. Oral Update on Migration of Vanguard Index Funds to Fidelity Index Funds and on Changes to Sector/Specialty Funds (Bob Gleason)

NEW BUSINESS

Empower

- 5. Present of Quarterly Plan Review (Bob Gleason)
- 6. Discuss 2023 Educational Plan for Plan Participants (Armando Llanes, Patrick Washington)
- 7. Review Empower's Cyber Security Systems and Issues (Trish McGinity)

Innovest

- 8. Fiduciary Education: Innovest Quarterly Topics & Trends (Rick Rodgers)
- 9. Presentation and Acceptance of Quarterly Investment Review (Rick Rodgers & Brett Minnick)
- 10. Discuss 2023 Fiduciary Educational Plan for DCAC (Rick Rodgers)
- 11. Next Steps in Investment Menu Analysis (Brett Minnick)
 - A. Target-Date Funds Deep-Dive
- 12. Discuss Focus and Direction for 2023 Annual Survey (Brett Minnick, Armando Llanes)
- 13. Legislative Updates (Rick Rodgers)

County Staff

- 14. Approve December 12 Retreat Agenda (Jay Castellano)
- 15. Discuss Highlights of NAGDCA Conference (Attendees, Innovest)

INFORMATIONAL ITEMS

Innovest

16. INNOVIEWS, Fall 2022

County Staff

- 17. Updates to the California's Brown Act
- 18. County Legislative Engagement Policy
- 19. Upcoming Meeting Dates
 - A. Monday, December 12, 2022 (Retreat)
 - B. Thursday, February 23, 2023
 - C. Thursday, May 25, 2023
 - D. Thursday, August 24, 2023

NEXT MEETING AGENDA ITEMS

- 20. Next Steps in Investment Menu Analysis (Innovest)
 - A. ESG Alternatives
 - B. Review of HRA Plan Fees

ADJOURNMENT

RECURRING QUARTERLY AGENDA ITEMS

Q1 MEETINGS

- Empower Quarterly Plan Review
- Innovest Quarterly Investment Performance Review
- Empower Affirmation of Plan Document Compliance
- Final Education Plans for Committee and for Participants
- NAGDCA Participation/Award Consideration
- Annual Survey: Review, approve survey
- Investment Policy Review (annual)

Q3 MEETINGS

- Empower Quarterly Plan Review
- Innovest Quarterly Investment Performance Review
- Education Policy Review (annual)
- Due Diligence Special Services
- Next Calendar Year's Meeting Schedule
- Annual Survey: Include workplan items in new budget, as appropriate

Q2 MEETINGS

- Empower Quarterly Plan Review
- Empower Annual Plan Review
- Innovest Quarterly Investment Performance Review
- Finalize NAGDCA conference attendees
- Recordkeeper Performance Review
- Budget / Workplan
- Fund Balance Policy
- Reserve Policy
- Annual Survey: Review, discuss survey results

Q4 MEETINGS

- Empower Quarterly Plan Review
- Innovest Quarterly Investment Performance Review
- Education Plan for Participants
- Education Plan for DCAC
- NAGDCA Highlights
- Cyber Security Review (annual)
- Annual Survey: Discuss, provide direction on next survey

Rocio Kiryczun Director

County Government Center 455 County Center, 5th Floor Redwood City, CA 94063 650-363-4321 T 650-363-4822 F http://hr.smcgov.org http://jobs.smcgov.org

SAN MATEO COUNTY DEFERRED COMPENSATION ADVISORY COMMITTEE THURSDAY, AUGUST 25, 2022 (9:00 AM- 12:30 PM)

MINUTES

Link to Recording: https://hr.smcgov.org/deferred-compensation-governance

Committee Members	Appointed As
Lisa Okada, Chair, present	Human Resources Director Designee
Tiffany Htwe, present	Tax Collector-Treasurer Designee
Laurel Finnegan, absent	Non-Management Appointee
Lilibeth Dames, present	Non-Management Appointee
Robert Raw, present	Non-Management Appointee
Steve Perry, present	Non-Management Appointee
Bridget Love, present	Management Appointee
Michael Wentworth, absent	Management Appointee
Gina Wilson, present	Management Appointee

Staff	Empower	Innovest
Kim Pearson Marife Viola Jay Castellano	Bob Gleason Armando Llanes Patrick Washington	Rick Rodgers Brett Minnick

CALL TO ORDER

The meeting was called to order at 9:01am.

INTRODUCTION: NEW DCAC MEMBER GINA WILSON

ROLL CALL

All DCAC members were present except Member Wentworth.

APPROVAL OF RESOLUTION PURSUANT TO AB 361

A motion was made to approve the resolution pursuant to AB 361. M/S/C Raw/Perry/8-0 Motion approved by roll call vote.



ORDERS OF THE DAY

The agenda was accepted as posted.

PUBLIC COMMENTS

None.

CONSENT ITEMS

- 1. Approve Minutes: May 26, 2022 (Jay Castellano)
- 2. Annual Review of Special Services Performed by Empower (Bob Gleason)

A motion was made to approve the Consent Items.

M/S/C Love/Raw/8-0 Motion approved by roll call vote.

OLD BUSINESS

3. Oral Update on Q4 Transition to Empower Recordkeeping Platform (Bob Gleason)

The DCAC accepted this update.

4. Approve Migration of Vanguard Index Funds to Fidelity Index Funds (Rick Rodgers)

A motion was made to do the following:

- Remove the Vanguard Total Stock Market Index (VTSAX) Fund
- Map all assets and future allocations to the S&P Index Fund
- Replace all Vanguard Index Funds with Fidelity Index Funds

M/S/C Perry/Raw/8-0 Motion approved by roll call vote.

NEW BUSINESS

Empower

5. Discuss and Determine 2021 Performance Penalty Related to Call Center Response (Bob Gleason, Jay Castellano)

A motion was made to apply the 2021 performance penalty to Empower in accordance with the contract provision, meaning that Empower will pay a \$1,000 for not meeting its 2021 call center response performance guarantee.

M/S/C Love/Okada/4-3-1 Motion approved by roll call vote with Members Htwe, Perry and Raw dissenting, and with Member Wilson abstaining.

6. Presentation of Quarterly Plan Review (Bob Gleason)

The DCAC accepted this presentation.

7. Review Implementation Plan for 2021-22 Survey Recommendations (Armando Llanes)

The DCAC accepted this presentation.

8. Review and Approve Education Policy (Bob Gleason)

A motion was made to approve the Education Policy without updates.

M/S/C Perry/Love/8-0 Motion approved by roll call vote.

Innovest

9. Approve Recordkeeping RFP Recommendation by Ad Hoc Selection Committee (Brett Minnick)

A motion was made to accept the Ad Hoc Selection Committee's recommendation to select Empower as the plans' recordkeeper for the period of March 22, 2023, through March 21, 2028. The recommendation to the Board of Supervisors will include a five-year contract, not the County procurement standard of three years with options up to five years total.

M/S/C Perry/Raw/6-0 Motion approved by roll call vote.

10. Presentation and Acceptance of Quarterly Investment Review (Rick Rodgers)

The DCAC accepted this presentation.

11. Discuss and Approve Changes to Sector or Specialty Funds (Brett Minnick)

A motion was made to do the following:

- Eliminate the funds identified on Page 9 of Innovest's presentation (Item 11 on agenda)
- Map all assets and future allocations to the funds identified on Page 9 of Innovest's presentation (Item 11 on agenda)

M/S/C Dames/Love/7-0-1 Motion approved by roll call vote with Member Perry abstaining.

12. Legislative Updates (Rick Rodgers)

The DCAC accepted this update.

County Staff

13. Approval of 2022 NAGDCA Conference Attendees (Jay Castellano)

A motion was made to approve the updated list of NAGDCA conference attendees for whom expenses will be authorized to include Member Finnegan and Member Wilson (if she chooses to attend).

M/S/C Love/Wilson/8-0 Motion approved by roll call vote.

INFORMATIONAL ITEMS

Innovest

14. INNOVIEWS, Summer 2022

County Staff

- 15. Upcoming Meeting Dates
 - A. Thursday, November 3, 2022
 - B. Monday, December 12, 2022 (Retreat)
 - C. Thursday, February 23, 2023
 - D. Thursday, May 25, 2023
 - E. Thursday, August 24, 2023

NEXT MEETING AGENDA ITEMS

- 16. Next Steps in Investment Menu Analysis (Innovest)
 - A. Target-Date Funds Deep-Dive
 - A. ESG Alternatives
 - B. Updates to the HRA Investment Options to Match the §457 Plan
 - C. Review of HRA Plan Fees

ADJOURNMENT

The meeting was adjourned at 12:23pm.

ADDITIONAL STAFF ACTION ITEMS

- Schedule a demonstration of the new Empower platform in November 4 meeting or in Retreat (Jay, Bob)
- Develop plan, schedule to migrate from Vanguard to Fidelity Index Funds (Empower, Innovest)
- Update the Education Policy for posting (Bob)
- Submit the new Empower contract to the BOS for approval (Jay)
- Include the following in the Retreat agenda
 - A. Educate DCAC on ESG Alternatives (Wendy Dominguez)
 - B. Review of HRA Plan Fees (Kyli Soto)
- Develop plan, schedule to migrate Sector and Specialty Funds (Empower, Innovest)
- Correct spelling of Laurel Finnegan (not Lauren) in Item 13 memo (Jay)
- Send NAGDCA conference information to Gina Wilson (Jay)
- Schedule and coordinate orientation for Gina Wilson (Jay, Bob, Rick)
- Develop Retreat agenda for consideration in November 3 DCAC meeting (Jay, Bob, Rick)
- Provide for NAGDCA attendees the 3 Key Learnings, 3 Action Items form (Jay)
- Migrate ICMA-RC assets to Empower (Bob, Kyli)

Q3 2022 Plan Summary Review

San Mateo County Deferred Compensation Plan

Current Period: July 1, 2022 - September 30, 2022

Prior Period: April 1, 2022 – June 30, 2022

Effective on the closing date of the transaction, Empower Retirement (Empower) acquired the Massachusetts Mutual Life Insurance Company's (MassMutual) retirement business. Through this transaction, business written by MassMutual is reinsured by Great-West Life & Annuity Insurance Company (GWLA) and in New York by GreatWest Life & Annuity Insurance Company of New York. Concurrently, MassMutual retroceded business it reinsures from a cedent, which MassMutual assumed in a previous transaction. On the closing date of the transaction, Empower will administer the business on MassMutual's behalf, with certain administrative services being performed by MassMutual and its affiliates during a temporary transition period. Additionally, GWFS Equities, Inc. will be the distributor of the MassMutual Insurance products sold on Empower's platform. Empower Retirement refers to the products and services offered by GWLA and its subsidiaries. GWFS Equities is a subsidiary of GWLA and an affiliate of Empower Retirement, LLC; Great-West Funds, Inc.; and registered investment advisers Advised Assets Group, LLC and Personal Capital. Empower is not affiliated with MassMutual or its affiliates.

2021 Empower Retirement, LLC. All rights reserved.



Executive Summary

61869-1-San Mateo County Deferred Compensation Plan

Plan Statistics

	6/30/2022	9/30/2022	Plan Tren		
Total plan assets	\$599,364,227	\$581,109,454	▼	3%	
Total outstanding loan balances	\$7,448,325	\$7,289,749	T	2%	
Participant contributions					
Participant	\$11,280,607	\$11,288,670	A	0%	
Employee Pre-Tax	\$8,683,490	\$8,425,328	V	3%	
Roth	\$1,999,792	\$2,219,116	A	11%	
Loan Repayment	\$663,763	\$644,226	V	3%	
Rollover	\$479,647	\$400,145		17%	
Transferred assets	\$8,158	\$0	_	100%	
Distributions					
Withdrawals	(\$2,695,943)	(\$1,082,168)	T	60%	
Terminations	(\$6,231,771)	(\$5,334,525)	T	14%	
Loans	(\$921,657)	(\$751,949)	▼	18%	
Expenses*	(\$89,983)	(\$86,350)	T	4%	
Investment income	(\$72,094,210)	(\$22,841,686)	A	68%	

Notes Terminations = lump sum payments due to retirement or termination

Withdrawals = In-service withdrawal, death benefits, minimum distribution, installment payments, loan default

Total plan assets exclude unallocated assets. The Contribution data displays the combined dollar value of Contributions & Loan Repayments, if applicable.

^{*}The expenses shown reflect expenses deducted from plan assets. Expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan are not reflected.

Executive Summary

61869-1-San Mateo County Deferred Compensation Plan

Participant Statistics

	6/30/2022	9/30/2022	Plan Trend		
Total participants	9,910	10,068	▲ 2%		
Participation rates: average percenta	99%	96%	▼ 3%		
Average account balance	\$60,481	\$57,718	▼ 5%		
Average number of investments	4.9	5.0	▲ 2%		
Number of outstanding loans	623	615	▼ 1%		
Percent of participants with a loan	6%	6%	♦ ▶ 0%		
Average loan balance	\$11,956	\$11,853	▼ 0%		
Total calls to 800#	168	146	▼ 13%		
Total visits to website	12,623	10,122	▼ 20%		

2Q 2022 eligible - 5,323 (does not include extra help); total # contributing - 5,277 - 99% 3Q 2022 eligible - 5,473 (does not include extra help); total # contributing - 5,261 - 96%

The participation rate calculation is based upon eligible participants with a salary deferral contribution in the past 12 months / total eligible employees (active and eligible not participating). The contribution rate does not include flat dollar contributions.

457 Plan activity

61869-1-San Mateo County Deferred Compensation Plan



The below shows the plan level activity for the current time period. The balances are based on all activity employed and terminated plan participants. The balances do not include any unallocated assets or outstanding loan amounts.

Plan Activity July 01, 2022 through September 30, 2022 Balances as of Percentage* Contribution Transfers Distributions Expenses** Investment Balances as of Percentage¹ **Investment Options** Other 6/30/2022 **Activity** 9/30/2022 Income SAGIC Core Bond (61869) \$150,134,190 25.05% \$1.106.842 \$245.901 \$2,800,519 (\$1,553,863) (\$21,654)\$916,821 \$153,628,756 26.44% 0.64% 0.58% PIMCO Long-Term Real Return Func \$3.807.052 \$71.086 \$9,524 (\$55,329)(\$66,251) (\$540)(\$420,538)\$3.345.003 PIMCO Total Return Fund \$12,105,131 2.02% \$116.062 \$13,965 (\$192.621) (\$98.509)(\$1.625)(\$584,784)\$11,357,618 1.95% Vanguard Total Bond Mrkt Index Fu 1.43% \$8,570,093 \$124,272 \$14,983 (\$188,163) (\$516,781) (\$1,147)(\$366,747)\$7,636,509 1.31% MassMutual High Yield Fund \$1.071.237 0.18% \$26,490 \$103.922 0.20% \$7,177 (\$20,350) (\$158)(\$13,394) \$1,174,924 Closed Vanguard Target Retmnt \$10.509.787 1.75% \$12.132 \$177 (\$10,566,522) \$0 \$0 \$44,425 \$0 0.00% Vanguard Target Retmnt 2020 Fd 0.10% \$197,040 \$3,242 (\$16,855) (\$1,016) (\$93)\$761,283 0.13% \$623,620 (\$44,655) Vanguard Target Retmnt 2025 Fd 6.23% 6.08% \$37,331,426 \$692,976 \$43,338 (\$396,086) (\$204,374) (\$5,203) (\$2,108,691) \$35,353,386 Vanguard Target Retmnt 2030 Fd \$2.085.783 0.35% \$5,222 (\$89,005) (\$38,424) 0.38% \$383,637 (\$313)(\$138,140) \$2,208,759 Vanguard Target Retmnt 2035 Fd \$37,144,074 6.20% \$1,188,535 \$94,314 (\$456,808) (\$220,372)(\$5,595) (\$2,315,815) \$35,428,333 6.10% Vanguard Target Retmnt 2040 Fd \$2,109,936 0.35% \$419,501 \$7.691 \$64,195 (\$30,393)(\$325)(\$175,598)\$2,395,008 0.41% Vanguard Target Retmnt 2045 Fd \$32,704,651 5.46% \$1,169,673 \$89.096 (\$107.064) (\$114,286)(\$4,829) (\$2,217,431) \$31,519,810 5.42% Vanguard Target Retmnt 2050 Fd 0.39% \$715.358 (\$22,025)0.48% \$2.331.360 \$7.532 (\$6,468) (\$442)(\$218,846)\$2,806,470 Vanguard Target Retmnt 2055 Fd 3.96% (\$69.020)3.93% \$23,745,125 \$1,009,647 \$19,196 (\$233,916) (\$3,536) (\$1,639,214) \$22,828,282 Vanguard Target Retmnt 2060 Fd 0.20% \$368,690 0.25% \$1,214,660 \$2,786 (\$2,265)(\$9.265)(\$291) (\$114,149) \$1,460,166 Vanguard Target Retmnt 2065 Fd \$135,131 0.02% \$48,262 \$1,006 (\$1,046) \$0 (\$23)(\$13,346) \$169,985 0.03% Vanguard Target Retmnt Incm Fd \$7.227.058 1.21% \$124,723 \$9,126 \$10,515,912 (\$166,882) \$16,839,340 2.90% (\$2,484)(\$868,113)American Funds American Mutual Fu \$21,489,493 3.59% \$202,425 \$585,245 (\$468.328)3.53% \$29,148 (\$3,014) (\$1,345,676) \$20,489,292 American Funds Fndmntl Invstrs Fnc 7.32% 7.06% \$43,878,235 \$255,177 \$28,030 (\$544,408) (\$341,383) (\$6,231) (\$2,216,478) \$41,052,941

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

457 Plan activity

61869-1-San Mateo County Deferred Compensation Plan



		Plan Activity July 01, 2022 through September 30, 2022									
Investment Options	Balances as of 6/30/2022	Percentage*	Contributions	Other Activity	Transfers	Distributions	Expenses**	Investment Income	Balances as of F 9/30/2022	Percentage	
Parnassus Core Equity Fund	\$8,044,352	1.34%	\$150,495	\$14,044	(\$128,664)	(\$175,886)	(\$1,149)	(\$530,497)	\$7,372,695	1.27%	
Vanguard Institutional Index Fund	\$29,614,324	4.94%	\$381,617	\$34,376	\$7,746	(\$348,614)	(\$4,363)	(\$1,452,944)	\$28,232,141	4.86%	
Vanguard Total Stock Mkt Index Fd	\$21,604,315	3.60%	\$415,702	\$27,394	(\$674,283)	(\$146,732)	(\$3,332)	(\$930,050)	\$20,293,012	3.49%	
American Funds Grth Fund of America	\$37,415,228	6.24%	\$339,412	\$47,932	(\$247,940)	(\$271,313)	(\$5,603)	(\$964,287)	\$36,313,429	6.25%	
American Century Mid Cap Value Fund	\$6,761,604	1.13%	\$76,668	\$30,300	\$153,473	(\$92,627)	(\$976)	(\$390,879)	\$6,537,562	1.13%	
Vanguard Mid Cap Index Fund	\$8,623,371	1.44%	\$125,499	\$11,673	(\$96,466)	(\$51,644)	(\$1,300)	(\$354,131)	\$8,257,003	1.42%	
MassMutual Mid Cap Growth Fund	\$14,041,313	2.34%	\$123,616	\$13,977	(\$107,049)	(\$81,726)	(\$2,018)	(\$466,193)	\$13,521,920	2.33%	
Boston Partners Sm Cap Val II Fd	\$1,001,598	0.17%	\$23,395	\$2,710	(\$57,429)	(\$18,380)	(\$161)	(\$51,966)	\$899,765	0.15%	
Vanguard Small Cap Index Fund	\$12,238,546	2.04%	\$206,870	\$15,598	(\$91,691)	(\$269,747)	(\$1,781)	(\$291,316)	\$11,806,480	2.03%	
Harbor Small Cap Growth Fund	\$6,154,564	1.03%	\$99,831	\$10,349	(\$106,983)	(\$80,826)	(\$927)	(\$44,395)	\$6,031,612	1.04%	
American Fnds Cap Wld Gr and Inc Fd	\$10,684,389	1.78%	\$126,467	\$12,655	(\$58,375)	(\$159,398)	(\$1,523)	(\$759,051)	\$9,845,165	1.69%	
Vanguard Developed Markets Index Fo	\$4,087,277	0.68%	\$105,239	\$12,845	\$124,879	(\$240,435)	(\$587)	(\$414,563)	\$3,674,653	0.63%	
Amer Funds EuroPacific Growth Fund	\$8,638,368	1.44%	\$126,616	\$14,321	(\$1,979)	(\$74,181)	(\$1,233)	(\$808,292)	\$7,893,621	1.36%	
Invesco Developing Markets Fund	\$2,915,870	0.49%	\$84,992	\$7,000	\$30,644	(\$56,297)	(\$401)	(\$287,605)	\$2,694,203	0.46%	
Invesco Real Estate Fund	\$3,457,851	0.58%	\$69,308	\$5,015	(\$91,594)	(\$30,388)	(\$501)	(\$356,850)	\$3,052,841	0.53%	
Bank of The West Savings	\$7,256,569	1.21%	\$71,564	\$5,484	(\$230,284)	(\$749,574)	(\$977)	\$8,655	\$6,361,437	1.09%	
Hartford Healthcare HLS Fund	\$6,203,163	1.03%	\$63,340	\$23,302	(\$204,632)	(\$35,024)	(\$865)	(\$266,227)	\$5,783,057	1.00%	
Schwab PCRA	\$4,742,489	0.79%	\$0	\$0	(\$27,113)	\$0	\$0	(\$163,224)	\$4,552,152	0.78%	
Vanguard Utilities Index Fund	\$7,660,994	1.28%	\$84,594	\$13,724	\$445,168	(\$194,989)	(\$1,149)	(\$477,502)	\$7,530,841	1.30%	

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

457 Plan activity

61869-1-San Mateo County Deferred Compensation Plan



	Plan Activity July 01, 2022 through September 30, 2022								
Investment Options	Balances as of Percentage*	Contribution	Other	Transfers	Distributions	Expenses**	Investment	Balances as of	Percentage ¹
	6/30/2022	S	Activity				Income	9/30/2022	
Total	\$599,364,227 100%	\$10,907,753	\$934,153		(\$7,168,642)	(\$86,350)	(\$22,841,686)	\$581,109,454	100%

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

401(a) Plan activity

61869-3-County of San Mateo 401(a) Retirement Plan



		Plan Activity July 01, 2022 through September 30, 2022									
Investment Options	Balances as of 6/30/2022	Percentage*	Contributions	Other Activity	Transfers	Distributions	Expenses**	Investment Income	Balances as of F 9/30/2022	Percentage [*]	
SAGIC Core Bond (61869)	\$686,488	7.50%	\$5,435	(\$365)	\$35,220	(\$27,012)	(\$96)	\$4,144	\$703,815	7.89%	
PIMCO Long-Term Real Return Fund	\$15,480	0.17%	\$541	\$0	\$140	\$0	(\$2)	(\$1,845)	\$14,314	0.16%	
PIMCO Total Return Fund	\$21,354	0.23%	\$912	\$0	(\$1,269)	\$0	(\$3)	(\$1,031)	\$19,963	0.22%	
Vanguard Total Bond Mrkt Index Fund	\$33,669	0.37%	\$2,235	\$0	(\$1,164)	\$0	(\$5)	(\$1,617)	\$33,118	0.37%	
MassMutual High Yield Fund	\$4,309	0.05%	\$272	\$0	\$351	\$0	(\$1)	(\$64)	\$4,867	0.05%	
Closed Vanguard Target Retmnt	\$215,940	2.36%	\$98	\$0	(\$216,951)	\$0	\$0	\$913	\$0	0.00%	
Vanguard Target Retmnt 2020 Fd	\$228,036	2.49%	\$49,356	\$0	\$0	(\$26,418)	(\$33)	(\$13,411)	\$237,531	2.66%	
Vanguard Target Retmnt 2025 Fd	\$615,269	6.72%	\$8,903	(\$1,570)	\$0	(\$3,825)	(\$88)	(\$34,748)	\$583,940	6.55%	
Vanguard Target Retmnt 2030 Fd	\$1,169,545	12.78%	\$48,184	(\$1,728)	\$0	(\$68,470)	(\$129)	(\$67,512)	\$1,079,890	12.11%	
Vanguard Target Retmnt 2035 Fd	\$877,038	9.58%	\$27,780	(\$21,669)	\$85	(\$31,562)	(\$123)	(\$51,603)	\$799,947	8.97%	
Vanguard Target Retmnt 2040 Fd	\$142,775	1.56%	\$40,819	\$0	\$1,162	\$0	(\$40)	(\$12,687)	\$172,029	1.93%	
Vanguard Target Retmnt 2045 Fd	\$1,606,930	17.56%	\$67,941	(\$1,856)	(\$6,025)	\$0	(\$247)	(\$110,270)	\$1,556,473	17.45%	
Vanguard Target Retmnt 2050 Fd	\$263,338	2.88%	\$83,091	\$0	\$0	\$0	(\$42)	(\$25,169)	\$321,217	3.60%	
Vanguard Target Retmnt 2055 Fd	\$2,089,235	22.82%	\$71,820	(\$2,814)	\$0	(\$5,939)	(\$298)	(\$144,187)	\$2,007,816	22.52%	
Vanguard Target Retmnt 2060 Fd	\$113,465	1.24%	\$31,155	(\$4,453)	(\$1,158)	\$0	(\$17)	(\$9,974)	\$129,017	1.45%	
Vanguard Target Retmnt 2065 Fd	\$5,035	0.06%	\$2,606	\$0	\$0	\$0	(\$1)	(\$561)	\$7,079	0.08%	
Vanguard Target Retmnt Incm Fd	\$4,424	0.05%	\$865	\$0	\$216,908	\$0	(\$31)	(\$11,295)	\$210,870	2.36%	
American Funds American Mutual Fund	\$43,970	0.48%	\$1,398	\$0	(\$278)	(\$430)	(\$6)	(\$2,863)	\$41,791	0.47%	
American Funds Fndmntl Invstrs Fnd	\$22,018	0.24%	\$1,140	\$0	\$67	\$0	(\$3)	(\$1,310)	\$21,912	0.25%	

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

401(a) Plan activity

61869-3-County of San Mateo 401(a) Retirement Plan



	Plan Activity July 01, 2022 through September 30, 2022										
Investment Options	Balances as of 6/30/2022	Percentage*	Contributions	Other Activity	Transfers	Distributions			Balances as of F 9/30/2022	'ercentage	
Parnassus Core Equity Fund	\$53,801	0.59%	\$3,184	\$0	\$137	\$0	(\$8)	(\$4,196)	\$52,919	0.59%	
Vanguard Institutional Index Fund	\$244,292	2.67%	\$19,004	(\$1,491)	(\$17,148)	(\$413)	(\$35)	(\$11,851)	\$232,358	2.61%	
Vanguard Total Stock Mkt Index Fd	\$161,264	1.76%	\$9,871	(\$1,463)	\$153	\$0	(\$24)	(\$8,533)	\$161,268	1.81%	
American Funds Grth Fund of America	\$67,249	0.73%	\$3,626	\$0	\$288	\$0	(\$10)	(\$2,554)	\$68,598	0.77%	
American Century Mid Cap Value Func	\$19,053	0.21%	\$2,433	\$0	\$1,375	\$0	(\$3)	(\$1,380)	\$21,478	0.24%	
Vanguard Mid Cap Index Fund	\$60,937	0.67%	\$2,511	\$0	\$243	\$0	(\$9)	(\$3,252)	\$60,430	0.68%	
MassMutual Mid Cap Growth Fund	\$39,505	0.43%	\$3,504	\$0	(\$401)	\$0	(\$6)	(\$1,614)	\$40,988	0.46%	
Boston Partners Sm Cap Val II Fd	\$17,284	0.19%	\$648	\$0	(\$76)	\$0	(\$3)	(\$1,035)	\$16,819	0.19%	
Vanguard Small Cap Index Fund	\$86,149	0.94%	\$2,373	\$0	\$613	\$0	(\$13)	(\$2,942)	\$86,180	0.97%	
Harbor Small Cap Growth Fund	\$9,267	0.10%	\$559	\$0	\$317	\$0	(\$1)	(\$146)	\$9,996	0.11%	
American Fnds Cap Wld Gr and Inc Fd	\$13,890	0.15%	\$553	\$0	\$598	\$0	(\$2)	(\$1,469)	\$13,570	0.15%	
Vanguard Developed Markets Index Fc	\$52,255	0.57%	\$4,401	\$0	\$1,808	\$0	(\$7)	(\$6,084)	\$52,373	0.59%	
Amer Funds EuroPacific Growth Fund	\$15,953	0.17%	\$430	\$0	\$441	\$0	(\$2)	(\$1,572)	\$15,250	0.17%	
Invesco Developing Markets Fund	\$30,659	0.33%	\$1,626	\$0	(\$808)	\$0	(\$4)	(\$3,082)	\$28,392	0.32%	
Invesco Real Estate Fund	\$22,932	0.25%	\$1,137	\$0	\$18	\$0	(\$3)	(\$2,610)	\$21,475	0.24%	
Bank of The West Savings	\$40,191	0.44%	\$799	\$0	(\$20,501)	\$0	(\$4)	\$46	\$20,530	0.23%	
Hartford Healthcare HLS Fund	\$8,550	0.09%	\$351	\$0	\$2	\$0	(\$1)	(\$427)	\$8,475	0.10%	
Vanguard Utilities Index Fund	\$51,814	0.57%	\$7,040	\$0	\$5,854	\$0	(\$8)	(\$4,274)	\$60,425	0.68%	
Total	\$9,153,363	100%	\$508,601	(\$37,409)		(\$164,068)	(\$1,310)	(\$542,064)	\$8,917,113	100%	

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

457 and 401(a) OBRA Plan activity

San Mateo County 457 and 401(a) Part Time, Seasonal and Temporary Plans Summary



		Plan Activity July 01, 2022 through September 30, 2022							
Investment Options	Balances as of	Percentage*	Contributions	Transfers	Distributions	Expenses**	Investment	Balances as of	Percentage*
457 OBRA Plan	6/30/2022						Income		
SAGIC (61869OB)	\$14,811,798	100.00%	\$897,586	\$0	(\$251,416)	(\$2,151)	\$43,835	\$15,499,652	100.00%
Total	\$14,811,798	100%	\$897,586		(\$251,416)	(\$2,151)	\$43,835	\$15,499,652	100%

		Plan Activity July 01, 2022 through September 30, 2022							
Investment Options	Balances as of P	Percentage*	Contributions	Transfers	Distributions	Expenses**	Investment	Balances as of	Percentage*
401(a) OBRA Plan	6/30/2022						Income		
SAGIC (61869OB)	\$10,395,461	100.00%	\$0	\$0	(\$115,756)	(\$267)	\$29,879	\$10,309,318	100.00%
Total	\$10,395,461	100%	\$0		(\$115,756)	(\$267)	\$29,879	\$10,309,318	100%

^{*}Due to rounding, percentages may not total 100 percent.

^{**}The expenses shown reflect expenses deducted from plan assets. Does not include expenses billed directly to the plan sponsor or expenses related to the expense ratio of investments under the plan.

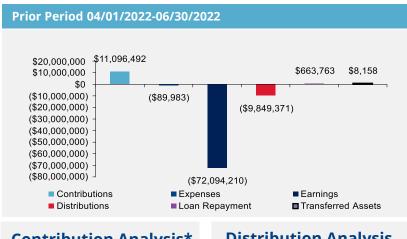
Cash Flow Analysis

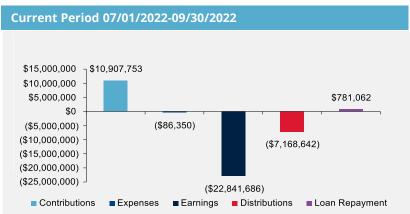
61869-1-San Mateo County Deferred Compensation Plan

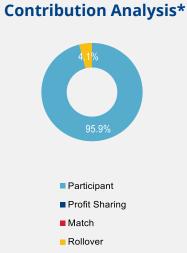


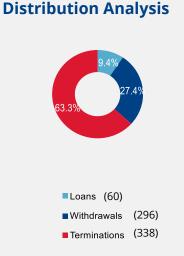
Cash flow

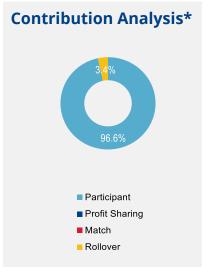
Cash flow includes all inflows and outflows of dollars from the plan by active and terminated employees as applicable and the impact of cash flow on participant balances.

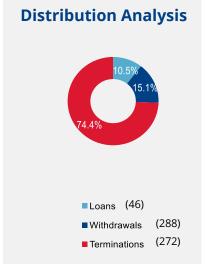












^{*}The Contribution Analysis Pie Charts display the percentage of the combined dollar value of the Contributions & Loan Repayments

457 Plan Asset Allocation

61869-1-San Mateo County Deferred Compensation Plan



The balances reflected are based on plan participant status. The participant balances do not include any outstanding loan amounts. The investment selection percentage reflect participants with an active status. Due to rounding the percentage may not total 100%

		1	PARTICIPANTS					
Investment Options	Active	Beneficiary	Retired	Terminated	QDRO	Participants in Option as of 06/30/2022	Participants in Option as of 09/30/2022	Investment Selection
SAGIC Core Bond (61869)	\$50,162,199	\$2,030,673	\$16,488,268	\$84,631,256	\$316,360	2,375	2,389	6.5%
PIMCO Long-Term Real Return Fund	\$1,729,050	\$4,464	\$45,761	\$1,561,159	\$4,569	489	502	0.3%
PIMCO Total Return Fund	\$4,988,922	\$143,359	\$890,480	\$5,332,407	\$2,450	874	869	0.7%
Vanguard Total Bond Mrkt Index Fund	\$4,492,361	\$0	\$452,861	\$2,679,277	\$12,010	582	581	0.6%
MassMutual High Yield Fund	\$656,856	\$0	\$2,225	\$515,842	\$0	203	210	0.1%
Vanguard Target Retmnt 2020 Fd	\$698,372	\$0	\$26,037	\$36,874	\$0	93	93	1.6%
Vanguard Target Retmnt 2025 Fd	\$21,769,110	\$73,894	\$983,610	\$12,502,067	\$24,705	1,008	999	5.2%
Vanguard Target Retmnt 2030 Fd	\$2,055,957	\$0	\$0	\$152,802	\$0	232	241	3.7%
Vanguard Target Retmnt 2035 Fd	\$28,075,383	\$77	\$67,073	\$7,268,441	\$17,359	1,392	1,378	9.4%
Vanguard Target Retmnt 2040 Fd	\$1,941,433	\$0	\$0	\$453,575	\$0	325	332	5.0%
Vanguard Target Retmnt 2045 Fd	\$26,604,490	\$21,763	\$6,424	\$4,866,037	\$21,096	1,660	1,664	12.0%
Vanguard Target Retmnt 2050 Fd	\$2,702,045	\$0	\$0	\$104,425	\$0	528	552	8.6%
Vanguard Target Retmnt 2055 Fd	\$19,091,868	\$32,571	\$32,353	\$3,671,491	\$0	2,407	2,425	14.0%
Vanguard Target Retmnt 2060 Fd	\$1,331,248	\$0	\$0	\$128,919	\$0	487	546	9.6%
Vanguard Target Retmnt 2065 Fd	\$162,320	\$0	\$0	\$7,665	\$0	266	298	6.1%
Vanguard Target Retmnt Incm Fd	\$4,286,960	\$824,124	\$4,787,864	\$6,939,224	\$1,167	434	746	1.5%
American Funds American Mutual Fund	\$11,001,350	\$129,560	\$1,240,700	\$8,085,111	\$32,570	1,055	1,066	1.0%
American Funds Fndmntl Invstrs Fnd	\$17,312,838	\$584,145	\$4,287,850	\$18,824,503	\$43,605	1,350	1,340	1.5%
Parnassus Core Equity Fund	\$4,592,046	\$13,283	\$581,912	\$2,185,453	\$0	714	717	0.7%

Total Participants 10068: 6833 Active, 50 Beneficiary, 266 Retired, 2903 Terminated, 16 QDRO

Contracts with multiple plans may results in participants maintaining balances in more than one plan.

457 Plan Asset Allocation

61869-1-San Mateo County Deferred Compensation Plan



The balances reflected are based on plan participant status. The participant balances do not include any outstanding loan amounts. The investment selection percentage reflect participants with an active status. Due to rounding the percentage may not total 100%

			PARTICIPANTS						
Investment Options	Active	Active Beneficiary Retir		Terminated QDRO		Participants in Option as of 06/30/2022	Participants in Option as of 09/30/2022	Investment Selection	
Vanguard Institutional Index Fund	\$16,047,855	\$435,678	\$1,622,897	\$10,110,479	\$15,231	985	980	1.6%	
Vanguard Total Stock Mkt Index Fd	\$15,357,372	\$71,277	\$680,676	\$4,183,687	\$0	880	884	1.9%	
American Funds Grth Fund of America	\$17,449,183	\$316,803	\$3,432,575	\$15,030,289	\$84,578	1,323	1,319	1.8%	
American Century Mid Cap Value Fund	\$3,444,426	\$12,357	\$218,654	\$2,861,170	\$955	695	703	0.3%	
√anguard Mid Cap Index Fund	\$4,777,553	\$74,017	\$555,297	\$2,848,777	\$1,359	772	774	0.6%	
MassMutual Mid Cap Growth Fund	\$6,886,384	\$159,131	\$1,065,406	\$5,382,381	\$28,619	1,009	998	0.7%	
Boston Partners Sm Cap Val II Fd	\$692,018	\$5,523	\$22,213	\$180,011	\$0	483	484	0.2%	
√anguard Small Cap Index Fund	\$6,886,407	\$153,353	\$468,308	\$4,296,766	\$1,646	978	974	0.8%	
Harbor Small Cap Growth Fund	\$3,941,702	\$27,973	\$130,421	\$1,914,764	\$16,751	932	927	0.5%	
American Fnds Cap Wld Gr and Inc Fd	\$5,927,661	\$46,263	\$377,286	\$3,481,407	\$12,550	890	886	0.6%	
Vanguard Developed Markets Index Fd	\$2,669,372	\$0	\$112,351	\$890,863	\$2,067	591	594	0.5%	
Amer Funds EuroPacific Growth Fund	\$4,080,467	\$7,854	\$451,291	\$3,345,903	\$8,105	874	872	0.5%	
nvesco Developing Markets Fund	\$1,840,897	\$290	\$85,618	\$763,651	\$3,747	679	679	0.3%	
nvesco Real Estate Fund	\$1,777,038	\$7,947	\$84,541	\$1,183,316	\$0	716	717	0.3%	
Bank of The West Savings	\$3,191,267	\$0	\$563,913	\$2,606,257	\$0	246	247	0.4%	
Hartford Healthcare HLS Fund	\$2,874,465	\$22,191	\$292,214	\$2,593,337	\$850	373	365	0.3%	
Schwab PCRA	\$1,325,645	\$0	\$499,819	\$2,726,688	\$0	61	60		
√anguard Utilities Index Fund	\$3,385,515	\$111,702	\$494,268	\$3,536,664	\$2,693	405	421	0.5%	
Total	\$306,210,036	\$5,310,273	\$41,051,166	\$227,882,938	\$655,042			100%	

Contracts with multiple plans may results in participants maintaining balances in more than one plan.

Participant average balances

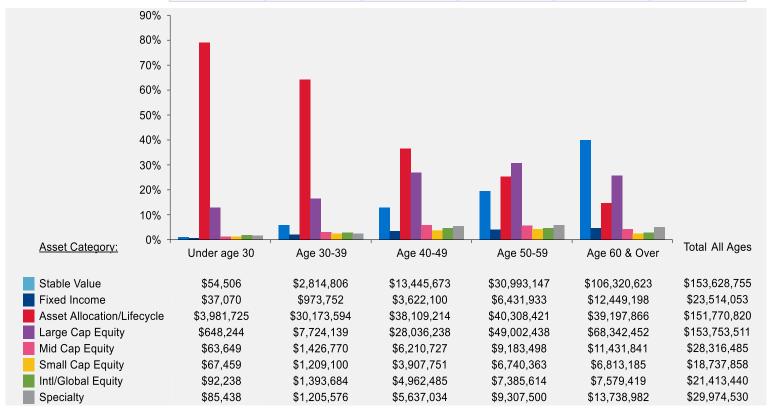
61869-1-San Mateo County Deferred Compensation Plan



Average account balance

The average participant account balance is based on the balance of all actively employed and terminated plan participants at the end of the period. The balances do not include any outstanding loan amounts.

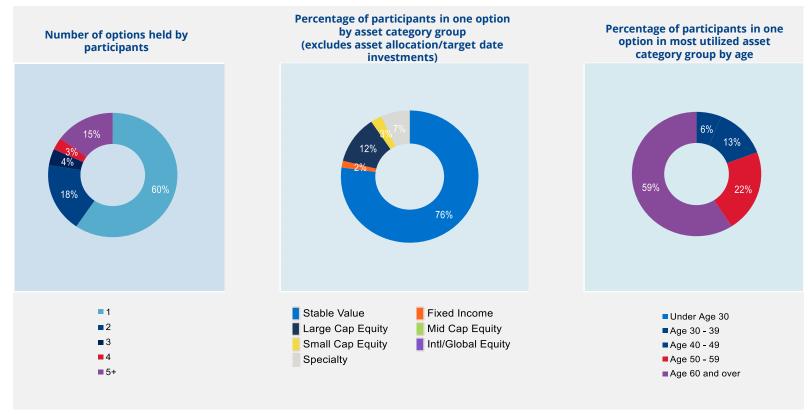
Age	Under age 30	Age 30-39	Age 40-49	Age 50-59	Age 60 and Over	Total
Number of Participants	1,321	2,438	2,179	1,987	2,143	10,068
Group Balance	\$5,030,330	\$46,921,421	\$103,931,222	\$159,352,915	\$265,873,567	\$581,109,455
Average Account Balance	\$3,808	\$19,246	\$47,697	\$80,198	\$124,066	\$57,718



Asset Allocation

61869-1-San Mateo County Deferred Compensation Plan

9	/30/2020	9/30/2021	09/30/2022	Industry Average *
Average number of options	5.4	4.9	5.0	5.5
Number of participants in one option (includes asset allocation investments)	6008	5407	5994	N/A



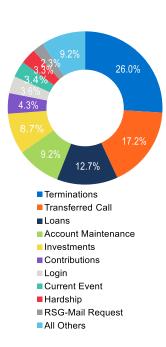
^{*}Source: Hewitt Associates 2016 Universe Benchmarks Report

Participant Interactions

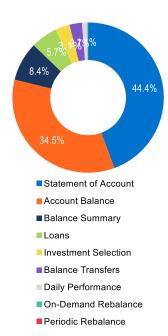
07/01/2022 through 09/30/2022

Total Visits Toll Free 800# 146 Call Center 1,182 Website 10,122

Toll Free 800#



Website (My Account)



Highlights - Retirement Services Call Center

Transferred Call	148
Loans	120
RSG-Retirement Options	103
Investments	81
Participant Indicative	46

Loans

61869-1-San Mateo County Deferred Compensation Plan



Account reduction loans

The loan information represents all outstanding loans for actively employed and terminated employees. Outstanding loan amounts include new loans issued for the given time period. Loans that have been categorized as a distribution are not included.

	Your Plan 06/30/2022	Your Plan 09/30/2022	All industries average		
Number of loans allowed	1	1	1.0*		
Average number of loans per participant with loans	1	1	Not available		
Percentage of participants with loans	6.2%	6.%	23.2%*		
Average loan balance	\$11,956	\$11,853	\$10,642*		
Percentage of plan assets loaned	1.2%	1.3%	1.8%*		
	Your 06/30	Plan /2022	Your Plan 09/30/2022		
Total number of participants with loans	61	11	603		
Total number of outstanding loans	62	23	615		
Average account balance of participants with loar	\$69,	106	\$65,358		
Total value of outstanding loans	\$7,44	3,325	\$7,289,749		

Current Loan Interest Rate = 7.25%

^{*}Source: PSCA's 62nd Annual Survey of PS and 401(k) Plans

Miscellaneous Statistics

Activity	Total #	Total \$	
Total 4Q TRAK Calculation	64		
Managed Accounts added in Q3 2022 Total Managed Accounts	4 95	\$162,025.53 \$7,149,037.03	
3Q Hardships Processed	3	\$59,945.78	
Rollovers In	18	\$400,144.83	
Purchase of Service Credit to SamCera	7	\$37,239.19	
Rollovers Out	37	\$3,663,952.98	
QDRO	0	\$0	
401(a) Forfeiture Balance as of 09/30/2022	452	\$660,194.11	

Date	Location	In-person Group	Individual One-on-one	Participant Action						
		Meeting Attendees	Session Attendees	Sign-up	Save More	Asset Allocation	Consolidate	TRAK	MMR	
7/5	NEBO	26		12	7		5			
7/12	LMS	-								
7/13	Teams		4		2	3	1	2	2	
7/14	SamCERA	80		3	11	16	8			
7/14	LMS/Team s	4	2		5	2	1	2	4	
7/18	Teams		4		2	3	1	3		
7/19	NEBO- 455	12		7	4		5			
7/19	LMS	4		1	3	2				
7/20	Teams		1					1		
7/21	Teams		4		2	4	1	4		
7/25	Teams		1		1	1				
7/26	Teams		2		1	2	1			
7/27	Teams		1			1				
7/28	Teams		5		1	3	1	3	2	
7/28	LMS	6			3	4	2			
12	15	106	24	23	32	41	26	15	8	

Date	Location	In-person Group	Individual One-on-one		F	articipant	Action		
		Meeting Attendees	Session Attendees	Sign-up	Save More	Asset Allocation	Consolidate	TRAK	MMR
8/1	Teams		3		1	2	2	3	1
8/2	NEBO	34							
8/2	LMS/Team s	10	1		2	4	4	1	10
8/3	Teams		2		1	2	1	2	
8/8	Teams		3		1	3	2	2	1
8/9	Teams		2		2	1		2	
8/10	Teams		4		1	3	1	3	
8/11	LMS	9		1	4		4		9
8/15	Teams		1						
8/16	NEBO/LMS	11	1	5	2	1	3	1	1
8/17	Teams		1			1		1	
8/18	NHO/LMS	11		5	3	3	4	3	6
8/22	Teams		3		2	3	1	3	
8/23	LMS/Team s	-	3		1	2	1	3	
8/24	Teams		6		3	4	2	4	
8/29	Teams		3			2		3	1
8/30	NEBO	15		6	3		4		
8/30	LMS/Team s	16	3		2	3		3	16
8/31	Teams		4		1	1	1	4	
17	22	101	40		29	35	30	38	45

Date	Location	In-person Group	Individual One-on-one		F	articipant	Action		
		Meeting Attendees	Session Attendees	Sign-up	Save More	Asset Allocation	Consolidate	TRAK	MMR
9/1	Teams		2		1	1	2	2	
9/5	Teams		3		1	3		3	
9/8	NHO	2		2			1		
9/13	NEBO	26		15			7		
9/13	Teams		2			2		2	
9/14	Teams		5		1	4		4	
9/27	NEBO-455	16							
6	7	44	12	17	3	10	10	- 11	

Date	Date Location In-person	Individual One-on-one	Participant Action						
Julio	2504511	Meeting Attendees	Session Attendees	Sign-up	Save More	Asset Allocation	Consolidate	TRAK	MMR
JUL	13	106	24	23	32	41	26	15	8
AUG	22	101	40	17	29	35	30	38	45
SEP	7	44	12	17	3	10	10	11	0
Total	42	251	76	57	64	86	66	64	53

Additional Special Services	
Pre-Retirement Eligibility Reports	23
Pre-Retirement Eligibility Use	19*
Service Credit Purchases:	20*

^{*} Based on reports from County Benefits and SamCERA, may not match transactional data



County	of San	Mateo	Qua	rterly	Cont	ribution Rep	ort

Contract #	Calendar Year	Quarter	EE Pre-Tax	EE Roth	Total
61869-1	2022	3	\$8,425,327.68	\$2,219,115.79	\$10,644,443.47
61869-1	2022	2	\$8,683,490.26	\$1,999,791.80	\$10,683,282.06
61869-1	2022	1	\$8,432,260.52	\$2,055,770.74	\$10,488,031.26
61869-1	2021	4	\$7,835,654.18	\$1,841,460.76	\$9,677,114.94
61869-1	2021	3	\$8,360,172.49	\$2,026,613.54	\$10,386,786.03
61869-1	2021	2	\$8,284,598.00	\$1,772,728.35	\$10,057,326.35
61869-1	2021	1	\$7,611,326.91	\$1,749,303.80	\$9,360,630.71
61869-1	2020	4	\$7,201,592.79	\$1,581,629.26	\$8,783,222.05
61869-1	2020	3	\$7,514,493.87	\$1,670,142.79	\$9,184,636.66
61869-1	2020	2	\$7,097,890.84	\$1,480,832.91	\$8,578,723.75
61869-1	2020	1	\$8,253,915.74	\$1,765,037.38	\$10,020,264.11
61869-1	2019	4	\$5,872,601.95	\$1,190,537.43	\$7,063,139.38
61869-1	2019	3	\$7,033,269.71	\$1,424,921.77	\$8,458,191.48
61869-1	2019	2	\$6,771,702.24	\$1,248,882.22	\$8,020,584.46
61869-1	2019	1	\$7,562,049.16	\$1,442,926.53	\$9,004,975.69
61869-1	2018	4	\$5,523,800.28	\$992,490.95	\$6,516,291.23
61869-1	2018	3	\$6,725,469.48	\$1,150,112.39	\$7,875,581.87
61869-1	2018	2	\$6,600,516.54	\$1,000,384.62	\$7,600,901.16
61869-1	2018	1	\$7,038,132.82	\$1,178,579.41	\$8,216,712.23
61869-1	2017	4	\$5,275,596.83	\$845,837.78	\$6,121,434.61
61869-1	2017	3	\$6,134,167.32	\$978,802.21	\$7,112,969.53
61869-1	2017	2	\$5,717,738.53	\$857,348.96	\$6,575,087.49
61869-1	2017	1	\$6,237,144.14	\$974,332.43	\$7,211,476.57
61869-1	2016	4	\$4,690,748.46	\$672,966.46	\$5,363,714.92
61869-1	2016	3	\$5,414,639.16	\$735,646.32	\$6,150,285.48
61869-1	2016	2	\$5,837,856.22	\$738,468.22	\$6,576,324.44
150018 & 61869-1	2016	1	\$4,859,213.43	\$543,647.44	\$5,402,860.87
		Totals:	\$184,995,369.55	\$36,138,312.26	\$221,134,992.80

San Mateo County Q3 2022 Rollover Out Report

Total Rollover Out

(44 transactions)

Plan Number	Subscriber	Payee Name	Post Date	Payee Type	Gross Amount	9/30/2022
	Number				of Distribution	Account Balance
1	1	SamCERA	9/14/2022	457(b) Plan to Plan Transfer	\$3,599.98	\$13,467.06
1	1	SamCERA	9/15/2022	457(b) Plan to Plan Transfer	\$9,429.02	\$14,950.59
1	1	SamCERA	9/1/2022	457(b) Plan to Plan Transfer	\$3,976.74	\$29,472.00
1	1	SamCERA	8/24/2022	457(b) Plan to Plan Transfer	\$3,041.71	\$53,216.77
1	1	SamCERA	9/20/2022	457(b) Plan to Plan Transfer	\$4,969.67	\$7,451.33
1	1	SamCERA	9/23/2022	457(b) Plan to Plan Transfer	\$6,065.70	\$1,563.75
1	1	SamCERA	9/26/2022	457(b) Plan to Plan Transfer	\$6,156.37	\$47,613.45
Subtotal Rollover	Out to SamCE	RA (7 transactions)			\$37,239.19	

	Number	Payee Name	Post Date	Payee Type	Gross Amount of Distribution	9/30/2022 Account Balance
1	1	AMERICAN CENTURY INVESTMENTS	07/25/2022	IRA Rollover	\$16,934.63	\$0.00
1	1	Calpers	08/11/2022	IRA Rollover	\$69.08	\$0.00
1	1	Charles Schwab	07/26/2022	IRA Rollover	\$90,062.55	\$1.04
1	1	Charles Schwab	08/15/2022	IRA Rollover	\$33,737.57	\$0.00
1	1	Empower Trust Company	08/24/2022	IRA Rollover	\$2,643.80	\$0.00
1	1	Empower Trust Company LLC	09/22/2022	IRA Rollover	\$92,471.32	\$0.00
1	1	Fidelity	08/29/2022	IRA Rollover	\$1,784.07	\$0.00
1	1	Fidelity & Guaranty Life	09/09/2022	IRA Rollover	\$524,151.36	\$0.00
1	1	Fidelity Investments	08/10/2022	IRA Rollover	\$794,470.85	\$0.00
1	1	Fidelity Investments	07/11/2022	IRA Rollover	\$619.13	\$0.00
1	1	Fidelity Management Trust Co	09/01/2022	IRA Rollover	\$341,065.80	\$0.00
1	1	FMTC	08/25/2022	IRA Rollover	\$195,362.56	\$0.00
1	2	FMTC	08/31/2022	IRA Rollover	\$37,666.19	\$0.00
1	1	FMTC	07/07/2022	IRA Rollover	\$30,000.00	\$401,779.38
1	1	FMTC	08/04/2022	IRA Rollover	\$2,642.72	\$0.00
1	1	FMTC	08/25/2022	IRA Rollover	\$731.08	\$0.00
1	2	FMTC	08/31/2022	IRA Rollover	\$128.80	\$0.00
1	1	Great West Life Annuity Ins	07/05/2022	Roth IRA Rollover	\$10,000.00	\$102,785.97
1	1	LPL Financial	07/29/2022	IRA Rollover	\$7,946.80	\$0.00
1	1	MassMutual	09/15/2022	Roth IRA Conversion Rollover	\$95,453.41	\$143,216.10
1	1	MassMutual	08/02/2022	IRA Rollover	\$50,000.00	\$0.00
1	1	MassMutual	07/07/2022	Roth IRA Conversion Rollover	\$25,000.00	\$288,962.10
1	1	MassMutual	08/29/2022	IRA Rollover	\$9,237.92	\$0.00
1	1	Nationwide	07/22/2022	IRA Rollover	\$138.21	\$0.00
1	1	Nationwide LIC	07/13/2022	IRA Rollover	\$107,177.91	\$0.23
1	1	Pershing LLC	08/18/2022	IRA Rollover	\$887,527.16	\$0.47
1	1	San Mateo Credit Union	08/09/2022	IRA Rollover	\$58,908.43	\$0.00
1	1	TD Ameritrade	09/02/2022	IRA Rollover	\$5,080.47	\$0.00
1	1	TDA Clearing	08/02/2022	IRA Rollover	\$152,052.14	\$0.09
1	1	Vanguard	09/06/2022	IRA Rollover	\$75,711.61	\$0.00
1	1	Vanguard	07/01/2022	IRA Rollover	\$1,198.22	\$0.00
1	1	Vanguard	07/21/2022	IRA Rollover	\$1,181.74	\$0.00
1	1	Vanguard	07/05/2022	IRA Rollover	\$59.09	\$0.00
1	1	Vanguard	07/01/2022	IRA Rollover	\$6.63	\$0.00
1	1	Vanguard Fiduciary Trust Co.	08/11/2022	IRA Rollover	\$11,741.34	\$0.00
1	1	Vanguard.	07/21/2022	Roth IRA Rollover	\$823.02	\$0.00
1	1	Voya Trust Company	08/19/2022	IRA Rollover	\$167.37	\$0.00
Subtotal Rollover	Out to Other	(37 transactions)			\$3,663,952.98	

\$3,701,192.17



Communications Planning

County of San Mateo | November 2022

Armando Llanes, Senior Communications Strategist

2022 / 2023 calendars



2022 participant communications delivered

Activity	ty Goal		Tactics	Timing
Participation campaign	Increase engagement	Non-participating employee	Email	February
Market Volatility campaign	Stay the course	Participants	Email	March
NAGDCA Communications Award Entry	N/A	N/A	N/A	April
Participant and non-participant survey	Obtain participant feedback	Participants and employees	Email and Survey Monkey	April/May
Beneficiary campaign	Confirm and update beneficiary info	Participants	Email	May
Enrollment Guide (development)	Assist newly eligible with resources to enroll	Eligible employees	Email / guide	N/A
Investing campaign	Basic investment education	Participants	Email	September
Pre migration communication	Awareness	Participants	Email and postcard	October
lew custom participant website: mpower.com/sanmateocounty Expanded online tools		All employees	Web	November
Post migration communication Awareness		Participants	Email and postcard	November

Fiscal Year 2022 Educational Meeting Results

Date	Location	Group on Meeting Attendees	One-on-one Session Attendees	Participant Action					
Dule	Localion			Sign-up	Save More	Asset Allocation	Consol.	TRAK	MMR
ОСТ	15	121	31	45	60	49	35	18	161
NOV	12	59	23	37	22	20	24	16	72
DEC	16	151	30	25	33	42	23	18	165
JAN	14	38	27	33	22	18	14	15	3
FEB	9	46	13	35	14	9	10	12	2
MAR	13	87	26	47	18	19	20	16	17
APR	12	40	40	27	18	20	11	18	8
MAY	13	73	29	48	8	26	22	19	18
JUN	13	66	28	39	23	19	23	19	22
JUL	13	106	24	23	32	41	26	15	8
AUG	22	101	40	17	29	35	30	38	45
SEP	7	44	12	17	3	10	10	11	0
Total	159	932	323	393	271	308	248	215	521

2023 participant communications & engagement calendar

January/ February

Campaign:

Beneficiary

Encourage participants to check or update beneficiary info

Seminars:

Maximize contributions/catch-up

Saving early

March/April

Campaign:

Meet with your Advisor

Promote 1:1 meetings

Seminars:

Achieving Financial Wellness

Myths about retirement plans –

Future Healthcare costs

May/June

Campaign:

Asset Allocation

Understanding investing basics and diversification

Seminars:

Retirement planning for women

Investing in your retirement account

July/August

Campaign:

Roth campaignGetting to know your

Roth options

Seminars:

Getting to know your Roth options

Personalized Web Experience

September /October

Campaign:

National Retirement Security Month-Multi-campaigns

Seminars:

Moving forward in uncertain times

Pursuing your financial freedom

November/ December

Campaign:

Retirement Readiness

How ready are you?

Seminars:

Retirement Readiness: Are you ready?

Take your investing to the next level

Retirement Readiness Reviews and with retirement plan counselor – ONGOING

Personalized participant communications – AUTOMATED and ONGOING

Participation | Welcome | Complete your profile | See where you stand | Investing | Consolidation | Managed accounts

The Retirement Readiness Review is provided by an Empower representative registered with Empower Advisory Group, LLC and may provide investment counseling and/or recommendations at no additional cost to participants. There is no guarantee provided by any party that use of the review will result in a profit.

FOR PLAN SPONSOR OR FINANCIAL PROFESSIONAL USE ONLY.

2023 participant engagement calendar

Facility Location		Site Visit/Year	Depts Supported	Location
Remote	Virtual	50	ALL	
County Center	455 County Center, RWC	24	HR, Public Works, Finance, Parks, ISD, Ag, Retirees	
San Mateo Medical Center	225 39 th Ave, SMO	24	Medical, Med Systems, Retirees	
County Center	400 County Center, RWC	24	DA, Sheriffs, Courts, Medical	
Youth Service Center	222 Paul Scannell Rd, SMO	24	Sworn/Un-sworn staff	
Health Systems	801 Gateway, SSF	24	OES, EMS, Health Systems staff	801
SMSO- Maguire / Maple St	300 Bradford, RWC 100 Blomquist, RWC	24	Sworn/ Un-sworn Staff	
HSA – North County	271 92nd St, DC	12	HSA	
HSA- Central County	1 Davis, Belmont 400 Harbor, Belmont	12	HSA, Retirees	

2023 participant engagement calendar

Facility	Location	Site Visit/Year	Depts Supported	Location
HSA- North County	1487 Huntington Ave, SSF	4	HSA	
BHRS/Env. Health	2000 Alameda, SMO	4	Medical, Behavioral Health, Health Systems	
HSA- South County	2500 Middlefield, RWC	4	HSA	
Courts-North County	1050 Mission Rd, SSF	4	Sworn/Un-sworn staff, Probation	
Probation- South County	2415 University Ave, EPA	4	Sworn/Un-Sworn Staff, Library	
Public Works	555 County Center 752 Chestnut, RWC	4	Public Works	
Coastside Clinic	225 Cabrillo Hwy, HMB	4	Medical, SMSO	
Nevin Health Center	375 89 th St, DC	4	Medical, BHRS	

Personalized automated messages



Empower is investing in and enhancing our communications program



More personalized delivery channels



New wording and imagery based on research and campaign results



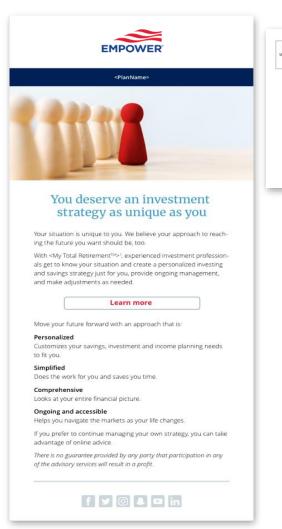
New campaigns that are closely integrated with the new personalized web and app experience



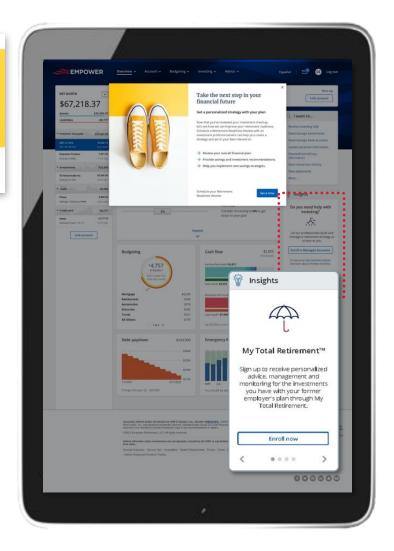
More timely messages

Consistent messages synchronized where your employees will see them

- Email to preferred email address
- Direct mail (print)
- Message at login
- Call from Empower
- Text messaging*
- App push notifications*







Post-migration: automatic messaging is driven in 2 ways

A unique experience for every employee (begins about 4-6 weeks post migration)

Empower your future

Messages delivered on a time schedule based on birthday

Topics

- Do you need help investing?
- Get help with financial wellness
- Benefits of using personalized website
- Save more

Moments that matter

Messages initiated by individual actions

Topics

- Welcome to your retirement plan
- Your retirement savings options (individual exits the workplace organization)
- Welcome to professionally managed accounts (if applicable)
- Offer of a personalized financial review (participant opt in)

This program is a continuous, automated outreach designed to drive engagement with the plan that focuses on key behaviors: enrolling, participating, saving, investing and account management. Personalized messages are sent to employees based on identified needs and recommended next steps. Each message is triggered based on behavior, activity or the reaching of a milestone.

The plan name, logo, phone number and website URL as well as plan features are included in these communications. Metrics will be provided to help us understand engagement and to inform ongoing messaging.

Prioritization

If an individual is eligible for an "Empowering your future" message and a "Moments that matter" message, the "Moments that matter" message takes priority

Consistent messages, synchronized where your employees will see them

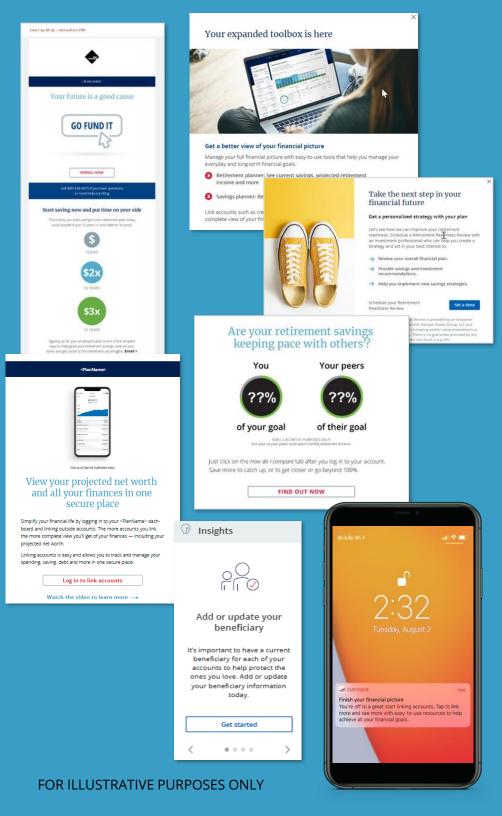
- •Email to preferred email address
- Direct mail (print)
- Message at login
- •Call from Empower

FOR FINANCIAL PROPESSION AND PLAN

CDUNICUD LICE UNILV

Creating a richer dialogue with participants through automated, personalized communications

Goal	Address the needs of all employees based on where they are in their retirement planning stage and time to retire		
Components	 Personalized messaging Multi-touch, auto-triggered Delivered through multiple channels: email, print, web message, app push notification, outbound calling 		
Topics	 Participate in your plan Welcome to your plan Update your beneficiary and profile Benefits of using the website Save more Invest wisely Welcome to My Total Retirement Milestones, including age 50 catch-up Advisory services options Your retirement savings options (for those exiting the workplace 		



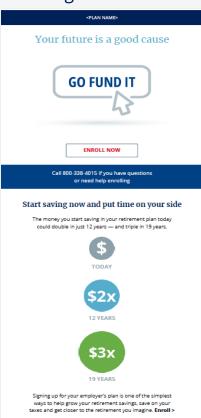
Participate in your retirement plan

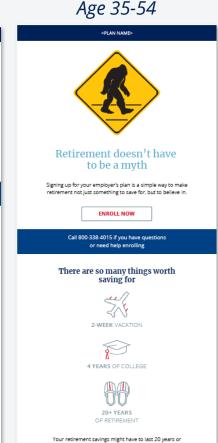
Objective	Join the plan
Channel	Email
Audience	Individuals that are eligible to enroll
Timing	Ongoing — 1x per year

Number of touches: 2 emails

Age 18-34

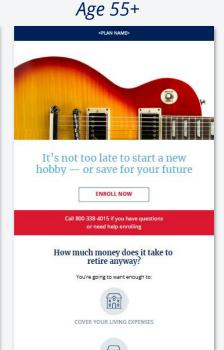
Touch 1





longer. Think about putting the majority of your savings

toward retirement while still saving for other items. Sign up >



MAINTAIN YOUR LIFESTYLE

MAINTAIN YOUR LIFESTYLE

Sign up today - because the way you're saving now might

be enough to cover your living expenses, but not enough to

Touch 2



FOR ILLUSTRATIVE PURPOSES ONLY: This is a demonstration of mathematical rules that approximate the number of years it takes a given investment to double and triple in value. It assumes a \$100 balance and 6% rate of return and is not a guarantee of future

Welcome to your retirement plan

Effectively onboard newly enrolled participants Register account Designate beneficiary **Objective** • Set communication preferences • Use online tools Call us for help Consider advisory services Email Channel Mail (limited) Outbound calling (limited) Newly enrolled DC participants or existing **Audience** participants that are new to Empower Triggered — date of first cash or **Timing** contribution (new participants) or date of first money transfer (plan transition)

Number of touches: 4 emails, 1 mailer, outbound call

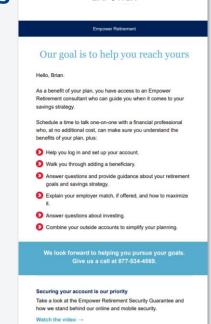
Touch 1



Touch 2



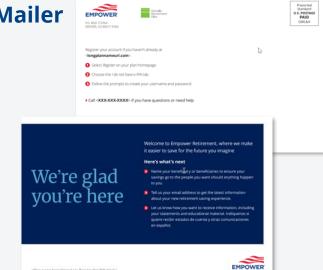
Touch 3



Touch 4



Mailer



Outbound call



Update your beneficiary and profile

Channel Cha

Number of touches: 2 emails

Doesn't take action

«Firstname», finish your profile now to get the most out of your retire

See if your communication preference is up to date

planning experience and to stay in the know when your account needs

EMPOWER Plan Name

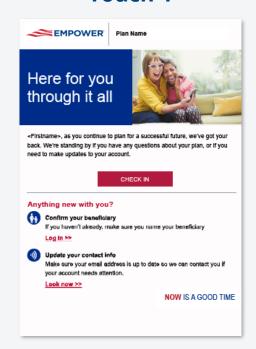
You're so close to

a complete profile

Here's what you need to do

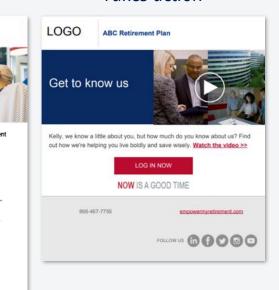
<Log in and explore your dashboard>

Touch 1



Touch 2

Takes action



Mailer

NOW IS A GOOD TIME



Benefits of using the personalized website

Objective	Encourage participants to use web-based planning tools and link accounts for a more complete view of their financial picture	
ChannelEmailPost-login action (PLA)		
Audience	Active and terminated participants on the new web experience	
Timing	Ongoing — 3x per year	

Number of touches: 2 emails, 1 post-login action

Touch 1

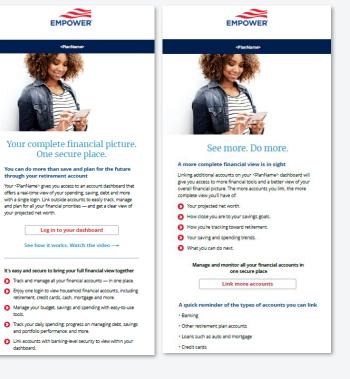
No linked accounts

EMPOWER

One secure place.

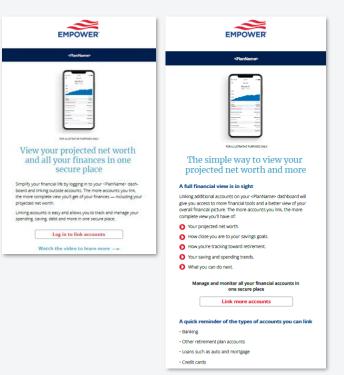
your projected net worth.

Linked accounts

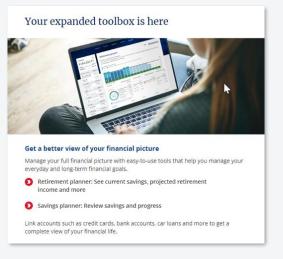


Touch 2

No linked accounts No linked accounts



Post-login action



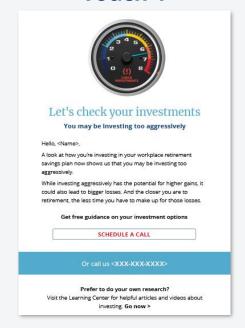
FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

FOR ILLUSTRATIVE PURPOSES ONLY

Invest wisely

Objective	Ensure investments are on track with your goals	
Channel	Email	
Audience	 Active and terminated participants with a balance Not enrolled in a managed account 	
Timing	Ongoing — sent 1x per year	

Number of touches: 2 emails Touch 1

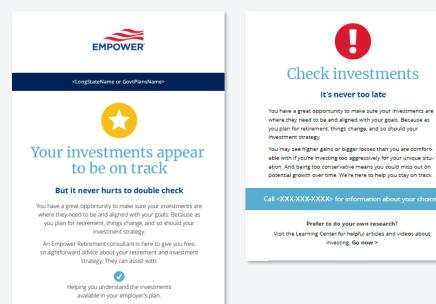


Touch 2

On track

Providing recommendations based on your personal situation.

Need help

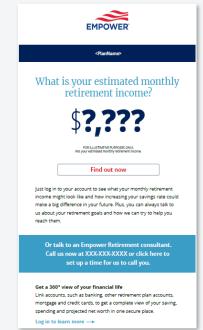


Save more

Objective	Increase contribution rate	
Channel	Email	
Audience	Participants currently saving in their retirement plan and eligible to save more	
Timing	Ongoing — sent 2x per year	

Number of touches: 2 emails

Touch 1



Touch 2

Standard

Personalized





Get help with financial wellness

(comprehensive financial planning)

Objective	Schedule a consultation	
Channel	EmailOutbound calling (limited)Post-login action (PLA)	
Audience	Participants in plans offering financial planning services from RSG who have not enrolled in the service	
Ongoing — sent 2x per year Outbound call only 1x per year		

There is no guarantee provided by any party that participation in any of the advisory services will result in a profit.

Empower Advisory Group, LLC, a registered investment adviser, provides financial planning services using the MoneyGuidePro tool. MoneyGuidePro is not affiliated with Empower Retirement, LLC and its affiliates. Empower Retirement, LLC and its affiliates are not responsible for the third-party content provided.

Online Advice and My Total RetirementTM are part of the Empower Advisory Services suite of services offered by Empower Advisory Group, LLC, a registered investment adviser.

FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

Number of touches: 3 emails, 1 post-login action, outbound call

Touch 1



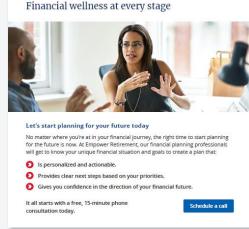
Touch 2



Touch 3



Post-login action (PLA)



Outbound call



FOR ILLUSTRATIVE PURPOSES ONLY

Do you need help investing?

Objective	Drive awareness of the value of Advisory Services OR Schedule a Retirement Readiness Review	
Channel	 Email Mail (limited) Outbound call (limited) Post-login action (PLA) Insight widget 	
Audience	Not enrolled in My Total Retirement or Advisor Managed Accounts	
Timing	Ongoing — 2x per year	

The Retirement Readiness Review is provided by an Empower representative registered with Empower Advisory Group, LLC and may provide investment counseling and/or recommendations at no additional cost to participants. There is no guarantee provided by any party that use of the review will result in a profit.

FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

Number of touches: 4 emails, 1 post-login action, 1 insight widget, 1 mailer, outbound call

Touch 1

Touch 2

No RSG

Touch 3

RSG I

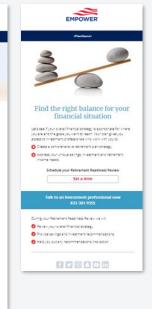
No RSG





RSG







Touch 4

RSG No RSG



Post-login action (PLA)



Mailer



My Total Retirement™ Sign up to receive personalized advice, management and monitoring for the investments you have with your current employer's plan through My Total Retirement.

Enroll now

Insight widget

Insights

Outbound call



FOR ILLUSTRATIVE PURPOSES ONLY

RPA investment advice

Objective	Make an appointment with your retirement plan advisor (RPA) for a Retirement Readiness Review	
Channel	EmailOutbound calling	
Audience	 Participants that may not be invested appropriately for their age Plans with an RPA assigned 	
Timing	Triggered — sent every 270 days	

There is no guarantee provided by any party that participation in any of the advisory services will result in a profit.

Online Advice and My Total RetirementTM are part of the Empower Advisory Services suite of services offered by Empower Advisory Group, LLC, a registered investment adviser.

FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

Number of touches: 2 emails, outbound call

Touch 1



City of Livonia Defined Contribution Retirement Plan

Liz.

You have less than 25% of your account invested in the market, which may mean you are playing it too safe for someone your age. Let's review your investments and talk about ways that could help you generate the income you need in retirement.

There is no better time to schedule your complimentary retirement review. Even if you think you are correctly allocated, it's a good idea to review your investments and talk about ways to help protect your retirement savings.

I am available to meet with you over the phone or by videoconference. During the meeting we will:

- Review your savings level, risk tolerance and current investments and determine whether it might be appropriate to make any changes to help you stay on track to meet your goals.
- · Help you determine at which age you may be able to retire.
- Help you look at all of your income sources to give you a complete picture of your progress toward your future needs.

To schedule a time that is convenient for you, you can call me at 312-415-4742 or simply click below.

SCHEDULE YOUR REVIEW >>

I look forward to meeting you.

Sincerely, Moises Flores Retirement Plan Advisor

Touch 2



City of Livonia Defined Contribution Retirement Plan

Liz

I'm Moises Flores, the Retirement Plan Advisor designated to your City of Livonia Defined Contribution Retirement Plan. I wanted to take a moment to tell you about the personalized retirement analysis that's offered through your plan — at no cost to you.

You may be playing it too safe for someone your age. Let's review your investments and talk about ways that could help you generate the income you need in retirement.

I can also help you answer questions like:

- · Am I on track to meet my retirement goals?
- · Are there other plan features I should be taking advantage of?
- What, if any, impact will Social Security have on my retirement income?
- · Where will my income come from in retirement?

To schedule a time that is convenient for you, you can call me at 312-415-4742 or simply click below.

SCHEDULE YOUR REVIEW >>

I look forward to meeting you.

Sincerely, Moises Flores

Retirement Plan Advisor

Outbound call



FOR ILLUSTRATIVE PURPOSES ONLY

RPA near retiree/retiree

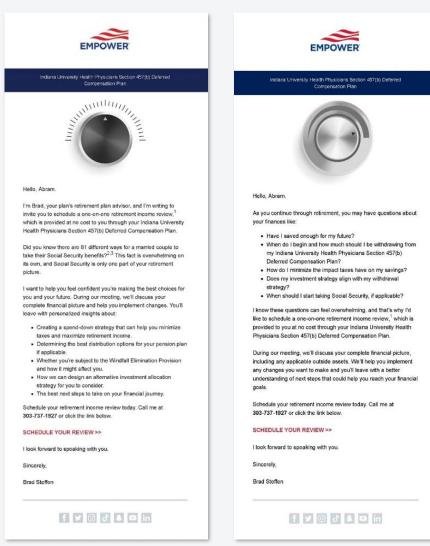
Objective	Make an appointment with your retirement plan advisor (RPA) for a Retirement Income Review	
Channel	EmailOutbound calling	
Audience	 Participants age 50 or older with a minimum account balance of \$50,000 Plans with an RPA assigned 	
Timing	Triggered — sent every 270 days	

There is no guarantee provided by any party that participation in any of the advisory services will result in a profit.

Online Advice and My Total RetirementTM are part of the Empower Advisory Services suite of services offered by Empower Advisory Group, LLC, a registered investment adviser.

FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

Number of touches: 2 emails, outbound call Touch 1 Touch 2







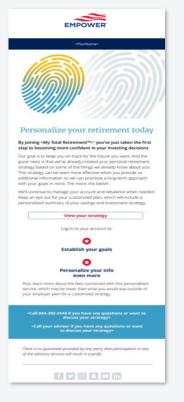
FOR ILLUSTRATIVE PURPOSES ONLY

Welcome to your professionally managed account

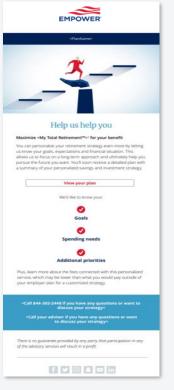
Objective	Welcome to newly enrolled members into the managed account service and encourage them to personalize their profile	
Channel	EmailOutbound callPost-login action (PLA)Welcome kit	
Audience	Newly enrolled in My Total Retirement or Advisor Managed Account	
Timing	Triggered — 1 day after enrollment	

Number of touches: 3 emails, 1 post-login action, 1 welcome kit, outbound call

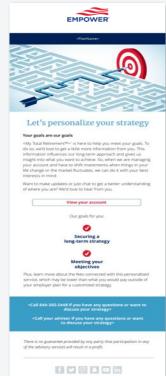
Touch 1



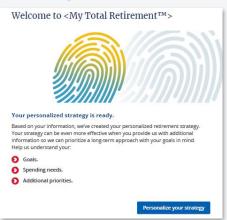
Touch 2



Touch 3



Post-login action (PLA)



Welcome kit



Outbound call



FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

FOR ILLUSTRATIVE PURPOSES ONLY

Engage with your professionally managed account

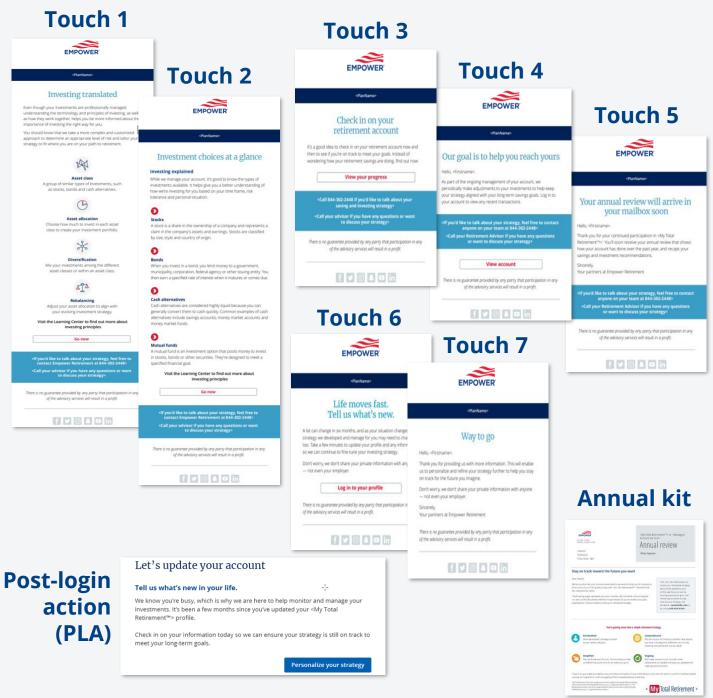
Objective	Provide ongoing engagement with members in advisory services	
Channel	EmailPost-login action (PLA)Annual kit	
Audience	Enrolled in My Total Retirement or Advisor Managed Account	
Timing	Ongoing — 4 emails sent once per year AND Triggered — 3 emails based on activity	

There is no guarantee provided by any party that participation in any of the advisory services will result in a profit.

Online Advice and My Total Retirement[™] are part of the Empower Advisory Services suite of services offered by Empower Advisory Group, LLC, a registered investment adviser.

FOR FINANCIAL PROFESSIONAL AND PLAN SPONSOR USE ONLY.

Number of touches: 7 emails, 1 post-login action, 1 annual kit



FOR ILLUSTRATIVE PURPOSES ONLY

Stay on track when you reach key milestone ages

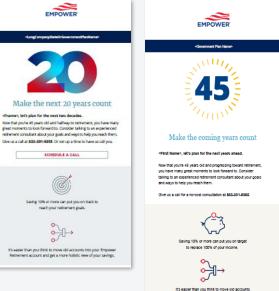
Objective	Call or schedule a consultant with a retirement consultant	
Channel	Email	
Audience	 Active and terminated participants Only available to plans that have opted into Retirement Solutions Group (RSG) services, with outbound services selected 	
Timing	Triggered — delivered within a month of their birthday	

FOR ILLUSTRATIVE PURPOSES ONLY
FOR PLAN SPONSOR OR FINANCIAL PROFESSIONAL USE ONLY.

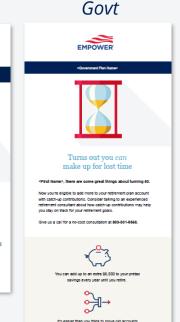
Number of touches: 4 emails — 1 touch at every age Age 45 Age 50

Core & LMN

Govt







Age 58

Core & LMN

Govt

into your Empower account and get a more holistic view of your savings.





Age 71.5

Core & LMN

Core & LMN

Govt





Ongoing guidance for stay-in-plan terminated participants

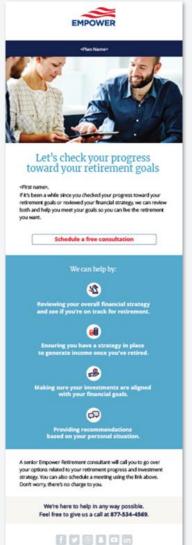
Objective	Offer timely guidance to terminated participants who have stayed in plan	
Channel	EmailOutbound calling	
Audience	Participants terminated 6 months or more with a balance of >\$25K	
Timing	Triggered based on web activities: • Use lifetime income tool • Visit withdrawal pages • Visit investment or MA pages • Rebalance or TDF transaction • Change beneficiary or address OR Reaching age 55, 60, 61.5, 64.5 Each trigger results in 1 email and 1 call Maximum of 2 received per year	

Number of touches: 4 emails versioned and sent based on web or age trigger, outbound call









Outbound call



Your retirement savings options balance >\$25,000

Objective	Encourage participants to schedule a consultation to review options for their retirement savings plan with previous employer	
Channel	 Email Mail Outbound call Post-login action (PLA) Web banner 	
Audience	Newly terminated participants	
Timing	Daily as notification of termination received from plan	

Number of touches: 6 emails - first 3 versioned for age 55+ and under age 55, 1 mailer, 1 post-login action, 1 web banner, outbound call



Touch 4 Touch 5 Touch 6



Post-login action (PLA)



Mailer





Web banner

Let us help you meet your goals with personalized guidance, 88% of our customers Are you on track to retire?

Securities, when presented, are offered and/or distributed by Empower Financial Services, Inc., Member FINRA/SIPC. EFSI is an affiliate of Empower Retirement, LLC; Empower Funds, Inc.; and registered investment adviser Empower Advisory Group, LLC. This material is for informational purposes only and is not intended to provide investment, legal or tax recommendations or advice.

The charts, graphs and screen prints shown are for ILLUSTRATIVE PURPOSES ONLY.

IMPORTANT: The projections or other information regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results may vary with each Financial Analysis Report and over time.

IMPORTANT: The projections, or other information generated on the website by the investment analysis tool regarding the likelihood of various investment outcomes, are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. The results may vary with each use and over time.

<Investments are not FDIC insured, are not guaranteed by Optum Financial or its subsidiaries and are subject to risk including fluctuations in value and the possible loss of the principal amount invested.</p>

Educational, communication and operational services regarding Empower HSA may be provided by registered representatives of EFSI. By electing Empower HSA, plan participants are contracting directly with Optum and its affiliates for this service. EFSI, or its affiliates, is not affiliated with Optum and is not responsible for their services.

Health savings accounts (HSAs) are individual accounts offered or administered by Optum Bank®, Member FDIC, a subsidiary of Optum Financial, Inc. Optum Financial, Inc. is not a bank or an FDIC insured institution. HSAs are subject to eligibility requirements and restrictions on deposits and withdrawals to avoid IRS penalties. State taxes may apply. Fees may reduce earnings on account. This communication is not intended as legal or tax advice. Please contact a competent legal or tax professional for personal advice on eligibility, tax treatment and restrictions. Federal and state laws and regulations are subject to change.

All Optum trademarks and logos are owned by Optum[®]. All other brand or product names are trademarks or registered marks of their respective owners. Because we are continually improving our products and services, Optum reserves the right to change specifications without prior notice. Optum is an equal opportunity employer.>

<My Financial Path includes products made available by Empower Retirement, LLC and third-party providers outside of the retirement benefits provided under the Plan.>

<The Empower Student Debt Solution is provided by CommonBond, Inc., which is not affiliated with Empower Retirement, LLC or its affiliates. Loans are offered through CommonBond Lending, LLC (NMLS #1175900) and subject to state law restriction. nmlsconsumeraccess.org

IMPORTANT: The projections or other information generated by MoneyGuidePro regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. MoneyGuidePro results may vary with each use and over time. Empower Retirement, LLC and its affiliates are not responsible for the third-party content provided.

Point-in-time advice is provided by an Empower representative registered with EFSI Equities, Inc. at no additional cost to participants. There is no guarantee provided by any party that use of the advice will result in a profit.

Empower Advisory Services refers to the advisory services offered by Empower Advisory Group, LLC, such as My Total Retirement and Online Advice. EAG uses Morningstar Investment Management LLC to provide subadvisory services. EAG and Morningstar Investment Management are unaffiliated registered investment advisers. Morningstar Investment Management is a subsidiary of Morningstar, Inc. EAG is a subsidiary of Empower Annuity Insurance Company of America. Morningstar is a registered trademark of Morningstar, Inc. ©2022

Empower Advisory Services refers to the advisory services offered by Empower Advisory Group, LLC, such as My Total Retirement and Online Advice. EAG uses Morningstar Investment Management LLC to provide subadvisory services. EAG and Morningstar Investment Management are unaffiliated registered investment advisers. Morningstar Investment Management is a subsidiary of Morningstar, Inc. EAG is a subsidiary of Empower Annuity Insurance Company of America. Morningstar is a registered trademark of Morningstar, Inc. ©2022 Morningstar, Inc. Future results are not guaranteed by EAG, Morningstar Investment Management or any other party.

©2022 Empower Retirement, LLC. All rights reserved. GEN-EDP-WF-2023040-0922 RO2346178 0922





Cybersecurity Overview

Agenda

- 1 Trends in Cybersecurity What we are seeing
- 2 Ways Empower is protecting data, how are we unique.
- B Empower's response to the DOL cybersecurity best practices
- 4 Empower's Security Guarantee
- What we can do to improve data security
- **6** Q&A

Threat and vulnerability statistics

70%

of ransomware attacks now include data exfiltration

most common compromise points for ransomware

- Phishing
- Unpatched exploitable vulnerabilities
- Remote Desktop Protocol



- 2020 new vulnerabilities: 28,000
- 2021 new vulnerabilities: 45,000
- Are you patched?
- 11,000 exploitable vulnerabilities

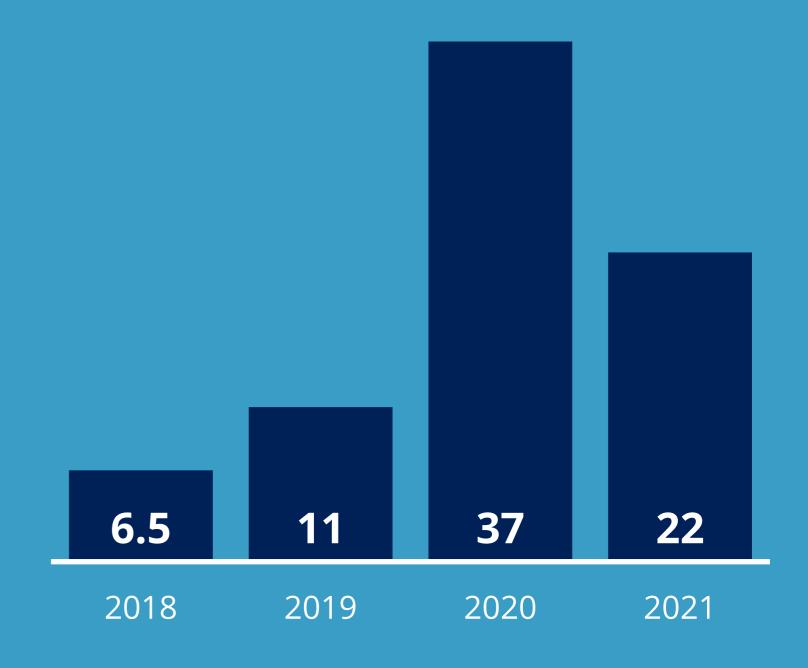
CSO Online 2020 and 2020, cve.mitre.org.

01/21/2021: over 37 billion records from 2020 Risk Based Security: A Flashpoint Company, "New Research: No. of Records Exposed Increased 141% in 2020," January 21, 2021.

02/24/2022: 22 billion records from 2021 <u>Risk Based Security: A Flashpoint Company, "Data Breach Report: 2021 Year End," February 4, 2022.</u>
59 billion in last two years.

FOR PLAN SPONSOR OR FINANCIAL PROFESSIONAL USE ONLY.

5 Dillion records were stolen in 2020 and 2021



We protect corporate data



All our data is stored in the USA.



Only have company-owned and maintained devices are allowed to connect to our VPN. Our VPN is always on.



We fully encrypt all desktops and laptops.



We use data loss prevention tools and processes to ensure data does not leak.



We enforce screen-lock timeouts to deter snooping friends and family members.



We use security awareness training that includes how to work securely while remote.



We publish specific training for our users about phishing scams related to current events e.g., tax season, donating to causes, winning a prize, etc.



We do not allow printing from home.



We do not allow copying of data to USBs/CDs/DVDs.



We block personal use sites like Google Docs/Email, Box, SharePoint Online and OneDrive for personal use – only company owned applications should have your data.



Employee Benefits Security Administration (EBSA) & United States Department of Labor (DOL) & Securities and Exchange Commission (SEC)



SPARK Institute & Empower

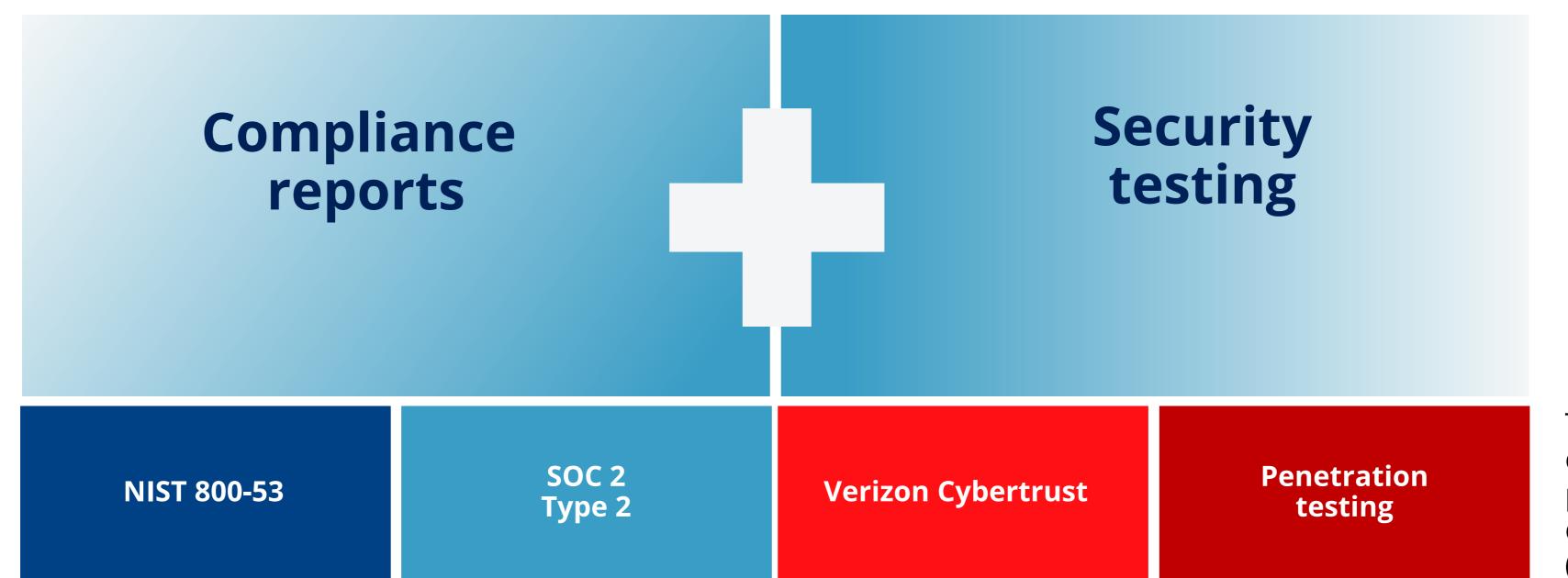
cybersecurity program best practices for recordkeepers and service providers

tips for plan sponsors: how to select a service provider with strong cybersecurity practices

online security tips

Alignment with DOL guidelines: comprehensive information security program

NIST 800-53 Gold standard & U.S. Cyber Defense Standard (DOL Tip #1)



Verizon Cybertrust Certified Enterprise for 11 years (DOL Best Practice #2)

SOC 2 Type 2 – Attestation of internal controls of Trust Services Criteria (DOL Tip # 1 & 2) Testing of development code, penetration testing, dark web monitoring (DOL Best Practice #8)









Identity proofing and verification

Multifactor authentication (MFA) for individual account access

Advanced security analytics

Fraud data sharing community

How Recordkeepers can protect you

Multiple levels of security protection

- We encrypt your data
- We don't sell your data
- We partner with cybersecurity leaders to keep your data safe
- What happens if bad actors take over my account? Like with identity theft?

Keep your data safe and secure



We will restore losses from your participants' accounts that occur as a result of unauthorized transactions that occur through no fault of their own.





Cybersecurity

Modern platform

SOC 2 Type II + security testing

Quarterly risk assessments

Penetration testing

Fraud prevention

Robust disaster recovery

For more information regarding account security and the Security Guarantee's conditions, visit **empowermyretirement.com** and click on *Security Guarantee* at the bottom of the page.

DOL 6 tips for hiring a service provider with strong cybersecurity practices

DOL	Empower
1. Security standards, practices and policies	NIST 800-53
2. Validation, implementation and compliance of security practices	 AICPA SOC 2 Type II – compliance reports Verizon Certification 11 years – security testing Penetration testing Dark web monitoring Development code testing
3. Evaluate the service provider's track record in the industry	 Plan Advisor: #1 Value for Price (9 years in a row) Plan Advisor: #1 Overall Service (4 years in a row) Fund Intelligence: 2020 Retirement Leader of the Year Plan Sponsor: #1 Best-in-Class cups with 89 awards Plan Sponsor: 4 Service Commendations
4. Service provider response to past security breaches if applicable	Empower has not had a breach
5. Insurance policies that would cover losses caused by cybersecurity and identity theft breaches	Cyber liability insurance + Security Guarantee
6. Service agreements that document ongoing compliance with cybersecurity and information security standards	SOC 2 Type II, Verizon Certification, Data Security and Privacy Addendum

How plan sponsors can increase plan security

- Provide current participant contact information through payroll highest payroll integration gives best participant data.
- 2 Set up forced email encryption (TLS) with their recordkeeper and other third parties they send/receive sensitive emails to/from.
- Provide security awareness training, including phishing.
- Tell us about any breaches or fraud.
- Use e-delivery for all participant communications and go paper free.

Online security tips

DOL: 9 online security tips

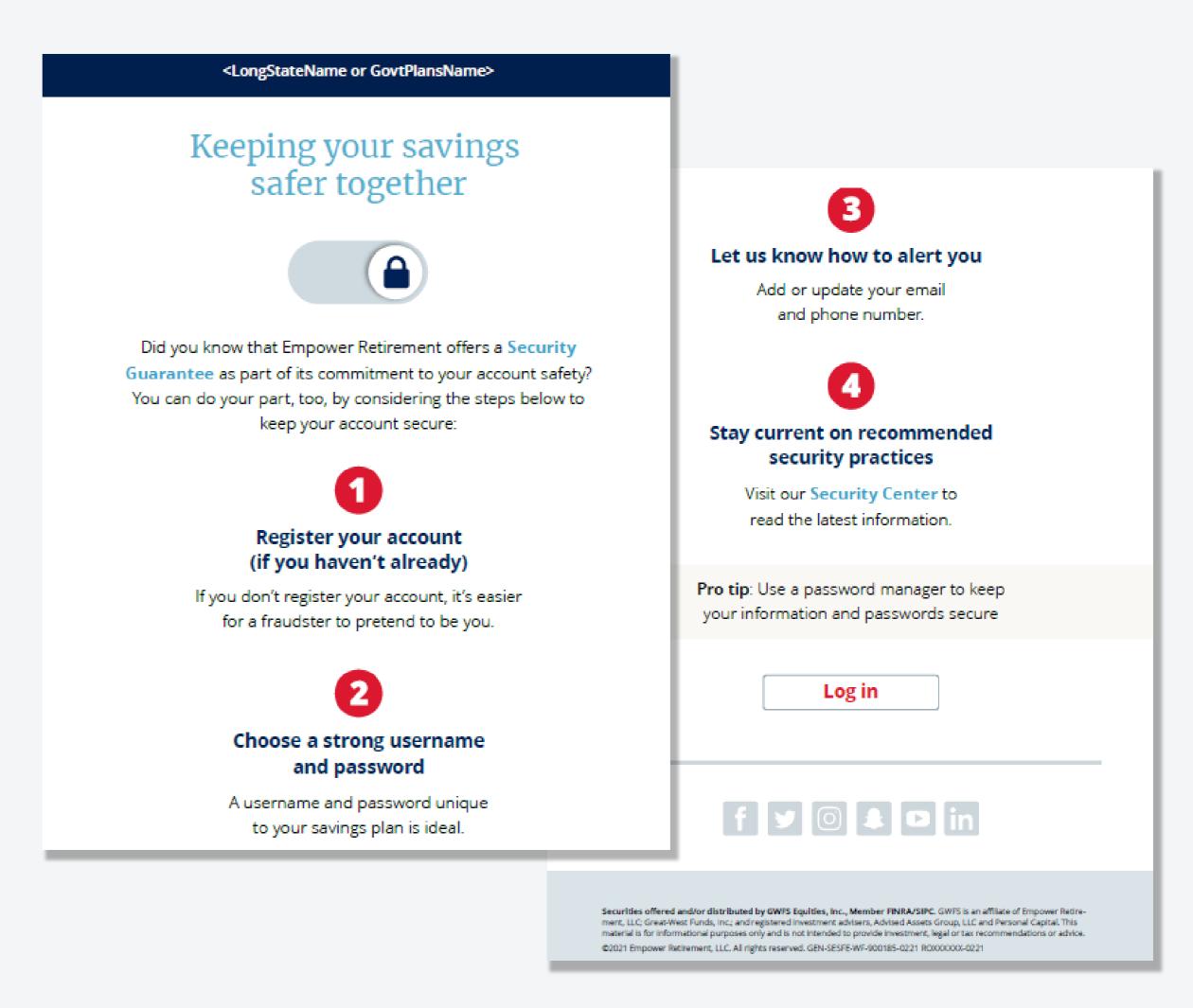
- 1 Register, set up and routinely monitor your online account.
- Use strong and unique passwords.
- Use multifactor authentication (MFA).
- 4 Keep personal contact information current.
- Close or delete unused accounts.
- Be wary of free Wi-Fi (use a VPN).
- Beware of phishing attacks.
- Use antivirus software and keep apps and software current.
- Know how to report identity theft and cybersecurity incidents.

You: 7 steps to better security

- Register your account on Empower.
- Provide all available **emails** and **phones**.
- Use a **password manager** (e.g., LastPass, 1Password, KeePass).
- Use multifactor authentication (MFA).
- Leave MFA enabled by not clicking "remember this device."
- **Pay attention** to security alerts.
- Freeze your **credit** (+ family).

Participant communications campaigns

Co-branded



FOR PLAN SPONSOR OR FINANCIAL PROFESSIONAL USE ONLY.

Industry links and resources



Society of Professional Asset-Managers and Record Keepers

Leading nonprofit association regarded as a major voice influencing federal retirement policy and thought leader for data security.

- Data Security Oversight Board: 16 control objectives
- Cybersecurity conferences and training sparkinstitute.org/



Cybersecurity & Infrastructure Security Agency (CISA)

All services are available at no cost to federal agencies, state and local governments, critical infrastructure, and private organizations.

- Security assessments
- Cybersecurity training

https://us-cert.cisa.gov/resources/ncats



National Institute of Standards and Technology – Small Business

Puts key free cybersecurity resources in one place. Their website does not offer operational assistance.

• SBA, Stay Safe Online, MEP, NICE, CISA nist.gov/itl/smallbusinesscyber



FBI – Internet Crime Complaint Center (IC3)

Small businesses should immediately report any threats and incidents to the FBI's IC3. The IC3 accepts online internet crime complaints from either the actual victim or from a third party to the complainant.

- File a complaint
- Consumer alerts
- Industry alerts
 ic3.gov/default.aspx



Cybersecurity resources:

- Empower Recordkeeping Technology and Cybersecurity Guide 12 pages
- Empower's Response to the DOL's Cybersecurity Guidelines - 16 pages
- Empower Overview DOL EBSA
 Cybersecurity Guidance 4 pages
- CISO cybersecurity videos
- Co-branded participant communications campaigns
- White paper: Defense-in-Depth Protecting Your Plan
- SOC 2 Type II + AICPA SOC 2 Overview

Questions and answers



Disclosure

Securities, when presented, are offered and/or distributed by GWFS Equities, Inc., Member FINRA/SIPC. GWFS is an affiliate of Empower Retirement, LLC; Great-West Funds, Inc.; and registered investment adviser, Advised Assets Group, LLC. This material is for informational purposes only and is not intended to provide investment, legal or tax recommendations or advice.

"EMPOWER" and all associated logos and product names are trademarks of Great-West Life & Annuity Insurance Company.

©2022 Empower Retirement, LLC. All rights reserved. GEN-EEV-WF-1897221-0722 RO2180116-0522



Q3 2022 Portfolio Review

County of San Mateo Retirement Plans



Gordon Tewell, CFA, CPC, ERPA | Principal Rick Rodgers, AIFA® | Principal Kyli Soto, AIF® | Vice President Brett Minnick | Vice President

Report Prepared by: Matt Popish



Q3 2022 Innovest at a Glance

Dedication to Client • Hard Work • Honesty & Integrity

New Professionals at Innovest

- Christine Attai
- Anna Berdahl
- Tracey Blackford
- Kristin Grayner
- Matt Popish

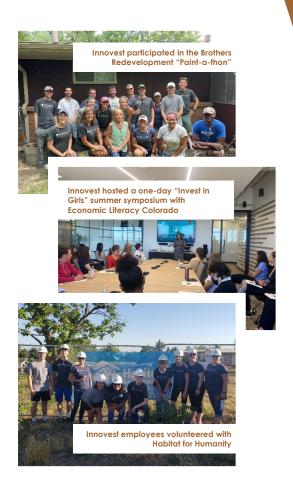
Service in Our Local Community

- Brothers Redevelopment
- Economic Literacy Colorado
- Habitat for Humanity

Summer Interns

Thank you to our summer interns John Walsh, Natalie Kuzia, and Nick Mancini!

On July 1, 2022 Innovest celebrated 26 years of bringing custom, innovative solutions to our clients with authenticity and expertise.





Innovest's History with County of San Mateo

2022

- Retained Innovest Portfolio Solutions for retirement plan consulting services, effective January 1, 2022.
- Share class merger of the Vanguard Target Retirement series, reducing the expense ratio to 0.08% effective February 11, 2022.
- Presented the annual Fee Review for the 457 plan
- Presented the Investment Policy Statement
- Presented manager searches for small cap value and small cap growth, resulting in the following changes, effective May 2, 2022:
 - Replaced Small Cap Value CIT (WTIXMX) with Boston Partners SCV II (BPSIX)
 - Replaced Small Cap Growth CIT (WTIXLX) with Harbor Small Cap Growth (HASGX)
- Committee approved the revised IPS incorporating ESG consideration language
- Issued an RFP for recordkeeping services, resulted in retaining Empower at reduced fees, and transitioning the 401(a) plan at MissionSquare to Empower, pending effective date
- Presented a share class review analysis, resulting in the following changes, pending effective date:
 - Replace Vanguard Institutional Index (VINIX) with Fidelity
 500 Index (FXAIX)
 - Replace Vanguard Mid Cap Index (VMCIX) with Fidelity Mid Cap Index (FSMDX)
 - Replace Vanguard Small Cap Index (VSCIX) with Fidelity Small Cap Index (FSSNX)
 - Replace Vanguard Developed Markets Index (VTMGX) with Fidelity International Index (FSPSX)
 - Replace Vanguard Total Bond Market Index with Fidelity US Bond Index (FXNAX)

2022 (continued)

- Presented menu consolidation analysis resulting in the following changes, pending effective date:
 - Remove the Vanguard Total Stock Market Index and map to Fidelity 500 Index (FXAIX)
 - Remove American Funds Capital World Growth & Income (RWIGX) and map to Fidelity 500 Index (FXAIX)
 - Remove Hartford Healthcare HLS (HIAHX) and map to American Funds Growth Fund of America (RGAGX)
 - Remove Vanguard Utilities Index (VUIAX) and map to American Funds American Mutual (RMFGX)
 - Remove Invesco Real Estate (IARIX) and map to Fidelity Mid Cap Index (FSMDX)
 - Remove Mass Mutual Premier High Yield (MPHZX) and map to Fidelity US Bond Index (FXNAX)
 - Remove PIMCO Long-Term Real Return (PRAIX) and map to PIMCO Total Return (PTTRX)
- Assisted with the implementation of the fund lineup for the County's new HRA plan at Aviben







Topics & Trends: Fiduciary Education





Liability - What's at Stake

- Important to know that you can be held personally liable as a plan fiduciary for any losses incurred as a result of a fiduciary breach
- Co-fiduciary liability also applies for participating in, concealing or failing to stop the breach of another fiduciary
- If found in violation, offenders must make good by restoring any gains obtained by improperly using plan assets
- Violators may also be subject to other court-imposed penalties, such as:
 - An excise tax of 15% of the amount of the violation, per year, until correction
 - Up to an additional 100% penalty on *uncorrected* prohibited transactions
 - An additional penalty of 20% if the Department of Labor becomes involved
 - And...possible imprisonment





Over 300 DC Plan Lawsuits Since 2006

- Large plan sponsor fiduciaries
- Plan service providers
- Financial institution plan sponsors
- Large universities with 403(b) plans
- More lawsuits likely
 - More plaintiff law firms are entering the business
 - Smaller plans are being targeted
 - Law firms are finding new categories of defendants to sue and raising creative new claims



Common Claims

- **FEES:** Plan sponsor should have considered lower-cost share classes of mutual funds or less expensive vehicles like collective investment trusts or separate accounts.
- **FEES:** Recordkeeper was compensated through asset-based revenue sharing from the funds, but as assets grew, plan sponsor didn't renegotiate recordkeeping agreement.
- **FEES**: Failure to monitor fees managed account provider paid to recordkeeper.
- FEES: Financial advisor was overpaid.
- FEES: Revenue sharing not levelized among participants.

Recently Announced Settlements

Fees: \$57 million, including \$19 million in legal fees

- Failure to monitor recordkeeping costs and revenue sharing.
- Inclusion of imprudent investments, including retail share classes of mutual funds, and undiversified technology fund, and a small-cap stock fund that failed prudence standards and paid the recordkeeper revenue sharing.



Fees and Investments: Hughes v. Northwestern

- The Supreme Court revived this excessive fee lawsuit filed in 2016 by vacating lower court dismissals.
- Northwestern retirement plan participants alleged that plan fiduciaries breached their duties by failing to monitor recordkeeping fees, offering higher-cost, retail share classes, and having a menu with over 400 options that confused participants.
- District court and Seventh Circuit previously dismissed the case because the plan fiduciaries provided a broad menu that included low-cost funds and participants had the ultimate choice over their investments.
- The Supreme Court ruled that offering a diverse menu does not excuse allegedly imprudent decisions and fiduciaries must conduct their own independent evaluation to determine which investments are prudent for the plan's menu.
- This decision reinforces that fiduciaries have an ongoing duty to monitor plan investments and failure to remove an imprudent investment within a reasonable time is a fiduciary breach.



Conflict of Interest: Lowes settled for \$12.5 million, consultant claims dismissed

• Plan fiduciaries allowed the consultant (Aon) to offer its untested and underperforming proprietary investments (CITs).



Northwestern



Recent filings



Wood Group (oil & gas)/NFP (consultant)

- Plaintiffs allege that NFP caused the plan the plan to invest in NFP's collective investment trusts (CITs) managed by its affiliate flexPATH Strategies, which benefitted the NFP defendants at the expense of plan participants.
- Failed to use their plan's bargaining power to obtain reasonable investment management fees, which caused unreasonable expenses to be charged to the plan.



Juniper Networks

- •Plaintiffs allege unreasonable investment and fee disclosures.
- •Managed account fees unreasonable because the advice was not materially different than TDFs.
- •The recordkeeper used its own subsidiary as the managed account provider and charged the plan higher fees than other similarly-sized plans.

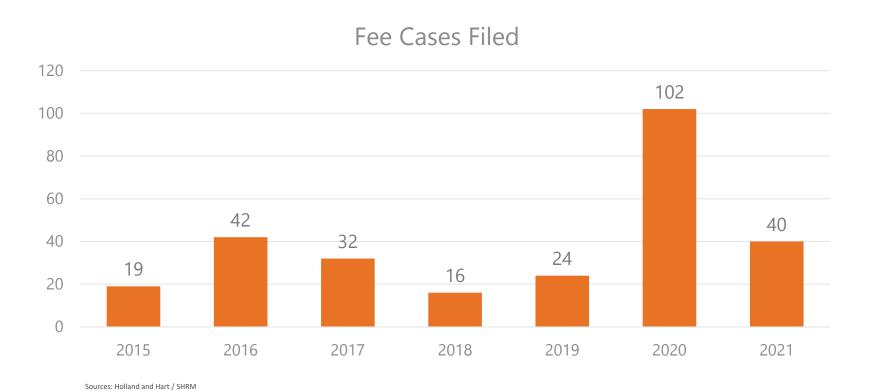


TriHealth

- Retail mutual fund share classes offered when lower-gross institutional share classes were available.
- •Assert the mean cost was 86bps when an alleged mean of 41bps was available.
- "[e]ven if a prudent investor might make available a wide range of valid investment decisions in a given year, only an imprudent financier would offer a more expensive share when he could offer a functionally identical share for less."



Boom in Fee Cases Filed



Who is a Fiduciary?

- Anyone who has discretionary control over management/administration of the plan, exercises control over plan assets, or renders investment advice for compensation
- Fiduciary status is based less on any named role and more on actual functions performed for the plan.
- Every plan must have at least one *named fiduciary,* identified by office or by actual name. Most plans have more than one.
- Fiduciaries typically include:
 - Plan Sponsors (the employer)
 - Trustees
 - Investment Advisors
 - Individuals exercising discretion in plan administration
 - All members of a plan's administrative/investment committee
- Plan recordkeepers, auditors, and accountants are usually <u>not</u> fiduciaries, since their roles are ministerial in nature.



Plan Fiduciary Requirements

- Duty of Loyalty: Act solely in the best interest of plan participants (and beneficiaries)
- Duty of Prudence: Establish a prudent process for selecting & monitoring investments
 - Carefully evaluate, select, and monitor service providers
 - Should have established expertise, track record, processes, and reputation
 - Not a reasonable defense to simply trust that your provider did their job appropriately
- Duty to Diversify: Offer diverse array of investment options to help participants minimize large losses.
- Duty to Follow Plan Documents: Discharge fiduciary duties in accordance with the documents and instruments governing the plan.
- Ensure that fees paid to service providers and other expenses of the plan are reasonable in light of the level and quality of services provided
- Avoid prohibited transactions



Fiduciary liability insurance carriers taking notice

Excessive fee questionnaire requiring following disclosures:

Recordkeeping fees

- Describe process for selecting and monitoring fees.
- Last time RFI or RFP was issued.
- Disclose recordkeeping fees.

Investment fees

- Describe process for evaluating, benchmarking, and monitoring funds.
- Confirm least-expensive share classes offered.
- Does plan offer low-cost index funds?

Documentation

Include any plan fee disclosures.

Proprietary funds/Services

- Disclose any use of proprietary funds or services.
- How much of the plan is invested in these funds and how much is paid for services?

Inquiries by plaintiff litigators

• Have you received any inquiries by a law firm regarding your plan?





Committee Best Practices

- Objectives and responsibilities of the Committee and other interested parties should be described in a Committee Charter or By-laws.
- Appoint or hire capable plan fiduciaries.
- Conduct regular and consistent (at least annual) **plan meetings** to review the investment menu and expenses, plan service providers, participant education, and operational administration of the plan (auditing & testing).
- **Document key decisions** made keep records of topics and governance, including the reasoning (process is important).
- Implement and maintain an *Investment Policy Statement* (IPS).
- Offer a well-diversified menu of prudently selected investment options, while avoiding redundnacy.
- Implement QDIA (Qualified Default Investment Alternative).
- Provide required disclosures and notices; timely file required annual reports.
- Maintain a fiduciary liability insurance policy.



Plan Providers

Empower

- Plan Administration
- Recordkeeping
- Trust & Custody

Innovest

- Retirement Plan Consultant
- Investment Selection, Monitoring and Replacement

Investment Managers

- Mutual Funds
- Collective Investment Trusts
- Fixed Accounts

Other Professionals

- Plan Auditor
- Legal Counsel







Process, Not Hindsight, is the Relevant Standard

- Courts in fiduciary breach cases have consistently stated that the fiduciary does not need to be "right" on every decision, but that the decisionmaking process is what will determine fiduciary liability.
- Compliance with the prudent investor rule is determined in light of the facts and circumstances existing at the time of a fiduciary's decision or action and not by hindsight.



"Your investments are not working out because your hindsight is 20/20 and your foresight is 20/400."



County of San Mateo 457(b) Plan Summary

	Current Structure	Considerations and Next Steps
Plan Provisions	 Legal Plan Name and Plan Type: San Mateo County Deferred Compensation Plan Vesting Schedule: Immediate Eligibility Requirements: Immediately Eligible Roth: Yes Normal Retirement Age: 65 or 40 for qualified police or firefighter 	
Contributions	 Contribution Rate: EE - voluntary 100% up to \$20,500, catch-up 100% up to \$6,500 Match Provision: Yes, certain unions only, match to 401(a) Enrollment: Participant Elected Automatic Enrollment: Yes, @ 1% Auto-Escalation: Yes, starting at 1% up to 5% (except certain union groups) 	
Distributions	 Loans: Yes Unforeseen Emergencies: Yes Installments: Yes In-Service Withdrawals: Yes Force Out Distributions: Yes, for terminated employees with <\$5k account balance 	
Investments	 Investment Direction: Participant Number of Investment Options: 26 QDIA/DIA: Yes, age-appropriate Target Date Fund Re-enrollment: No Managed Accounts: Yes Self-Directed Brokerage Window: Yes Guaranteed Minimum Withdrawal Benefit Options: No 	
Governance	 Investment Policy Statement: Initial Review 2022 Governance Documents: Established by Board Resolution - Rev. 2009 Plan Documents: Effective January 1, 2019 Fiduciary Education: Recordkeeper Contract: Empower Retirement – curren Attorney: City Counsel's Office – Sarah Trela Innovest Contract: January 1, 2022 	IPS review schedule to be determined Fiduciary Education scheduled for 3Q review
Costs	 Plan Expenses Paid by: Fee Leveling: 0.055% on all participant accounts: 0.035% for recordkeeping, 0.02% for plan administration and professional fees including investment consultant, revenue share is credited back to participants Annual Fee Review: January 2022 Competitive Pricing Analysis: RFP - 20 Other Fees: Managed Accounts, SDB, Loans Share Class Review: March 2022 	New fee proposal pending effective date Fee Review schedule to be determined Share Class Review schedule to be determined
Education	 Participant Education Plan: Empower, group meetings and one-on-one sessions, pursuant to the annual Education Plan 	



County of San Mateo 457 Annual Fee Review

	<u>Plan</u>	<u>Benchmark</u> *
Plan assets as of 12/31/2021	\$ 706,958,904	Similarly Sized
Investment, Recordkeeping and Administrative Costs	0.30%	0.54%
Estimated Total Plan Expenses	0.32%	N/A

		Employer Paid		Particip	ant Paid	Total	
	Provider	Fee (in \$)	Fee (in %)	Fee (in \$)	Fee (in %)	Fee (in \$)	Fee (in %)
Expense ratio retained by fund manager	Fund Managers			\$ 1,842,252	0.26%	\$ 1,842,252	0.26%
Revenue sharing sent to recordkeeper	Empower			\$ 45,461	0.01%	\$ 45,461	0.01%
Gross Investment Management Fees		\$	- 0.00%	\$ 1,887,714	0.27%	\$ 1,887,714	0.27%
Recordkeeping/Administration Fee (0.035%)	Empower			\$ 247,436	0.04%	\$ 247,436	0.04%
Gross Recordkeeping and Administrative Fees		\$	- 0.00%	\$ 247,436	0.04%	\$ 247,436	0.04%
Revenue Sharing credited to participant accounts	Empower			\$ (45,461)	-0.01%	\$ (45,461)	-0.01%
Total Investment, Recordkeeping and Administrative Costs		\$	- 0.00%	\$ 2,089,688	0.30%	\$ 2,089,688	0.30%
Professional Fees							
Investment Consultant	Innovest			\$ 56,667	0.01%	\$ 56,667	0.01%
Expense Budget Account**	Various			\$ 84,725	0.01%	\$ 84,725	0.01%
Total Plan Expenses		\$	- 0.00%	\$ 2,231,080	0.32%	\$ 2,231,080	0.32%
Selected Services Fees							
Managed Account Fees	Empower			\$ 14,109	0.00%	\$ 14,109	0.00%
Total Selected Services Fees		\$	- 0.00%	\$ 14,109	0.00%	\$ 14,109	0.00%

^{*}The plan's estimated investment, recordkeeping and administrative costs of 0.30% as shown above, compare favorably to 401(k) Source data, a universe of 19 recordkeepers with similarly sized 401(k) plans, with an average investment, recordkeeping and administrative cost of 0.54%. Published since 1995, the 401k Averages Book is one of the oldest and recognized resources for comparative 401(k) average cost information in the industry.

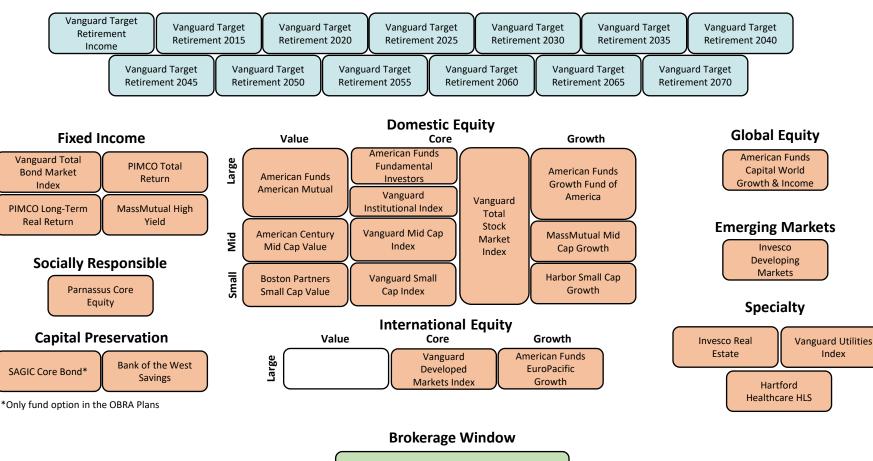
This review illustrates estimated plan costs based on available data.

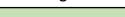


^{**}The County charges 0.02% on all assets that goes towards the Expense Budget Account, which covers Innovest's Investment Consulting fee along with other plan expenses. A total of 0.055% is deducted from participant accounts.

County of San Mateo Retirement Plans Menu Coverage

Target Date Funds





Schwab PCRA



457 Plan Asset Allocation

	Jun-202	2	Sep-2022			Jun-202	22	Sep-2022	
	(\$)	%	(\$)	%		(\$)	%	(\$)	%
All Cap Equity					Emerging Markets Equity				
Vanguard Total Stock Market Index	21,604,315	3.56	20,293,012	3.45	Invesco Developing Markets	2,915,870	0.48	2,694,203	0.46
Large Cap Equity					Fixed Income				
American Funds American Mutual	21,489,493	3.54	20,489,292	3.48	Vanguard Total Bond Market Index	8,570,093	1.41	7,636,509	1.30
American Funds Fundamental Investors	43,878,235	7.23	41,052,941	6.98	PIMCO Total Return	12,105,131	1.99	11,357,618	1.93
Vanguard Institutional Index	29,614,324	4.88	28,232,141	4.80	PIMCO Long-Term Real Return	3,807,052	0.63	3,345,003	0.57
American Funds Growth Fund of America	37,415,228	6.17	36,313,429	6.17	MassMutual High Yield	1,071,237	0.18	1,174,924	0.20
Total Large Cap Equity	132,397,280	21.82	126,087,803	21.43	Total Fixed Income	25,553,512	4.21	23,514,054	4.00
Mid Cap Equity					Stable Value				
American Century Mid Cap Value	6,761,604	1.11	6,537,562	1.11	SAGIC Core Bond	150,134,190	24.74	153,628,756	26.11
Vanguard Mid Cap Index	8,623,371	1.42	8,257,003	1.40	Bank of the West Savings	7,256,569	1.20	6,361,437	1.08
MassMutual Mid Cap Growth	14,041,313	2.31	13,521,920	2.30	Total Stable Value	157,390,759	25.94	159,990,194	27.19
Total Mid Cap Equity	29,426,287	4.85	28,316,485	4.81	Self-Directed Brokerage				
Small Cap Equity					Self Directed Brokerage Account	4,742,489	0.78	4,552,152	0.77
Boston Partners Small Cap Value	1,001,598	0.17	899,765	0.15	Loans				
Vanguard Small Cap Index	12,238,546	2.02	11,806,480	2.01	Loan Fund	7,448,325	1.23	7,308,903	1.24
Harbor Small Cap Growth	6,154,564	1.01	6,031,612	1.03	Loan rand	7,440,323	1.23	7,300,903	1.24
Total Small Cap Equity	19,394,708	3.20	18,737,857	3.18	Target Date Funds				
					Vanguard Target Retirement Income	7,227,058	1.19	16,839,340	2.86
International Equity					Vanguard Target Retirement 2015	10,509,787	1.73	-	0.00
Vanguard Developed Markets Index	4,087,277	0.67	3,674,653	0.62	Vanguard Target Retirement 2020	623,620	0.10	761,283	0.13
American Funds EuroPacific Growth	8,638,368	1.42	7,893,621	1.34	Vanguard Target Retirement 2025	37,331,426	6.15	35,353,386	6.01
Total International Equity	12,725,645	2.10	11,568,274	1.97	Vanguard Target Retirement 2030	2,085,783	0.34	2,208,759	0.38
Global Equity					Vanguard Target Retirement 2035	37,144,074	6.12	35,428,333	6.02
	10 694 300	1.76	9,845,165	1.67	Vanguard Target Retirement 2040	2,109,936	0.35	2,395,008	0.41
American Funds Capital World G&I	10,684,390	1.76	9,845,105	1.07	Vanguard Target Retirement 2045	32,704,650	5.39	31,519,810	5.36
Specialty Equity					Vanguard Target Retirement 2050	2,331,360	0.38	2,806,470	0.48
Parnassus Core Equity	8,044,352	1.33	7,372,695	1.25	Vanguard Target Retirement 2055	23,745,125	3.91	22,828,282	3.88
Vanguard Utilities Index	7,660,994	1.26	7,530,841	1.28	Vanguard Target Retirement 2060	1,214,660	0.20	1,460,166	0.25
Invesco Real Estate	3,457,851	0.57	3,052,841	0.52	Vanguard Target Retirement 2065	135,131	0.02	169,985	0.03
Hartford Healthcare HLS	6,203,163	1.02	5,783,057	0.98	Total Target Date Funds	157,162,611	25.90	151,770,821	25.79
Total Specialty Equity	25,366,361	4.18	23,739,434	4.03	County of San Mateo 457 Total Fund	606,812,552	100.00	588,418,358	100.00



401(a) Plan Asset Allocation

Asset Allocation

Asset Allocation

		<u></u>							
	Jun-20	22	Sep-20			Jun-2	022	Sep-20	
	(\$)	%	(\$)	%		(\$)	%	(\$)	%
All Cap Equity					Emerging Markets Equity				
Vanguard Total Stock Market Index	161,264	1.76	161,268	1.81	Invesco Developing Markets	30,659	0.33	28,392	0.32
Large Cap Equity					Fixed Income				
American Funds American Mutual	43,970	0.48	41,791	0.47	Vanguard Total Bond Market Idx	33,669	0.37	33,118	0.37
American Funds Fundamental Investors	22,018	0.24	21,912	0.25	PIMCO Total Return	21,354	0.23	19,963	0.22
Vanguard Institutional Index	244,292	2.67	232,358	2.61	PIMCO Long-Term Real Return	15,480	0.17	14,314	0.16
American Funds Growth Fund of America	67,249	0.73	68,598	0.77	MassMutual High Yield	4,309	0.05	4,867	0.05
Total Large Cap Equity	377,530	4.12	364,659	4.09	Total Fixed Income	74,812	0.82	72,263	0.81
Mid Cap Equity					Stable Value				
American Century Mid Cap Value	19,053	0.21	21,478	0.24	SAGIC Core Bond II	606 100	7.50	703,815	7.89
Vanguard Mid Cap Index	60,938	0.67	60,430	0.68	Bank of the West Savings	686,488 40,191	0.44	20,530	0.23
MassMutual Mid Cap Growth	39,505	0.43	40,988	0.46	Total Stable Value		7.94		8.12
Total Mid Cap Equity	119,495	1.31	122,895	1.38	Total Stable Value	726,679	7.94	724,345	8.12
Small Cap Equity					Target Date Funds				
Boston Partners Small Cap Value	17,284	0.19	16,819	0.19	Vanguard Target Retirement Income	4,424	0.05	210,870	2.36
Vanguard Small Cap Index	86,149	0.94	86,180	0.97	Vanguard Target Retirement 2015	215,940	2.36	-	0.00
Harbor Small Cap Growth	9,267	0.10	9,996	0.11	Vanguard Target Retirement 2020	228,036	2.49	237,531	2.66
Total Small Cap Equity	112,699	1.23	112,995	1.27	Vanguard Target Retirement 2025	615,269	6.72	583,940	6.55
					Vanguard Target Retirement 2030	1,169,545	12.78	1,079,890	12.11
International Equity					Vanguard Target Retirement 2035	877,038	9.58	799,947	8.97
Vanguard Developed Markets Index	52,255	0.57	52,373	0.59	Vanguard Target Retirement 2040	142,775	1.56	172,029	1.93
American Funds EuroPacific Growth	15,953	0.17	15,250	0.17	Vanguard Target Retirement 2045	1,606,930	17.56	1,556,472	17.45
Total International Equity	68,208	0.75	67,623	0.76	Vanguard Target Retirement 2050	263,338	2.88	321,217	3.60
Clobal Faults					Vanguard Target Retirement 2055	2,089,235	22.82	2,007,816	22.52
Global Equity	12.000	0.15	12.570	0.15	Vanguard Target Retirement 2060	113,465	1.24	129,017	1.45
American Funds Capital World G/I	13,890	0.15	13,570	0.15	Vanguard Target Retirement 2065	5,035	0.06	7,079	0.08
Specialty Equity					Target Date Funds	7,331,029	80.09	7,105,810	79.69
Parnassus Core Equity	53,801	0.59	52,919	0.59					
Vanguard Utilities Index	51,814	0.57	60,425	0.68	San Mateo 401a Total Fund	9,153,362	100.00	8,917,113	100.00
Invesco Real Estate	22,932	0.25	21,475	0.24					
Hartford Healthcare HLS	8,550	0.09	8,475	0.10					
Total Specialty Equity	137,097	1.50	143,294	1.61					
. , , , ,	,		, -						



HRA Plan Asset Allocation

Asset Allocation

Asset Allocation

	Jun-20	22	Sep-20)22		Jun-2022		Sep-2022	
	(\$)	%	(\$)	%		(\$)	%	(\$)	%
All Cap Equity					Stable Value				
Vanguard Total Stock Market Index	7,069	0.77	6,877	0.78	MassMutual Stable Value	157,830	17.25	164,283	18.60
arge Cap Equity					Target Date Funds				
American Funds Fundamental Investors	18,451	2.02	17,633	2.00	Vanguard Target Retirement Income	590,262	64.50	560,044	63.40
Parnassus Core Equity	13,217	1.44	12,345	1.40	Vanguard Target Retirement 2015	-	0.00	, -	0.00
American Funds Growth Fund of America	534	0.06	519	0.06	Vanguard Target Retirement 2020	-	0.00	-	0.00
otal Large Cap Equity	32,202	3.52	30,497	3.45	Vanguard Target Retirement 2025	21,413	2.34	20,246	2.29
					Vanguard Target Retirement 2030	-	0.00	-	0.00
Aid Cap Equity	24.656	2.27	20.000	2.27	Vanguard Target Retirement 2035	-	0.00	-	0.00
/anguard Mid Cap Index	21,656	2.37	20,960	2.37	Vanguard Target Retirement 2040	-	0.00	-	0.00
mall Cap Equity					Vanguard Target Retirement 2045	49,432	5.40	46,811	5.30
/anguard Small Cap Index	2,214	0.24	2,179	0.25	Vanguard Target Retirement 2050	-	0.00	-	0.00
,	,		,		Vanguard Target Retirement 2055	3,944	0.43	3,676	0.42
nternational Equity					Vanguard Target Retirement 2060	-	0.00	-	0.00
anguard Developed Markets Index	10,629	1.16	9,661	1.09	Vanguard Target Retirement 2065	-	0.00	-	0.00
					Total Target Date Funds	665,050	72.67	630,777	71.41
ixed Income									
anguard Total Bond Market Index	2,984	0.33	2,984	0.34	San Mateo HRA Plan Total Fund	915,205	100.00	883,360	100.00
PIMCO Real Return	4,713	0.51	4,445	0.50					
PIMCO Total Return	10,353	1.13	10,210	1.16					
Total Fixed Income	18,051	1.97	17,639	2.00					



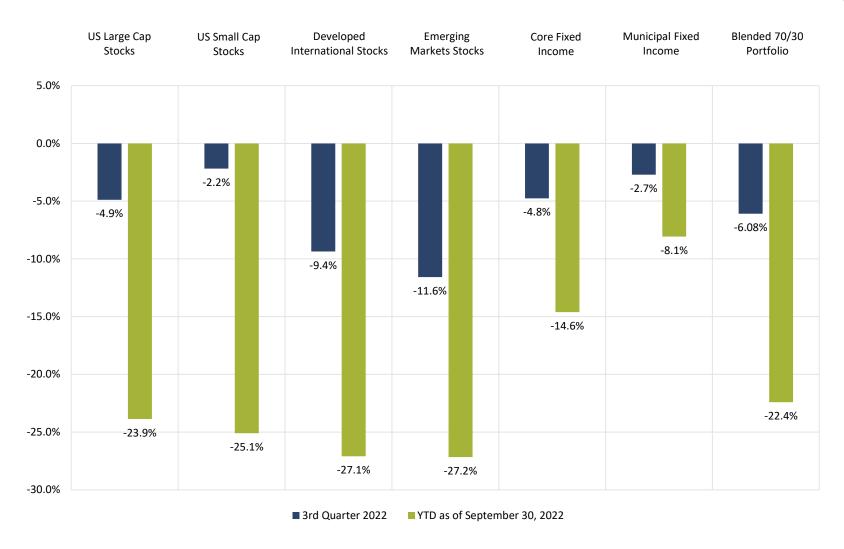
County of San Mateo Plan Totals

	Jun-2022 (\$)	Sep-2022 (\$)
County of San Mateo 457 Plan Total Fund	606,812,552	588,418,358
County of San Mateo 401a Plan Total Fund	9,153,362	8,917,113
County of San Mateo HRA Plan Total Fund	915,205	883,360
457 OBRA Plan (SAGIC Core Bond)	14,811,798	15,499,652
401(a) OBRA Plan (Frozen) (SAGIC Core Bond)	10,395,461	10,309,318
Deferred Compensation Plan (MSQ)	2,298,376	2,168,166
All County of San Mateo Plans Total	644,386,754	626,195,967





The Markets



Returns for US Large Cap Stocks = S&P 500 TR, US Small Cap Stocks = Russell 2000 TR, Developed International Stocks = MSCI EAFE NR, Emerging Markets Stocks = MSCI EM NR, Core Fixed Income = BBgBarc US Agg Bond TR, Municipal Fixed Income = BBgBarc Municipal Syr 4-6 TR, Blended 70/30 Portfolio = 70% S&P 500 TR, 30% MSCI ACWI NR All-Cap Index



Making Sense of the Markets

What We Know

- The fourth-worst start to a calendar year for stocks and the worst start for bonds
- The fastest monetary tightening cycle in over 40 years
- The yield curve is currently inverted, which has historically signaled weakening economic conditions
- After prior yield curve inversions, reduced fears of inflation has led to larger rallies in intermediateand long-duration bonds, as compared to short-duration bonds
- Floating rate loan spreads and high yield bond spreads are currently near their long-term averages

What No One Knows

- When and how deep the next recession will be
- How long it will take for inflation to fall before the Fed stops raising rates
- When the stock and bond markets will bottom





Incredibly Difficult Market Conditions

• The first nine months of 2022 has been the fourth worst start for stock returns going back to 1926 and the worst start to a calendar year for bond returns.

4th worst start to a year for U.S. stocks on record Since 1926, total return for 1/1-9/30 each calendar year

Year	First 9 months	Next 12 months
1931	-34.3	-9.6
1974	-32.8	38.1
2002	-28.2	24.4
2022	-23.9	?
2001	-20.4	-20.5
1962	-19.4	31.7
2008	-19.3	-6.9
1937	-17.3	-5.5
1966	-15.1	30.6
1946	-11.3	6.5
Avg.	-22.2	9.9

Worst start to a year for U.S. bonds on record Since 1926, total return for 1/1-9/30 each calendar year

Year	First 9 months	Next 12 months
2022	-14.6	?
1981	-3.9	35.2
1994	-3.2	14.1
1987	-2.9	13.3
1958	-2.0	-0.3
2013	-1.9	4.0
2018	-1.6	10.3
1969	-1.6	11.1
2021	-1.6	-14.6
1959	-1.0	11.0
Avg.	-3.4	9.3

Sources: (Charts) BlackRock Student of the Market. Morningstar. Data as of 09/30/2022. U.S. Bonds represented by the IA SBBI US Gov IT Index from 1/1/26 to 1/3/89 and Bloomberg U.S. Agg Bond TR Index from 1/3/89 to 09/30/22. U.S. stocks are represented by the IA SBBI U.S. Lrg Stock TR USD Index from 1/1/26 to 3/4/57 and the S&P 500 Index from 3/4/57 to 9/30/22.



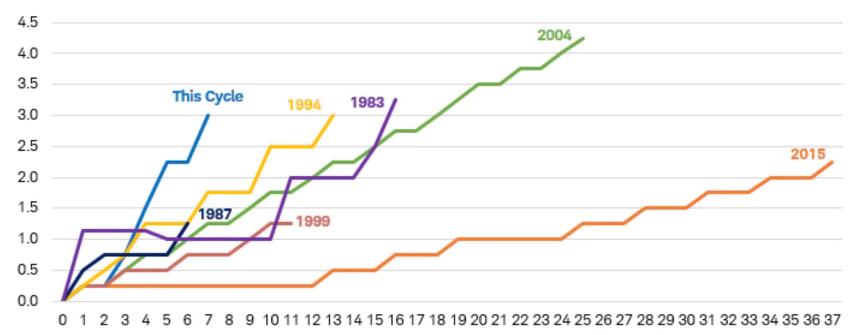


Monetary Policy: Fastest Tightening in Decades

- The current Fed tightening is the fastest rate hike cycle in over 40 years.
- The Federal Reserve has increased short-term rates by ~3.0% in just seven months.

Pace of Fed rate hikes over various cycles

Change in Fed Funds Rate (%)



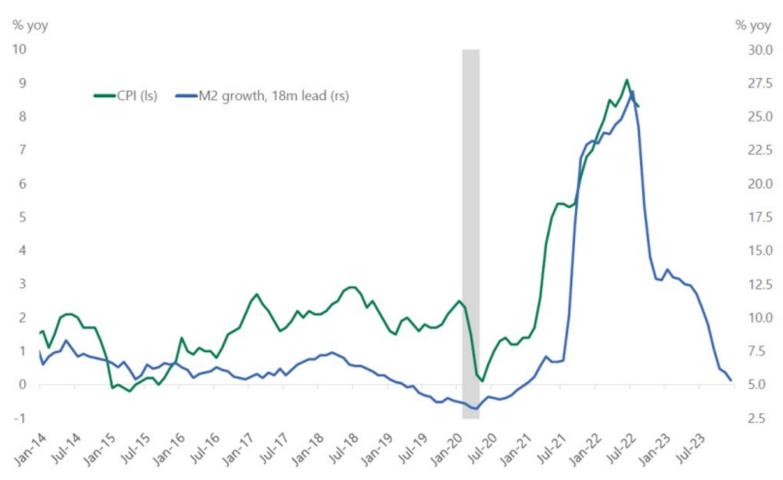
Months relative to the first rate hike

Sources: (Chart) Bloomberg. Charles Schwab. As of 9/30/2022.



Core Inflation and Money Supply Growth

• Leading money supply (M2) growth has historically been a strong predictor of inflation.



Sources: BLS, FRB, Bloomberg, and Apollo Chief Economist. Reported Sept. 28, 2022.





Forward-looking Returns

• Since 1950, equity returns have usually been strong after stock market declines of 25% or more.

After the S&P 500 Fell 25% or More (Since 1950)

Peak	Trough	% Decline	+1 Year	+3 Years	+5 Years	+10 Years
12/12/1961	6/26/1962	-28.0%	31.2%	69.2%	94.8%	171.1%
11/29/1968	5/26/1970	-36.1%	32.2%	44.3%	27.9%	97.5%
1/11/1973	10/3/1974	-48.2%	1.4%	23.8%	42.0%	188.4%
11/28/1980	8/12/1982	-27.1%	43.9%	81.2%	238.6%	403.9%
8/25/1987	12/4/1987	-33.5%	14.7%	34.1%	96.8%	387.1%
3/24/2000	10/9/2002	-49.1%	0.2%	1.9%	21.5%	38.3%
10/9/2007	3/9/2009	-56.8%	-6.9%	3.7%	61.2%	209.6%
2/19/2020	3/23/2020	-33.9%	56.4%	???	???	???
1/3/2022	9/30/2022	-25.2%	???	???	???	???
Aver	ages	-37.6%	21.6%	36.9%	83.3%	213.7%

Sources: (Chart) A Wealth of Common Sense, Ben Carlson. YCharts.



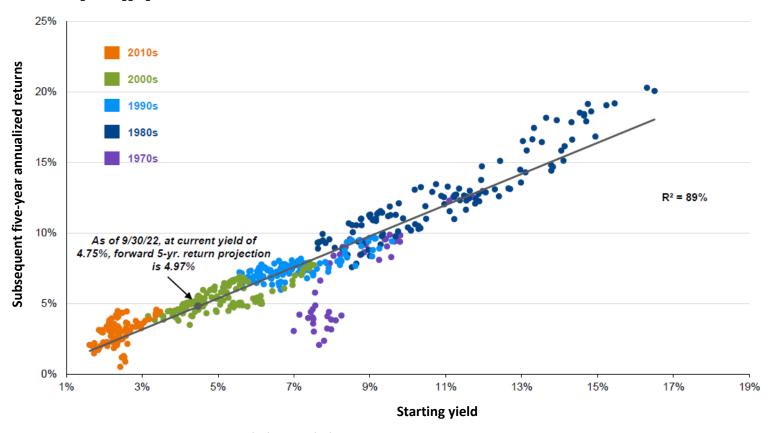


Bonds: Starting Yields Guide Future Returns

• Higher starting yields point to higher future expected returns for fixed income.

Yield-to-worst and subsequent 5-yr. annualized returns

Bloomberg U.S. Aggregate Total Return Index



Source: J.P. Morgan Asset Management. From 1/31/1976, to 9/30/2022, measured monthly.





Conflicting Signals in the Market

Positives

- Strong labor market jobless claims continue to decline
- Consumer remains strong
 - Restaurant, airline, hotel bookings and retail sales are still strong
- Bankruptcy filings at normal levels
- Bank loan growth remains strong

Negatives

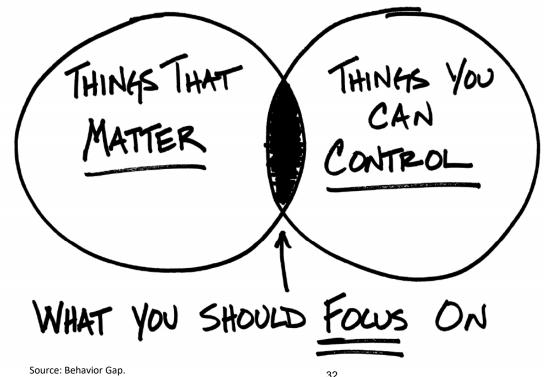
- High inflation
- Financial conditions tightening
- Weakening manufacturing data
- Corporate earnings estimates being revised downward





Final Thoughts

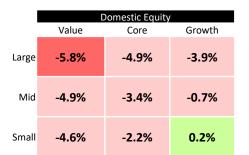
- Don't try to time the markets this typically leads to bad decisions
- Remain diversified and allocate to investments that have exposure to different economic outcomes
- Rebalance portfolios back to long-term target allocations
- Understand various risk exposures across portfolios and adjust as necessary
- Allow managers to allocate to areas of the market they find most attractive





Equity Performance as of September 30, 2022

3rd Quarter 2022





3 Years Annualized





YTD as of September 30, 2022

		Domestic Equity	/
	Value	Core	Growth
Large	-16.6%	-23.9%	-30.4%
Mid	-20.4%	-24.3%	-31.5%
Small	-21.1%	-25.1%	-29.3%

Developed International Equity								
Value Core Growth								
-21.1%	-27.1%	-33.0%						
Ei	merging Marke	ts						
	-27.2%							

5 Years Annualized

		Domestic Equity	/
	Value	Core	Growth
Large	6.2%	9.2%	11.4%
Mid	4.8%	6.5%	7.6%
Small	2.9%	3.6%	3.6%

Developed International Equity									
Value Core Growth									
-2.7%	-0.8%	0.7%							
Er	nerging Marke	ts							
	-1.8%								

1 yr Ending September 30, 2022

ı	[Domestic Equity	/
	Value	Core	Growth
Large	-9.6%	-15.5%	-21.1%
Mid	-13.6%	-19.4%	-29.5%
Small	-17.7%	-23.5%	-29.3%

Developed International Equity								
Value Core Growth								
-20.2%	-25.1%	-30.3%						
Eı	Emerging Markets							
	-28.1%							

10 Years Annualized

_			
	[Domestic Equity	/
	Value	Core	Growth
Large	9.6%	11.7%	13.2%
Mid	9.4%	10.3%	10.9%
Small	7.9%	8.6%	8.8%

Developed International Equity										
Value	Value Core Growth									
2.4%	3.7%	4.7%								
Eı	merging Marke	ts								
	1.0%									

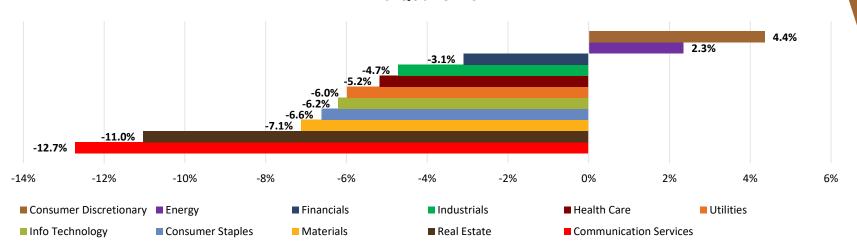
Large Cap Equity = S&P 500 TR, S&P 500 Value TR, and S&P 500 Growth TR. Mid Cap Equity = Russell Mid Cap TR, Russell Mid Cap Value TR, and Russell Mid Cap Growth TR. Small Cap Equity = Russell 2000 TR, Russell 2000 Value TR, and Russell Mid Cap Growth TR. International and EM Equity = MSCI EAFE NR, MSCI EAFE Value NR, MSCI EAFE Growth NR, MSCI EM NR. Returns for time periods of 3 years or longer are annualized.



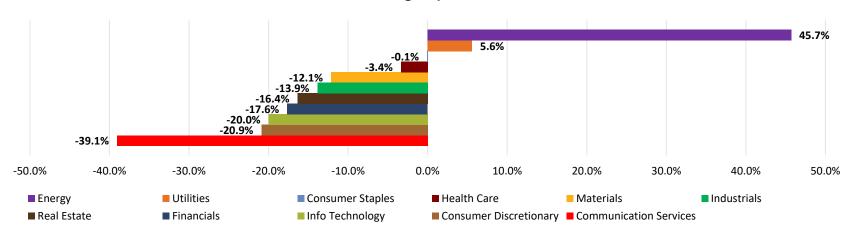


Domestic Equity Sector Performance as of September 30, 2022

Third Quarter 2022



One Year Ending September 30, 2022





Investment Returns Over Time

		s Ended er 30, 2022		Calend	ar Year I	Returns		А	Annualized Periods Ended September 30, 2022					
Broad Market Indices	QTD	YTD	2021	2020	2019	2018	2017	1 yr	3 yrs	5 yrs	7 yrs	10 yrs	20 yrs	
Domestic Equities														
Large Cap Value Stocks	-5.8	-16.6	24.9	1.4	31.9	-9.0	15.4	-9.6	5.1	6.2	9.0	9.6	8.8	
Large Cap Core Stocks	-4.9	-23.9	28.7	18.4	31.5	-4.4	21.8	-15.5	8.2	9.2	11.4	11.7	9.8	
Large Cap Growth Stocks	-3.9	-30.4	32.0	33.5	31.1	0.0	27.4	-21.1	9.9	11.4	13.1	13.2	10.6	
Mid Cap Value Stocks	-4.9	-20.4	28.3	5.0	27.1	-12.3	13.3	-13.6	4.5	4.8	7.7	9.4	10.2	
Mid Cap Core Stocks	-3.4	-24.3	22.6	17.1	30.5	-9.1	18.5	-19.4	5.2	6.5	8.8	10.3	10.7	
Mid Cap Growth Stocks	-0.7	-31.5	12.7	35.6	35.5	-4.8	25.3	-29.5	4.3	7.6	9.5	10.9	11.0	
Small Cap Value Stocks	-4.6	-21.1	28.3	4.6	22.4	-12.9	7.8	-17.7	4.7	2.9	7.4	7.9	8.8	
Small Cap Core Stocks	-2.2	-25.1	14.8	20.0	25.5	-11.0	14.6	-23.5	4.3	3.6	7.5	8.6	9.4	
Small Cap Growth Stocks	0.2	-29.3	2.8	34.6	28.5	-9.3	22.2	-29.3	2.9	3.6	7.1	8.8	9.7	
International Equities														
Developed International Value Stocks	-10.2	-21.1	10.9	-2.6	16.1	-14.8	21.4	-20.2	-2.8	-2.7	1.4	2.4	5.4	
Developed International Core Stocks	-9.4	-27.1	11.3	7.8	22.0	-13.8	25.0	-25.1	-1.8	-0.8	2.8	3.7	5.9	
Developed International Growth Stocks	-8.5	-33.0	11.3	18.3	27.9	-12.8	28.9	-30.3	-1.5	0.7	3.9	4.7	6.2	
Emerging Markets Stocks	-11.6	-27.2	-2.5	18.3	18.4	-14.6	37.3	-28.1	-2.1	-1.8	3.9	1.0	8.73	
Fixed Income														
Core Fixed Income	-4.8	-14.6	-1.5	7.5	8.7	0.0	3.5	-14.6	-3.3	-0.3	0.5	0.9	3.1	
Defensive Fixed Income	-1.5	-4.5	-0.6	3.2	3.6	1.6	0.4	-5.1	-0.5	0.5	0.5	0.6	1.7	
Municipal Fixed Income	-2.7	-8.1	0.3	4.3	5.4	1.7	3.1	-8.0	-0.9	0.5	0.9	1.2	2.8	
Defensive Municipal Fixed Income	-1.1	-2.3	0.3	1.8	2.5	1.7	0.9	-2.3	0.1	0.7	0.7	0.7	1.6	
Floating Rate Corporate Loans	1.4	-3.3	5.2	3.1	8.6	0.4	4.1	-2.5	2.2	3.0	3.7	3.5	4.6	
High Yield Fixed Income	-0.7	-14.6	5.4	6.2	14.4	-2.3	7.5	-14.1	-0.7	1.4	4.0	3.9	7.3	
Diversifying Asset Classes														
Low Correlated Hedge Funds	-	-	6.	10.9	8.4	-4.0	7.8	-						
Liquid Low Correlated Hedge Funds	-1.9	-7.3	4.7	3.2	6.7	-4.2	5.1	-6.7	0.6	0.8	1.2	1.2	2.2	
Commodities	-4.1	13.6	27.1	-3.1	7.7	-11.2	1.7	11.8	13.5	7.0	4.5	-2.1	1.5	
Midstream Energy	-			-2	24.1	-13.3	-2.4					-	-	
Global REITs	-11.4	-29.5	26.7	-6.2	22.8	-6.1	13.2	-22.5	-5.1	0.1	2.7	4.2	7.8	
Direct Real Estate				1.2	5.3	8.3	7.6							
Reinsurance	-6.7	-6.	1.	3.5	0.9	-3.9	-5.6	-5.	-0.7	-0.	-	1.	-	

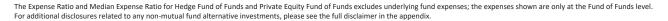
Returns based off the following indices: Large Cap Value Stocks = S&P 500 Value TR, Large Cap Core Stocks = S&P 500 FR, Large Cap Growth Stocks = S&P 500 Growth TR, Mid Cap Value Stocks = Russell Mid Cap Value TR, Mid Cap Value TR, Mid Cap Core Stocks = Russell Mid Cap TR, Small Cap Value Stocks = Russell 2000 Value TR, Small Cap Core Stocks = Russell 2000 TR, Small Cap Growth Stocks = MSCI EAFE Value NR, Developed International Value Stocks = MSCI EAFE Value NR, Developed International Growth Stocks = MSCI EAFE NR, Developed International Growth Stocks = MSCI EAFE Growth NR, Emerging Markets Stocks = MSCI EAFE NR, Developed International Growth Stocks = MSCI EAFE Growth NR, Emerging Markets Stocks = MSCI EAFE NR, Developed International Growth Stocks = MSCI EAFE NR, Developed International Value Stocks = MSCI EAFE Value NR, Core Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensive Fixed Income = BBgBarc US Agg Bond TR, Defensiv



457 & 401(a) Manager Scorecard

Under Review

.,	Criteria								Costs			
	Organization	People	Philosophy & Process	Style Consistency	Asset Base	Performance	Expenses	Overall	Exp Ratio (%)	Median Exp Ratio (%)	Ratio of Exp to Median (%)	
Vanguard TSM Idx;Adm (VTSAX)									0.040	0.850	4.706	
American Funds Mut;R6 (RMFGX)									0.270	0.800	33.750	
American Funds FInv;R6 (RFNGX)									0.280	0.790	35.440	
Vanguard Instl Indx;Inst (VINIX)									0.035	0.290	12.069	
American Funds Gro; R6 (RGAGX)									0.300	0.840	35.714	
Amer Cent:MC Val;R6 (AMDVX)									0.630	0.910	69.231	
Vanguard Md-Cp I;Inst (VMCIX)									0.040	0.950	4.211	
MassMutual S:MCG;I (MEFZX)									0.650	0.950	68.421	
RBB:BP SCV2;Inst (BPSIX)									0.990	1.020	97.059	
Vanguard S-C Id;Inst (VSCIX)									0.040	0.970	4.124	
Harbor:Sm Cap Gro;Inst (HASGX)									0.870	1.100	79.091	
Vanguard Dev Mkt;Adm (VTMGX)									0.070	0.830	8.434	
American Funds EuPc;R6 (RERGX)									0.460	1.040	44.230	
Invesco Dev Mkt;R6 (ODVIX)									0.810	1.120	72.321	
American Funds CWGI;R6 (RWIGX)									0.420	0.890	47.191	
Vanguard Tot Bd;Inst (VBTIX)									0.035	0.530	6.604	
PIMCO:Tot Rtn;Inst (PTTRX)									0.460	0.620	74.194	
PIMCO:LT RI Rtn;Inst (PRAIX)									0.540	0.500	108.000	
MassMutual P:HY;I (MPHZX)									0.540	0.760	71.053	
Parnassus:Core Eqty;Inst (PRILX)									0.610	0.850	71.765	
Vanguard Util Indx;Adm (VUIAX)									0.100	0.820	12.195	
Hartfd:Healthcare HLS;IA									0.920	0.900	102.222	
Invesco Real Estate; R5 (IARIX)									0.860	1.000	86.000	
SAGIC Core Bond									0.420	0.730	57.530	
Vanguard ITR 2030;Inst (VTTWX)									0.090	0.700	12.860	
Legend For Overall Criteria												
No/Minimum Concerns		New No	o/Minimum Con	cerns								
Minor Concern		Upgrad	e to Minor Conc	ern								
Major Concern		Downg	rade to Minor Co	oncern								



New Major Concern

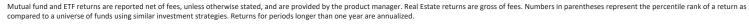


457 & 401(a) Manager Scorecard

Manager	Score Factor	Comments
American Funds FInv;R6 (RFNGX)	People	Firm veteran Dina Perry will relinquish her manager duties and retire from the firm Dec. 31, 2022. She is the longest-serving manager here, but the strategy remains in good hands since the othe 7 managers remain. Dimitrije Mitrinovic will officially join the management team on Nov. 1, 2022. This does not warrant a concern. Innovest will continue to monitor the fund.
American Funds FInv;R6 (RFNGX)	Performance	This fund has trailed its benchmark and peers over the 3 year and 5 year period warranting a minor concern. Innovest will continue to monitor this fund
American Funds Gro;R6 (RGAGX)	Performance	The strategy has underperformed its benchmark and peers over the rolling 3-year and 5 year period. Innovest will continue to monitor the fund.
Amer Cent:MC Val;R6 (AMDVX)	Overall	Current litigation is being pursued against American Century Investments regarding "closet indexing" of the American Century Value Fund. The ongoing lawsuit is cause for heightened monitoring, but no concern currently.
Amer Cent:MC Val;R6 (AMDVX)	People	New manager Nathan Rawlins joined the fund's team of six managers in March 2022. This change does not warrant a concern.
MassMutual S:MCG;I (MEFZX)	Performance	This fund has underperformed benchmarks and peers over the last 3 and 5 year rolling periods. Innovest will continue to monitor the fund.
RBB:BP SCV2;Inst (BPSIX)	People	David Debora retired in September 2022. He was a founding member of Boston Partners and had been a PM since the strategy inception. George Gumpert who has been a PM on the fund since 2005 will continue as the sole PM. Innovest will continue to monitor the product.
American Funds EuPc;R6 (RERGX)	People	Longtime PM of the fund Jersper Lyckeus retired from his portfolio management position on the fund effective July 1, 2022. 7 other PMs remain on the strategy, as Capital Group's team-oriented PM philosophy is well equipped to fulfill Mr. Lyckeus' prior responsibilities. Innovest has been made aware of succession plans well ahead of this retirement and will continue to monitor the team moving forward.
Invesco Dev Mkt;R6 (ODVIX)	Performance	This fund's performance has lagged the index, struggling in the 3- and 5-year periods. This is due in part to high exposure in the Russian Markets. Innovest will continue to monitor the performance of this fund.
American Funds CWGI;R6 (RWIGX)	Performance	The strategy has underperformed its benchmark and peers over the rolling 3-year and 5 year period. Innovest will continue to monitor the fund.
PIMCO:Tot Rtn;Inst (PTTRX)	People	PIMCO announced on October 3, 2022 that Scott Mather began a personal leave of absence that will last through the end of 2022 at a minimum. As a result, Dan Ivascyn and Qi Wang will join the current portfolio managers until Mather returns. While the departure is noteworthy, Innovest does not expect material changes to the strategy.
		This fund has experienced outflows over a 12-month period exceeding 47%, warranting a minor concern.
Parnassus:Core Eqty;Inst (PRILX)		AMG has entered into a definitive agreement to acquire a majority equity interest in Parnassus. After the closing of the transaction, Parnassus partners will continue to own a substantial portion of the equity of the firm and direct its day-to-day operations. The Parnassus investment process will not change because of this partnership, and the Parnassus investment team will remain fully independent.
nvesco Real Estate;R5 (IARIX)	Performance	The fund has failed to outperform both its peers and benchmark over a 3 and 5 year time period. These performance issues warrant a concern
Invesco Real Estate;R5 (IARIX)	People	

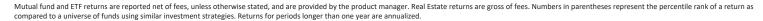


	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
All Cap Equity									
Vanguard Total Stock Market Index	-4.46 (41)	-24.89 (59)	-18.01 (60)	7.59 (28)	8.55 (21)	10.84 (15)	11.33 (19)	-20.20 (59)	09/01/2021
CRSP U.S. Total Market TR Index	-4.44 (39)	-24.86 (58)	-17.98 (59)	7.60 (28)	8.56 (20)	10.86 (15)	11.35 (18)	-20.18 (58)	
IM U.S. Multi-Cap Core Equity (MF) Median	-4.63	-24.30	-17.30	6.41	7.12	9.14	10.16	-19.82	
Large Cap Equity									
American Funds American Mutual	-6.15 (70)	-13.89 (13)	-4.68 (2)	6.26 (29)	7.42 (19)	9.93 (18)	10.10 (23)	-7.27 (4)	09/01/2021
Russell 1000 Value Index	-5.62 (52)	-17.75 (60)	-11.36 (67)	4.36 (74)	5.29 (74)	8.15 (64)	9.17 (54)	-13.41 (65)	
IM U.S. Large Cap Value Equity (MF) Median	-5.57	-16.74	-9.58	5.34	6.09	8.58	9.29	-11.71	
American Funds Fundamental Investors	-5.14 (49)	-24.62 (53)	-18.01 (65)	5.86 (80)	6.45 (86)	9.89 (66)	10.60 (57)	-20.27 (61)	09/01/2021
S&P 500 Index	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	11.40 (15)	11.70 (15)	-18.05 (29)	
IM U.S. Large Cap Core Equity (MF) Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	-19.58	
Vanguard Institutional Index	-4.89 (42)	-23.89 (40)	-15.50 (32)	8.14 (24)	9.21 (27)	11.38 (15)	11.67 (16)	-18.08 (30)	09/01/2021
S&P 500 Index	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	11.40 (15)	11.70 (15)	-18.05 (29)	
IM U.S. Large Cap Core Equity (MF) Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	-19.58	
American Funds Growth Fund of America	-2.62 (11)	-32.05 (35)	-27.58 (49)	7.78 (39)	8.54 (68)	11.11 (47)	11.94 (40)	-28.13 (38)	09/01/2021
S&P 500 Growth	-3.86 (33)	-30.41 (23)	-21.11 (13)	9.92 (13)	11.42 (14)	13.07 (12)	13.19 (11)	-23.96 (14)	
IM U.S. Large Cap Growth Equity (MF) Median	-4.41	-33.10	-27.73	7.08	9.29	10.99	11.66	-29.66	
Mid Cap Equity									
American Century Mid Cap Value	-5.52 (60)	-13.01 (2)	-6.67 (2)	5.38 (42)	5.32 (31)	8.62 (9)	N/A	-8.38 (2)	09/01/2021
Russell Midcap Value Index	-4.93 (47)	-20.36 (92)	-13.56 (90)	4.50 (65)	4.76 (49)	7.66 (45)	9.44 (28)	-15.56 (91)	
IM U.S. Mid Cap Value Equity (MF) Median	-5.00	-17.62	-10.23	4.99	4.70	7.34	8.65	-12.25	
Vanguard Mid Cap Index	-4.14 (43)	-25.42 (93)	-19.48 (91)	5.49 (36)	6.66 (19)	8.70 (19)	10.46 (13)	-21.26 (91)	09/01/2021
CRSP U.S. Mid Cap TR Index	-4.14 (43)	-25.42 (93)	-19.47 (91)	5.48 (36)	6.66 (19)	8.71 (19)	10.49 (12)	-21.26 (91)	
IM U.S. Mid Cap Core Equity (MF) Median	-4.32	-20.76	-14.07	4.68	5.27	7.43	8.80	-15.62	
MassMutual Mid Cap Growth	-3.39 (71)	-29.55 (23)	-26.68 (29)	3.05 (70)	6.47 (75)	8.89 (55)	11.15 (33)	-27.64 (23)	09/01/2021
S&P MidCap 400 Growth	-0.74 (32)	-25.48 (10)	-19.52 (10)	5.10 (49)	5.69 (82)	8.28 (74)	9.76 (69)	-21.39 (11)	
IM U.S. Mid Cap Growth Equity (MF) Median	-1.99	-33.10	-29.66	5.03	7.74	9.16	10.58	-30.55	



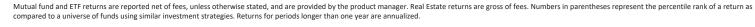


	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Small Cap Equity									
Boston Partners Small Cap Value	-5.64 (55)	-18.96 (35)	-16.08 (67)	3.81 (89)	2.73 (60)	6.63 (56)	7.86 (50)	-11.39 (38)	05/01/2022
Russell 2000 Value Index	-4.61 (42)	-21.12 (74)	-17.69 (86)	4.72 (75)	2.87 (57)	7.42 (35)	7.94 (47)	-12.38 (55)	
IM U.S. Small Cap Value Equity (MF) Median	-5.41	-19.93	-15.25	5.76	3.19	6.86	7.84	-12.14	
Vanguard Small Cap Index	-2.60 (24)	-23.68 (62)	-20.73 (75)	4.99 (45)	5.38 (15)	8.35 (20)	9.58 (18)	-21.62 (76)	09/01/2021
CRSP U.S. Small Cap TR Index	-2.63 (24)	-23.71 (62)	-20.75 (75)	4.96 (46)	5.35 (15)	8.32 (21)	9.65 (16)	-21.64 (76)	
IM U.S. Small Cap Core Equity (MF) Median	-4.48	-23.02	-18.44	4.60	3.57	6.98	8.28	-18.77	
Harbor Small Cap Growth	-0.91 (43)	-28.59 (34)	-25.47 (33)	7.08 (19)	8.07 (23)	9.70 (25)	11.11 (13)	-10.44 (48)	05/01/2022
Russell 2000 Growth Index	0.24 (24)	-29.28 (40)	-29.27 (54)	2.94 (78)	3.60 (79)	7.12 (71)	8.81 (65)	-7.74 (13)	
IM U.S. Small Cap Growth Equity (MF) Median	-1.36	-30.40	-29.12	4.73	5.95	8.51	9.31	-10.54	
International Equity									
Vanguard Developed Markets Index	-10.44 (51)	-27.69 (59)	-25.53 (45)	-1.26 (27)	-0.63 (20)	3.22 (21)	4.04 (17)	-26.24 (47)	09/01/2021
Vanguard Spliced Developed ex U.S. Index (Net)	-9.59 (28)	-27.40 (49)	-25.55 (46)	-1.08 (20)	-0.51 (15)	3.34 (15)	4.06 (15)	-25.99 (40)	
IM International Multi-Cap Core Equity (MF) Median	-10.43	-27.43	-25.66	-1.93	-1.31	2.52	3.25	-26.45	
American Funds EuroPacific Growth	-9.33 (39)	-32.09 (58)	-32.85 (73)	-1.24 (58)	-0.23 (52)	3.75 (36)	4.52 (29)	-33.39 (70)	09/01/2021
MSCI EAFE Growth Index (Net)	-8.50 (19)	-33.02 (67)	-30.28 (61)	-1.49 (64)	0.67 (38)	3.93 (33)	4.70 (26)	-30.90 (56)	
IM International Large Cap Growth Equity (MF) Median	-9.57	-30.90	-28.73	-0.84	-0.14	3.19	3.89	-29.70	
Emerging Markets Equity									
Invesco Developing Markets	-9.76 (33)	-32.55 (74)	-35.29 (81)	-6.23 (90)	-3.17 (68)	3.02 (58)	1.01 (47)	-34.83 (77)	09/01/2021
MSCI Emerging Markets (Net) Index	-11.57 (61)	-27.16 (31)	-28.11 (31)	-2.07 (43)	-1.81 (39)	3.88 (38)	1.05 (46)	-28.97 (29)	
IM Emerging Markets Equity (MF) Median	-11.00	-29.27	-29.88	-2.54	-2.37	3.31	0.91	-30.97	
Global Equity									
American Funds Capital World G/I	-7.17 (52)	-26.73 (47)	-21.99 (48)	2.22 (57)	3.06 (59)	6.34 (50)	7.04 (51)	-23.59 (48)	09/01/2021
MSCI AC World Index	-6.71 (47)	-25.34 (41)	-20.29 (41)	4.23 (32)	4.96 (32)	7.98 (24)	7.84 (37)	-21.95 (40)	
IM Global Equity (MF) Median	-7.07	-27.24	-22.48	2.72	3.67	6.31	7.06	-23.89	
Specialty Equity									
Invesco Real Estate	-10.74 (51)	-26.94 (15)	-15.64 (13)	-2.49 (73)	3.07 (57)	4.74 (55)	5.96 (45)	-18.61 (12)	09/01/2021
Wilshire U.S. Real Estate Securities Index	-10.20 (35)	-29.63 (68)	-17.56 (50)	-2.17 (68)	2.89 (63)	4.67 (57)	6.32 (29)	-20.26 (46)	
IM Real Estate Sector (MF) Median	-10.74	-28.99	-17.59	-1.30	3.31	4.83	5.83	-20.48	



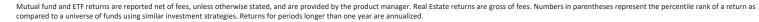


	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Parnassus Core Equity	-6.88 (92)	-25.61 (69)	-17.58 (60)	7.08 (54)	9.82 (12)	10.80 (36)	11.74 (14)	-20.74 (71)	09/01/2021
S&P 500 Index	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	11.40 (15)	11.70 (15)	-18.05 (29)	
IM U.S. Large Cap Core Equity (MF) Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	-19.58	
Hartford Healthcare HLS	-4.50 (63)	-19.97 (59)	-16.87 (50)	8.96 (46)	6.85 (49)	8.44 (42)	13.07 (31)	-19.94 (54)	09/01/2021
S&P 500 Index	-4.88 (69)	-23.87 (76)	-15.47 (37)	8.16 (55)	9.24 (16)	11.40 (7)	11.70 (48)	-18.05 (39)	
IM Health/Biotech Sector (MF) Median	-2.99	-19.02	-16.88	8.58	6.59	7.57	11.55	-19.73	
Vanguard Utilities Index	-5.88 (49)	-7.00 (43)	5.24 (33)	2.79 (56)	7.28 (27)	9.63 (16)	9.73 (11)	-1.14 (34)	09/01/2021
MSCI U.S. IMI Utilities 25/50 Index (Net)	-6.06 (57)	-7.53 (53)	4.42 (43)	1.92 (73)	6.35 (61)	8.66 (51)	8.72 (41)	-1.91 (45)	
IM Utility Sector (MF) Median	-5.94	-7.19	2.98	2.92	6.80	8.67	8.32	-2.25	
Fixed Income									
Vanguard Total Bond Market Idx	-4.65 (47)	-14.58 (26)	-14.65 (26)	-3.26 (55)	-0.24 (40)	0.55 (54)	0.86 (53)	-14.32 (28)	09/01/2021
Blmbg. U.S. Aggregate Index	-4.75 (60)	-14.61 (28)	-14.60 (24)	-3.26 (55)	-0.27 (44)	0.54 (55)	0.89 (51)	-14.25 (23)	
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67	-15.17	-15.29	-3.22	-0.33	0.58	0.90	-14.89	
PIMCO Total Return	-4.83 (71)	-15.59 (65)	-15.66 (64)	-3.15 (45)	-0.30 (47)	0.92 (21)	1.05 (37)	-15.03 (55)	09/01/2021
Blmbg. U.S. Aggregate Index	-4.75 (60)	-14.61 (28)	-14.60 (24)	-3.26 (55)	-0.27 (44)	0.54 (55)	0.89 (51)	-14.25 (23)	
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67	-15.17	-15.29	-3.22	-0.33	0.58	0.90	-14.89	
PIMCO Long-Term Real Return	-11.87 (100)	-35.48 (99)	-31.52 (99)	-4.42 (98)	0.16 (98)	1.66 (69)	N/A	-30.85 (99)	09/01/2021
Blmbg. U.S. TIPS 10+ Year	-11.78 (99)	-34.88 (99)	-30.83 (99)	-4.52 (99)	0.12 (99)	1.50 (81)	0.08 (82)	-30.20 (99)	
IM U.S. TIPS (MF) Median	-5.04	-13.53	-11.72	0.76	1.75	1.91	0.66	-11.46	
MassMutual High Yield	-0.90 (58)	-14.48 (52)	-13.98 (52)	-0.68 (39)	1.20 (39)	3.79 (21)	4.42 (4)	-12.45 (42)	09/01/2021
Blmbg. U.S. Corp High Yield	-0.65 (40)	-14.74 (58)	-14.14 (56)	-0.45 (32)	1.57 (23)	4.13 (11)	3.94 (12)	-13.13 (56)	
IM U.S. High Yield Bonds (MF) Median	-0.78	-14.45	-13.92	-0.94	1.00	3.17	3.10	-12.92	
Stable Value									
SAGIC Core Bond II	0.55 (11)	1.66 (6)	2.19 (6)	2.40 (6)	2.76 (1)	N/A	N/A	2.48 (1)	09/01/2021
Ryan 3 Yr GIC Master Index	0.37 (80)	1.04 (78)	1.41 (70)	1.91 (52)	1.98 (57)	1.82 (80)	1.60 (83)	1.42 (67)	
IM U.S. GIC/Stable Value (SA+CF) Median	0.50	1.34	1.77	1.94	2.01	1.89	1.77	1.66	
Bank of the West Savings	0.12	0.37	0.50	0.50	0.50	0.50	0.50	0.50	09/01/2021
90 Day U.S. Treasury Bill	0.46	0.61	0.62	0.59	1.15	0.94	0.67	0.58	





	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Target Date Funds									
Vanguard Target Retirement Income	-4.64 (56)	-15.89 (44)	-14.19 (42)	-0.02 (34)	1.96 (37)	3.21 (43)	3.31 (41)	-14.57 (42)	09/01/2021
Vanguard Target Income Composite Index	-4.56 (47)	-15.77 (42)	-14.03 (40)	0.33 (26)	2.23 (28)	3.46 (34)	3.54 (30)	-14.39 (40)	
IM Mixed-Asset Target Today (MF) Median	-4.60	-16.49	-14.84	-0.37	1.56	3.07	3.13	-15.19	
Vanguard Target Retirement 2020	-5.12 (51)	-18.21 (43)	-15.83 (37)	1.17 (43)	2.91 (28)	4.91 (24)	5.46 (21)	-16.52 (43)	09/01/2021
Vanguard Target 2020 Composite Index	-4.93 (39)	-17.97 (37)	-15.53 (29)	1.62 (22)	3.26 (8)	5.24 (5)	5.74 (8)	-16.21 (34)	
IM Mixed-Asset Target 2020 (MF) Median	-5.12	-18.70	-16.29	0.99	2.61	4.56	4.93	-16.91	
Vanguard Target Retirement 2025	-5.59 (65)	-20.35 (66)	-17.53 (65)	1.40 (41)	3.15 (29)	5.39 (23)	5.96 (19)	-18.40 (67)	09/01/2021
Vanguard Target 2025 Composite Index	-5.32 (55)	-19.95 (49)	-17.09 (46)	1.97 (18)	3.58 (8)	5.78 (7)	6.29 (8)	-17.95 (51)	
IM Mixed-Asset Target 2025 (MF) Median	-5.23	-19.99	-17.19	1.11	2.82	4.86	5.20	-17.95	
Vanguard Target Retirement 2030	-5.93 (71)	-21.60 (53)	-18.42 (59)	1.82 (47)	3.43 (36)	5.86 (33)	6.46 (27)	-19.42 (60)	09/01/2021
Vanguard Target 2030 Composite Index	-5.58 (50)	-21.16 (44)	-17.96 (46)	2.39 (20)	3.87 (14)	6.26 (12)	6.79 (9)	-18.95 (46)	
IM Mixed-Asset Target 2030 (MF) Median	-5.59	-21.54	-18.17	1.67	3.24	5.49	5.86	-19.13	
Vanguard Target Retirement 2035	-6.09 (62)	-22.40 (35)	-18.87 (46)	2.39 (49)	3.78 (39)	6.39 (35)	6.99 (25)	-20.02 (43)	09/01/2021
Vanguard Target 2035 Composite Index	-5.75 (40)	-22.01 (30)	-18.48 (32)	2.94 (25)	4.22 (18)	6.78 (18)	7.32 (9)	-19.59 (29)	
IM Mixed-Asset Target 2035 (MF) Median	-5.87	-22.90	-19.06	2.36	3.62	6.12	6.38	-20.19	
Vanguard Target Retirement 2040	-6.33 (62)	-23.27 (27)	-19.42 (31)	2.91 (44)	4.11 (34)	6.89 (28)	7.40 (21)	-20.69 (29)	09/01/2021
Vanguard Target 2040 Composite Index	-5.93 (42)	-22.86 (22)	-19.01 (22)	3.47 (20)	4.55 (13)	7.29 (12)	7.75 (10)	-20.24 (19)	
IM Mixed-Asset Target 2040 (MF) Median	-6.13	-24.21	-19.89	2.71	3.89	6.48	6.81	-21.22	
Vanguard Target Retirement 2045	-6.51 (61)	-24.10 (29)	-19.93 (37)	3.46 (30)	4.42 (25)	7.20 (21)	7.61 (16)	-21.33 (32)	09/01/2021
Vanguard Target 2045 Composite Index	-6.11 (35)	-23.71 (25)	-19.55 (23)	3.99 (11)	4.85 (11)	7.60 (9)	7.96 (8)	-20.90 (22)	
IM Mixed-Asset Target 2045 (MF) Median	-6.40	-24.94	-20.31	3.02	4.08	6.66	6.93	-21.82	
Vanguard Target Retirement 2050	-6.64 (62)	-24.43 (28)	-20.18 (38)	3.41 (32)	4.39 (26)	7.18 (25)	7.60 (21)	-21.60 (33)	09/01/2021
Vanguard Target 2050 Composite Index	-6.21 (38)	-24.04 (24)	-19.81 (26)	3.97 (8)	4.84 (11)	7.59 (9)	7.95 (10)	-21.17 (20)	
IM Mixed-Asset Target 2050 (MF) Median	-6.47	-25.19	-20.67	3.08	4.09	6.70	7.02	-22.23	
Vanguard Target Retirement 2055	-6.63 (60)	-24.44 (28)	-20.17 (38)	3.40 (33)	4.38 (30)	7.17 (28)	7.58 (27)	-21.59 (31)	09/01/2021
Vanguard Target 2055 Composite Index	-6.21 (35)	-24.04 (22)	-19.81 (25)	3.97 (9)	4.84 (10)	7.59 (7)	7.95 (11)	-21.17 (20)	
IM Mixed-Asset Target 2055 (MF) Median	-6.51	-25.14	-20.79	3.11	4.11	6.74	7.13	-22.28	





	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Vanguard Target Retirement 2060	-6.64 (63)	-24.44 (24)	-20.16 (37)	3.40 (36)	4.38 (33)	7.17 (42)	7.58 (N/A)	-21.58 (30)	09/01/2021
Vanguard Target 2060 Composite Index	-6.21 (37)	-24.04 (18)	-19.81 (27)	3.97 (10)	4.84 (12)	7.59 (12)	7.95 (N/A)	-21.17 (20)	
IM Mixed-Asset Target 2060 (MF) Median	-6.45	-25.12	-20.84	3.19	4.20	7.09	N/A	-22.32	
Vanguard Target Retirement 2065	-6.60 (56)	-24.38 (23)	-20.10 (26)	3.38 (43)	4.36 (43)	N/A	N/A	-21.55 (16)	09/01/2021
Vanguard Target 2065 Composite Index (Net)	-6.21 (38)	-24.04 (17)	-19.81 (22)	3.97 (11)	4.84 (1)	N/A	N/A	-21.17 (12)	
IM Mixed-Asset Target 2065+ (MF) Median	-6.47	-25.57	-21.09	3.22	4.33	N/A	N/A	-22.78	



HRA Manager Scorecard

				Crite	eria					Costs	
	Organization	People	Philosophy & Process	Style Consistency	Asset Base	Performance	Expenses	Overall	Exp Ratio (%)	Median Exp Ratio (%)	Ratio of Exp to Median (%)
Vanguard TSM Idx;Adm (VTSAX)									0.040	0.850	4.706
Parnassus:Core Eqty;Inv (PRBLX)									0.820	0.850	96.471
American Funds Gro;F3 (GAFFX)									0.300	0.840	35.714
American Funds Flnv;F3 (FUNFX)									0.280	0.730	38.356
Vanguard Md-Cp I;Adm (VIMAX)									0.050	0.950	5.263
Vanguard S-C Id;Adm (VSMAX)									0.050	0.970	5.155
AB Sm Cp Gr;Adv (QUAYX)									0.840	1.100	76.364
Vanguard Dev Mkt;Adm (VTMGX)									0.070	0.830	8.434
Vanguard Tot Bd;Adm (VBTLX)									0.050	0.530	9.434
PIMCO:Tot Rtn;A (PTTAX)									0.800	0.620	129.032
PIMCO:Real Return;A (PRTNX)									0.870	0.500	174.000
MassMutual Stable Value - San Mateo									0.730	0.730	100.000
Vanguard Tgt Ret2030;Inv (VTHRX)									0.080	0.620	12.903

Legend For Overall Criteria									
No/Minimum Concerns	New No/Minimum Concerns								
Minor Concern	Upgrade to Minor Concern								
Major Concern	Downgrade to Minor Concern								
Under Review	New Major Concern								

Manager	Score Factor	Comments
Parnassus:Core Eqty;Inv (PRBLX)	Organization	AMG has entered into a definitive agreement to acquire a majority equity interest in Parnassus. After the closing of the transaction, Parnassus partners will continue to own a substantial portion of the equity of the firm and direct its day-to-day operations. The Parnassus investment process will not change because of this partnership, and the Parnassus investment team will remain fully independent.
American Funds Gro;F3 (GAFFX)	Performance	The strategy has underperformed its benchmark and peers over the rolling 3-year and 5 year period. Innovest will continue to monitor the fund.
American Funds Flnv;F3 (FUNFX)	Performance	This fund has trailed its benchmark and peers over the 3 year and 5 year period warranting a minor concern. Innovest will continue to monitor this fund
American Funds FInv;F3 (FUNFX)	People	Firm veteran Dina Perry will relinquish her manager duties and retire from the firm Dec. 31, 2022. She is the longest-serving manager here, but the strategy remains in good hands since the othe 7 managers remain. Dimitrije Mitrinovic will officially join the management team on Nov. 1, 2022. This does not warrant a concern. Innovest will continue to monitor the fund.
AB Sm Cp Gr;Adv (QUAYX)	People	AB Small Cap Growth has announced that lead manager and longtime co-CIO of U.S. Small/SMID Cap equities Bruce Aronow will retire at the end of 2023.
AB Sm Cp Gr;Adv (QUAYX)	Asset Base	This fund's assets haved declined in the last year, but Innovest will continue to monitor asset flows.
PIMCO:Tot Rtn;A (PTTAX)	People	PIMCO announced on October 3, 2022 that Scott Mather began a personal leave of absence that will last through the end of 2022 at a minimum. As a result, Dan Ivascyn and Qi Wang will join the current portfolio managers until Mather returns. While the departure is noteworthy, Innovest does not expect material changes to the strategy.

The Expense Ratio and Median Expense Ratio for Hedge Fund of Funds and Private Equity Fund of Funds excludes underlying fund expenses; the expenses shown are only at the Fund of Funds level. For additional disclosures related to any non-mutual fund alternative investments, please see the full disclaimer in the appendix.



HRA Manager Scorecard

MassMutual Stable Value - San Mateo

Manager	Score Factor		Comments
PIMCO:Real Return; A (PRTNX)	Expenses	This expense ratio exceeds its peers by more than 150%	

Expenses

*General Accounts typically do not have an explicit, consistent expense ratio, as the fund manager instead derives revenue from the variable spread between the contractual rate of return and the actual underlying return of the portfolio. To reasonably approximate plan costs, the median expense ratio for the stable value universe (IM U.S. GIC/Stable Value Median) is applied here.



HRA Table of Returns

	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
All Cap Equity									
Vanguard Total Stock Market Index	-4.46 (41)	-24.89 (59)	-18.01 (60)	7.59 (28)	8.55 (21)	10.84 (15)	11.33 (19)	-20.20 (59)	09/01/2021
CRSP U.S. Total Market TR Index	-4.44 (39)	-24.86 (58)	-17.98 (59)	7.60 (28)	8.56 (20)	10.86 (15)	11.35 (18)	-20.18 (58)	
IM U.S. Multi-Cap Core Equity (MF) Median	-4.63	-24.30	-17.30	6.41	7.12	9.14	10.16	-19.82	
Large Cap Equity									
American Funds Fundamental Investors	-5.14 (40)	-24.63 (96)	-18.01 (96)	5.85 (40)	6.44 (40)	N/A	N/A	-20.29 (97)	09/01/2021
American Funds Flnv;A (ANCFX)	-5.22 (41)	-24.81 (96)	-18.26 (97)	5.51 (46)	6.12 (50)	9.55 (28)	10.26 (21)	-20.53 (97)	
S&P 500 Value	-5.82 (58)	-16.56 (48)	-9.63 (51)	5.11 (56)	6.17 (47)	8.95 (39)	9.63 (36)	-11.69 (50)	
IM U.S. Large Cap Value Equity (MF) Median	-5.57	-16.74	-9.58	5.34	6.09	8.58	9.29	-11.71	
Parnassus Core Equity	-6.93 (93)	-25.73 (70)	-17.76 (62)	6.85 (60)	9.58 (19)	10.56 (45)	11.52 (22)	-20.91 (74)	09/01/2021
S&P 500 Index	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	11.40 (15)	11.70 (15)	-18.05 (29)	
IM U.S. Large Cap Core Equity (MF) Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	-19.58	
American Funds Growth Fund of America	-2.62 (11)	-32.05 (35)	-27.57 (48)	7.78 (40)	8.54 (68)	N/A	N/A	-28.13 (37)	09/01/2021
American Funds Gro;A (AGTHX)	-2.70 (13)	-32.21 (38)	-27.80 (51)	7.44 (46)	8.20 (73)	10.76 (58)	11.58 (54)	-28.36 (41)	
S&P 500 Growth	-3.86 (33)	-30.41 (23)	-21.11 (13)	9.92 (13)	11.42 (14)	13.07 (12)	13.19 (11)	-23.96 (14)	
IM U.S. Large Cap Growth Equity (MF) Median	-4.41	-33.10	-27.73	7.08	9.29	10.99	11.66	-29.66	
Mid Cap Equity									
Vanguard Mid Cap Index	-4.14 (43)	-25.43 (93)	-19.48 (91)	5.47 (37)	6.64 (19)	8.69 (20)	10.45 (13)	-21.28 (92)	09/01/2021
CRSP U.S. Mid Cap TR Index	-4.14 (43)	-25.42 (93)	-19.47 (91)	5.48 (36)	6.66 (19)	8.71 (19)	10.49 (12)	-21.26 (91)	
IM U.S. Mid Cap Core Equity (MF) Median	-4.32	-20.76	-14.07	4.68	5.27	7.43	8.80	-15.62	
Small Cap Equity									
Vanguard Small Cap Index	-2.61 (24)	-23.70 (62)	-20.74 (75)	4.98 (45)	5.37 (15)	8.34 (20)	9.57 (18)	-21.63 (76)	09/01/2021
CRSP U.S. Small Cap TR Index	-2.63 (24)	-23.71 (62)	-20.75 (75)	4.96 (46)	5.35 (15)	8.32 (21)	9.65 (16)	-21.64 (76)	
IM U.S. Small Cap Core Equity (MF) Median	-4.48	-23.02	-18.44	4.60	3.57	6.98	8.28	-18.77	
AB Small Cap Growth	-3.14 (74)	-40.73 (97)	-39.68 (94)	4.03 (60)	7.78 (28)	10.80 (14)	10.51 (22)	-38.92 (93)	09/01/2021
Russell 2000 Growth Index	0.24 (24)	-29.28 (40)	-29.27 (54)	2.94 (78)	3.60 (79)	7.12 (71)	8.81 (65)	-29.94 (55)	
IM U.S. Small Cap Growth Equity (MF) Median	-1.36	-30.40	-29.12	4.73	5.95	8.51	9.31	-29.40	
International Equity									
Vanguard Developed Markets Index	-10.44 (51)	-27.69 (59)	-25.53 (45)	-1.26 (27)	-0.63 (20)	3.22 (21)	4.04 (17)	-26.24 (47)	09/01/2021
Vanguard Spliced Developed ex U.S. Index (Net)	-9.59 (28)	-27.40 (49)	-25.55 (46)	-1.08 (20)	-0.51 (15)	3.34 (15)	4.06 (15)	-25.99 (40)	
IM International Multi-Cap Core Equity (MF) Median	-10.43	-27.43	-25.66	-1.93	-1.31	2.52	3.25	-26.45	

Mutual fund and ETF returns are reported net of fees, unless otherwise stated, and are provided by the product manager. Real Estate returns are gross of fees. Numbers in parentheses represent the percentile rank of a return as compared to a universe of funds using similar investment strategies. Returns for periods longer than one year are annualized.



HRA Table of Returns

	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Fixed Income									
Vanguard Total Bond Market Index	-4.65 (48)	-14.59 (27)	-14.66 (27)	-3.27 (56)	-0.26 (42)	0.54 (55)	0.85 (55)	-14.33 (29)	09/01/202
Blmbg. U.S. Aggregate Index	-4.75 (60)	-14.61 (28)	-14.60 (24)	-3.26 (55)	-0.27 (44)	0.54 (55)	0.89 (51)	-14.25 (23)	
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67	-15.17	-15.29	-3.22	-0.33	0.58	0.90	-14.89	
PIMCO Real Return	-5.52 (80)	-14.44 (88)	-12.69 (83)	0.45 (66)	1.44 (69)	1.87 (53)	0.47 (64)	-12.41 (85)	09/01/2022
Bloomberg U.S. TIPS Index	-5.14 (57)	-13.61 (58)	-11.57 (46)	0.79 (49)	1.95 (32)	2.21 (22)	0.98 (24)	-11.32 (46)	
IM U.S. TIPS (MF) Median	-5.04	-13.53	-11.72	0.76	1.75	1.91	0.66	-11.46	
PIMCO Total Return	-4.92 (78)	-15.81 (72)	-15.95 (71)	-3.48 (72)	-0.64 (77)	0.56 (52)	0.69 (68)	-15.32 (66)	09/01/2022
Blmbg. U.S. Aggregate Index	-4.75 (60)	-14.61 (28)	-14.60 (24)	-3.26 (55)	-0.27 (44)	0.54 (55)	0.89 (51)	-14.25 (23)	
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67	-15.17	-15.29	-3.22	-0.33	0.58	0.90	-14.89	
Stable Value									
MassMutual Stable Value Group Annuity - San Mateo	0.50 (10)	1.50 (5)	2.10 (2)	2.38 (1)	2.46 (1)	N/A	N/A	2.50 (1)	09/01/202
Ryan 3 Yr GIC Master Index	0.37 (66)	1.04 (52)	1.41 (48)	1.91 (17)	1.98 (22)	1.82 (44)	1.60 (51)	1.42 (46)	
IM U.S. GIC/Stable Value (SA+CF) Median	0.39	1.06	1.38	1.67	1.81	1.75	1.64	1.38	
Target Date Funds									
Vanguard Target Retirement Income	-4.64 (56)	-15.89 (44)	-14.19 (42)	-0.02 (34)	1.96 (37)	3.21 (43)	3.31 (41)	-14.57 (42)	09/01/202
Vanguard Target Income Composite Index	-4.56 (47)	-15.77 (42)	-14.03 (40)	0.33 (26)	2.23 (28)	3.46 (34)	3.54 (30)	-14.39 (40)	
IM Mixed-Asset Target Today (MF) Median	-4.60	-16.49	-14.84	-0.37	1.56	3.07	3.13	-15.19	
Vanguard Target Retirement 2020	-5.12 (51)	-18.21 (43)	-15.83 (37)	1.17 (43)	2.91 (28)	4.91 (24)	5.46 (21)	-16.52 (43)	09/01/2022
Vanguard Target 2020 Composite Index	-4.93 (39)	-17.97 (37)	-15.53 (29)	1.62 (22)	3.26 (8)	5.24 (5)	5.74 (8)	-16.21 (34)	
IM Mixed-Asset Target 2020 (MF) Median	-5.12	-18.70	-16.29	0.99	2.61	4.56	4.93	-16.91	
Vanguard Target Retirement 2025	-5.59 (65)	-20.35 (66)	-17.53 (65)	1.40 (41)	3.15 (29)	5.39 (23)	5.96 (19)	-18.40 (67)	09/01/202
Vanguard Target 2025 Composite Index	-5.32 (55)	-19.95 (49)	-17.09 (46)	1.97 (18)	3.58 (8)	5.78 (7)	6.29 (8)	-17.95 (51)	
IM Mixed-Asset Target 2025 (MF) Median	-5.23	-19.99	-17.19	1.11	2.82	4.86	5.20	-17.95	
Vanguard Target Retirement 2030	-5.93 (71)	-21.60 (53)	-18.42 (59)	1.82 (47)	3.43 (36)	5.86 (33)	6.46 (27)	-19.42 (60)	09/01/202
Vanguard Target 2030 Composite Index	-5.58 (50)	-21.16 (44)	-17.96 (46)	2.39 (20)	3.87 (14)	6.26 (12)	6.79 (9)	-18.95 (46)	
IM Mixed-Asset Target 2030 (MF) Median	-5.59	-21.54	-18.17	1.67	3.24	5.49	5.86	-19.13	
Vanguard Target Retirement 2035	-6.09 (62)	-22.40 (35)	-18.87 (46)	2.39 (49)	3.78 (39)	6.39 (35)	6.99 (25)	-20.02 (43)	09/01/202
Vanguard Target 2035 Composite Index	-5.75 (40)	-22.01 (30)	-18.48 (32)	2.94 (25)	4.22 (18)	6.78 (18)	7.32 (9)	-19.59 (29)	
IM Mixed-Asset Target 2035 (MF) Median	-5.87	-22.90	-19.06	2.36	3.62	6.12	6.38	-20.19	

Mutual fund and ETF returns are reported net of fees, unless otherwise stated, and are provided by the product manager. Real Estate returns are gross of fees. Numbers in parentheses represent the percentile rank of a return as compared to a universe of funds using similar investment strategies. Returns for periods longer than one year are annualized.



HRA Table of Returns

	Last Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Vanguard Target Retirement 2040	-6.33 (62)	-23.27 (27)	-19.42 (31)	2.91 (44)	4.11 (34)	6.89 (28)	7.40 (21)	-20.69 (29)	09/01/2021
Vanguard Target 2040 Composite Index	-5.93 (42)	-22.86 (22)	-19.01 (22)	3.47 (20)	4.55 (13)	7.29 (12)	7.75 (10)	-20.24 (19)	
IM Mixed-Asset Target 2040 (MF) Median	-6.13	-24.21	-19.89	2.71	3.89	6.48	6.81	-21.22	
Vanguard Target Retirement 2045	-6.51 (61)	-24.10 (29)	-19.93 (37)	3.46 (30)	4.42 (25)	7.20 (21)	7.61 (16)	-21.33 (32)	09/01/2021
Vanguard Target 2045 Composite Index	-6.11 (35)	-23.71 (25)	-19.55 (23)	3.99 (11)	4.85 (11)	7.60 (9)	7.96 (8)	-20.90 (22)	
IM Mixed-Asset Target 2045 (MF) Median	-6.40	-24.94	-20.31	3.02	4.08	6.66	6.93	-21.82	
Vanguard Target Retirement 2050	-6.64 (62)	-24.43 (28)	-20.18 (38)	3.41 (32)	4.39 (26)	7.18 (25)	7.60 (21)	-21.60 (33)	09/01/2021
Vanguard Target 2050 Composite Index	-6.21 (38)	-24.04 (24)	-19.81 (26)	3.97 (8)	4.84 (11)	7.59 (9)	7.95 (10)	-21.17 (20)	
IM Mixed-Asset Target 2050 (MF) Median	-6.47	-25.19	-20.67	3.08	4.09	6.70	7.02	-22.23	
Vanguard Target Retirement 2055	-6.63 (60)	-24.44 (28)	-20.17 (38)	3.40 (33)	4.38 (30)	7.17 (28)	7.58 (27)	-21.59 (31)	09/01/2021
Vanguard Target 2055 Composite Index	-6.21 (35)	-24.04 (22)	-19.81 (25)	3.97 (9)	4.84 (10)	7.59 (7)	7.95 (11)	-21.17 (20)	
IM Mixed-Asset Target 2055 (MF) Median	-6.51	-25.14	-20.79	3.11	4.11	6.74	7.13	-22.28	
Vanguard Target Retirement 2060	-6.64 (63)	-24.44 (24)	-20.16 (37)	3.40 (36)	4.38 (33)	7.17 (42)	7.58 (N/A)	-21.58 (30)	09/01/2021
Vanguard Target 2060 Composite Index	-6.21 (37)	-24.04 (18)	-19.81 (27)	3.97 (10)	4.84 (12)	7.59 (12)	7.95 (N/A)	-21.17 (20)	
IM Mixed-Asset Target 2060 (MF) Median	-6.45	-25.12	-20.84	3.19	4.20	7.09	N/A	-22.32	
Vanguard Target Retirement 2065	-6.60 (56)	-24.38 (23)	-20.10 (26)	3.38 (43)	4.36 (43)	N/A	N/A	-21.55 (16)	09/01/2021
Vanguard Target 2065 Composite Index (Net)	-6.21 (38)	-24.04 (17)	-19.81 (22)	3.97 (11)	4.84 (1)	N/A	N/A	-21.17 (12)	
IM Mixed-Asset Target 2065+ (MF) Median	-6.47	-25.57	-21.09	3.22	4.33	N/A	N/A	-22.78	

Vanguard Target Date Funds

Organization:

Founded in 1975, Vanguard's total AUM has eclipsed the \$4 trillion mark across more than 240 mtual funds. The foundation of Vanguard's investment methodology is based around low-cost indexed mutual funds. Day-to-day management of the target date series is overseen William Coleman and Walter Nejman.

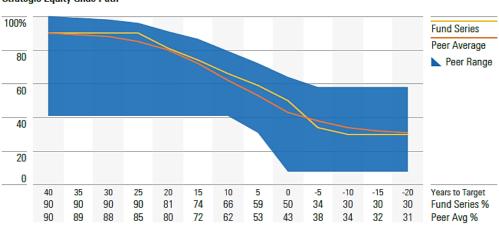
Glide Path Rationale:

With approximately 50% equity exposure at retirement, Vanguard's target date suite is moderately aggressive in comparison to its peers (equity exposure ranges from 70% to 20% across the industry, with the average around 45%). The allocation in this target date suite is managed until seven years after retirement, at which point the glide path becomes static with an allocation of 30% equity and 70% fixed income.

Composition of Funds:

Each of the Vanguard Target Retirement Funds invests in a mix of the firm's broadest proprietary index funds. 100% of the underlying funds are passively managed, predominantly across four index funds (Total Stock Market Index. Total International Stock Index, Total Bond Market II Index. and Total International Bond Index), and the series introduces an allocation to the Vanguard Inflation Protected Securities Index five years prior to the target retirement date. The broad underlying index funds provide exposure to more than 9.500 equity securities and more than 12.700 fixed income securities.

Strategic Equity Glide Path



Peer group includes all series of target-date mutual funds. Each fund in a series follows a predefined asset-allocation glide path and is assigned to Morningstar Category based upon its target retirement date.

^{*}GlidePath generated using Morningstar Target Date Series Report

	COMPOSITION										
Funds Number of Open Sub- of Funds/ Architecture Advisors Funds Holdings (%) Used % Active											
Υ	5	0%	N	0%							

GLIDE PATH						
Max % Equity	% Equity at Target-Date	Min % Equity	Age at Glide Path End			
90%	50%	30%	75			

ASSET CLASS SUMMARY				
U.S. Equity	•			
International Equity	•			
Emerging Markets Equity	•			
U.S. Fixed Income	•			
U.S. TIPS	•			
High Yield Fixed Income				
International Fixed Income	•			
Emerging Markets Debt				
REITs				
Commodities				

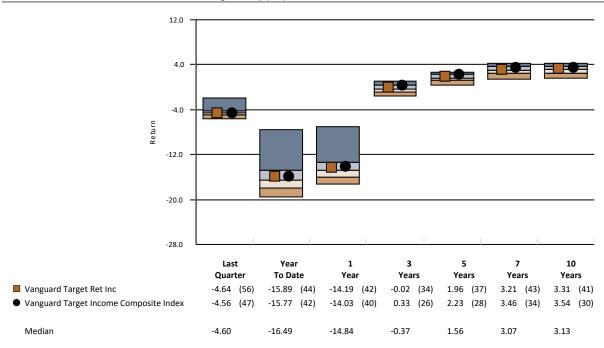
Expenses					
	Vanguard	Median			
Income	0.08%	0.60%			
2015	0.08%	0.63%			
2020	0.08%	0.68%			
2025	0.08%	0.67%			
2030	0.08%	0.70%			
2035	0.08%	0.68%			
2040	0.08%	0.72%			
2045	0.08%	0.70%			
2050	0.08%	0.72%			
2055	0.08%	0.71%			
2060	0.08%	0.70%			
2065	0.08%	0.70%			

Top Holdings				
Fund	Asset Class			
Vanguard Total Stock Mkt Idx	Large Cap Core			
Vanguard Total Intl Stock Index	International Core			
Vanguard Total Bond Mkt II Idx	Domestic Fixed Income			
Vanguard Total Intl Bd Idx	International Fixed Income			
Vanguard ST Infl-Prot Sec Idx	US TIPS			

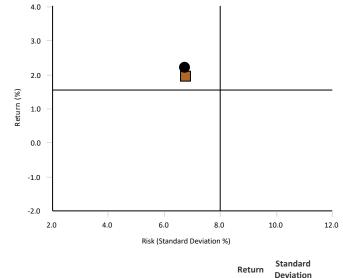


Vanguard Target Ret Inc 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target Today (MF)



RISK VS. RETURN (5 YEARS*)

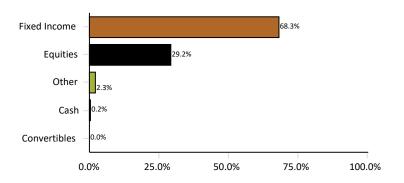


	Return	Deviation
■ Vanguard Target Ret Inc	1.96	6.76
 Vanguard Target Income Composite Index 	2.23	6.73
— Median	1.56	7.98

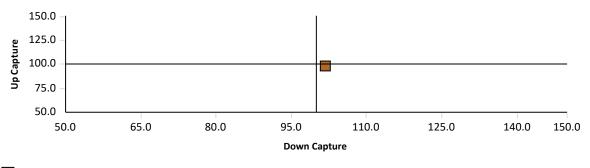
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret Inc	5.25 (69)	10.02 (34)	13.16 (56)	-1.99 (11)	8.47 (61)	5.25 (46)	-0.17 (9)
Vanguard Target Income Composite Index	5.44 (66)	10.70 (20)	13.41 (50)	-1.97 (9)	8.68 (55)	5.35 (39)	0.13 (3)
IM Mixed-Asset Target Today (MF) Median	6.16	9.50	13.34	-3.57	8.92	5.13	-1.42

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)



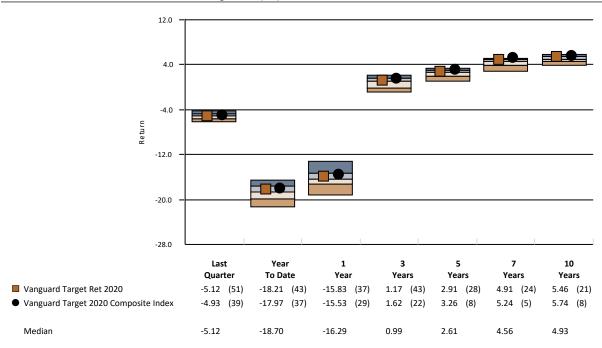
Vanguard Target Ret Inc



^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Target Ret 2020 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target 2020 (MF)



RISK VS. RETURN (5 YEARS*) 6.0 4.0 -2.0 -4.0 7.7 8.4 9.1 9.8 10.5 11.2 11.9

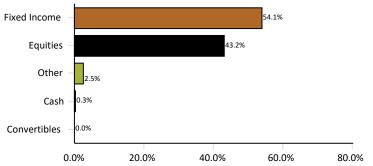
	Keturn	Deviation
■ Vanguard Target Ret 2020	2.91	9.51
 Vanguard Target 2020 Composite Index 	3.26	9.44
Median	2.61	0.51

Risk (Standard Deviation %)

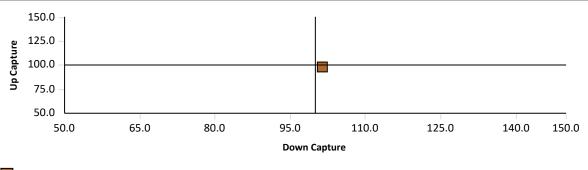
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret 2020	8.17 (67)	12.04 (37)	17.63 (24)	-4.24 (44)	14.08 (15)	6.95 (31)	-0.68 (23)
Vanguard Target 2020 Composite Index	8.43 (60)	12.85 (21)	17.87 (20)	-4.13 (40)	14.22 (11)	7.17 (25)	-0.40 (13)
IM Mixed-Asset Target 2020 (MF) Median	8.70	10.90	15.97	-4.52	12.69	6.36	-1.44

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)



^{0.0% 20.0% 40.0% 60.0% 80.0%} Vanguard Target Ret 2020

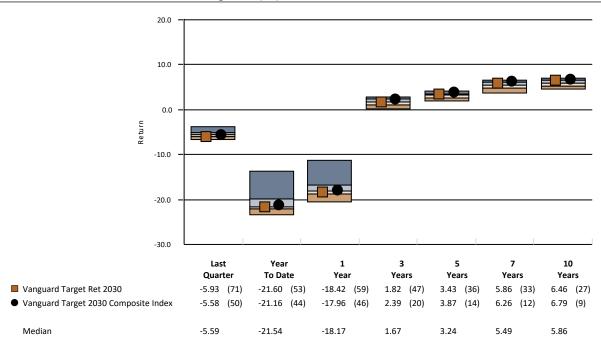


Standard

^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Target Ret 2030 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target 2030 (MF)



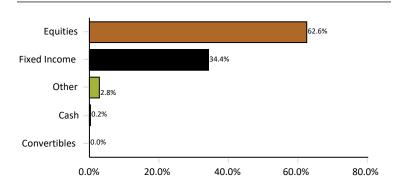
RISK VS. RETURN (5 YEARS*) 5.0 4.0 Return (%) 2.0 1.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 18.0 14.0 16.0 Risk (Standard Deviation %) Standard

	Return	Deviation
Vanguard Target Ret 2030	3.43	12.27
 Vanguard Target 2030 Composite Index 	3.87	12.18
— Median	3.24	12.23

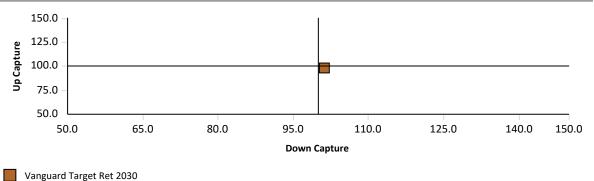
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret 2030	11.38 (52)	14.10 (36)	21.07 (32)	-5.86 (39)	17.52 (34)	7.85 (32)	-1.03 (33)
Vanguard Target 2030 Composite Index	11.66 (44)	14.98 (18)	21.34 (26)	-5.72 (35)	17.66 (30)	8.11 (25)	-0.79 (26)
IM Mixed-Asset Target 2030 (MF) Median	11.44	12.86	20.08	-6.32	16.92	7.30	-1.47

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)

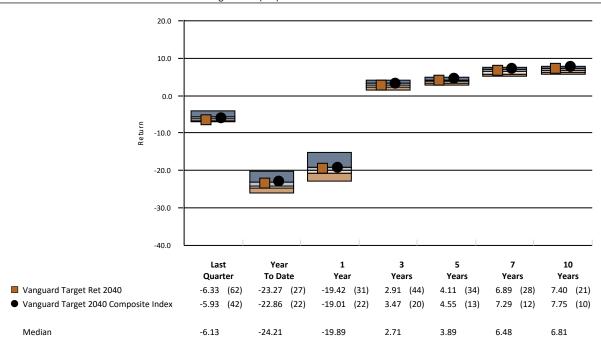




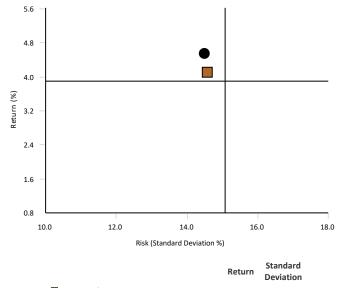
^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Target Ret 2040 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target 2040 (MF)



RISK VS. RETURN (5 YEARS*)

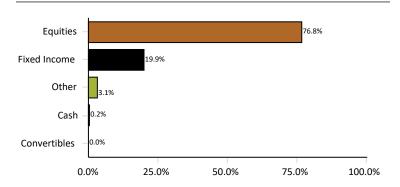


	Return	Deviation
■ Vanguard Target Ret 2040	4.11	14.56
 Vanguard Target 2040 Composite Index 	4.55	14.49
— Median	3.89	15.07

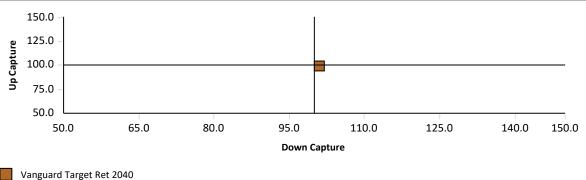
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret 2040	14.56 (79)	15.47 (39)	23.86 (44)	-7.32 (33)	20.71 (28)	8.73 (26)	-1.59 (48)
Vanguard Target 2040 Composite Index	14.84 (72)	16.31 (30)	24.19 (36)	-7.22 (30)	20.86 (23)	8.98 (20)	-1.25 (39)
IM Mixed-Asset Target 2040 (MF) Median	15.67	14.74	23.63	-7.97	19.74	7.95	-1.66

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)

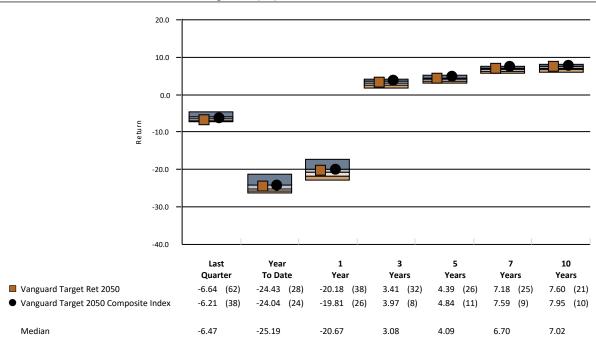




^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Target Ret 2050 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target 2050 (MF)



RISK VS. RETURN (5 YEARS*) 5.6 4.9 4.2 Return (%) 3.5 2.8 2.1 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 Risk (Standard Deviation %) Standard Return Deviation ■ Vanguard Target Ret 2050 4.39 15.73

4.84

4.09

15.68

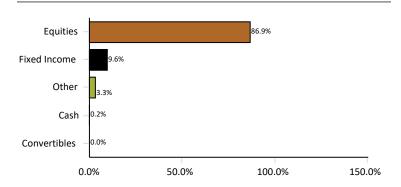
15.95

Vanguard Target 2050 Composite Index

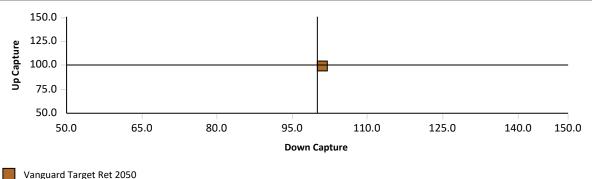
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret 2050	16.41 (70)	16.39 (37)	24.98 (41)	-7.90 (34)	21.39 (33)	8.85 (31)	-1.58 (49)
Vanguard Target 2050 Composite Index	16.75 (58)	17.17 (30)	25.37 (30)	-7.77 (27)	21.55 (26)	9.13 (26)	-1.25 (39)
IM Mixed-Asset Target 2050 (MF) Median	16.99	15.54	24.67	-8.54	20.80	8.10	-1.63

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)



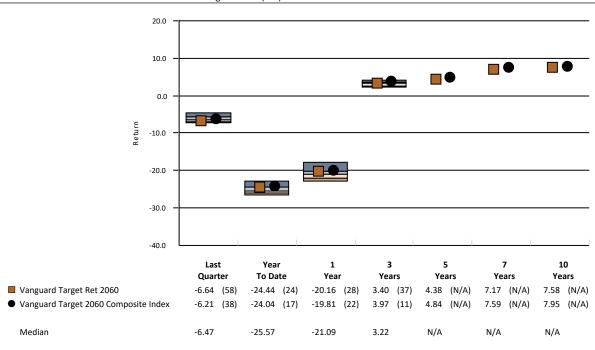
___ Median



^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Target Ret 2060 09/30/22

PEER GROUP ANALYSIS - IM Mixed-Asset Target 2060+ (MF)



RISK VS. RETURN (5 YEARS*) 5.2 4.8 Return (%) 4.0 3.6 3.2 15.0 15.6 16.2 16.8 17.4 18.0 Risk (Standard Deviation %) Standard Return Deviation ■ Vanguard Target Ret 2060 4.38 15.71

4.84

N/A

15.68

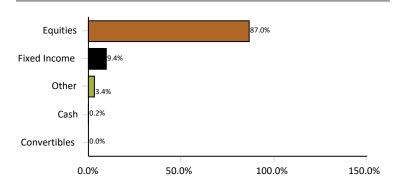
N/A

Vanguard Target 2060 Composite Index

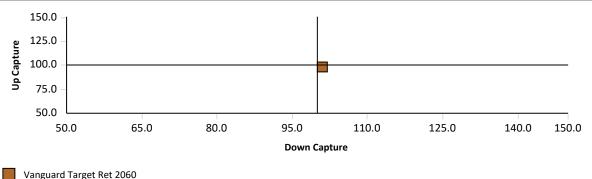
CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Target Ret 2060	16.44 (66)	16.32 (47)	24.96 (63)	-7.89 (4)	21.39 (N/A)	8.84 (N/A)	-1.68 (N/A)
Vanguard Target 2060 Composite Index	16.75 (60)	17.17 (27)	25.37 (56)	-7.77 (1)	21.55 (N/A)	9.13 (N/A)	-1.25 (N/A)
IM Mixed-Asset Target 2060+ (MF) Median	17.15	16.23	26.28	-9.37	N/A	N/A	N/A

ASSET ALLOCATION



UP/DOWN CAPTURE (10/01/17 - 09/30/22)



___ Median

^{*}If less than 5 years, data is since inception of fund share class.

THIS PAGE LEFT INTENTIONALLY BLANK



FUND INFORMATION

PEER GROUP ANALYSIS - IM U.S. Multi-Cap Core Equity (MF)

VI V I		

Fund Vanguard Family:

Fund Inception: 11/13/2000 Portfolio O'Reilly/Nejman

Manager :

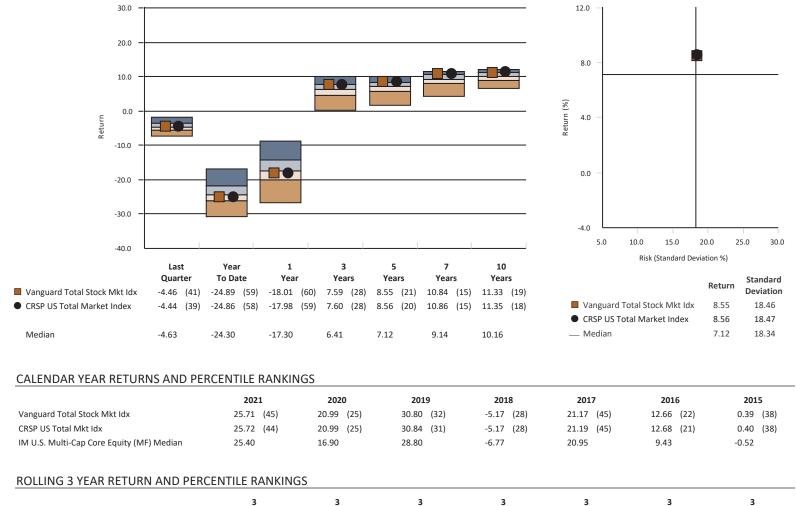
Total \$295,048 Million

Assets:

Turnover: 4%

Investment Strategy:

The Fund seeks to track the CRSP U.S. Total Market Index, which measures the investment return of the overall stock market. The Fund remains fully invested and is diversified across large-, mid-, and small-cap equities.



Years

Ending

Sep-2020

11.64 (19)

11.65 (19)

9.37

Years

Ending

Sep-2019

12.81 (22)

12.82 (21)

11.66

Years

Ending

Sep-2018

17.07 (12)

17.07 (12)

14.87

Years

Ending

Sep-2017

10.69 (16)

10.71 (15)

9.15

Vanguard Total Stock Mkt Idx

IM U.S. Multi-Cap Core Equity (MF) Median

CRSP US Total Mkt Idx



Years

Ending

Sep-2016

10.42 (14)

10.43 (13)

8.76

RISK VS. RETURN (5 YEARS*)

Years

Ending

Sep-2021

16.06 (21)

13.80

16.04 (22)

Years

Ending

Sep-2022

(28)

7.59

7.60 (28)

6.41

^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Total Stock Mkt Idx 09/30/22

OKIFO	LIO CHARACTERISTICS			TOP 10 HOLDINGS						
		Portfolio	Benchmark			Portfolio		Benchmark		arterly
_	. Mkt. Cap \$M	\$396,225	\$395,293			Weight (%)		Weight (%)	Ret	urn (%)
	۱kt. Cap \$M	\$852	\$822	Apple Inc		5.98		5.95		1.22
-	nings ratio	17.09	17.25	Microsoft Corp		4.91		4.90		-9.12
rice/Boo		3.54	3.54	Amazon.com Inc		2.75		2.76		6.39
	Growth Rate (%)	18.23	18.20	Tesla Inc		1.97		1.99		18.17
ırrent Y	` '	1.80	1.78	Alphabet Inc		1.63		1.62		12.22
eta (5 Ye	ears, Monthly)	1.00	1.00	Alphabet Inc		1.44		1.42		12.09
	Securities	2.82	2.81	Unitedhealth Group In		1.33		1.33		-1.36
ctive Sha	are	1.03	N/A	Berkshire Hathaway In	С	1.26		0.93		-2.20
umber c	of Stocks	4,003	4,054	Johnson & Johnson		1.21		1.21		-7.35
				Exxon Mobil Corp		1.04		1.03		2.91
ECTOR	ALLOCATION		SECTOR PE	RFORMANCE		TOTA	AL SECTOR A	ATTRIBUTION		
nforma	Industrials ation Technology Materials Real Estate Utilities 0.0 8.0	9:1 26:3 0 16.0 24.0 32.0 4	10.0 -20.0 -2	-3:2 -3:8 -6:8 -11:0 -5:7 -15.0 -10.0 -5.0	0.0 5.0	-0.	2	-0.1 Fund (Total: (0.0	0.
STYLE I	MAP (12/01/00 - 09/30/22)			UP/DOV	VN CAPTURE ([10/01/17 - 09/30/2	2)			
1	Large Cap Value	1	Large Cap Grow	uth 15	0.0 –		1			
_	Eurge cup value		Eurge cup Grow	4.2	5.0					
Ē				ž						
liza				12 db 10 db 7	0.0					
ţ				s 7	5.0 –					
· 云										
Capitalization				5	0.0					
Capi	Small Cap Value		Small Cap Grow	rth		70.0	90 0	110.0	130.0	150
Capi	Small Cap Value	Manager Style	Small Cap Grow	<u>,th </u>	50.0	70.0	90.0 Down C	110.0	130.0	150.



FUND INFORMATION

Fund Capital
Family: Group/American Funds

Fund Inception: 05/01/2009
Portfolio Team Managed

Manager:

Total \$22,691 Million

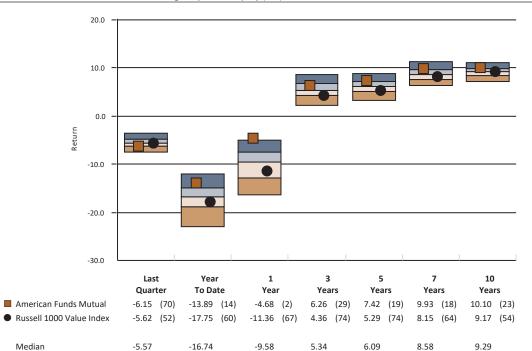
Assets:

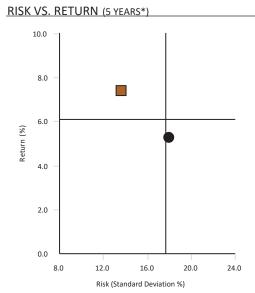
Turnover: 23%

Investment Strategy:

The American Funds American Mutual fund invests in U.S. equities with the with a focus on income, growth and conservation of capital. Although the funds is benchmarked against the Russell 1000 Value Index the portfolio management teams aims to reduce volatility and risk.

PEER GROUP ANALYSIS - IM U.S. Large Cap Value Equity (MF)





	Return	Deviation
American Funds Mutual	7.42	13.62
 Russell 1000 Value Index 	5.29	17.94
Median	6.09	17.65

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
American Funds Mutual	25.33 (60)	5.10 (35)	22.12 (85)	-1.78 (5)	17.99 (33)	14.53 (40)	-2.57 (42)
Russell 1000 Value Index	25.16 (63)	2.80 (61)	26.54 (50)	-8.27 (45)	13.66 (82)	17.34 (17)	-3.83 (69)
IM U.S. Large Cap Value Equity (MF) Median	25.96	3.82	26.50	-8.61	16.95	13.85	-3.00

ROLLING 3 YEAR RETURN AND PERCENTILE RANKINGS

	3	3	3	3	3	3	3
	Years	Years	Years	Years	Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
American Funds Mutual	6.26 (29)	10.18 (49)	6.95 (12)	11.35 (23)	15.01 (29)	9.80 (12)	9.88 (9)
Russell 1000 Value Index	4.36 (74)	10.07 (50)	2.63 (69)	9.43 (69)	13.55 (63)	8.53 (43)	9.70 (10)
IM U.S. Large Cap Value Equity (MF) Median	5.34	10.06	4.05	10.27	14.10	8.28	8.18



^{*}If less than 5 years, data is since inception of fund share class.

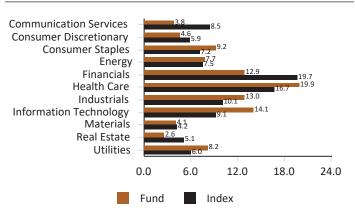
American Funds Mutual 09/30/22

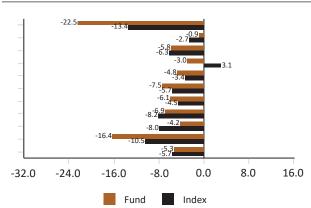
PORTFOLIO CHARACTERISTICS

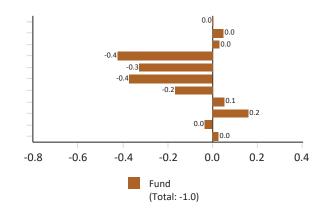
TOP 10 HOLDINGS

	Portfolio	Benchmark		Portfolio	Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$233,476	\$133,921		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$56,501	\$10,526	Microsoft Corp	4.27	0.00	-9.12
Price/Earnings ratio	15.93	13.71	AbbVie Inc	2.90	0.00	-11.55
Price/Book ratio	3.07	2.25	Unitedhealth Group Inc	2.85	0.26	-1.36
5 Yr. EPS Growth Rate (%)	12.82	12.70	Raytheon Technologies Corp	2.56	0.74	-14.33
Current Yield (%)	2.95	2.52	Linde Plc	2.38	0.65	-5.85
Beta (5 Years, Monthly)	0.74	1.00	Home Depot Inc. (The)	2.17	0.72	1.26
% in Int'l Securities	13.10	3.49	Abbott Laboratories	2.12	0.87	-10.55
Active Share	67.81	N/A	General Mills Inc.	2.03	0.28	2.26
Number of Stocks	173	855	Conocophillips	2.00	0.79	16.03
			Comcast Corp	1.98	0.78	-24.75

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



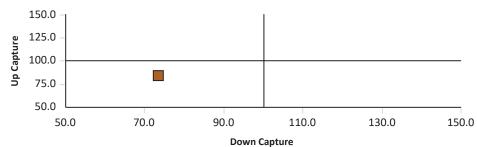




STYLE MAP (06/01/09 - 09/30/22)

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style











FUND INFORMATION

Fund Capital

Family: Group/American Funds
Fund Inception: 08/01/1978

Portfolio Team Managed

Manager:

Total \$56,328 Million

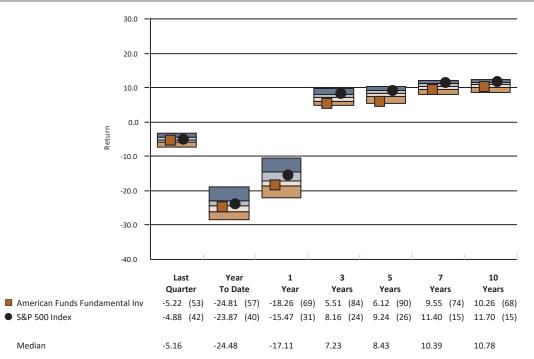
Assets:

Turnover: 25%

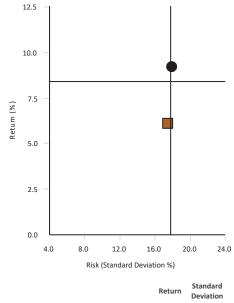
Investment Strategy:

Using principles of fundamental analysis, the fund's management seeks undervalued, overlooked, and out-of-favor stocks with the potential for long-term growth. Companies under consideration for the portfolio often have strong balance sheets, high-quality products and leading market share. The fund seeks to invest in companies that represent good value and possess above-average potential for growth in sales, earnings and dividends.

PEER GROUP ANALYSIS - IM U.S. Large Cap Core Equity (MF)



RISK VS. RETURN (5 YEARS*)



	Return	Deviation
American Funds Fundamental Inv	6.12	17.44
S&P 500 Index	9.24	17.92
Median	8.43	17.73

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
American Funds Fundamental Inv	22.49 (93)	14.95 (71)	27.60 (80)	-6.60 (72)	23.37 (27)	12.54 (14)	3.38 (12)
S&P 500 Index	28.71 (25)	18.40 (50)	31.49 (36)	-4.38 (32)	21.83 (45)	11.96 (20)	1.38 (35)
IM U.S. Large Cap Core Equity (MF) Median	26.95	18.39	30.64	-5.45	21.45	9.70	0.53

ROLLING 3 YEAR RETURN AND PERCENTILE RANKINGS

	3	3	3	3	3	3	3
	Years	Years	Years	Years	Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
American Funds Fundamental Inv	5.51 (84)	13.09 (85)	8.63 (85)	11.28 (73)	17.00 (26)	11.48 (9)	10.24 (34)
S&P 500 Index	8.16 (24)	15.99 (42)	12.28 (38)	13.39 (31)	17.31 (20)	10.81 (22)	11.16 (11)
IM U.S. Large Cap Core Equity (MF) Median	7.23	15.58	11.52	12.60	15.73	9.78	9.63



^{*}If less than 5 years, data is since inception of fund share class.

American Funds Fundamental Inv 09/30/22

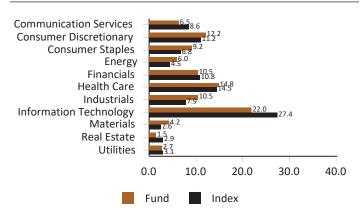
PORTFOLIO CHARACTERISTICS

TOP 10 HOLDINGS

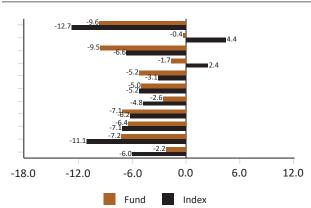
Wtd. Avg. Mkt. Cap \$M	Portfolio \$231,645	Benchmark \$463,992		Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Median Mkt. Cap \$M	\$37,708	\$27,066	Microsoft Corp	4.93	5.77	-9.12
Price/Earnings ratio	14.97	18.15	Broadcom Inc	3.73	0.60	-7.83
Price/Book ratio	3.29	3.76	Unitedhealth Group Inc	2.65	1.57	-1.36
5 Yr. EPS Growth Rate (%)	22.32	18.17	Philip Morris International Inc	2.19	0.43	-14.70
Current Yield (%)	2.19	1.85	Centene Corp	1.96	0.15	-8.04
Beta (5 Years, Monthly)	0.96	1.00	Amazon.com Inc	1.81	3.33	6.39
% in Int'l Securities	20.51	2.92	Eli Lilly and Co	1.55	0.85	0.05
Active Share	61.62	N/A	Meta Platforms Inc	1.51	1.03	-15.86
Number of Stocks	317	503	British American Tobacco	1.51	0.00	-15.93
			Pfizer Inc	1.30	0.82	-15.88

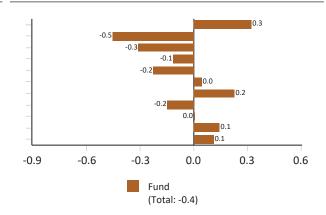
SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION

Average Style Exposure



Sep-2022



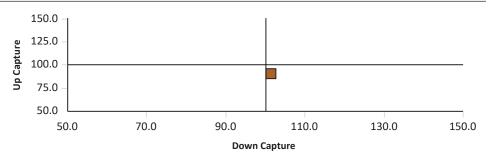


STYLE MAP (01/01/79 - 09/30/22)

Style History



UP/DOWN CAPTURE (10/01/17 - 09/30/22)







FUND INFORMATION

PΕ Equity (MF)

EER	GROUP	ANALYS	SIS - IM	U.S.	Large	Cap	Core	E
								_

Fund Vanguard Family: Fund Inception: 07/31/1990 Portfolio Butler/Louie Manager:

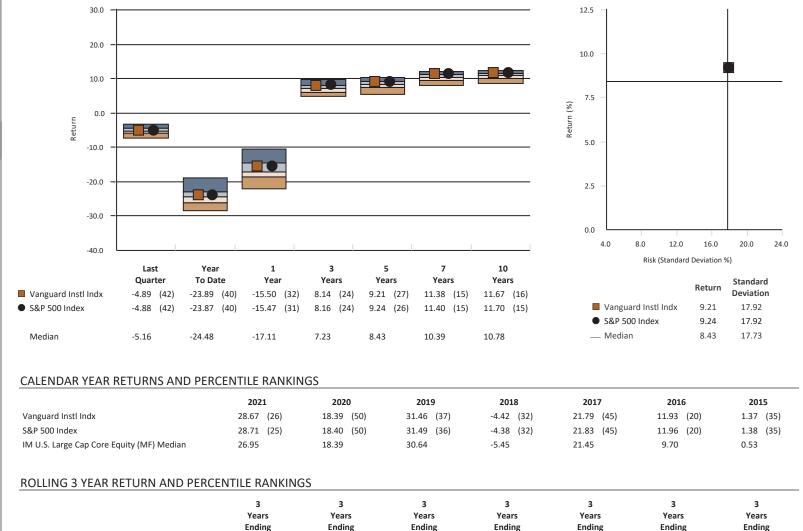
Total \$106,028 Million

Assets:

Turnover: 3%

Investment Strategy:

The Fund seeks to track the performance of the Standard & Poor's 500 Index, a U.S. large-cap equity index diversified across growth and value styles. It is passively managed and takes a full-replication approach. The Fund attempts to remain fully invested and its low expenses help minimize net tracking error.



Sep-2020

12.25 (39)

12.28 (38)

11.52

Sep-2019

13.36 (32)

13.39 (31)

12.60

Sep-2018

17.27 (21)

17.31 (20)

15.73

Sep-2017

10.79 (23)

10.81 (22)

9.78

Vanguard Instl Indx

IM U.S. Large Cap Core Equity (MF) Median

S&P 500 Index



Sep-2016

11.13 (11)

11.16 (11)

9.63

RISK VS. RETURN (5 YEARS*)

Sep-2021

15.99 (42)

15.58

15.97 (43)

Sep-2022

8.14 (24)

8.16

7.23

^{*}If less than 5 years, data is since inception of fund share class.

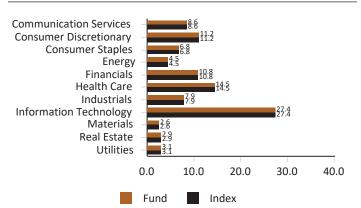
Vanguard Instl Indx 09/30/22

PORTFOLIO CHARACTERISTICS

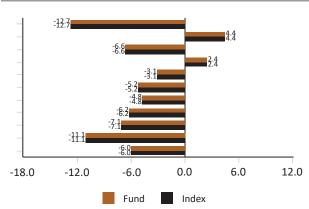
TOP 10 HOLDINGS

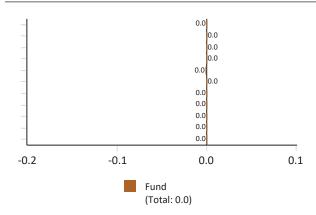
Wtd. Avg. Mkt. Cap \$M	Portfolio \$465,338	Benchmark \$463,992		Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Median Mkt. Cap \$M	\$27,006	\$27,066	Apple Inc	7.04	6.93	1.22
Price/Earnings ratio	18.03	18.15	Microsoft Corp	5.77	5.77	-9.12
Price/Book ratio	3.75	3.76	Amazon.com Inc	3.27	3.33	6.39
5 Yr. EPS Growth Rate (%)	18.24	18.17	Tesla Inc	2.21	2.35	18.17
Current Yield (%)	1.85	1.85	Alphabet Inc	1.90	1.90	-12.22
Beta (5 Years, Monthly)	1.00	1.00	Alphabet Inc	1.76	1.71	-12.09
% in Int'l Securities	2.92	2.92	Berkshire Hathaway Inc	1.60	1.60	-2.20
Active Share	0.69	N/A	Unitedhealth Group Inc	1.57	1.57	-1.36
Number of Stocks	503	503	Johnson & Johnson	1.42	1.43	-7.35
			Exxon Mobil Corp	1.22	1.21	2.91

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



Sep-2022





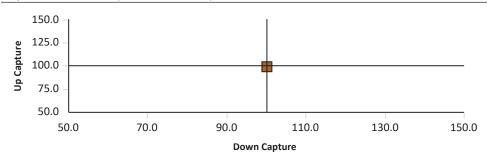
STYLE MAP (08/01/90 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style

Average Style Exposure

UP/DOWN CAPTURE (10/01/17 - 09/30/22)







FUND INFORMATION

Fund Capital Group/American Funds

Family: Fund Inception: 05/01/2009

Team Managed

Portfolio Manager:

Total \$36,400 Million

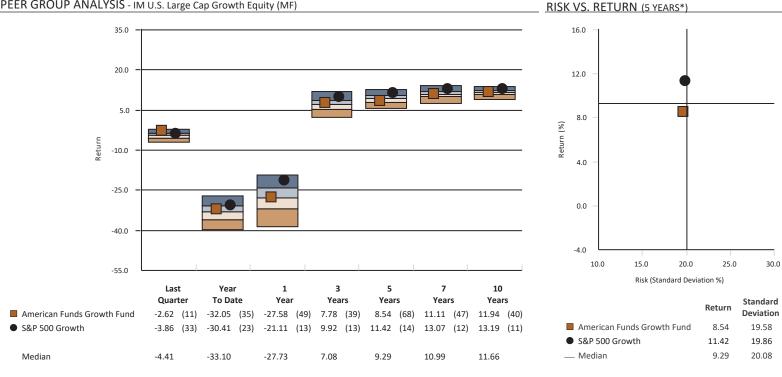
Assets:

Turnover: 24%

Investment Strategy:

American Funds Growth Portfolio fund of funds seeks to help investors pursue longer term goals through exposure to a diverse mix of stocks of companies with strong growth potential. The strategy maintains exposure to more than 1,200 companies in more than 40 countries, offering a broad spectrum of equity investments. Equity exposure includes companies with proven growth records, as well as those with overlooked, out-of-favor stocks.

PEER GROUP ANALYSIS - IM U.S. Large Cap Growth Equity (MF)



CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
American Funds Growth Fund	19.69 (67)	38.28 (36)	28.54 (89)	-2.60 (64)	26.53 (74)	8.82 (2)	5.70 (49)
S&P 500 Growth	32.01 (1)	33.47 (63)	31.13 (72)	-0.01 (37)	27.44 (68)	6.89 (12)	5.52 (52)
IM U.S. Large Cap Growth Equity (MF) Median	22.39	35.62	33.26	-1.22	29.28	2.21	5.61

ROLLING 3 YEAR RETURN AND PERCENTILE RANKINGS

	3	3	3	3	3	3	3
	Years	Years	Years	Years	Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
American Funds Growth Fund	7.78 (39)	19.24 (67)	16.84 (81)	13.10 (83)	19.41 (31)	11.82 (31)	10.74 (36)
S&P 500 Growth	9.92 (13)	20.23 (52)	19.09 (62)	15.73 (46)	19.88 (23)	12.24 (24)	12.75 (7)
IM U.S. Large Cap Growth Equity (MF) Median	7.08	20.44	20.28	15.40	18.69	11.06	10.17



^{*}If less than 5 years, data is since inception of fund share class.

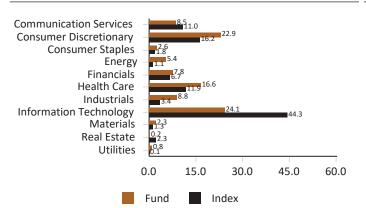
American Funds Growth Fund 09/30/22

PORTFOLIO CHARACTERISTICS

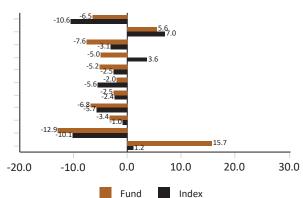
TOP 10 HOLDINGS

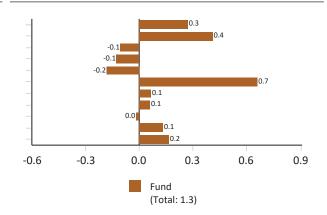
Wtd. Avg. Mkt. Cap \$M	Portfolio \$330,374	Benchmark \$806,761		Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Median Mkt. Cap \$M	\$24,616	\$27,824	Microsoft Corp	7.19	11.87	-9.12
Price/Earnings ratio	18.46	21.82	Amazon.com Inc	5.00	6.85	6.39
Price/Book ratio	4.16	6.63	Unitedhealth Group Inc	4.75	1.36	-1.36
5 Yr. EPS Growth Rate (%)	25.44	24.92	Meta Platforms Inc	2.99	2.12	-15.86
Current Yield (%)	1.14	1.07	Tesla Inc	2.93	4.83	18.17
Beta (5 Years, Monthly)	0.96	1.00	Broadcom Inc	2.30	0.70	-7.83
% in Int'l Securities	12.88	1.95	Thermo Fisher Scientific Inc	1.64	1.36	-6.59
Active Share	60.23	N/A	Netflix Inc	1.62	0.72	34.64
Number of Stocks	362	242	Mastercard Inc	1.47	0.78	-9.73
			Carrier Global Corp	1.19	0.00	-0.28

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



Sep-2022





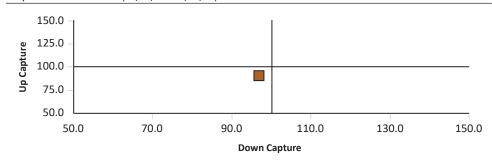
STYLE MAP (06/01/09 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style

Average Style Exposure

UP/DOWN CAPTURE (10/01/17 - 09/30/22)







FUND INFORMATION

Fund American Century Family: Investments Fund Inception: 01/13/2005 Portfolio Team Managed

Manager:

Total \$233 Million

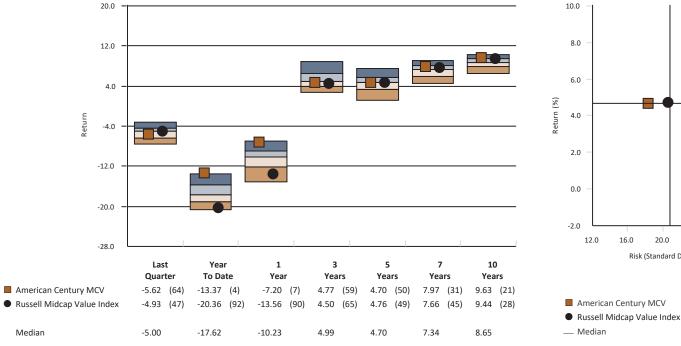
Assets:

Turnover: 50%

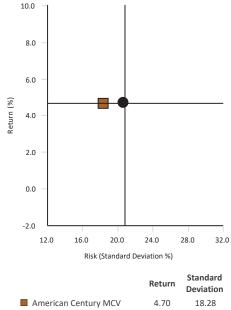
Investment Strategy:

This strategy seeks to find companies with good returns on capital with relatively low levels of debt, that are cheap based on at least two of five valuation measures, including P/E, P/FCF, and dividend yield. They resemble a more relative value manager, and are not looking for turnarounds, but rather companies that have strong competitive positions and a healthy balance sheet. They have a strict sell discipline at their price target, which can result in higher turnover.

PEER GROUP ANALYSIS - IM U.S. Mid Cap Value Equity (MF)



RISK VS. RETURN (5 YEARS*)



CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
American Century MCV	22.75 (98)	1.43 (59)	28.55 (37)	-13.25 (42)	11.32 (78)	22.50 (11)	-1.81 (18)
Russell MCV Idx	28.34 (58)	4.96 (33)	27.06 (47)	-12.29 (27)	13.34 (55)	20.00 (29)	-4.78 (53)
IM U.S. Mid Cap Value Equity (MF) Median	28.76	2.50	26.76	-13.77	13.58	16.24	-4.62

ROLLING 3 YEAR RETURN AND PERCENTILE RANKINGS

	3 Years Ending						
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
American Century MCV	4.77 (59)	8.27 (69)	0.47 (34)	7.72 (37)	13.26 (23)	10.88 (10)	11.95 (6)
Russell MCV Idx	4.50 (65)	10.28 (27)	0.82 (24)	7.82 (34)	13.09 (24)	9.19 (30)	10.49 (14)
IM U.S. Mid Cap Value Equity (MF) Median	4.99	8.96	-0.65	7.08	11.63	8.18	7.94



20.59

20.81

4.76

4.70

^{*}If less than 5 years, data is since inception of fund share class.

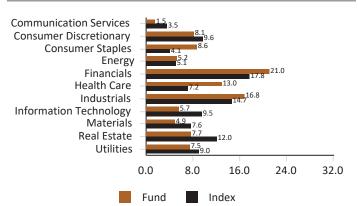
American Century MCV 09/30/22

PORTFOLIO CHARACTERISTICS

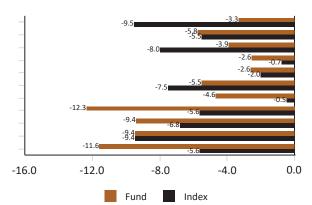
TOP 10 HOLDINGS

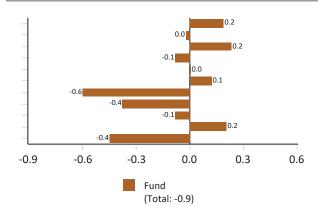
	Portfolio	Benchmark		Portfolio	Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$20,031	\$17,795		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$15,729	\$7,985	Zimmer Biomet Holdings Inc	3.43	0.39	-0.26
Price/Earnings ratio	14.10	12.81	Northern Trust Corp	2.49	0.31	-10.65
Price/Book ratio	1.97	2.12	Bank of New York	2.49	0.50	-6.85
5 Yr. EPS Growth Rate (%)	7.31	13.46	The Allstate Corporation	2.32	0.60	-1.05
Current Yield (%)	3.07	2.35	Conagra Brands Inc	2.27	0.27	-3.78
Beta (5 Years, Monthly)	0.87	1.00	Reinsurance Group of Amer.	2.19	0.15	7.92
% in Int'l Securities	13.11	3.48	Emerson Electric Co.	2.10	0.00	-7.40
Active Share	84.34	N/A	Edison International	2.08	0.38	-8.45
Number of Stocks	95	702	Quest Diagnostics Inc	2.00	0.26	-7.28
			Koninklijke Ahold Delhaize NV	2.00	0.00	0.18

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



Sep-2022



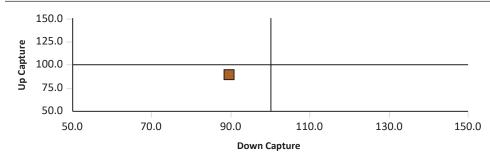


STYLE MAP (02/01/05 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style





Average Style Exposure

American Century MCV



Ы 1F)

EER	GROUP	ANALYSIS	- IM	U.S.	Mid	Cap	Core	Equity	(M

Fund Vanguard Family: Fund Inception: 11/12/2001

Portfolio Butler/Khan

Manager:

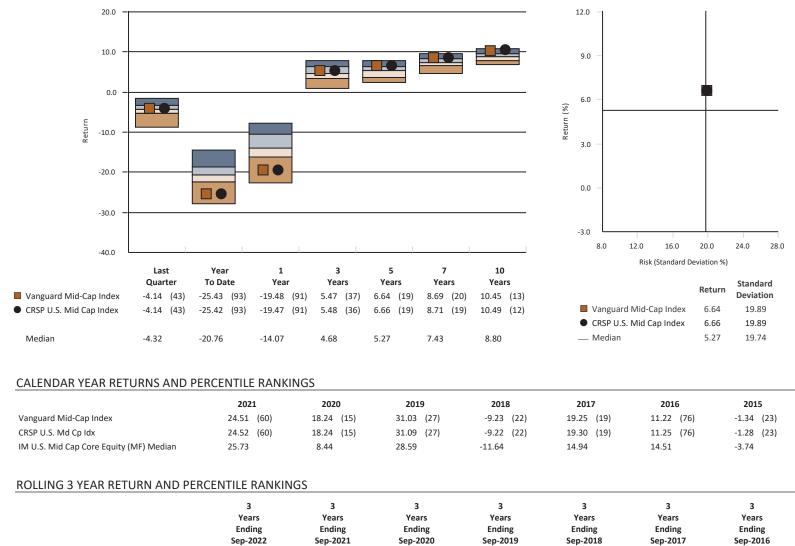
Total \$54,589 Million

Assets:

Turnover: 16%

Investment Strategy:

The Fund tracks the CRSP US Mid Cap Index. The CRSP US Mid Cap Index targets inclusion of U.S. companies that fall between the top 70%-80% of investable market capitalization. The index includes securities traded on NYSE, NYSE Market, NASDAQ or ARCA.



7.98 (13)

7.99 (12)

3.00

10.67 (22)

10.70 (22)

8.83

13.78 (29)

13.81 (29)

12.17

9.72 (17)

9.77 (17)

7.94

Vanguard Mid-Cap Index

IM U.S. Mid Cap Core Equity (MF) Median

CRSP U.S. Md Cp Idx



9.90 (8)

9.96 (8)

7.29

RISK VS. RETURN (5 YEARS*)

14.74 (6)

14.76 (6)

10.99

5.47 (37)

5.48 (36)

4.68

^{*}If less than 5 years, data is since inception of fund share class.

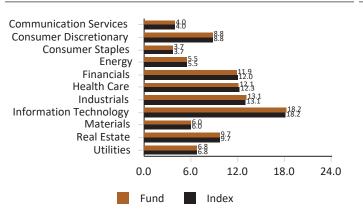
Vanguard Mid-Cap Index 09/30/22

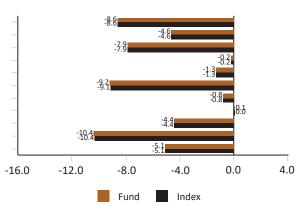
PORTFOLIO CHARACTERISTICS

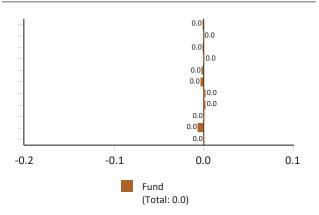
TOP 10 HOLDINGS

	Dautalia	Danish was all		Portfolio	Donahmank	O. contonler
	Portfolio	Benchmark			Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$22,548	\$22,433		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$15,775	\$16,082	Synopsys Inc	0.86	0.43	0.60
Price/Earnings ratio	15.36	16.17	Centene Corp	0.84	0.82	-8.04
Price/Book ratio	2.82	2.82	Cadence Design Systems Inc	0.83	0.83	8.93
5 Yr. EPS Growth Rate (%)	16.13	15.68	Corteva Inc	0.76	0.76	5.82
Current Yield (%)	1.85	1.79	Amphenol Corp	0.74	0.73	4.29
Beta (5 Years, Monthly)	1.00	1.00	Devon Energy Corp	0.73	0.73	11.58
% in Int'l Securities	2.93	2.92	Cheniere Energy Inc.	0.70	0.76	25.00
Active Share	2.98	N/A	Motorola Solutions Inc	0.69	0.69	7.20
Number of Stocks	362	358	Enphase Energy Inc	0.69	0.69	42.12
			Arthur J. Gallagher & Co.	0.66	0.66	5.31

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION







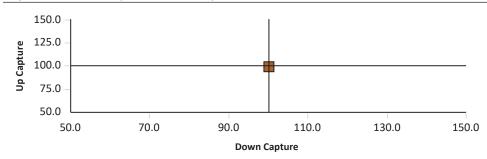
STYLE MAP (12/01/01 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Capitalization Small Cap Value Small Cap Growth **Manager Style** Sep-2022

Average Style Exposure

UP/DOWN CAPTURE (10/01/17 - 09/30/22)







PEER GROUP ANALYSIS - IM U.S. Mid Cap Growth Equity (MF)

RISK VS. RETURN (5 YEARS*)

Fund	MassMutual
Family :	
Fund Inception :	06/01/2000
Portfolio	Berghuis/Scarpa/Dabas
Manager :	

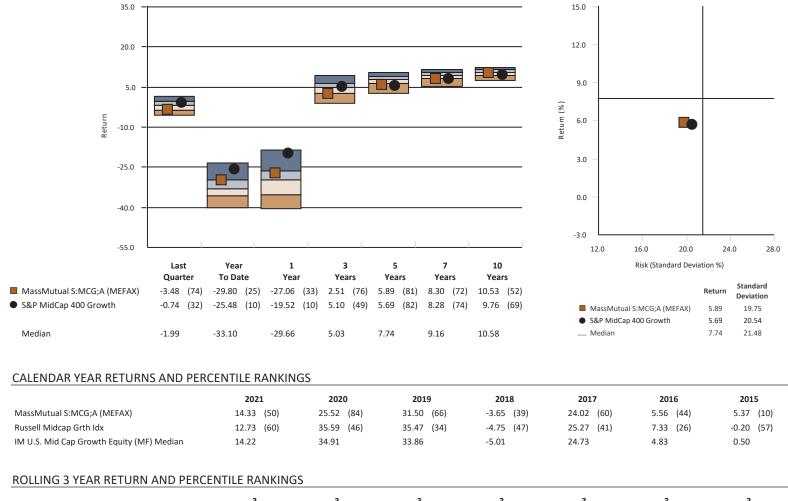
Total \$98 Million

Assets:

Turnover: 29%

Investment Strategy:

The investment seeks growth of capital over the long-term. The fund invests primarily in equity securities of midcapitalization companies. It normally invests in mid-cap companies whose earnings the subadvisers expect to grow at a faster rate than the average company.



	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
MassMutual S:MCG;A (MEFAX)	2.51 (76)	16.13 (75)	12.31 (77)	13.79 (50)	15.22 (58)	12.68 (10)	10.37 (10)
Russell Midcap Grth Idx	4.26 (61)	19.14 (42)	16.23 (43)	14.50 (39)	16.65 (39)	9.96 (39)	8.90 (27)
IM U.S. Mid Cap Growth Equity (MF) Median	5.03	18.65	15.77	13.79	15.73	9.48	7.24



^{*}If less than 5 years, data is since inception of fund share class.

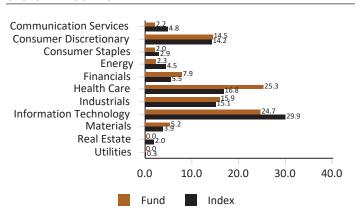
MassMutual S:MCG;A (MEFAX) 09/30/22

PORTFOLIO CHARACTERISTICS

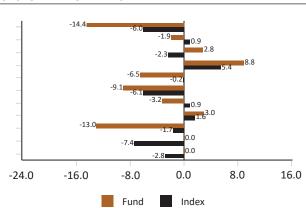
TOP 10 HOLDINGS

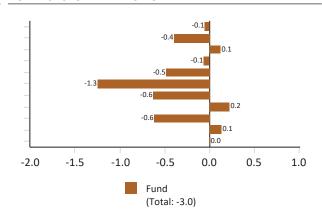
Wtd. Avg. Mkt. Cap \$M	Portfolio \$20,668	Benchmark \$21,654		Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Median Mkt. Cap \$M	\$12,386	\$9,834	Hologic Inc	2.63	0.00	-6.90
Price/Earnings ratio	20.60	22.89	Microchip Technology Inc	2.52	0.89	5.52
Price/Book ratio	3.69	6.09	Agilent Technologies Inc	2.13	1.04	2.52
5 Yr. EPS Growth Rate (%)	20.61	23.00	Textron Inc	2.09	0.00	-4.57
Current Yield (%)	0.63	0.82	Ingersoll Rand Inc	1.84	0.00	2.84
Beta (5 Years, Monthly)	0.91	1.00	Teleflex Inc	1.83	0.00	-17.95
% in Int'l Securities	6.22	3.92	Marvell Technology Inc	1.80	0.00	-1.30
Active Share	68.72	N/A	KLA Corp	1.56	0.00	-4.83
Number of Stocks	186	407	Dollar General Corporation	1.46	0.00	-2.06
			Chipotle Mexican Grill Inc	1.41	1.33	14.96

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



Sep-2022





STYLE MAP (07/01/00 - 09/30/22)

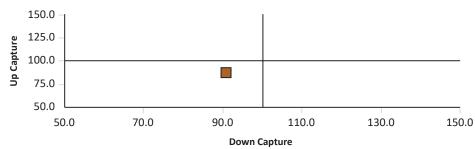
Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style



Average Style Exposure

UP/DOWN CAPTURE (10/01/17 - 09/30/22)





MassMutual S:MCG;A (MEFAX)



Fund **Boston Partners**

Family:

Fund Inception: 07/01/1998

Portfolio Dabora/Bumpert

Manager:

\$692 Million Total

Assets:

Turnover: 33%

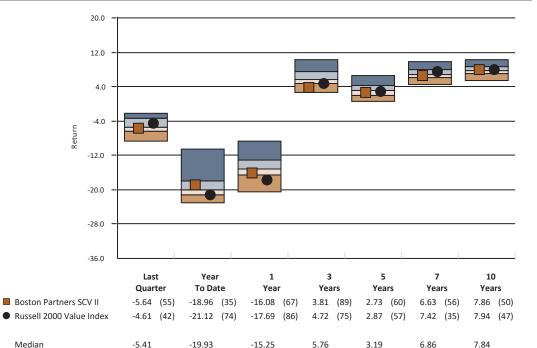
Investment Strategy:

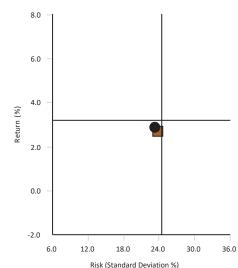
Boston Partners Small Cap Value is fundamental, bottom-up value strategy. Their value discipline is rooted in three "fundamental truths": 1. Low valuation stocks outperform high valuation stocks. 2. Companies with strong fundamentals (high returns on invested capital) outperform companies with poor. 3. Stocks with positive business momentum (improving trends/rising earnings) outperform stocks with negative momentum. These characteristics are analyzed using a bottom-up blend of qualitative and quantitative inputs to build a portfolio which they believe will outperform with the ultimate goal to "win by not losing".

Innovest's Assessment:

The strategy should be expected to outperform in market environments with an upward bias that are broadly based and balanced in terms of style. It should also outperform in periods marked by a correction from prior market imbalances and recovery from profound valuation dislocations. It should underperform in a highly speculative market in which valuation and fundamental investment principles are disregarded.

PEER GROUP ANALYSIS - IM U.S. Small Cap Value Equity (MF)





RISK VS. RETURN (5 YEARS*)

	Return	Standard Deviation
■ Boston Partners SCV II	2.73	23.76
 Russell 2000 Value Index 	2.87	23.19
— Median	3.19	24.49

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Boston Partners SCV II	25.78 (91)	1.60 (64)	28.02 (7)	-16.34 (51)	9.78 (36)	25.97 (61)	-4.33 (19)
Russell 2000 Val Idx	28.27 (73)	4.63 (35)	22.39 (28)	-12.86 (23)	7.84 (60)	31.74 (17)	-7.47 (57)
IM U.S. Small Cap Value Equity (MF) Median	31.97	3.57	21.05	-16.08	8.46	26.70	-7.05

	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
Boston Partners SCV II	3.81 (89)	8.64 (37)	-4.76 (28)	6.58 (20)	13.35 (57)	10.98 (28)	6.86 (25)
Russell 2000 Val Idx	4.72 (75)	8.58 (38)	-5.13 (32)	6.54 (21)	16.12 (19)	12.12 (19)	6.77 (27)
IM U.S. Small Cap Value Equity (MF) Median	5.76	7.96	-6.13	4.94	13.60	9.92	5.90



^{*}If less than 5 years, data is since inception of fund share class.

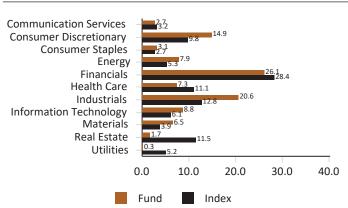
Boston Partners SCV II 09/30/22

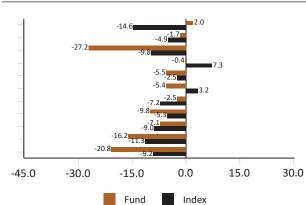
PORTFOLIO CHARACTERISTICS

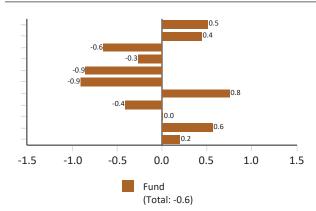
TOP 10 HOLDINGS

	Portfolio	Benchmark		Portfolio	Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$3,207	\$2,148		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$2,261	\$782	Change Healthcare inc	3.06	0.00	19.21
Price/Earnings ratio	9.86	9.24	Graphic Packaging Holding Co	2.67	0.00	-3.39
Price/Book ratio	2.01	1.51	WESCO International Inc	2.36	0.00	11.47
5 Yr. EPS Growth Rate (%)	19.52	12.45	Stride Inc	2.09	0.00	3.04
Current Yield (%)	2.11	2.37	SLM Corp	1.86	0.00	-11.58
Beta (5 Years, Monthly)	1.00	1.00	Harley-Davidson Inc.	1.62	0.00	10.59
% in Int'l Securities	6.61	4.15	Topgolf Callaway Brands Corp	1.58	0.25	-5.59
Active Share	90.10	N/A	ABM Industries Inc	1.54	0.24	-11.55
Number of Stocks	178	1,394	Valvoline Inc	1.52	0.00	-11.73
			Curtiss-Wright Corp	1.29	0.00	5.52

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION





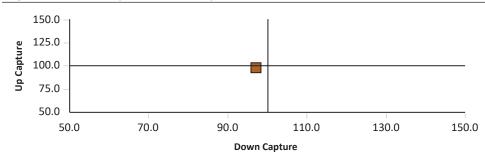


STYLE MAP (08/01/98 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth

UP/DOWN CAPTURE (10/01/17 - 09/30/22)



Manager Style

Sep-2022 Average Style Exposure

Boston Partners SCV II

PΕ quity (MF)

EER GROUP	ANALYSIS - II	M U.S. Small	Cap Core Eq
		· ·	

Fund Vanguard Family:

Fund Inception: 11/13/2000 Portfolio Coleman/O'Reilly

Manager:

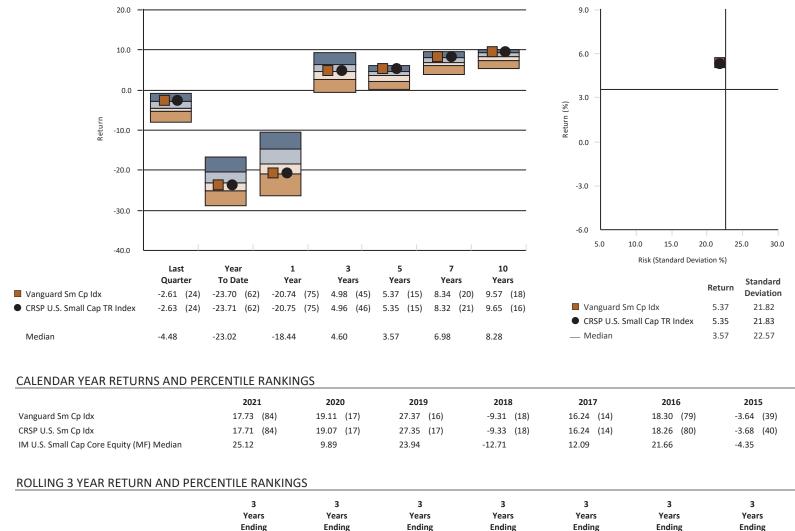
Total \$47,449 Million

Assets:

Turnover: 17%

Investment Strategy:

This fund tracks the CRSP U.S. Small Cap Index, which is comprised of U.S. companies that fall between the bottom 2%-15% of the investable market capitalization. There is no lower limit in market capitalization, other than what is specified by investable screens.



Sep-2020

4.39 (5)

4.37 (5)

-1.61

Vanguard Sm Cp Idx

CRSP U.S. Sm Cp Idx

IM U.S. Small Cap Core Equity (MF) Median



Sep-2016

7.92 (25)

7.91 (25)

6.70

RISK VS. RETURN (5 YEARS*)

Sep-2018

16.34 (30)

16.31 (30)

14.65

Sep-2017

10.44 (59)

10.41 (59)

10.86

Sep-2019

9.62 (10)

9.61 (10)

7.16

Sep-2021

11.98 (15)

11.96 (15)

9.12

Sep-2022

4.98 (45)

4.96 (46)

4.60

^{*}If less than 5 years, data is since inception of fund share class.

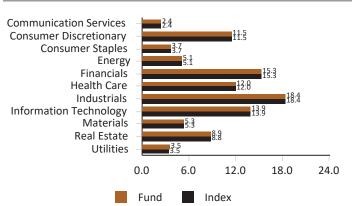
Vanguard Sm Cp Idx 09/30/22

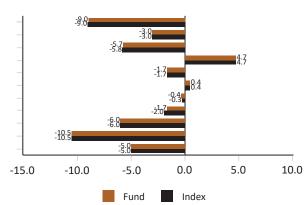
PORTFOLIO CHARACTERISTICS

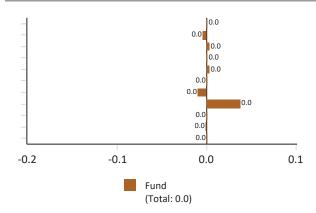
TOP 10 HOLDINGS

Wtd. Avg. Mkt. Cap \$M	Portfolio \$5,837	Benchmark \$5,623		Portfolio Weight (%)	Benchmark Weight (%)	Quarterly Return (%)
Median Mkt. Cap \$M	\$2,383	\$2,404	Molina Healthcare Inc.	0.47	0.24	17.96
Price/Earnings ratio	11.93	11.88	Quanta Services Inc.	0.45	0.22	1.69
Price/Book ratio	2.45	2.44	LPL Financial Holdings Inc	0.41	0.20	18.56
5 Yr. EPS Growth Rate (%)	19.46	19.13	IDEX Corp	0.37	0.37	10.40
Current Yield (%)	1.74	1.74	Carlisle Cos Inc	0.35	0.36	17.80
Beta (5 Years, Monthly)	1.00	1.00	Atmos Energy Corp	0.35	0.35	-8.62
% in Int'l Securities	2.65	2.63	Targa Resources Corp	0.34	0.34	1.65
Active Share	2.35	N/A	Brown & Brown Inc	0.33	0.17	3.83
Number of Stocks	1,504	1,497	Constellation Energy Corp	0.33	0.00	45.54
			EQT Corp	0.33	0.17	18.89

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION





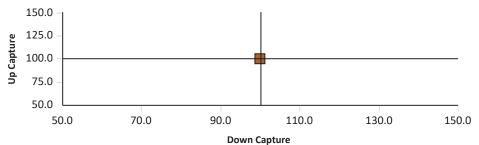


STYLE MAP (12/01/00 - 09/30/22)

Style History

Large Cap Value Large Cap Growth Small Cap Value Small Cap Growth Manager Style











Fund Mar Vista

Family:

Fund Inception: 11/01/2000

Portfolio Team Managed

Manager:

Total \$593 Million

Assets:

Turnover: 71%

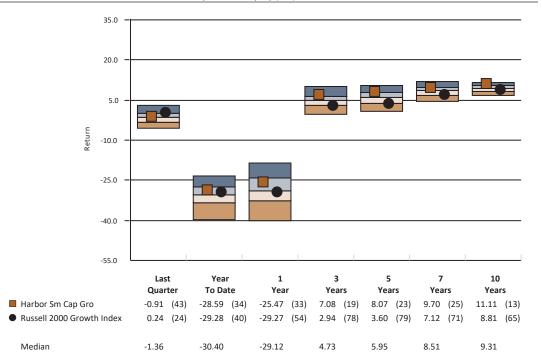
Investment Strategy:

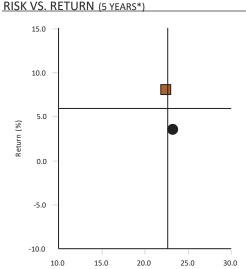
Harbor Small Cap Growth has been managed by Westfield Capital Management Company, L.P. since late 2000. Westfield looks for stocks with market caps between \$300 million and \$1.5 billion, earnings-growth rates of at least 20%, and reasonable price/earnings multiples, although it is flexible about those guidelines. They come up with a price target for each stock in the portfolio, and if a stock hits its target, they either trim the position or raise the target. If a stock drops 20%, they either buy more or sell, depending on whether their reason for owning it is still valid.

Innovest's Assessment:

Harbor Small Cap Growth should outperform after market inflection points, as earnings benefit from operating leverage or revenue improvements, and when market valuations converge with company specific fundamentals. The strategy should underperform during periods when "momentum" investments are outperforming, and high valuation stocks are on the rise.

PEER GROUP ANALYSIS - IM U.S. Small Cap Growth Equity (MF)





	Return	Standard Deviation
Harbor Sm Cap Gro	8.07	22.36
 Russell 2000 Growth Index 	3.60	23.26
— Median	5.95	22.63

Risk (Standard Deviation %)

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Harbor Sm Cap Gro	9.77 (54)	38.39 (44)	42.33 (1)	-10.74 (79)	24.60 (32)	6.22 (80)	-1.31 (33)
Russell 2000 Growth Idx	2.83 (82)	34.63 (56)	28.48 (47)	-9.31 (73)	22.17 (43)	11.32 (43)	-1.38 (34)
IM U.S. Small Cap Growth Equity (MF) Median	10.53	36.55	27.69	-5.57	20.72	10.11	-2.35

	3 Years							
	Ending Sep-2022	Ending Sep-2021	Ending Sep-2020	Ending Sep-2019	Ending Sep-2018	Ending Sep-2017	Ending Sep-2016	
Harbor Sm Cap Gro	7.08 (19)	16.81 (35)	14.93 (31)	12.81 (41)	17.20 (60)	9.88 (60)	7.13 (17)	
Russell 2000 Growth Idx	2.94 (78)	11.70 (75)	8.18 (62)	9.79 (66)	17.98 (48)	12.17 (29)	6.58 (24)	
IM U.S. Small Cap Growth Equity (MF) Median	4.73	14.44	10.12	11.28	17.85	10.51	5.01	



^{*}If less than 5 years, data is since inception of fund share class.

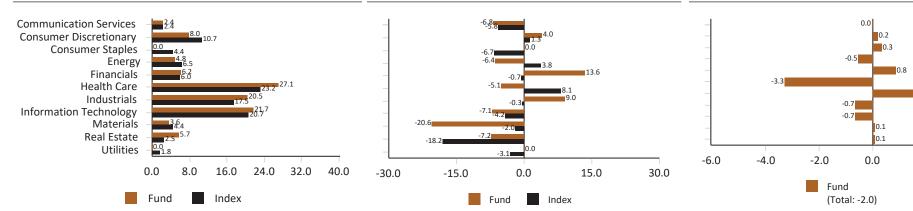
Harbor Sm Cap Gro 09/30/22

PORTFOLIO CHARACTERISTICS

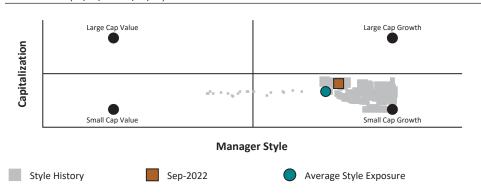
TOP 10 HOLDINGS

	Portfolio	Benchmark		Portfolio	Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$4,121	\$2,912		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$2,914	\$1,085	Option Care Health Inc	3.68	0.44	13.24
Price/Earnings ratio	13.93	14.95	Advanced Drainage Systems Inc	3.62	0.00	38.20
Price/Book ratio	3.18	3.49	WillScot Mobile Mini Holdings Corp	2.75	0.00	24.40
5 Yr. EPS Growth Rate (%)	31.20	21.09	Atkore Inc	2.74	0.29	-6.26
Current Yield (%)	0.73	0.83	Encore Wire Corp	2.64	0.00	11.18
Beta (5 Years, Monthly)	0.92	1.00	Churchill Downs Inc	2.44	0.00	-3.85
% in Int'l Securities	8.14	2.74	Spirit Realty Capital Inc	2.38	0.00	-2.50
Active Share	93.65	N/A	PDC Energy Inc	2.37	0.00	-5.68
Number of Stocks	62	1,121	Innoviva Inc	2.32	0.07	-21.34
			Ascendis Pharma AS	2.28	0.00	11.08

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION

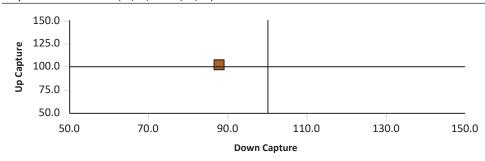


STYLE MAP (12/01/00 - 09/30/22)



UP/DOWN CAPTURE (10/01/17 - 09/30/22)

Harbor Sm Cap Gro





2.0

4.0

PEER GROUP ANALYSIS - IM International Multi-Cap Core Equity (MF)

RISK VS. RETURN (5 YEARS*)



Fund Inception: 08/17/1999
Portfolio Franquin/Perre

Manager:

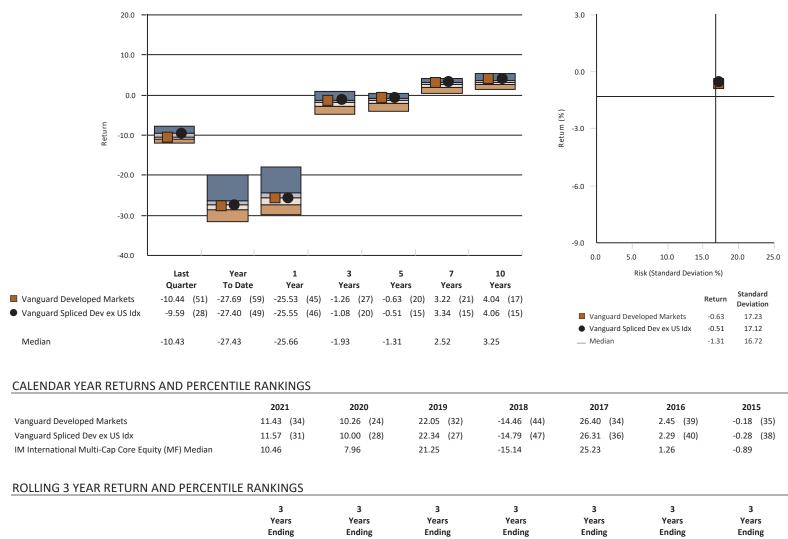
Total \$21,968 Million

Assets :

Turnover: 3%

Investment Strategy:

The Fund seeks to track a spliced index, investing in developed international growth and value stocks issued by companies in Canada and the major markets of Europe and the Pacific region.

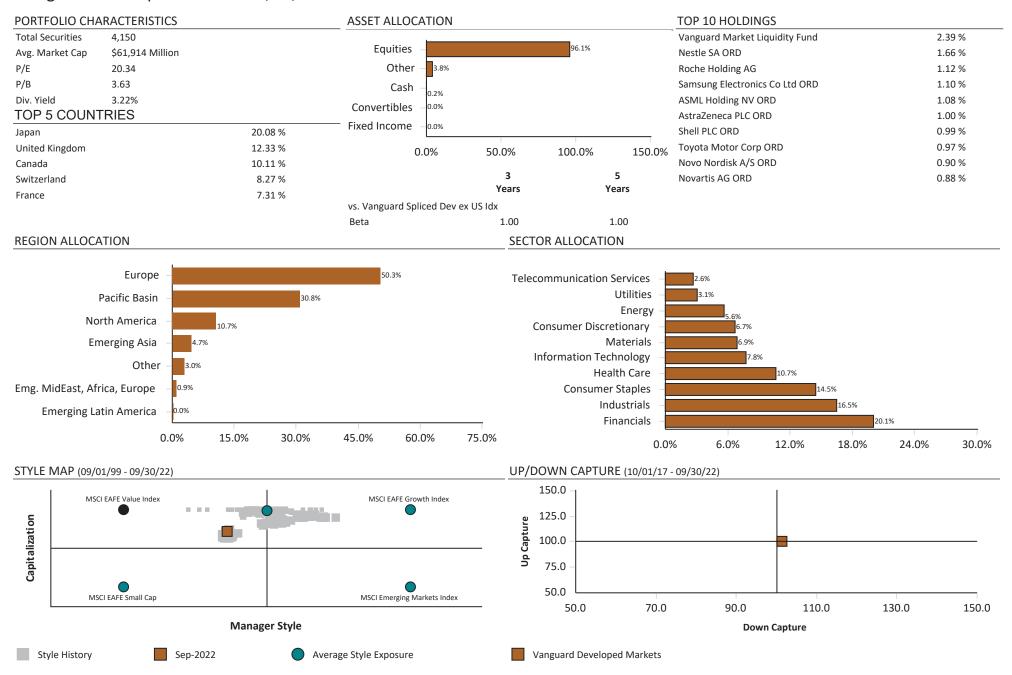


	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
Vanguard Developed Markets	-1.26 (27)	8.18 (30)	0.94 (28)	6.28 (24)	9.82 (26)	5.87 (33)	1.10 (45)
Vanguard Spliced Dev ex US Idx	-1.08 (20)	8.31 (24)	0.92 (30)	6.32 (20)	9.99 (18)	5.75 (36)	1.09 (46)
IM International Multi-Cap Core Equity (MF) Median	-1.93	7.35	0.03	5.38	8.79	5.24	0.89



^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Developed Markets 09/30/22





PEER GROUP ANALYSIS - IM International Large Cap Growth Equity (MF)

RISK	VS.	RFT	JRN	(5 YFARS*)	۱



Portfolio Team Managed Manager :

Total \$65,422 Million

Assets :

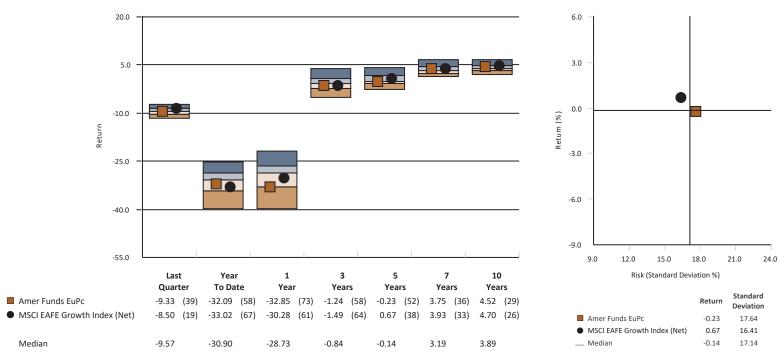
Turnover: 29%

Investment Strategy:

This fund's managers are focused on long term capital growth. They primarily invest in common stocks of European and Pacific Basin issuers that have prospects of above average capital appreciation. The managers may use cash to moderate volatility, typically holding 5-10% of fund assets in cash. The Fund has a stake in emergingmarkets companies and will sometimes hold preferred stock and convertible debt.

Innovest's Assessment:

The fund's focus on bottom-up. fundamental factors can lead to periods of underperformance when the market is less concerned about company fundamentals and more driven by extreme volatility (a flight to quality) associated with geopolitical shocks to the financial system or in momentumdriven markets.. By allowing managers to operate autonomously, the fund benefits from varied investment approaches and styles, giving it the capability to outperform in different market environments. Finally, the fund's immense asset base is likely to present some challenges in the fund's ability to build meaningful positions in smaller companies and to opportunistically trade in less liquid markets.



CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

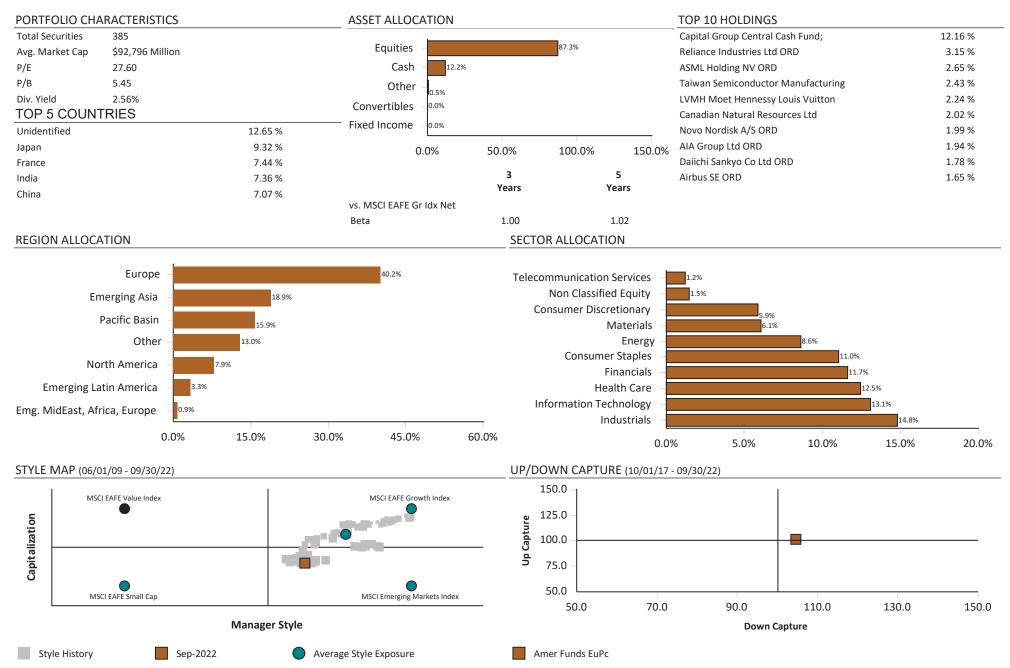
	2021	2020	2019	2018	2017	2016	2015
Amer Funds EuPc	2.84 (86)	25.27 (17)	27.40 (54)	-14.91 (54)	31.17 (28)	1.01 (21)	-0.48 (59)
MSCI EAFE Gr Idx Net	11.25 (29)	18.29 (56)	27.90 (43)	-12.83 (31)	28.86 (49)	-3.04 (64)	4.09 (11)
IM International Large Cap Growth Equity (MF) Median	8.88	20.00	27.50	-14.67	28.61	-1.94	0.25

	3	3	3	3	3	3	3
	Years	Years	Years Years		Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
Amer Funds EuPc	-1.24 (58)	13.21 (27)	5.67 (51)	7.38 (37)	9.93 (30)	7.56 (19)	3.34 (19)
MSCI EAFE Gr Idx Net	-1.49 (64)	11.91 (53)	7.07 (36)	7.77 (35)	10.26 (24)	6.48 (44)	2.39 (36)
IM International Large Cap Growth Equity (MF) Median	-0.84	11.99	5.73	6.87	8.53	6.21	1.64



^{*}If less than 5 years, data is since inception of fund share class.

Amer Funds EuPc 09/30/22



Fund Invesco

Family:

Fund Inception: 11/18/1996 Portfolio Justin Leverenz

Manager:

Total \$2,900 Million

Assets:

Turnover:

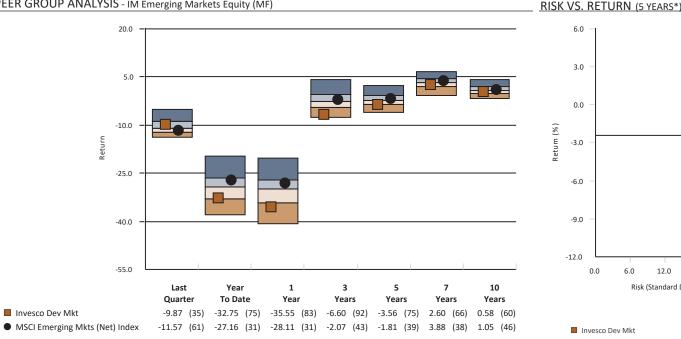
Investment Strategy:

The portfolio manager invests in emerging market businesses that appear likely to grow at a faster pace than world GDP and may benefit from distinctive structural global growth themes. They rely on fundamental analysis to search for exceptional businesses with sustainable competitive advantages, strong management and high return on capital. They maintain a country and sector agnostic approach.

Innovest Assessment:

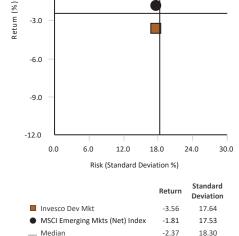
This fund will tend to outperform when "rational" markets prevail (i.e., when earnings and stock price are positively correlated and when the relationship between security valuations and stock performance matter). It has also performed well in down-markets due to investments in companies with a strong downside position resulting from favorable balance sheets, solid cash flows, and some competitive advantage in their industry. In irrational markets (e.g., when low-quality companies outperform in the short-term), the strategy may lag behind its peers.

PEER GROUP ANALYSIS - IM Emerging Markets Equity (MF)



-29.88

-2.54



6.0

3.0

0.0

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

Median

-11.00

-29.27

	2021	2020	2019	2018	2017	2016	2015
Invesco Dev Mkt	-7.50 (83)	17.22 (54)	23.99 (28)	-12.14 (14)	34.77 (55)	6.89 (56)	-14.06 (55)
MSCI EM (Net) Index	-2.54 (58)	18.31 (47)	18.42 (63)	-14.57 (30)	37.28 (43)	11.19 (29)	-14.92 (62)
IM Emerging Markets Equity (MF) Median	-1.63	17.67	20.15	-16.45	35.66	8.25	-13.73

-2.37

3.31

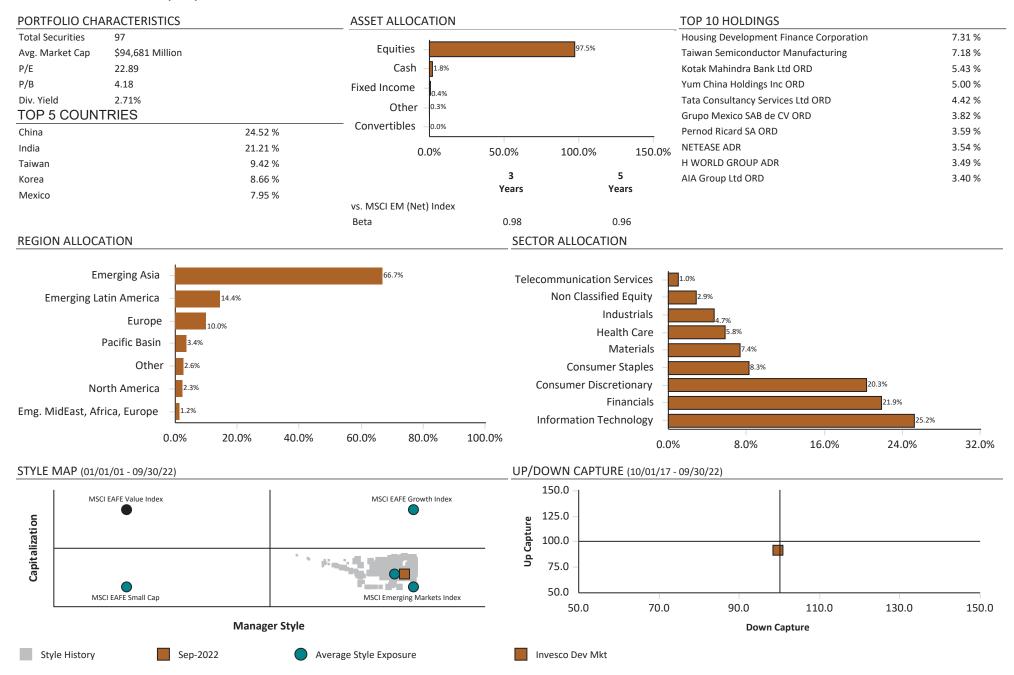
0.91

	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
Invesco Dev Mkt	-6.60 (92)	8.94 (57)	4.09 (29)	7.60 (18)	12.84 (17)	3.20 (70)	-1.50 (70)
MSCI EM (Net) Index	-2.07 (43)	8.58 (61)	2.42 (46)	5.97 (38)	12.36 (21)	4.90 (44)	-0.56 (53)
IM Emerging Markets Equity (MF) Median	-2.54	9.59	2.07	5.33	10.44	4.68	-0.42



^{*}If less than 5 years, data is since inception of fund share class.

Invesco Dev Mkt 09/30/22





Fund Capital
Family: Group/American Funds
Fund Inception: 05/01/2009

Portfolio Team Managed

Manager:

Total \$26,840 Million

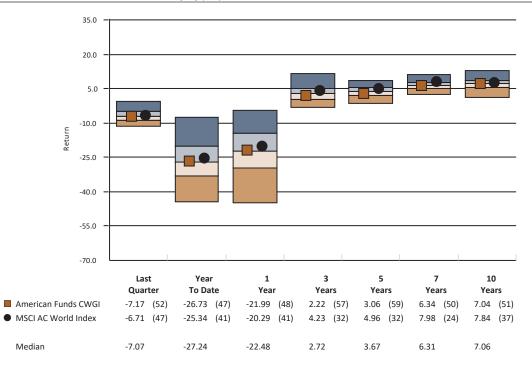
Assets:

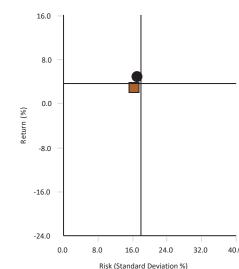
Turnover: 32%

Investment Strategy:

This Fund's managers are focused on long-term growth while providing income. They invest in many blue-chip stocks issued by companies in the world's largest stock markets that also have healthy dividends. They usually try to purchase stocks when they are cheaply priced and hold them for the long term, giving the portfolio low price multiples relative to peers. The managers use cash to moderate volatility, typically holding 5-10% of assets in cash. The fund may also have a stake in emerging-markets companies and will sometimes hold limited amounts of preferred stock. convertible debt, and traditional debt securities.

PEER GROUP ANALYSIS - IM Global Equity (MF)





RISK VS. RETURN (5 YEARS*)

	Return	Deviation
American Funds CWGI	3.06	16.22
 MSCI AC World Index 	4.96	17.00
— Median	3.67	17.91

Chandond

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

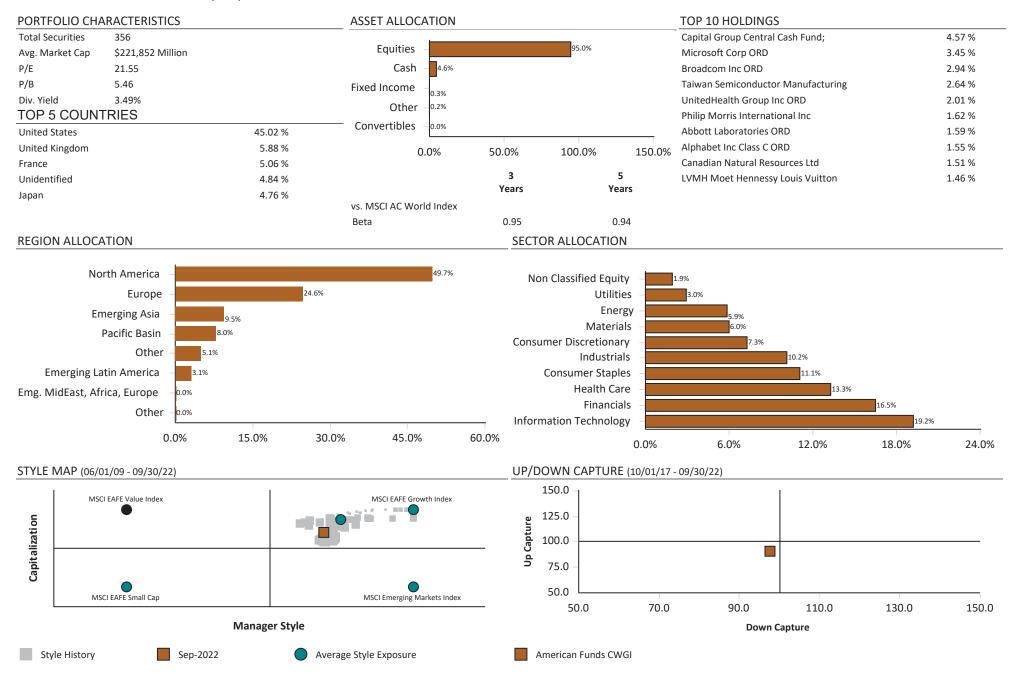
	2021	2020	2019	2018	2017	2016	2015
American Funds CWGI	15.15 (59)	15.78 (48)	25.74 (55)	-9.97 (56)	25.08 (34)	6.85 (46)	-1.88 (55)
MSCI AC World Index	19.04 (30)	16.82 (45)	27.30 (45)	-8.93 (42)	24.62 (37)	8.49 (32)	-1.84 (55)
IM Global Equity (MF) Median	16.55	15.37	26.38	-9.55	22.45	6.49	-1.42

	3	3	3	3	3	3	3
	Years	Years	Years	Years	Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
American Funds CWGI	2.22 (57)	11.65 (53)	6.33 (47)	8.94 (43)	12.31 (46)	7.66 (43)	5.70 (42)
MSCI AC World Index	4.23 (32)	13.14 (42)	7.68 (41)	10.30 (28)	14.02 (25)	8.02 (39)	5.74 (41)
IM Global Equity (MF) Median	2.72	12.00	5.66	8.48	11.88	7.15	5.28



^{*}If less than 5 years, data is since inception of fund share class.

American Funds CWGI 09/30/22





PEER GROUP ANALYSIS - IM U.S. Broad Market Core Fixed Income (MF)

RISK VS. RETURN (5 YEARS*)

Fund Family :	Vanguard
Fund Inception :	11/12/2001
Portfolio	Joshua C. Barrickn

Manager:

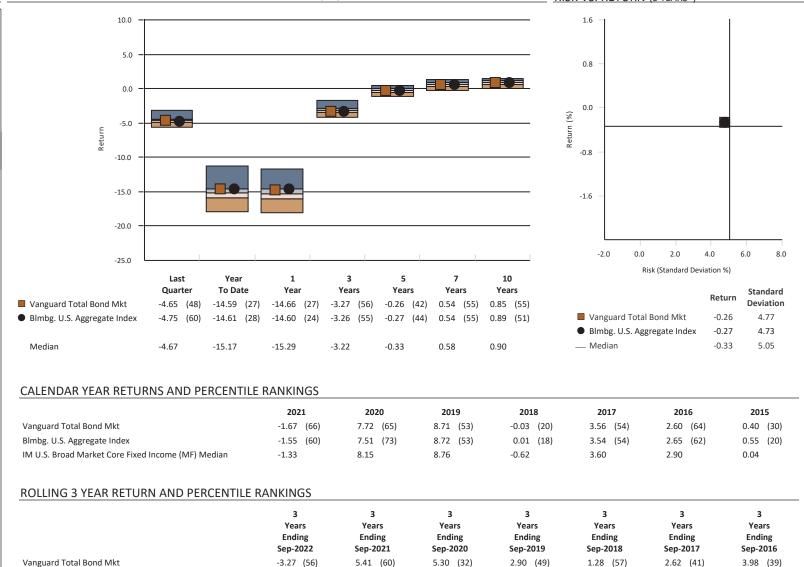
Total \$102,651 Million

Assets:

Turnover: 69%

Investment Strategy:

The Fund seeks to track the performance of a broad, marketweighted bond index. The Fund will provide diversified exposure to investment-grade U.S. bonds by sampling the index.



Blmbg. U.S. Aggregate Index

IM U.S. Broad Market Core Fixed Income (MF) Median



4.03 (34)

3.82

-3.26 (55)

-3.22

5.35 (63)

5.58

5.24 (36)

5.04

2.92 (47)

2.88

1.31 (55)

1.40

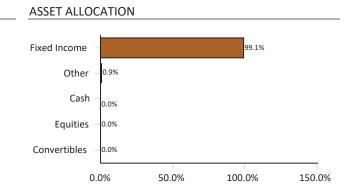
2.71 (32)

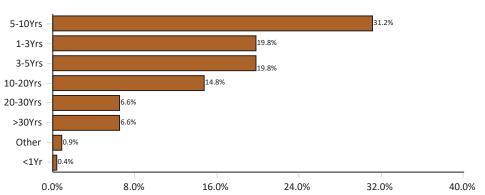
2.52

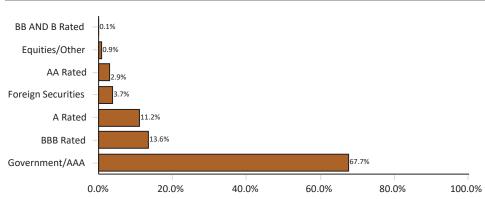
^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Total Bond Mkt 09/30/22

PORTFOLIO CHARACTERISTICS TOP SECTOR ALLOCATIONS Avg. Coupon 2.60 % Corporate Notes/Bonds **Nominal Maturity** N/A **Government Agency Securities Effective Maturity** 8.90 Years Treasury Notes/Bonds Duration 6.70 Years GNMA and Other Mtg Backed SEC 30 Day Yield 2.65 Fgn. Currency Denominated Bonds **Asset Backed Securities** Avg. Credit Quality AA **Current Yield** 2.56 MATURITY DISTRIBUTION **QUALITY ALLOCATION**







26.70 %

22.95 %

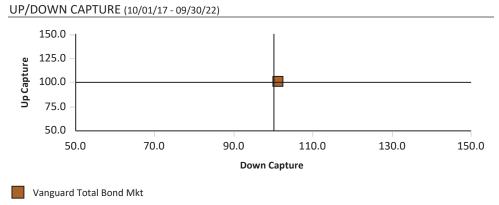
22.95 %

22.40 %

3.70 %

0.40 %







Fund Pimco

Fund Inception: 05/11/1987

Portfolio Mather/Kiesel/Mittal

Manager:

Total \$47,356 Million

Assets:

Family:

Turnover: 289%

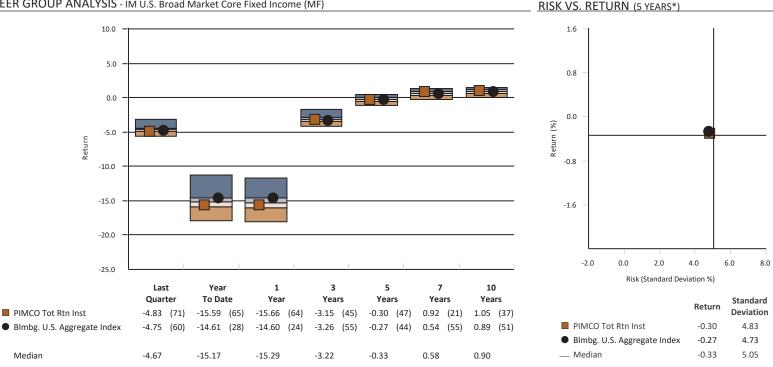
Investment Strategy:

The fund aims to provide investors with a combination of income and capital appreciation potential. It emphasizes higher-quality, intermediate-term bonds and aims to avoid concentration risk by being more globally diversified than many core bond funds. It also has considerable flexibility to respond to changing economic conditions, helping to manage risk and increase total return potential. Major shifts in portfolio strategy are driven by secular and cyclical outlooks as opposed to shortterm market events or aberrations in interest rates

Innovest's Assessment:

The fund attempts to add value through top-down positioning and by aggressively pursuing relatively attractive sectors of the bond market. The fund's total return approach allows them to diversify from heavily weighted sectors in the benchmark. Historically, their sector allocation decisions have resulted in strong relative outperformance; however, it is important to note that the fund's intermediate duration mandate could become a headwind to performance in a rising interest rate environment. PIMCO also has the potential to underperform when its macroeconomic forecast is materially wrong, either from a timing perspective or a fundamental perspective. PIMCO's approach will not always be lockstep with the broad bond market index.

PEER GROUP ANALYSIS - IM U.S. Broad Market Core Fixed Income (MF)



CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
PIMCO Tot Rtn Inst	-0.84 (27)	8.87 (30)	8.26 (72)	-0.26 (31)	5.14 (5)	2.59 (64)	0.72 (13)
Blmbg. U.S. Aggregate Index	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (62)	0.55 (20)
IM U.S. Broad Market Core Fixed Income (MF) Median	-1.33	8.15	8.76	-0.62	3.60	2.90	0.04

	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
PIMCO Tot Rtn Inst	-3.15 (45)	5.85 (36)	5.21 (39)	3.55 (8)	2.15 (17)	3.21 (9)	3.50 (69)
Blmbg. U.S. Aggregate Index	-3.26 (55)	5.35 (63)	5.24 (36)	2.92 (47)	1.31 (55)	2.71 (32)	4.03 (34)
IM U.S. Broad Market Core Fixed Income (MF) Median	-3.22	5.58	5.04	2.88	1.40	2.52	3.82



^{*}If less than 5 years, data is since inception of fund share class.

PIMCO Tot Rtn Inst 09/30/22

PORTFOLIO CHARACTERISTICS

Avg. Coupon 2.71 %

Nominal Maturity 6.96 Years

Effective Maturity N/A

Duration 5.49 Years

SEC 30 Day Yield 2.44

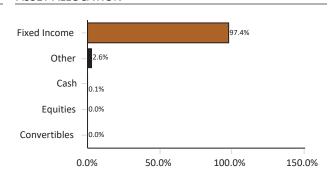
Avg. Credit Quality AA

Current Yield 3.41

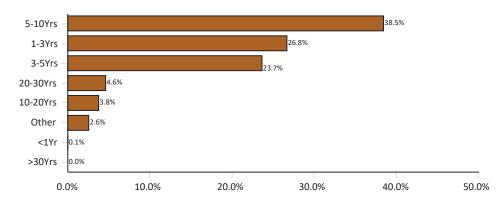
TOP SECTOR ALLOCATIONS

GNMA and Other Mtg Backed 38.22 %
Treasury Notes/Bonds 25.12 %
Corporate Notes/Bonds 22.68 %
Fgn. Currency Denominated Bonds 7.47 %
Government Agency Securities 3.90 %

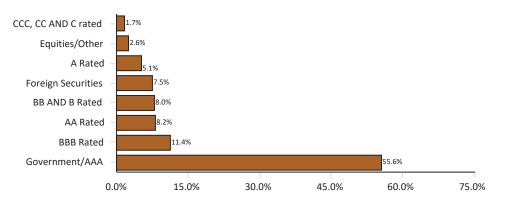
ASSET ALLOCATION



MATURITY DISTRIBUTION



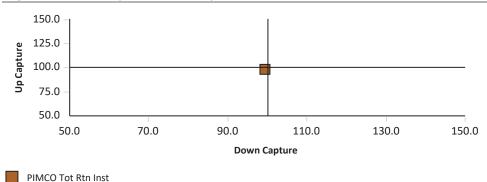
QUALITY ALLOCATION



STYLE MAP (06/01/87 - 09/30/22)



UP/DOWN CAPTURE (10/01/17 - 09/30/22)





Fund Pimco Family :

Fund Inception : 11/12/2001 Portfolio Rodosky/He

Manager:

Total \$173 Million

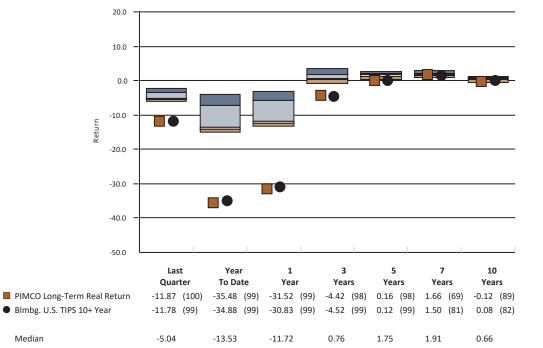
Assets:

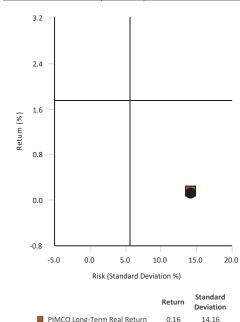
Turnover: 127%

Investment Strategy:

Manager sTEPHEN rODOSKY looks to obtain cost-efficient exposure to Treasury Inflation-Protected Securities and other inflation-linked bonds by seeking better execution than passive investors. He employs both macrodriven strategies (such as real growth, inflation, and country differentiation) and micro-driven bets such as CPI seasonality and implied inflation volatility to determine positioning. The Fund will normally limit its foreign currency exposure (from non-U.S. dollar-denominated securities or currencies) to 20% of its total assets.

PEER GROUP ANALYSIS - IM U.S. TIPS (MF)





RISK VS. RETURN (5 YEARS*)

	Return	Standard Deviation
■ PIMCO Long-Term Real Return	0.16	14.16
 Blmbg. U.S. TIPS 10+ Year 	0.12	14.09
Median	1.75	5.64

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
PIMCO Long-Term Real Return	7.24 (8)	27.23 (1)	17.10 (1)	-6.53 (99)	8.84 (2)	7.87 (8)	-6.66 (97)
Blmbg. U.S. TIPS 10+ Year	7.02 (9)	25.33 (2)	17.40 (1)	-5.82 (99)	7.54 (2)	7.28 (10)	-4.81 (89)
IM U.S. TIPS (MF) Median	5.26	9.70	7.41	-1.57	2.60	4.38	-2.15

	3 Years Ending Sep-2022	3 Years Ending Sep-2021	3 Years Ending Sep-2020	3 Years Ending Sep-2019	3 Years Ending Sep-2018	3 Years Ending Sep-2017	3 Years Ending Sep-2016
PIMCO Long-Term Real Return	-4.42 (98)	13.54 (1)	12.42 (1)	4.04 (1)	3.85 (8)	2.03 (4)	4.54 (2)
Blmbg. U.S. TIPS 10+ Year	-4.52 (99)	13.18 (2)	12.38 (1)	3.97 (1)	3.43 (11)	2.73 (2)	5.23 (2)
IM U.S. TIPS (MF) Median	0.76	6.57	4.76	1.76	1.82	0.99	1.35



^{*}If less than 5 years, data is since inception of fund share class.

PIMCO Long-Term Real Return 09/30/22

Style History

Sep-2022

PORTFOLIO CHARACTERISTICS TOP SECTOR ALLOCATIONS ASSET ALLOCATION 1.46 % **Government Agency Securities** 108.86 % Avg. Coupon Fixed Income 78.3% **Nominal Maturity** 21.79 Years **GNMA** and Other Mtg Backed 20.06 % **Effective Maturity** N/A 21.6% Cash Duration 20.70 Years SEC 30 Day Yield 2.91 Other 0.1% Avg. Credit Quality AAA 0.0% **Equities** No data found. Convertibles 0.0% 0.0% 50.0% 100.0% MATURITY DISTRIBUTION **QUALITY ALLOCATION** 89.2% 20-30Yrs Foreign Securities 29.9% Equities/Other 0.1% <1Yr 10-20Yrs A Rated 1.6% 2.1% 3-5Yrs **BBB Rated** BB AND B Rated Other 0.1% 0.0% CCC, CC AND C rated >30Yrs 3.6% -12.0 % 1-3Yrs AA Rated 5-10Yrs -28.3 % Government/AAA 103.6% -100.0 % -50.0 % 0.0% 50.0% 100.0% 150.0% 0.0% 50.0% 100.0% 150.0% UP/DOWN CAPTURE (10/01/17 - 09/30/22) STYLE MAP (12/01/01 - 09/30/22) 150.0 Barclays Capital 1-5 Yr Gov Barclays Capital Long Term Govt Bond 125.0 Capitalization Up Capture 100.0 75.0 50.0 Barclays Capital U.S. Credit 1-5 Year Index Barclays Capital Long U.S. Credit 50.0 70.0 90.0 110.0 130.0 150.0 **Manager Style Down Capture** PIMCO Long-Term Real Return



Average Style Exposure

Fund Parnassus Investments Family:

Fund Inception: 04/28/2006

Portfolio Ahlsten/Allen/Choi

Manager:

Total \$13,697 Million

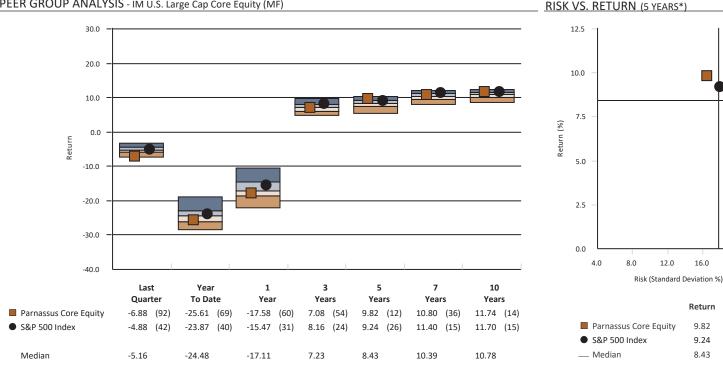
Assets:

Turnover: 26%

Investment Strategy:

The Parnassus Core Equity Fund invests in U.S. large cap companies with long-term competitive advantages and relevancy, quality management teams and positive performance on ESG criteria. The Fund is fossil-fuel free, as it does not invest in companies that derive significant revenues from the extraction, exploration, production or refining of fossil fuels. To determine a company's prospects, the Adviser reviews the company's income statement, cash flow statement and balance sheet, and analyzes the company's sustainable strategic advantage and management team. The ESG factors the Adviser evaluates are the Environment, Community, Customers, Workplace and Governance. Issues that fall under these factors include, but are not limited to: Corporate governance and business ethics, Employee pay, benefits and corporate culture, Stakeholder relations, Product safety, Customers and supply chain, Environmental impact. The portfolio managers focus on high quality companies that may perform better than the market during downturns.

PEER GROUP ANALYSIS - IM U.S. Large Cap Core Equity (MF)



CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Parnassus Core Equity	27.82 (35)	21.47 (25)	30.96 (47)	0.05 (4)	16.81 (91)	10.61 (38)	-0.34 (64)
S&P 500 Index	28.71 (25)	18.40 (50)	31.49 (36)	-4.38 (32)	21.83 (45)	11.96 (20)	1.38 (35)
IM U.S. Large Cap Core Equity (MF) Median	26.95	18.39	30.64	-5.45	21.45	9.70	0.53

ROLLING 3 YEAR RETURN AND PERCENTILE RANKINGS

	3	3 3		3 3		3	3
	Years						
	Ending Sep-2022	Ending Sep-2021	Ending Sep-2020	Ending Sep-2019	Ending Sep-2018	Ending Sep-2017	Ending Sep-2016
Darmassus Cara Equity	•	•	•	•	•	•	•
Parnassus Core Equity	7.08 (54)	18.41 (8)	14.77 (7)	13.75 (25)	14.42 (77)	9.06 (68)	10.76 (20)
S&P 500 Index	8.16 (24)	15.99 (42)	12.28 (38)	13.39 (31)	17.31 (20)	10.81 (22)	11.16 (11)
IM U.S. Large Cap Core Equity (MF) Median	7.23	15.58	11.52	12.60	15.73	9.78	9.63



16.0

Return

9.82

9.24

8.43

20.0

Standard

Deviation

16.39

17.92

17.73

24.0

^{*}If less than 5 years, data is since inception of fund share class.

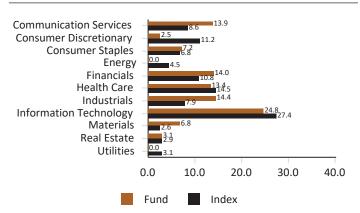
Parnassus Core Equity 09/30/22

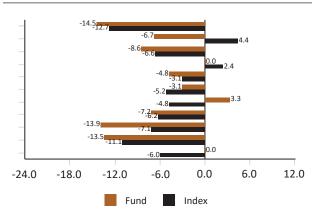
PORTFOLIO CHARACTERISTICS

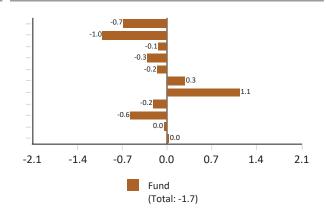
TOP 10 HOLDINGS

	Portfolio	Benchmark		Portfolio	Benchmark	Quarterly
Wtd. Avg. Mkt. Cap \$M	\$356,247	\$463,992		Weight (%)	Weight (%)	Return (%)
Median Mkt. Cap \$M	\$113,348	\$27,066	Microsoft Corp	6.80	5.77	-9.12
Price/Earnings ratio	22.57	18.15	Alphabet Inc	5.63	1.90	-12.22
Price/Book ratio	3.87	3.76	Fiserv Inc.	4.46	0.20	5.17
5 Yr. EPS Growth Rate (%)	15.65	18.17	Danaher Corp	4.30	0.56	1.98
Current Yield (%)	1.49	1.85	DEERE & COMPANY	4.08	0.31	11.86
Beta (5 Years, Monthly)	0.90	1.00	Becton Dickinson and Co	4.03	0.21	-9.31
% in Int'l Securities	6.19	2.92	CME Group Inc	3.92	0.21	-13.04
Active Share	75.46	N/A	Mastercard Inc	3.40	0.81	-9.73
Number of Stocks	40	503	S&P Global Inc	3.40	0.35	-9.20
			T-Mobile US Inc	3.29	0.27	-0.28

SECTOR ALLOCATION SECTOR PERFORMANCE TOTAL SECTOR ATTRIBUTION



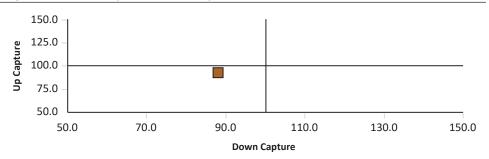


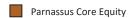


STYLE MAP (05/01/06 - 09/30/22)

Large Cap Value Large Cap Growth Small Cap Value Small Cap Value Style History Sep-2022 Average Style Exposure

UP/DOWN CAPTURE (10/01/17 - 09/30/22)







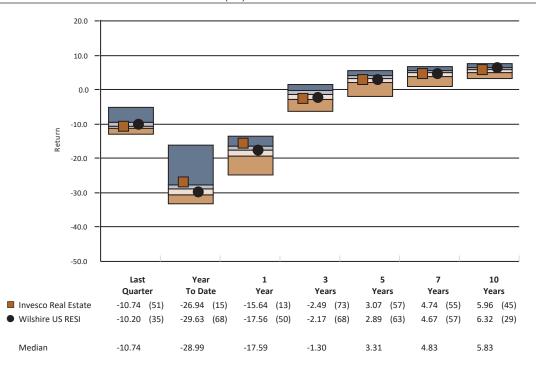
Investment Strategy:

The investment seeks high total return through growth of capital and current income. The fund normally invests at least 80% of assets in securities of real estate and real estate-related companies, including real estate investment trusts (REITs). It primarily invests in equity securities. The fund may invest in equity and debt securities of issuers unrelated to the real estate industry that the portfolio managers believe are undervalued and have potential for growth of capital. It may invest in non-investment grade debt securities of real estate and real estaterelated issuers.

Invesco Real Estate

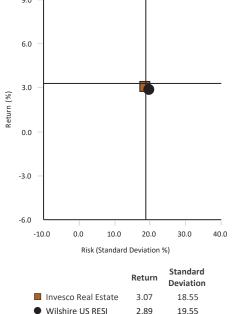
Invesco is most likely to outperform the market where benchmark performance is not concentrated in two or a few property sectors and periods where larger, better capitalized, better managed REITs outperform. The fund will underperform in a narrowly focused market where two or a few property sectors significantly outperform the benchmark or when smaller cap REITs or high beta companies materially influence benchmark returns.

PEER GROUP ANALYSIS - IM Real Estate Sector (MF)



RISK VS. RETURN (5 YEARS*)

— Median



3.31

18.87

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Invesco Real Estate	41.49 (46)	-10.39 (90)	28.22 (41)	-5.28 (42)	8.86 (14)	6.18 (53)	2.07 (70)
Wilshire US RESI	46.11 (13)	-7.95 (80)	25.79 (64)	-4.80 (35)	4.84 (59)	7.62 (33)	4.81 (8)
IM Real Estate Sector (MF) Median	41.32	-4.31	27.32	-5.71	5.32	6.34	2.91

	3 Years Ending						
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
Invesco Real Estate	-2.49 (73)	9.67 (75)	2.46 (44)	8.38 (28)	7.52 (27)	8.83 (46)	12.97 (61)
Wilshire US RESI	-2.17 (68)	10.34 (65)	0.42 (76)	7.47 (39)	7.52 (27)	10.17 (12)	14.61 (7)
IM Real Estate Sector (MF) Median	-1.30	11.47	2.31	6.88	6.70	8.74	13.33



^{*}If less than 5 years, data is since inception of fund share class.

Invesco Real Estate 09/30/22

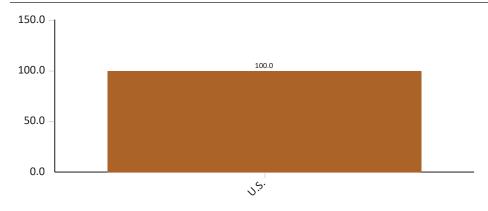
PORTFOLIO CHARACTERISTICS

Total Securities	48
Avg. Market Cap	\$42,836 Million
P/E	44.62
P/B	4.92
Div. Yield	2.63%
Annual EPS	50.54
5Yr EPS	8.54
3Yr EPS Growth	12.99

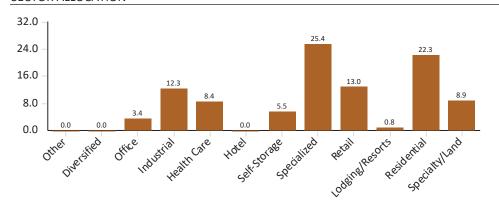
TOP 10 HOLDINGS

American Tower Corp ORD	9.57 %
Prologis Inc ORD	7.91 %
SBA Communications Corp ORD	5.26 %
Equinix Inc ORD	4.76 %
Invitation Homes Inc ORD	4.68 %
UDR Inc ORD	4.38 %
Welltower OP LLC ORD	4.15 %
Avalonbay Communities Inc ORD	4.13 %
Crown Castle Inc ORD	4.11 %
VICI Properties Inc ORD	3.69 %

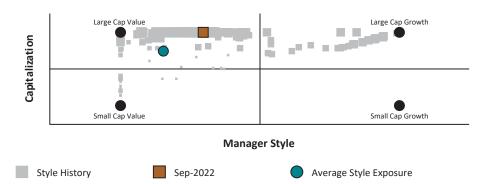
REGIONAL ALLOCATION



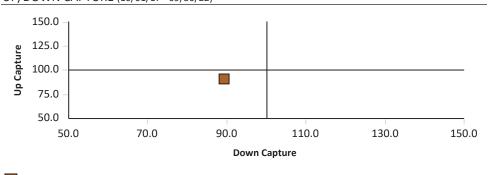
SECTOR ALLOCATION



STYLE MAP (05/01/04 - 09/30/22)



UP/DOWN CAPTURE (10/01/17 - 09/30/22)



Invesco Real Estate



PEER GROLIP ANALYSIS - IM Utility Sector (MF)

IVIATION	PEER GROUP ANALYSIS - IM Utilit

Fund Vanguard Family: Fund Inception: 01/26/2004

Portfolio Khan/Nejman Manager:

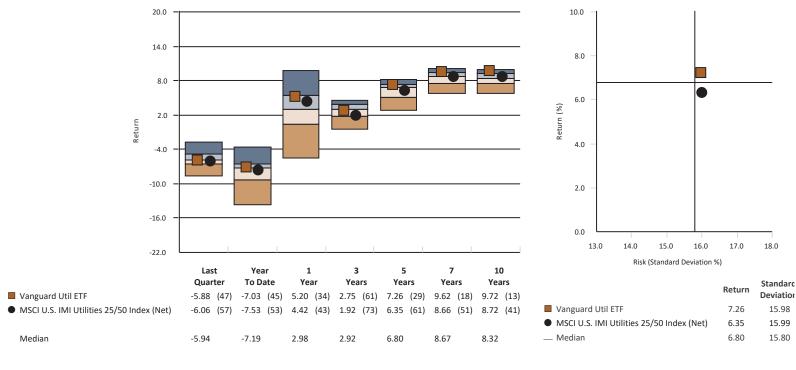
Total \$6,030 Million

Assets:

Turnover: 6%

Investment Strategy:

The investment seeks to track the performance of the MSCI US Investable Market Utilities 25/50 Index. The Fund employs a passive investment management approach that invests in electric, gas, utilities, and other power companies.



RISK VS. RETURN (5 YEARS*)

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
Vanguard Util ETF	17.33 (45)	-0.84 (61)	24.92 (39)	4.43 (19)	12.51 (53)	17.52 (18)	-4.83 (8)
MSCI U.S. IMI Utilities 25/50 Index (Net)	16.39 (53)	-1.72 (67)	23.83 (55)	3.47 (33)	11.47 (66)	16.41 (39)	-5.84 (15)
IM Utility Sector (MF) Median	16.76	-0.11	23.99	1.84	12.88	15.17	-8.32

	3	3	3	3	3	3	3
	Years	Years	Years	Years	Years	Years	Years
	Ending	Ending	Ending	Ending	Ending	Ending	Ending
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
Vanguard Util ETF	2.75 (61)	8.98 (51)	6.63 (24)	13.84 (16)	11.78 (15)	12.25 (4)	13.23 (8)
MSCI U.S. IMI Utilities 25/50 Index (Net)	1.92 (73)	8.04 (62)	5.68 (46)	12.78 (40)	10.73 (38)	11.16 (15)	12.14 (23)
IM Utility Sector (MF) Median	2.92	8.98	5.52	12.18	10.19	7.36	9.03



^{*}If less than 5 years, data is since inception of fund share class.

Vanguard Util ETF 09/30/22

Style History

Sep-2022

PORTFOLIO CHARACTERISTICS **TOP 10 HOLDINGS Total Securities** 67 Nextera Energy Inc ORD 13.79 % Avg. Market Cap \$55,925 Million **Duke Energy Corp ORD** 7.03 % P/E 32.24 Southern Co ORD 6.78 % P/B 2.63 Dominion Energy Inc ORD 5.52 % Div. Yield 2.89% Sempra Energy ORD 4.35 % Annual EPS 17.24 American Electric Power Company 4.13 % 5Yr EPS 1.47 Exelon Corp ORD 3.79 % 3Yr EPS Growth 1.76 Xcel Energy Inc ORD 3.31 % 2.92 % Consolidated Edison Inc ORD 3 Years 5 Years Public Service Enterprise Group 2.74 % Beta 1.00 1.00 **ASSET ALLOCATION SECTOR ALLOCATION Equities** 99.1% **Financials** Other 0.9% Industrials Cash 0.0% Utilities Convertibles 0.0% Other Fixed Income 0.0% 0.0 20.0 40.0 60.0 80.0 100.0 120.0 Vanguard Util ETF MSCI U.S. IMI Utilities 25/50 Index (Net) 0.0% 25.0% 50.0% 75.0% 100.0% 125.0% STYLE MAP (02/01/04 - 09/30/22) UP/DOWN CAPTURE (10/01/17 - 09/30/22) 150.0 Large Cap Growth Large Cap Value 125.0 **Capitalization** 100.0 75.0 50.0 Small Cap Value Small Cap Growth 50.0 70.0 90.0 130.0 110.0 150.0 **Manager Style Down Capture** Vanguard Util ETF

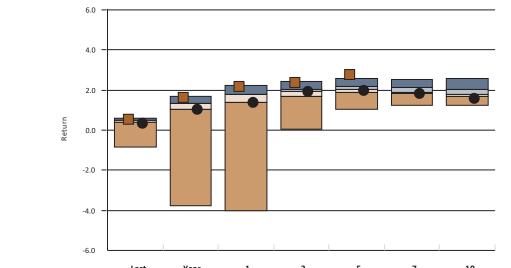


Average Style Exposure

Investment Strategy:

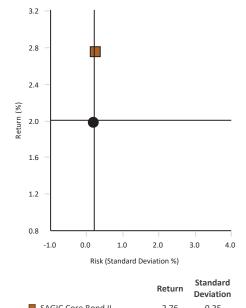
he Diversified II invests in a diversified portfolio of primarily investment-grade fixed income securities, with the potential of up to 25% of assets in below investment -grade debt securities. The portfolio manager uses a core-plus fixed income strategy to seek a superior total rate of return by investing in securities with attractive yields, including, but not limited to, corporate, U.S. government and agency, foreign issuers, and private placement bonds, and mortgage-backed and other asset-backed securities. The portfolio's core -plus fixed income strategy may hold a substantial position in securities in sectors not represented by its benchmark index, the Bloomberg Barclays U.S. Aggregate Bond Index. The portfolio seeks to identify the most attractively priced sectors and securities, with the belief that current income is the primary determinant of total return over intermediate- and long-term time horizons. The portfolio's core fixed income strategy will mainly hold securities in sectors represented by its benchmark index, the Bloomberg Barclays U.S. Aggregate Bond Index.

PEER GROUP ANALYSIS - IM U.S. GIC/Stable Value (SA+CF)



	Last	Year	1	3	5	/	10
	Quarter	To Date	Year	Years	Years	Years	Years
SAGIC Core Bond II	0.55 (11)	1.66 (6)	2.19 (6)	2.40 (6)	2.76 (1)	N/A	N/A
Ryan 3 Yr GIC Master Index	0.37 (80)	1.04 (78)	1.41 (70)	1.91 (52)	1.98 (57)	1.82 (80)	1.60 (83)
Median	0.50	1.34	1.77	1.94	2.01	1.89	1.77

RISK VS. RETURN (5 YEARS*)



	Return	Deviation
SAGIC Core Bond II	2.76	0.25
Ryan 3 Yr GIC Master Index	1.98	0.19
— Median	2.01	0.20

CALENDAR YEAR RETURNS AND PERCENTILE RANKINGS

	2021	2020	2019	2018	2017	2016	2015
SAGIC Core Bond II	2.13 (7)	2.74 (10)	3.13 (12)	3.34 (1)	3.13 (2)	N/A	N/A
Ryan 3 Yr GIC Master Index	1.75 (42)	2.34 (31)	2.38 (81)	1.96 (87)	1.60 (94)	1.39 (94)	1.16 (94)
IM U.S. GIC/Stable Value (SA+CF) Median	1.72	2.12	2.51	2.14	1.84	1.80	1.70

	3	3	3	3	3	3	3
	Years						
	Ending						
	Sep-2022	Sep-2021	Sep-2020	Sep-2019	Sep-2018	Sep-2017	Sep-2016
SAGIC Core Bond II	2.40 (6)	2.79 (9)	3.11 (8)	3.22 (1)	N/A	N/A	N/A
Ryan 3 Yr GIC Master Index	1.91 (52)	2.21 (47)	2.18 (76)	1.90 (96)	1.57 (92)	1.33 (98)	1.16 (96)
IM U.S. GIC/Stable Value (SA+CF) Median	1.94	2.18	2.28	2.12	1.86	1.76	1.65



^{*}If less than 5 years, data is since inception of fund share class.

Glossary

Active Share measures the percentage of a product's holdings that differ from the product's benchmark index, based on portfolio weightings. An Active Share of 60% or higher is generally considered to be active management and less than 20% is generally considered to be passive management. Active Share allows investors to distinguish between products that do and do not engage in a large amount of stock selection. Products with high Active Share may experience significant deviation from the performance of benchmarks over time.

Alpha measures a portfolio's return in excess of the market return adjusted for risk. It is a measure of the manager's contribution to performance with reference to security selection. A positive alpha indicates that a portfolio was positively rewarded for the residual risk that was taken for that level of market exposure.

Beta measures the sensitivity of rates of portfolio return to movements in the market. A portfolio's beta measures the expected change in return per 1% change in the return on the market. If the beta of a portfolio is 1.5, a 1 percent increase in the return of the market will result, on average, in a 1.5 percent increase in the return on the portfolio. The converse would also be true.

Dividend Yield - The total amount of dividends paid out for a stock over the preceding twelve months divided by the closing price of a share of the common stock.

Down Capture Ratio - The Down Capture Ratio is a measure of the Investment's compound return when the Benchmark was down divided by the Benchmark's compound return when the Benchmark was down. The smaller the value, the better.

Duration - A time measure of a bond's interest-rate sensitivity, based on the weighted average of the time periods over which a bond's cash flows accrue to the bondholder.

Forecasted Long-Term Earnings Growth - This growth rate is a measure of a company's expected long-term success in generating future year-over-year earnings growth. This growth rate is a market value weighted average of the consensus (mean) analysts' long-term earnings growth rate forecast for each company in the portfolio. The definition of long-term varies by analyst but is limited to a 3-8 year range. This value is expressed as the expected average annual growth of earnings in percent.

Information Ratio measures the excess return per unit of residual "non market" risk in a portfolio. The ratio is equal to the Alpha divided by the Residual Risk.

Market Capitalization - The market value of a company's outstanding shares of common stock at a specific point in time, computed as the product of the number of outstanding shares times the stock's closing price per share.

P/E ratio relates the price of the stock to the per-share earnings of the company. A high P/E generally indicates that the market will pay more to obtain the company because it has confidence in the company's ability to increase its earnings. Conversely, a low P/E indicates that the market has less confidence that the company's earnings will increase, and therefore will not pay as much for its stock. In most cases a fund with a high average P/E ratio has paid a premium for stocks that have a high potential for increased earnings. If the fund's average P/E ratio is low, the manager may believe that the stocks have an overlooked or undervalued potential for appreciation.

P/B ratio of a company relates the per-share market price of the company's stock to its per -share book value, the historical accounting value of the company's tangible assets. A high P/B ratio indicates that the price of the stock exceeds the actual worth of the company's assets. A low P/B ratio would indicate that the stock is a bargain, priced below what the company's assets could be worth if liquidated.

P/CF ratio compares the total market value of the portfolio to the portfolio's share of the underlying stocks' earnings (or book value, cash flow, sales or dividends).

R-Squared indicates the extent to which the variability of the portfolio returns is explained by market action. It can also be thought of as measuring the diversification relative to the appropriate benchmark. An R-Squared value of .75 indicates that 75% of the fluctuation in a portfolio return is explained by market action. An R-Squared of 1.0 indicates that a portfolio's returns are entirely related to the market and it is not influenced by other factors. An R-Squared of zero indicates that no relationship exists between the portfolio's return and the market.

Residual Risk is the unsystematic risk of a fund, or the portion of the total risk unique to the manager and not related to the overall market. This reflects the "bets" which the manager places in that particular asset class. These bets reflect emphasis in particular sectors, maturities (for bonds), or other issue specific factors which the manager considers a good investment opportunity. Diversification of the portfolio will reduce the residual risk of that portfolio.

Sharpe Ratio is a measure of risk-adjusted return. It is calculated by subtracting the risk-free return (90 day T-Bills) from the portfolio return and dividing the resulting "excess return" by the portfolio's total risk level (standard deviation). The result is a measure of returned gained per unit of total risk taken.

Standard Deviation is a statistical measure of portfolio risk. It reflects the average deviation of observations from their sample mean. Stand ard Deviation is used as an estimate of risk since it measures how wide the range of returns typically is. The wider the typical range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. as a bell shaped curve distribution) then approximately 66% of 2/3 of the returns would occur within plus or minus one standard deviation of the sample mean.

Style Exposure Chart indicates a portfolio's exposure to a particular capitalization (large, medium or small) and style (value or growth). Based on Sharpe's return based style analysis, a style map will attempt to correlate a manager to a particular style of investing (i.e. Large Cap Growth).

Turnover Ratio - This is a measure of the fund's trading activity which is computed by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets.

Up Capture Ratio - The Up Capture Ratio is a measure of the Investment's compound return when the Benchmark was up divided by the Benchmark's compound return when the Benchmark was up. The greater the value, the better.

Down Capture Ratio - The Down Capture Ratio is a measure of the Investment's compound return when the Benchmark was down divided by the Benchmark's compound return when the Benchmark was down. The smaller the value, the better.



Fund Analysis Overview Key

Each of the 7 criteria are evaluated on an individual basis and subjective based on Innovest's assessment. Below are examples of the many factors under each category we consider when making an assessment.

Organization	Philosophy/Process	Performance
Pct. Owned by Employee Boutique vs. Institutional	Investment Mandate Domestic/Int'l Drift	Short Term vs Benchmark and Style Group Long Term vs. Benchmark and Style Group
Recent Changes in Ownership Management Investment in Firms Products Specialized vs. All in One People	Style Consistency	Consistency – Relative/Absolute/Risk Adjusted
	Growth/Value, Market Cap	Expenses
	Asset Base	Cost vs. Competitors
Size of Team Structure of Team Experience of Team Turnover of Key Members Growth of Team with Assets	Current Growth of AUM Capacity Constraints Soft Closed Re-opening of Products	

Examples of things that would cause concern resulting in a YELLOW or RED box include but not limited to:

1)ORGANIZATION - A change in ownership whereby it is unclear what the structure of the new organization will be, how will key personnel be compensated, and what type of employment contracts are in place to keep key decision makers.

2)PEOPLE - A change in portfolio manager would be a cause for concern. We would assess the new talent taking over. Is the new portfolio manager a current member of the team or is it someone new from outside the group or organization.

3)PHILOSOPHY/PROCESS - A change in the investment team's process or investment mandate would be cause for concern. For example, a concern could be warranted if an investment team transitioned from a top-down approach to a bottom-up approach while evaluating investments. A concern could also be warranted if an investment team whose process heavily included onsite visits ceased to do so.

4)STYLE CONSISTENCY - A change in portfolio characteristics or investments in securities significantly outside of their benchmarks would be a cause for concern. For example, if a growth manager suddenly starts investing in value names during a value rally, or if a small cap manager began investing in mid-sized companies.

5)ASSET BASE - A small cap fund with more than \$3 billion in assets would be a cause for concern or a fund that continues to add assets as it becomes clear the portfolio management team can not handle the inflows. A sign of this would be a large increase in the cash position of the portfolio.

6)PERFORMANCE - A product that fails to outperform either the index and/or the median manager on a consistent basis (at least 50% of the time) would be a cause for concern. Short term and long term performance is considered both on an absolute basis and relative basis in addition to risk-adjusted measures.

7)EXPENSES - A fund or product that is substantially above the median expense ratio or management fee would be a cause for concern.

Table of Returns Key

Investment Product Owned in Your Portfolio - Top/Green Line
Unmanaged Industry Benchmark - Middle/Golden Line

Peer Group of Funds Using Similar Investment Strategies - Last/White Line



Disclaimer

Unless explicitly stated to the contrary, the material herein is not intended to provide and should not be relied on for investment advice. Under no circumstances does Innovest ever provide tax, accounting, or legal advice.

The statistical analysis contained herein was prepared by Innovest Portfolio Solutions LLC and may contain data provided by Investment Metrics, LLC, Thomson Reuters Lipper, Morningstar, Inc., and other sources. These materials may also include information, returns, and valuations that were compiled, computed or created by Standard & Poor's Financial Services LLC, MSCI Inc., and other sources. These materials and the information that they contain are intended solely for the use of the intended recipient(s). They may not be reproduced or distributed without written consent.

Reasonable care has been taken to ensure the accuracy of the computer software, databases, and information described in the preceding paragraph. Innovest assumes no responsibility for the accuracy of these computer software, databases or informatio. All are provided on an "as is" basis and the user assumes all risk related to using it. There is no guarantee of accuracy, adequacy, or completeness. All entities identified in this disclaimer hereby expressly disclaim any and all express or implied warranties.

None of these entities, nor any affiliate or other person involved in compiling, computing, or creating this information, may be held liable for damages of any type or any other costs or fees related to any person's use of the data.

Certain material in this work is proprietary to and copyrighted by Litman Gregory Analytics and is used by Innovest with permission. Reproduction or distribution of this material is prohibited, and all rights are reserved.

Returns included in these materials may represent mutual funds share classes or vehicles other than those in which clients are or may be invested. Typically, any differences are the result of efforts to present the longest track record of the investment strategies.

Innovest has performed investment due diligence on all recommended alternative investment funds (hedge funds, private equity funds, private real estate funds, and funds of these funds) and their managers, including a general review of the business terms. However, Innovest's investment advice does not encompass a legal review or opinion on the funds' offering and other documents. For a full legal review of the fund's offering and other documents, clients are encouraged to engage legal counsel.

Assumptions, opinions, and forecasts herein constitute Innovest's judgment and are subject to change without notice. Past performance is no guarantee of future results. The investment products discussed are not insured by the FDIC and involve investment risk including the possible loss of all principal.

Innovest is an independent Registered Investment Adviser registered with the Securities and Exchange Commission. Copyright 20 by Innovest Portfolio Solutions LLC.





Fiduciary Education Topics

Introduction to Fiduciary Responsibility for Board/Committee Members

This 45-minute session is a starting point for retirement plan Board/Committee members and provides an overview of their fiduciary responsibilities. The session is ideal for new Board/Committee members and a great refresher for seasoned members. Topics include:

- Understanding the Risks Associated with Fiduciary Oversight
- Fiduciary Breach Litigation Related to Retirement Plans
 - o Recently Settled Litigation
 - o Recently Filed Claims
- Legal Requirements of Fiduciaries
- Revenue Sharing
- Managed Accounts
- Board/Committee Best Practices
- Overview of the Prudent Process

Following and Documenting a Prudent Process

Detailed explanation of the prudent process and Innovest's methodical approach to managing the same. Topics include:

- Meeting Agendas and Minutes
- Maintaining the Permanent Fiduciary File
- Prudent Process
 - o Analyze, Strategize, Formalize, Implement, Monitor
- Investment Menu Design
- Investment Policy Statement
- Investment Selection
- Ongoing Investment Monitoring
- Investment Attribution
- Fee Reviews
- Share Class Reviews



Investing Fundamentals

This session an overview of fundamental investing principles in easy-to-understand terms. The workshop is customized to present investment options available within the plan. Board/Committee members will learn the basics of investing, industry terminology and portfolio development consistent with objectives, time horizon and risk tolerance. Topics include:

- The Three Major Asset Classes
- Impact of Inflation
- Asset Allocation and Diversification
- Mutual Funds
- Mutual Fund Sub-Asset Classes
- Portfolio Construction and Investment Selection
- Managing Investments Over Time
- Target Date Funds
- Understanding Plan Investment Options

Intermediate Investing

This session goes beyond Investing Fundamentals to provide additional information regarding investment analysis. Board/Committee members will learn about performance attribution metrics, additional industry terminology and performance evaluation criteria. Topics include:

- Portfolio Characteristics
 - Market Capitalization
 - o Price/Earnings Ratio
 - Price/Book Ratio
 - Other Metrics
- Portfolio Holdings
- Performance Attribution
- Modern Portfolio Theory Statistics
- Sector Weights and Attribution
- Evaluating Investment Risk



Understanding and Navigating Volatile Markets

Provides an overview of the current economic climate and capital markets considerations. The following topics are covered in this session:

- Brief Review of Investing Fundamentals
- Current Market Conditions and Economic Climate
 - o Equity and Fixed Income Markets
 - o Employment and Wages
 - o Inflation
 - Monetary Policy
- Stock Market Downturns and Recoveries
 - Impact on Stocks
 - Recessions
- Volatility and Risk
 - o Past Performance
 - Understanding Volatility
 - Dangers of Market Timing
 - Avoiding Common Mistakes

Lessons Learned from the Courtroom

Recent developments related to retirement plan fiduciary breach litigation, including recent settlements, rulings from the courts and new filings. Innovest will share observations related to our expert witness services and how fiduciaries avoided or could have avoided a fiduciary breach. Additionally, we review some of the most common claims, along with developing trends and the broadening scope of complaints.

Monetization of the Retirement Plan Participant

The defined contribution (DC) retirement plan is more than 40 years old. There have been many material changes throughout its evolution, most of which have been beneficial to 401(a), 401(k), 403(b), and 457 plan participants. Several recent developments related to the DC plan industry appear to be headed back to a practice that plan fiduciaries and their independent consultants fought hard to escape – monetization of plan assets and participants and the added risk/expense that comes with these tactics. This session will review these recent developments within the retirement plan industry and suggested practices to avoid related unnecessary risk.



Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to fund that are more likely to outperform over the long term on a risk-adjusted basis.

Neutral

0.08%

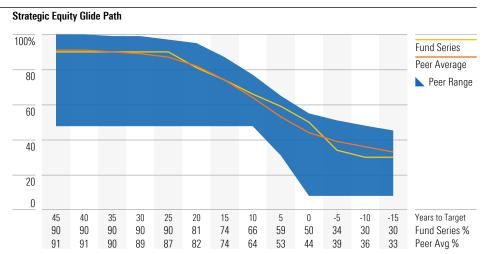
Negative

Analyst Rating Spectrum

♥ Gold ♥ Silver ♥ Bronze

Asset-Weighted Expense Ratio

	1 -
Key Features	
Firm Total Target-Date Assets (\$M)	\$599,716
Total Series Assets (\$M)	\$599,716
Inception Date (Oldest Share Class)	10/27/03
Glide Path Type Landing Point (Year To Target) Strategic/Tactical	Through Retirement -10 YTT Strategic
Underlying Investments	MF
Active Exposure	0.0%
Open Architecture	0%
Target-Date Vehicles Target Date Year Ranges	CIT,Mutual Fund 2065—2015
Increments	5 years
Income/Retirement Fund	Yes



Peer group includes all series of target-date mutual funds. Each fund in a series follows a predefined asset-allocation glide path and is assigned to Morningstar Category based upon its target retirement date.

Performance												
Fund Target Date	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	Income
5-Year Return %	_	10.95	10.95	10.96	10.89	10.28	9.57	8.85	8.14	7.27	5.95	5.30
5-Year Rank %	_	51	45	37	33	41	48	42	32	39	78	41
# of Funds in Cat.		141	163	168	165	168	165	168	168	127	89	122

Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original lost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, lease wish thruty-/davisor mornipostac com/familyinfo asp.

Analyst View Jason Kephart, CFA, Director, 24 Feb 2022

Vanguard Target Retirement continues to stand above peers thanks to its simple approach and extremely low costs. It earns a Morningstar Analyst Rating of Silver for its single share class.

In February 2022, this series' institutional shares were merged into its investor shares. As a result of the merger, shareholders in the investor share class saw fees drop to 0.08% from 0.14% and shareholders in the institutional shares got a 1-basis-point reduction to 0.08%. The series is now tied for the cheapest target-date mutual funds available that don't have a high minimum investment attached. These ultra-low fees provide an enduring edge for the series to outperform peers.

This series is emblematic of Vanguard. It features low-cost, broadly diversified index funds to gain efficient exposure to global stocks and bonds. The glide path starts with 90% equity exposure until 25 years to retirement and continues to decline until arriving at a 30% equity stake seven years after retirement. The series' equity glide path deviates the most from the peer average near retirement when account balances are likely near their peaks. Five years from retirement, the glide path has 59% equity exposure, 5 percentage points higher than the norm, and at retirement it has 50% equity exposure; 7 percentage points higher than the norm, leaving investors more vulnerable to sudden market drops near the retirement date. This could make it harder for more conservative investors to stick with the funds during rocky periods. In the first quarter of 2020, for example, the 2020 Institutional share class lost 10.7%, just below the Morningstar Category average of 10.1%. Since the bear market was short-lived, investors that were able to stomach the temporary drop in their nest egg were ultimately rewarded. For the full year, the fund gained 12%, outpacing the category norm by 2



percentage points.

The team overseeing the series has been forward-thinking. It was one of the first to increase its allocation to non-U.S. stocks and bonds to better reflect the global market. The series' huge size, \$1.19 trillion as of the end of 2021, does somewhat limit the ability to add new asset classes to the portfolio. The team now has the leeway to use up to 2% of assets to buy equity index and interestrate futures to help keep the desired asset-class exposures in place during market dislocations. It's a smart move that should keep the series, and shareholders, on the right glide path.

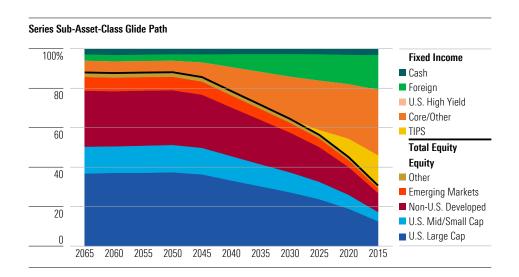
Process: Approach | • Above Average Jason Kephart, CFA, Director, 24 Feb 2022

Vanguard takes a pragmatic approach to the Vanguard Target Retirement series' glide path and underlying exposures. The straightforward strategy, coupled with evidence that the team regularly revisits its assumptions and research, helps the series earn an Above Average Process rating.

In 2020, the series crossed \$1 trillion in assets combined between its mutual funds and collective investment trusts. The underlying index funds track very liquid asset classes, so there are no capacity concerns. The team's ability to efficiently rebalance during volatile periods, as in the first quarter of 2020, does bear watching. To make it easier to retain its asset-class exposures through those periods, the firm now allows up to 2% of each fund to be invested in equity index and interest-rate futures. It's a prudent move that should help keep the glide path on track.

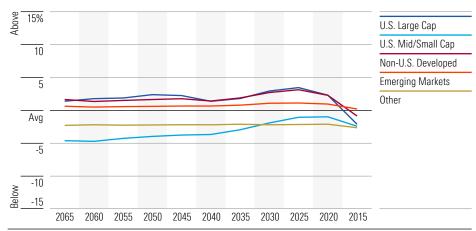
Vanguard's research into target-date investors' behavior finds that most don't start withdrawing assets until closer to age 72 than 65, leading the team to take on more equity risk at the retirement date than the norm. Its 50% allocation to stocks at the target-retirement date is seven percentage points higher than the average peer.

One distinguishing feature of the series is more non-U.S. exposure than the typical target-date peer, particularly in fixed-income. Management allocates 30% of the fixed-income portfolio to non-U.S. bonds throughout the glide path; that's roughly double the typical peer. It also invests 40% of its equities outside the U.S., which is more than the average peer, but not as dramatically so.



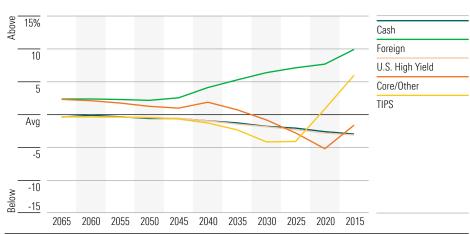


Equity Sub-Asset-Class Glide Path vs. Peer Average



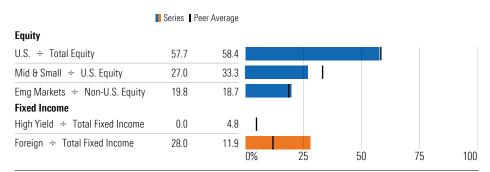
This chart indicates the degree (in percentage points) a fund's sub-asset-class exposure deviates from the peer average at different points along the glide path. Positive values indicate above-average exposure, whereas negative values reflect below-average exposure.

Fixed-Income Sub-Asset-Class Glide Path vs. Peer Average



This chart indicates the degree (in percentage points) a fund's sub-asset-class exposure deviates from the peer average at different points along the glide path. Positive values indicate above-average exposure, whereas negative values reflect below-average exposure.

Series' Average Portfolio Splits vs. Peer Average (%)



Process: Portfolio | • Above Average Jason Kephart, CFA, Director, 24 Feb 2022

The series' equity portfolio consists of two index funds, Vanguard Total Stock Market Index VTSMX and Vanguard Total International Stock Index VGTSX. Both offer market-cap-weighted exposure to

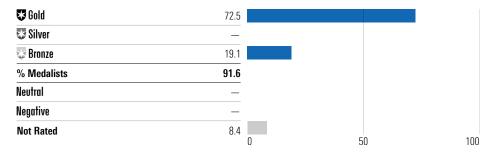


stocks within their respective regions and stretch from mega-caps to small-caps. The U.S. total stock market fund, for example, had an 8.5% allocation to small and micro caps as of February 2022 The international total stock market fund had a similar stake in smaller international companies. It also had about 20% in emerging-markets equities.

The team's most recent change to the underlying funds was to add Vanguard Total International Bond Index VTIBX to the bond allocation throughout the glide path in 2013. Vanguard added international bonds to broaden the diversification of the fixed-income portfolio and spread out the interest-rate, credit, and country risks. Notably, the international-bond fund hedges its foreign-currency risk to the U.S. dollar. Without this hedge, most of the fund's volatility would come from currency fluctuations. Domestic fixed-income exposure comes from Vanguard Total Bond Market II Index VTBIX and Vanguard Short-Term Inflation-Protected Securities Index VTAPX. The latter enters the series in the years leading up to retirement. The team prefers short-term Treasury Inflation-Protected Securities exposure because it provides a shorter-duration profile and purer inflation protection.

Portfolio Attributes	
Total # Holdings	5
% Portfolio in Top 10 Holdings	100.0
Average Morningstar Rating of Underlying Funds	2.97
Strategic/Tactical	Strategic
Underlying Investments	Mutual Funds
Active Exposure	0.0%
Open Architecture	0%

Underlying Funds' Morningstar Analyst Ratings (% of Series Assets)



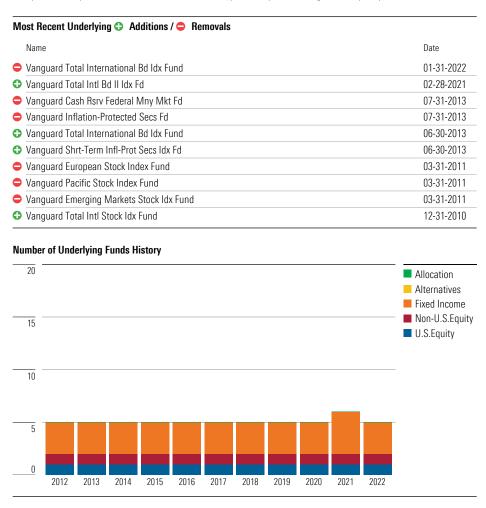
Top Investments

			1-Year		3-Year		5-Year		10-Year	r			
			Return	Rank	Return	Rank	Return	Rank	Return	Rank	Morningstar	Mornings	tar Date
Name	US Fund Category	% Assets	%	%	%	%	%	%	%	%	Analyst Rating	Rating	Added
Vanguard Total Stock Mkt Idx Instl Pls	Large Blend	42.3	11.69	63	18.17	35	15.38	32	14.21	27	🐯 Gold	***	12/31/03
	# of Funds in Category			1,368	1	,232	1	,116		818	03/07/22		
Vanguard Total Intl Stock Index Inv	Foreign Large Blend	27.7	-1.91	59	7.68	43	6.71	39	5.73	54	℧ Gold	***	12/31/10
	# of Funds in Category			767		705		610		407	12/08/21		
Vanguard Total Bond Market II ldx Inv	Intermediate Core Bond	19.1	-4.15	29	1.50	64	1.99	59	2.09	63	Bronze	***	03/31/09
	# of Funds in Category			431		391		356		256	07/07/21		
Vanguard Total Intl Bd II ldx Insl	Global Bond-USD Hedged	8.4	-4.98	68	_	_	_	_	_	_	_	_	02/28/21
	# of Funds in Category			129		112		84		53	_		
Vanguard Shrt-Term Infl-Prot Sec Idx Adm	Inflation-Protected Bond	2.5	3.86	50	4.34	92	3.07	87	_	_	℧ Gold	**	06/30/13
	# of Funds in Category			211		203		184		126	11/02/21		



Top Investments												
			1-Year		3-Year		5-Year	10-Year	r			
			Return	Rank	Return	Rank	Return Rank	Return	Rank	Morningstar	Morningsta	ar Date
Name	US Fund Category	% Assets	%	%	%	%	% %	%	%	Analyst Rating	Rating	Added

Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit http://advisor.morningstar.com/familyinfo.asp.



People | • Above Average Jason Kephart, CFA, Director, 24 Feb 2022

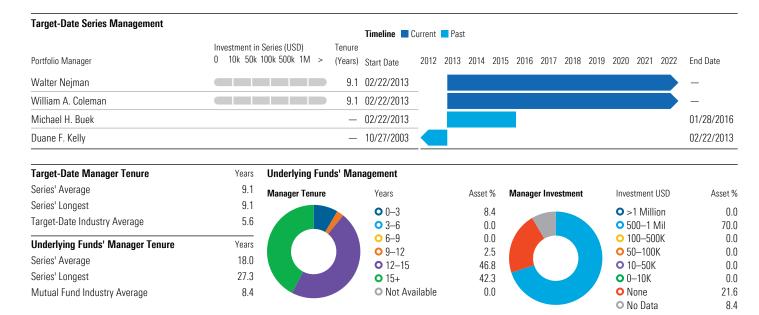
This series relies on the views of Vanguard's most senior leaders. Vanguard's strategic asset-allocation committee oversees the series' glide-path construction, asset allocation, and underlying fund selection. Ten members sit on that committee, including Vanguard's chief economist, global CIO, head of fixed income, and head of defined-contribution advisory services. Although the committee members have significant responsibilities in addition to this series, Vanguard's focus on delivering a simple solution for retirement saving makes the resources adequate. Plus, the series uses five broadly diversified low-cost index funds for exposure, all of which earn ratings of Gold, Silver, or Bronze, depending on the share class. These aspects earn the series an Above Average rating for People. The strategic asset allocation committee is supported by the firm's investment strategy group, which is composed of a global network of more than 70 investment professionals. Their research covers an

array of topics ranging from investor behavior to portfolio construction. This team's research also



touches the firm's other multi-asset portfolios, such as the Vanguard LifeStrategy target-risk series and the firm's model portfolios, which follow the same allocation philosophy.

The two listed comanagers, William Coleman and Walter Nejman, oversee the series' day-to-day portfolio trading and management.



Performance | Jason Kephart, CFA, Director, 24 Feb 2022

This series of target-date funds has delivered above-average returns over the long term.

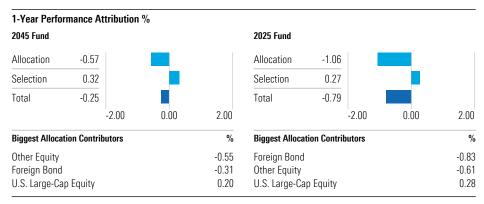
The funds in the series topped roughly 70% of peers, on average, over the trailing 10 years through January 2022. More recent results have been middling, however, as the series' overweight to international stocks relative to peers has largely been a headwind. Vanguard was one of the first to move to a strategic international stock allocation that comes close to the global market-cap in 2015, but U.S. stocks have been the clear winners since then. Over the trailing five- and three-year periods, its average category ranks have fallen closer to the middle of the pack. If international stocks start to meaningfully outperform, this series is well-suited to benefit.

The last year has been particularly challenging for the series. Rising interest rates have weighed on the passive bond index funds, which have tended to sport longer duration profiles than more actively managed peers; the longer duration has helped for most of the last decade but since rates have meaningfully moved higher since the start of 2021, it's been a tailwind. The international bond index fund lost 2.28% in 2021, trailing two thirds of peers, and the U.S bond index fund lost 1.8%, landing squarely in the middle of the pack. The mediocre returns on the bond side contributed to the series trailing 60% of peers, on average, for the one year ending Jan. 31, 2021.



Target-Date Fund Performance											
		1-Year		3-Year		5-Year		10-Year			
Name	Morningstar Rating	Return %	Rank	Return %	Rank	Return %	Rank	Return %Ra	ank	Sharpe Ratio	Cat Avg Sharpe Ratio
Vanguard Target Retirement Income Fund	***	0.15	49	5.75	44	5.30	41	4.95	37	0.96	0.80
Vanguard Target Retirement 2015 Fund	***	0.39	74	6.20	81	5.95	78	6.20	67	0.95	0.87
Vanguard Target Retirement 2020 Fund	***	1.39	50	7.87	47	7.27	39	7.31	29	0.92	0.85
Vanguard Target Retirement 2025 Fund	***	1.86	42	8.92	38	8.14	32	8.04	19	0.88	0.81
Vanguard Target Retirement 2030 Fund	***	2.53	47	9.84	46	8.85	42	8.68	23	0.87	0.81
Vanguard Target Retirement 2035 Fund	***	3.29	44	10.77	50	9.57	48	9.31	28	0.85	0.79
Vanguard Target Retirement 2040 Fund	***	4.10	47	11.68	50	10.28	41	9.85	28	0.84	0.79
Vanguard Target Retirement 2045 Fund	***	4.88	42	12.61	36	10.89	33	10.19	19	0.83	0.77
Vanguard Target Retirement 2050 Fund	***	5.07	41	12.74	38	10.96	37	10.23	19	0.83	0.78
Vanguard Target Retirement 2055 Fund	***	5.05	43	12.71	42	10.95	45	10.21	24	0.83	0.77
Vanguard Target Retirement 2060 Fund	***	5.05	42	12.71	52	10.95	51	10.24	1	0.83	0.83
Vanguard Target Retirement 2065 Fund	_	5.12	40	12.69	57	_	_	_	_	_	_

Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit http://advisor.morningstar.com/familyinfo.asp. Please see page 11 for additional information about these rankings, including the # of funds in each ranking category.

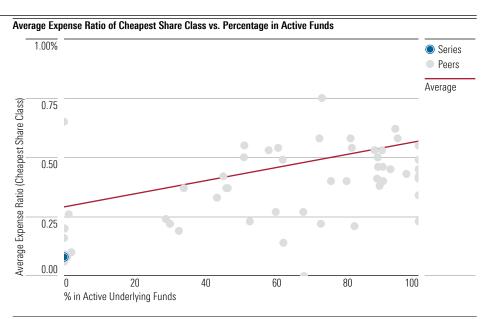


Price | Jason Kephart, CFA, Director, 24 Feb 2022

It's critical to evaluate expenses, as they come directly out of returns. The Morningstar Analyst Rating is based on our assessment of the strategy's People, Process, and Parent pillars in the context of the fees charged by each share class. Mutual funds with more than one share class are likely to have multiple ratings; those with lower fees are likely to have a higher rating. Medalist ratings—Gold, Silver, and Bronze—indicate conviction in the share class's ability to deliver positive alpha net of fees relative to the category benchmark over the long-term, with Gold being the highest rating. Neutral or Negative ratings, meanwhile, signal an expectation that the share class will not deliver positive alpha after fees.

Asset-Weighted Expense Ratio vs. Peer Average (%)	
Vanguard Target Retirement Series	0.08
Peer Average	0.49





Expense Ratio Analysis by Distribution Group



Parent | • High Alec Lucas, Ph.D., 19 May 2021

The Vanguard Group earns a High Parent rating for its investor-centric ethos, reliable strategies, and democratization of advice.

Vanguard is the asset-management industry's only client-owned firm, and it shows. Vanguard uses the money that its passive strategies make from securities lending to lower if not eliminate headline expense ratios. Modest fees, capable subadvisors, and performance incentives spur its active business to competitive results. Vanguard also offers advice, human and digital, at an accessible cost. All of this helped its global assets under management grow to USD 7.5 trillion as of March 31, 2021.

Yet, Vanguard's non-U.S. business only accounts for a fraction of its assets. Incumbents within many of these markets have sought to keep this low-cost provider at bay. Vanguard has shifted from leading with exchange-traded funds to using advice for entry, such as its joint venture with China's Ant Financial to offer a mobile-based retail service, which had more than 1 million Chinese users a



Morningstar Target-Date Fund Series Report Disclosure

The Morningstar Target-Date Fund Series Report ("Report") is for informational purposes, intended for financial professionals and/or qualified investors ("Users") and should not be the sole piece of information used by such Users or their clients in making an investment decision.

The analysis within this Report is prepared by the person(s) noted in their capacity as an analyst for Morningstar Research Services LLC, a subsidiary of Morningstar, Inc. The opinions expressed within the Report are given in good faith, are as of the date of the Report and are subject to change without notice. Neither the analyst nor Morningstar Research Services commits themselves in advance to whether and in which intervals updates to the Report are expected to be made. The written analysis and Morningstar Analyst Rating within this Report are statements of opinions; they are not statements of fact.

Morningstar Research Services believes its analysts make a reasonable effort to carefully research information contained in their analyses. The information on which the analysis is based has been obtained from sources that are believed to be reliable such as, for example, the fund's prospectus and shareholder reports (or their equivalents), target-date series company website, interviews with targetdate series company personnel, and relevant and appropriate press sources as well as data, statistics and information within Morningstar's own database. Morningstar does not perform an audit or seek independent verification of any of the data, statistics, and information it receives.

Unless otherwise provided in a separate agreement, Users accessing this Report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the Report is Morningstar, Inc., a U.S.A. domiciled financial institution.

This Report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist institutional investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors; Users and User clients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, Morningstar makes no representation that the Report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar and its officers, directors and employees will not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the Report. Morningstar encourages Users and User clients to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an investment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or that would subject Morningstar or its affiliates to any registration or licensing requirements in such jurisdiction. Where this Report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the Report, the English version will control and supersede any ambiguities associated with any part or section of a Report that has been issued in a foreign language. Neither the analyst, Morningstar, or Morningstar affiliates guarantee the accuracy of the translations. This Report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst or Morningstar. In Territories where a Distributor distributes our Report, the Distributor, and not the analyst or Morningstar, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research

For a list of funds that Morningstar Research Services currently covers and provides written analysis on please contact your local Morningstar office. For information on the historical Morningstar Analyst Rating for this series or any series Morningstar Research Services covers, please contact your local Morningstar office.

Please note that investments in securities (including target- date series funds) are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in the future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted

within the Report. Morningstar's Risk, Return and Star Ratings serve as useful data points with respect to evaluating a target-date fund series' risk profile.

A current yield percentage is not a reflection of the actual return an investor will receive in all cases as market prices for securities are constantly changing due to such things as market factors. Where a security is denominated in a different currency than the currency of the User or User's clients, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment. Indexes noted within the Report are unmanaged, their returns do not include payment of any sales charges or fees an investor would pay to purchase securities and cannot be invested in directly.

In certain jurisdictions, the Report contents, except for the Morningstar Analyst Rating and key analysis/ opinions, may be shared with the target-date series company prior to publication. In the unlikely event that Morningstar Research Services would change its analysis/opinions and/or the Morningstar Analyst Rating based on feedback as result of such review, the Report would disclose such a fact.

Conflicts of Interest

- Analysts may own (actual or beneficial) interests in the financial products that are the subject of the Report. No material interests are held by Morningstar, the analyst or the analyst's immediate family in the financial products that are the subject of the Report.
- Analysts' compensation is derived from Morningstar's overall earnings and consists of salary, bonus and in some cases restricted stock. Analysts' receive no compensation or material benefits from product issuers or third parties in connection with the Report.
- Morningstar Research Services does not receive commissions for providing research and does not charge financial product issuers to be rated.
- Analysts may not pursue business and employment opportunities outside Morningstar Research Services within the investment industry (including but not limited to, working as a financial planner, an investment professional or investment professional representative, a brokerdealer or broker-dealer agent, a financial writer, reporter, or analyst).
- Morningstar may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.
- Morningstar affiliates (i.e., its investment management group) may have arrangements with a fund company's affiliate to provide investment consulting advice, some



Morningstar Target-Date Fund Series Report Disclosure

of which an analyst may issue an investment research reports on one or more of the fund company's targetdate funds. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.

► Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" sectionhttp://investorrelations.morningstar.com/sec.cfm?doctype=Proxy&year=&x=12.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to https://corporate.morningstar.com/us/asp/subject.aspx?xmlfile=540.xml

The Morningstar Analyst Rating™ for Target-Date Fund Series

The Morningstar Analyst Rating™ for Target-Date Fund Series is a forward-looking analysis of a target date fund series. The Analyst Rating does not express a view on a given asset class or peer group; rather, it seeks to evaluate each target-date fund series within the context of its objective, an appropriate benchmark, and peer group.

The date shown next to the Morningstar Analyst Rating is the date on which the Morningstar Manager Research Analyst assigned or reaffirmed the current rating for the target-date fund series based on the analyst's latest review and research report for the target-date fund series.

The Five (5) Pillars

Morningstar has identified five key areas that we believe are crucial to predicting the future success of funds: People, Parent, Process, Performance, and Price. Each pillar is evaluated when assessing a fund as well as the interaction between the pillars, which we believe is crucial to understanding a fund's overall merit.

People

The overall quality of a target-date fund series' investment team is a significant key to its ability to deliver superior performance relative to its benchmark and/or peers. Evaluating a target-date fund series' investment team requires that analysts assess several relevant items including how key decisions are made.

We believe the parent organization is of utmost importance in evaluating a target-date fund series. The target date fund series' management set the tone for key elements of our evaluation, including capacity management, risk management, recruitment and retention of talent, and incentive pay. Beyond these operational areas, we prefer firms that have a culture of stewardship and put investors first to those that are too heavily weighted to salesmanship.

Process

We look for target-date fund series with a performance objective and investment process (for both security selection and portfolio construction) that is sensible, clearly defined, and repeatable. In addition, the portfolio should be constructed in a manner that is consistent with the investment process and performance objective.

Performance

We do not believe past performance is necessarily predictive of future results, and this factor accordingly receives a relatively small weighting in our evaluation process. In particular, we strive not to anchor on short term performance. However, we do believe that the evaluation of long-term return and risk patterns is vital to determining if a target-date fund series is delivering to our expectations.

Price

To reflect actual investor experience, price is evaluated within the context of the relevant market or cross border region—for example, the United States, Australia, Canada, or Europe. In recognition of differences in scale and distribution costs in various markets, the level at which a target-date fund series is penalized for high fees or rewarded for low fees can vary with region. In Europe, for example, target-date fund series are penalized if they land in the most expensive quintile of their Morningstar category and are rewarded if they land in the cheapest quintile. The assessment is made using prospectus expense ratios, but in the case of target-date fund series with performance fees, expenses are evaluated excluding any performance fees and then the structure of the performance fee is evaluated separately.

Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates funds based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five pillar evaluation to determine how they believe funds are likely to perform

relative to a benchmark, or in the case of exchangetraded funds and index mutual funds, a relevant peer group, over the long term on a riskadjusted basis. They consider quantitative and qualitative factors in their research, and the weight of each pillar may vary. The Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. A Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's conviction in a fund's prospects for outperformance. Analyst Ratings ultimately reflect the Manager Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months. For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to global.morningstar.com/managerdisclosures/.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating a fund, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the fund.

Morningstar Rating

The Morningstar Rating (or "star rating") is a proprietary data point that is quantitatively driven. Target-date fund series are rated from one to five stars based on how well the target-date fund series performed (after adjusting for risk and accounting for sales charges) in comparison to similar target-date fund series. Within each Morningstar Category, the top 10% of target-date fund series receive 5 stars and the bottom 10% receives 1 star. target-date fund series are rated for up to three time periods -three-, five-, and ten-years- and these ratings are combined to produce an overall star rating, which is noted within the Report. Target-date fund series with less than three years of history are not rated. Star Ratings are based entirely on a mathematical evaluation of past performance. Star Ratings are in no way to be considered a buy or sell signal nor should be viewed as a statement of fact.

The Overall Morningstar Rating is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/40% threeyear rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

For Recipients in Australia





Morningstar Target-Date Fund Series Report Disclosure

This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this Report. The Service is provided through the research of investment products. To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at www.morningstar.com.au/fsg.pdf.

For Recipients in Hong Kong

The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at http://global.morningstar.com/equitydisclosures.

For Recipients in India

This Investment Research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India (Registration number INA000001357) and provides investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data related services, financial data analysis and software development.

The Analyst has not served as an officer, director or employee of the target-date fund series company within the last 12 months, nor has it or its associates engaged in market making activity for the target-date fund series company.

*The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research Analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to

client, and are detailed in the respective client agreement.

For recipients in Japan

The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information.

For recipients in Singapore

For Institutional Investor audiences only. Recipients of this Report should contact their financial professional in Singapore in relation to this Report. Morningstar, Inc., and its affiliates, relies on certain exemptions (Financial Advisers Regulations, Section 32B and 32C) to provide its investment research to recipients in Singapore.



COUNTY OF SAN MATEO HUMAN RESOURCES DEPARTMENT

Rocio Kiryczun Director

County Government Center 455 County Center, 5th Floor Redwood City, CA 94063 650-363-4321 T 650-363-4822 F http://hr.smcgov.org http://jobs.smcgov.org

SAN MATEO COUNTY DEFERRED COMPENSATION ADVISORY COMMITTEE MONDAY, DECEMBER 12, 2022 (11:30AM-4:00 PM)

455 County Center, Room 402 Redwood City, CA 94063

RETREAT AGENDA

Committee Members	Appointed As
Lisa Okada, Chair	Human Resources Director Designee
Tiffany Htwe	Tax Collector-Treasurer Designee
Laurel Finnegan	Non-Management Appointee
Lilibeth Dames	Non-Management Appointee
Robert Raw	Non-Management Appointee
Steve Perry	Non-Management Appointee
Bridget Love	Management Appointee
Gina Wilson	Management Appointee
Michael Wentworth	Management Appointee

Staff	Empower	Innovest
Kim Pearson Marife Viola Jay Castellano	Bob Gleason Patrick Washington Armando Llanes	Wendy Dominguez Brett Minnick Gordon Tewell
		Kyli Soto Rick Rodgers

CALL TO ORDER

ROLL CALL

ORDERS OF THE DAY

PUBLIC COMMENTS





RETREAT ITEMS

- 1. Introduction (Jay Castellano)
- 2. Present Demonstration of New Empower Platform (???)
- 3. Fiduciary Education
 - A. Topics TBD
 - B. Topics TBD
 - C. Topics TBD
 - D. Topics TBD
- 4. Next Steps in Investment Menu Analysis (Innovest)
 - A. ESG Alternatives
 - B. Review of HRA Plan Fees
- 5. Develop 2023 Goals & Objectives
 - A. Reduce Plan Leakage
 - B. Participation?
 - C. Contribution Rates?
 - D. Asset Allocation:
 - E. Other Focus Areas?

ADJOURNMENT

RETIREMENT REPORT

County of San Mateo, CA | Deferred Compensation Plan





Fall 2022

Rekindle the Romance

Your 457 Plan Offers You Valuable Benefits You Just Can't Find Anywhere Else

In the midst of economic adversity, market volatility, geopolitical uncertainty and a host of other things (including a still-active pandemic, now in its third year), it can be hard to find a silver lining. However, there is one thing that keeps showing you some love every day — your 457! Here are some tips to remind you why you got together in the first place — and help keep the romance alive.

Your Savings Are Automatic

With your 457 plan, you're following the core financial planning principle of "pay yourself first." Money is deposited from your paycheck to your account without you even having to think about it. It doesn't get much easier than that.

Tax Savings

You can defer paying income tax on up to \$20,500 that you save in a 457 plan in 2022. A worker in the 24% tax bracket who saves this amount could reduce their tax bill by \$4,920. Income tax won't be due on this money until it is withdrawn from the account. Workers who earn less than \$34,000 in 2022 (\$68,000 for couples) might additionally qualify for the saver's credit, which is worth between 10% and 50% of 457 contributions up to \$2,000 for individuals and \$4,000 for couples. The biggest saver's credits go to workers with the lowest incomes.

Savings on Top of Savings

Employees who are age 50 and older are eligible to contribute an additional amount (called a catch-up contribution) to 457 plans. The 457 plan catch-up contribution limit is \$6,500 in 2022. That means older workers can defer paying income tax on up to \$27,000 in a 457 account. As a result, someone in the 24% tax bracket could potentially reduce their current tax bill by \$6,480.



Your Money Goes Where You Go

If you leave your employer for any reason, you can take your vested balance with you. It's fully portable, and you can roll it into an individual retirement account or a new employer's 457 plan (if allowed).

Account Management Made Easy

Your recordkeeper (Empower Retirement) provides you with comprehensive account access where you can view your balance, perform transactions and talk to a call center representative for guidance. On top of that, you can view retirement planning education materials and calculators, and likely even model various saving scenarios and assumptions to help gauge your progress toward retirement readiness.

The stock market will always have its ups and downs... but in the end, your 457 is your partner for life!

Taking a Hike

Four Ways Interest Rate Hikes Can Affect Your Finances — and How to Manage It

Unless you live on another planet, you are fully aware of this thing called inflation — whether you're at the grocery store, a gas station, buying clothes online, hiring a contractor or doing almost any other thing that requires spending money for something. Earlier this year, the Federal Reserve started raising interest rates to rein in inflation, which reached another 40-year high in June. By raising rates, the Fed hopes to slow the economy and inflation. That's because as borrowing becomes more expensive, consumers tend to reduce spending. The drop in demand for goods eventually leads to lower prices.

The Fed doesn't set interest rates on credit cards, mortgages, auto loans, and savings accounts, but its actions influence those rates. Here are four ways interest-rate hikes can affect your finances and how to deal with the impact:

1. Credit Cards

Most cards charge a variable rate that's tied to the bank's prime rate — the rate banks charge their best customers (many consumers pay an additional rate on top of prime, based on their credit profile.) Banks typically raise their prime rate quickly after the Fed boosts its key rate. HIKING TIP: It may take a couple of statements before you notice the impact of a rate increase. Start paying down any balance before rates get much higher, focusing on the card with the highest rate first.

2. Mortgages

If you have a fixed-rate mortgage, your monthly payments will stay the same. If you refinanced over the last few years and locked in a rate in the 2% to 3% range, that was really good timing. However, if you have an adjustable-rate mortgage (ARM), you may be faced with having to make larger payments, depending on the terms of your loan. HIKING TIP: If you have an ARM, budget for higher payments. Or, if you

anticipate buying a home within the next year or two, take steps to improve your credit score so you can secure a lower interest rate.

3. Home Equity Line of Credit

This allows you to borrow against the equity in your home as needed, usually at a variable interest rate. Borrowers typically pay only interest on the amount borrowed for the first 10 years, and thereafter must repay interest and the principal over the next, say, 15 or 20 years. Your Home Equity Line of Credit (HELOC) rate can adjust monthly or quarterly. So, if you have an outstanding balance, your payments will likely go up when the Fed implements a rate hike. HIKING TIP: If you have a HELOC, budget for higher payments. You can also pay down your HELOC balance to reduce the interest you pay, or talk to your lender about options, such as refinancing.

4. Auto Loans

It's already more expensive to buy a new or used car, as their prices have increased dramatically over the last two years. This is due to a number of reasons that have resulted in supply not keeping up with demand. Unfortunately, if you're planning on financing the purchase of a vehicle in the near future, you'll need to add in the higher cost of borrowing. HIKING TIP: Make a down payment of at least 20% of the purchase of a new car, and no less than 10% for a used car. A sizable down payment will lower your monthly payments and could help secure a lower interest rate.



Innovest is a Registered Investment Adviser registered with the US Securities and Exchange Commission. Unless explicitly stated to the contrary, the material herein is not intended to provide and should not be relied on for investment advice. Under no circumstances are we ever providing tax, accounting or legal advice.

Past performance is no guarantee of future results. Investing involves the risk of loss.

This document may contain returns and valuations from outside sources. While the information contained herein is believed to be true and accurate, Innovest assumes no responsibility for the accuracy of these valuations or return methodologies.

Whom do I call for help?

Account Information

Balances | Investment Changes | Personal Info

Contact: Empower

1-800-743-5274

www.retiresmart.com

Plan's Investment Consultant

Innovest Portfolio Solutions 2239 Harbor Bay Parkway Alameda, CA 94502

510-239-4200 | www.innovestinc.com

From: Michael Callagy

Sent: Monday, October 24, 2022 2:06 PM

Cc: BOS_AllStaff; Michael Callagy; Peggy Jensen; Iliana Rodriguez; Justin Mates; Roberto Manchia; Connie

Juarez-Diroll; Shireen Malekafzali; Michelle Durand; Kim Hurst; Sherry Golestan; Kimberly Marlow; Brian Kulich; Paul Sheng; Judith Holiber; Jennifer Stalzer; Tara Heumann; Jan Ellard; Caiti Busch; Rebecca Archer; Lauren Carroll; Nicolas Saenz; Judith Holiber; Peter Cruz; Melissa Andrikopoulos; Gina Beltramo; Craig Baumgartner; Tara Heumann; John Nibbelin; Thomas Westphal; Lisa Cho; Kimberly Marlow; Ramaah Sadasivam; Brian Kulich; Sarah Trela; Jennifer Stalzer; Timothy Fox; Brian Wong; Daniel Valim; Koren Widdel; Mark Church; Kim Cagno; Juan Raigoza; Robert Foucrault; John Nibbelin; Neal Taniguchi; Stephen Wagstaffe; Donald Mattei; Kitty Lopez; Louise Rogers; Raymond Hodges; Rocio Kiryczun; Ken Cole; Michael Wentworth; Rob Bartoli; Anne-Marie Despain; Nicholas Calderon; Steve Monowitz; John Keene; Adam Ely; Natasha Claire-Espino; Ann Stillman; Caroline Shaker; Scott Hood; Chester Kunnappilly; Carlos Bolanos; Carolyn Bloede; Sandie Arnott; Christina

Corpus

Subject: Update changes to the Brown Act impacting the rules on virtual meetings

Importance: High

Dear San Mateo County Board and Commission Members:

I write to update you on recent actions at the state level that will require a return to in-person meetings beginning March 1, 2023, for all County Boards and Commissions.

As you are aware, in response to the COVID-19 pandemic, Governor Newsom declared a statewide State of Emergency and issued several Executive Orders that adjusted the rules for Brown Act bodies to allow for online participation in public meetings. The Legislature followed suit with the passage of AB 361 (Chapter 165, Statutes of 2021), allowing these bodies to conduct virtual meetings under streamlined procedures for remote participation as long as a state of emergency remains in effect and the local agency finds that requiring participants to attend in-person meetings presents an imminent risk to public health and safety.

Recently, Governor Newsom announced that the COVID-19 State of Emergency will end on February 28, 2023. As a result, Brown Act bodies will no longer be able to conduct remote meetings under the provisions of AB 361 after February 28, 2023 unless the State of Emergency is unexpectedly extended or renewed.

You have probably heard of newly passed legislation, AB 2449 (Chapter 285, Statutes of 2022), that changes the current rules under which members of Brown Act bodies can attend meetings remotely. However, as explained in more detail below, a majority of the Brown Act body members must attend the meeting in person; the options for remote attendance are quite limited, and to plan and allow for such options would cause a significant administrative burden.

As a result, the County Executive's Office is instructing all County Boards and Commissions to return to in-person meetings by March 1, 2023, as the limited remote attendance options under AB 2449 will not apply.

What is AB 2449?

AB 2449 is legislation signed by Governor Newsom on September 13, 2022, establishing alternative teleconferencing procedures for all Brown Act bodies.

Before the COVID-19 pandemic, Brown Act bodies were required to meet in person. There have always been options for members of Brown Act-covered bodies to attend meetings remotely by teleconference. Still, those options carry significant requirements, such as posting an agenda outside all teleconference locations, identifying the teleconference locations on the agenda, and allowing the public to enter the teleconference location. For example, Board members who wished to attend a meeting from home were required to post the agenda outside their homes, their homes' addresses must be listed on the agenda, and they must open up their homes to members of the public during the meeting. These requirements were considered so inconvenient and onerous that utilizing them to participate in public meetings from a private home was rare before the pandemic. The Governor's executive orders and AB 361 loosened these requirements in light of the pandemic, suspending several of these requirements and allowing extremely flexible procedures for participating in meetings from home. However, as noted above, that flexibility ends when the State of Emergency ends.

AB 2449 establishes new grounds for members of Brown Act bodies to appear remotely without all of the teleconferencing requirements listed above. However, it only applies in very specific situations, such as when a member experiences certain listed life circumstances or emergency situations. In addition, a member can only use the remote attendance options under AB 2449 a few times a year. It is impossible for a member to plan to participate in a County Board or Commission solely by remote attendance in an ongoing matter. It is also important to note that AB 2449 does not allow for an entirely remote meeting, as at least a quorum of the Brown Act body must attend the meeting in person. In sum, the pandemic practice of conducting online meetings will sunset on February 28, 2023 (unless the Governor unexpectedly extends the State of Emergency), and AB 2449 does not allow that practice to continue. Instead, it provides solely for the occasional individual attendance via online participation when certain circumstances occur.

Finally, perhaps most relevant to County boards and commissions, for Brown Act bodies to avail themselves of AB 2449's allowance for occasional remote meeting attendance, each meeting <u>must allow for remote public participation and in-person public participation.</u> The body would be required to host a robust "hybrid" meeting by holding the meeting in a physical space *and* providing either a two-way audiovisual platform or a two-way telephonic service and a live webcasting of the meeting so the public may remotely hear and visually observe the meeting and provide comments. The agenda must identify and include an opportunity for all persons to attend via a call-in option, internet-based service option, and at the in-person location of the meeting.

What happens to AB 361 now that AB 2449 has been signed into law?

The authority provided to Brown Act bodies to meet in an all-virtual format as granted under AB 361 will cease on February 28, 2023, when Governor Newsom lifts the State of Emergency. While AB 361 does not sunset until the end of 2023, the Governor would need to declare another State of Emergency for Brown Act bodies to be able to return to an all-virtual meeting format. This is not expected to occur.

Thus, with reasonable certainty, starting on March 1, 2023, Brown Act bodies will be required to meet in person once again. Members of those bodies would only have the option to attend meetings remotely under the stricter provisions of AB 2449 or traditional Brown Act teleconference requirements.

Why is Governor Newsom lifting the State of Emergency?

In his announcement, the Governor cites improved pandemic-related healthcare conditions and operational preparedness (including vaccine and boosters, testing, treatments, and other mitigation measures like masking and indoor ventilation) as two reasons for ending the COVID-19 State of Emergency. By waiting until the end of February 2023 to lift the order, the Governor believes he will be giving healthcare systems the needed flexibility to deal with any potential surge that may emerge in December and January following the holidays.

How will meetings of County Boards and Commissions proceed, given the passage of AB 2449?

After carefully reviewing the County's current technical and staffing support capacity, my office has determined that it cannot currently meet all the procedural and substantive requirements of AB 2449 for County Boards and Commissions to avail themselves of AB 2449's remote attendance options.

<u>Therefore, all County Boards and Commissions should plan to return to in-person meetings on March 1, 2023.</u>

What happens if I'm sick?

If a temporary health condition or family circumstances occasionally prevent you from attending in person, we ask that you focus on your health and family and, without regret, stay home.

What support will the County Executive's Office provide for a return to in-person meetings? To assist in this transition, I have asked Connie Juarez-Diroll, Principal Management Analyst in my office, to work with you should you need help finding new meeting spaces and your assigned County Attorney in answering legal questions. Before you return to in-person meetings, you will also receive information on available COVID-19 services and resources the County Health System provides.

Finally, in the coming year, my office will continue to work closely with our statewide associations to advocate for changes to the Brown Act that would provide greater flexibility for Boards and Commissions to meet in an all-virtual format, given its many benefits for increased public engagement across our County.

I thank you for your resilience over these last two-and-half years of the COVID-19 pandemic and for your continued service to our County. My staff and I look forward to a return to in-person meetings and connecting with you in person in 2023.

If you have any questions or concerns, don't hesitate to contact Connie directly.

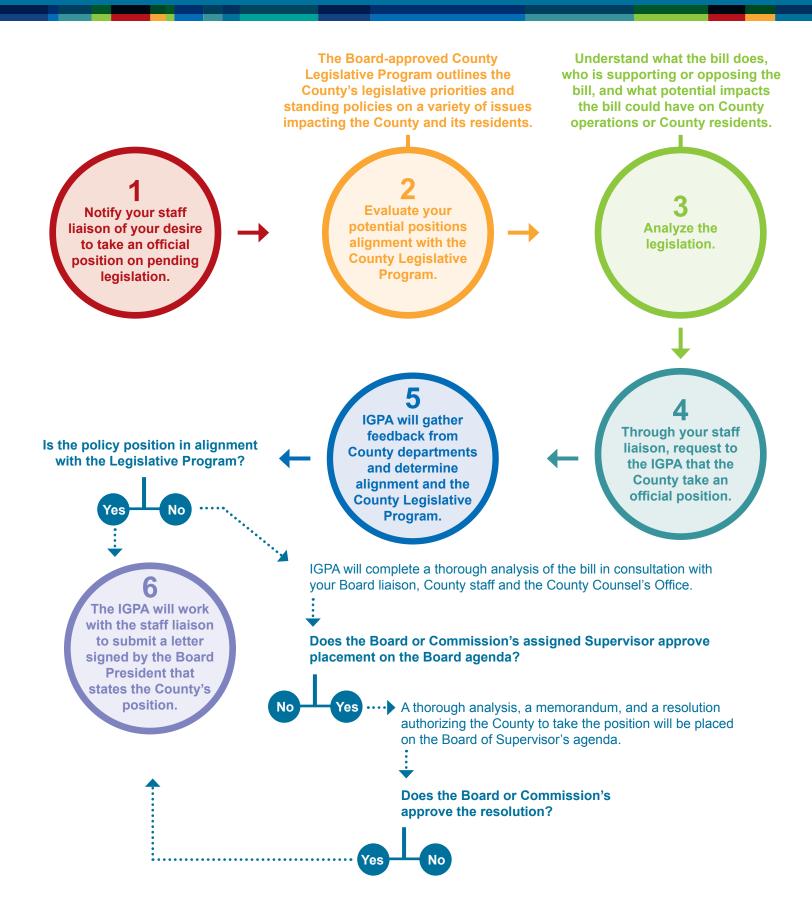
Thank you,

Mike Callagy (he/him)*
County Executive
County of San Mateo | 400 County Center, 1st floor, Redwood City, CA 94063
650-363-4129
mcallagy@smcgov.org
www.smcgov.org

*Here is why I include my pronouns: It's important to get pronouns correct to support belonging and respect in the workplace for everyone, inclusive of our LGBTQ+ communities. Pronouns are words used to refer to people and are often gendered (such as, she/her and he/him versus they/them). We cannot assume we can tell the correct pronoun for a person. As an ally, an easy way to normalize the use of self-identified pronouns is to include them in your email signature and share them when introducing yourself in meetings. When we normalize the inclusion of pronouns, it will be more affirming for transgender, nonbinary, and gender diverse

people to share theirs. Will you join me, in solidarity, to include your pronouns in your email signature? For more details on pronouns and how you can be in solidarity with gender diverse and transgender individuals visit: https://www.mypronouns.org/

How to Take a Position on Pending Legislation



San Mateo County Boards and Commissions Legislative Engagement Policy

In order to facilitate consistent and coordinated legislative advocacy on behalf of the County of San Mateo, all County Board and Commission members are expected to follow the Legislative Coordination and Advocacy Policy.



Key Points to Remember

Do not take any action that would imply the County's support or opposition to any pending legislation, budget proposal, or other policy unless it is consistent with Board-approved positions.

All legislative engagement must be coordinated through the Intergovernmental and Public Affairs Unit (IGPA) in the County Executive's Office. Your staff liaison can facilitate conversation with this Unit.

If you appear before a legislative body to express a personal opinion, you must state for the record that you are speaking as a private citizen, and not on behalf of the County or your Board or Commission.

Resources

The Intergovernmental and Public Affairs Unit https://www.smcgov.org/ceo/intergovernmental-and-public-affairs

California Legislative Information https://leginfo.legislature.ca.gov/

The California State Senate https://www.senate.ca.gov/

The California State Assembly https://www.assembly.ca.gov/

The California Legislative Analyst's Office https://lao.ca.gov/

United States' Senate https://www.senate.gov/

United States' House of Representatives https://www.house.gov/



A Publication of the County Executive's Office/Intergovernmental and Public Affairs Connie Juárez-Diroll, Chief Legislative Officer, (650) 599-1341 Samantha Tucci, Legislative Analyst, (650) 363-4230