

AGENDA

REGULAR MEETING MARIN COUNTY DEFERRED COMPENSATION COMMITTEE

Marin County Civic Center, 3501 Civic Center Drive
San Rafael, CA

Tuesday, February 14, 2023 / - 2:00 P.M – 3:30 P.M

Zoom Meeting Format

[Join Zoom Meeting](#)

Meeting ID: 864 4890 8019

Passcode: 318619

1. Call to Order
2. Roll Call
3. Open Time for Public Comment
4. Approval of Minutes – Meeting of December 5, 2022 (ACTION ITEM)
5. Deferred Compensation Committee Matters
 - Retiree Representative Update
 - New Committee Bylaws (ACTION ITEM)
6. Nationwide Retirement Solutions
 - Quarterly Summary Report and Updates for QE 12/31/2022
7. Hyas Group
 - Quarterly Performance Report for QE 12/31/2022
 - On Watch Funds: Schroder US Small Mid Cap Trust
 - Update on Vanguard target date fund CIT vehicle and Calvert Balanced Fund I share class change timing and communications
 - Review representative client fee comparison and discuss Nationwide’s contract term and potential renewal (Potential ACTION ITEM)
 - Legal and regulatory updates
8. Items for Future Agendas
 - Consider small account balance distributions and necessary Plan Document amendments
9. Schedule Upcoming Meetings - Proposed:
 - May 25, 2023; 2:30pm – 4:00pm – Regular Meeting (Civic Center Room 410-B)
 - August 24, 2023; 2:30pm – 4:00pm – Regular Meeting (Civic Center Room 410-B)
 - November 16, 2023; 2:30pm – 4:00pm – Regular Meeting (Civic Center Room 324-A)
10. Adjournment

Late agenda material can be inspected in the Department of Finance between the hours of 9:00 a.m. and 4:00p.m. The Department of Finance is located in Room 225 of the Marin County Civic Center, 3501 Civic Center Drive, San Rafael.



For disability accommodations please phone **415-473-2685** (Voice), CA Relay 711, or e-mail WSorensen@marincounty.org at least five business days in advance of the event. The County will do its best to fulfill requests received with less than five business days' notice. Copies of documents are available in alternative formats, upon request.

Minutes

MARIN COUNTY DEFERRED COMPENSATION COMMITTEE
Marin County Civic Center, 3501 Civic Center Drive
San Rafael, CA
Zoom Format
December 5, 2022 - 2:00 P.M.

1. Call to Order

Chair Mina Martinovich called the meeting to order at 2:01 p.m.

2. Roll Call

PRESENT: Mina Martinovich; Dan Eilerman; Jeff Wickman; Stephen Raab; Lisa Hatt;

ABSENT: Shanea Thompson; Jia Chen

Others in attendance: Jayson Davidson, Managing Partner, Hvas Group; John Steggell, Executive Relationship Manager; Greg Sabin, Program Director, Nationwide; Wendy Sorensen, Department of Finance

3. Open Time for Public Comment

None

4. Approval of Minutes – Meeting of August 25, 2022 (ACTION)

MOTION Dan Eilerman by to approve Minutes of August 25, 2022

SECOND by Lisa Hatt

AYES: ALL

5. Deferred Compensation Committee Matters

Mina Martinovich reported to the Committee that as a result of advertisement for the retiree committee member seat, there was one applicant. Committee members Mina Martinovich, Dan Eilerman, and Lisa Hatt, agreed to form a Sub-Committee to conduct an interview with the applicant, and will report back to the Committee on their recommendation.

6. Nationwide Retirement Solutions

• Quarterly Summary Report And Updates For QE 9/30/2022

John Steggell, Nationwide Relationship Manager, presented the 9/30/22 quarterly report for the 457 Plan. With distributions coming in above contributions for the quarter, cash flow was slightly negative. The largest component of distributions continues to be transfers/rollovers out. Mr. Steggell informed the Committee that the IRS has announced plan contributions limits for 2023. With current inflation levels, Participants will see increases across all statutory limits. In particular, the elective deferral limit for 457 plans will increase by \$2,000, from \$20,500 for calendar year 2022 to \$22,500 for calendar year 2023. The age 50 catch up will rise \$1,000 to \$7,500. Mr. Steggell will look into what targeted communications could be prepared to inform Participants of the higher limits.

Mr. Steggell provided an update on successful elements of the recently initiated Nationwide Virtual Benefits Courtyard. There were 100 unique participant visits to the Courtyard and 677 clicks through the links offered on the site. On the overall Participant services front, it was shared that there have been 165 individual meetings (virtual and on-site) held and from that, there has been 70 new enrollments.

Lisa Hatt asked about possibly marketing to the specific employees who are close to the cap or have gone over. John replied that email notifications go out to all participants but advised that he would look into it.

Mina Martinovich asked about the decline in online engagement in conjunction with statistics of one-to-one meetings and if Nationwide was aware of any correlations to note of. Greg Sabin explained it was the psychology of people not wanting to see how much money they may have lost as opposed to previous activity when things were going up.

Lisa Hatt asked about how often employees are being reached out to because she suspected that perhaps County new-hire employees were only receiving monthly emails from Nationwide. Lisa Hatt and John Steggell agreed to connect to discuss further.

- Virtual Benefits Fair Courtyard
Corresponds with open enrollment and stays open for 60 days, October 11-December 11, 2022.
- Second Quarter Participant Webinars
165 Appointments booked virtual or in person. 13 NEO calls, 70 Enrollments through DocuSign; 100 Unique Virtual Courtyard visits; 677 unique activities for the visits. Lisa Hatt mentioned that Lauren Ryan, Nationwide Representative, has come every 2 weeks to hold meetings and has been steadily booked.
- Introduction of a New Program Director
Greg Sabin is the new Nationwide Program Director, replacing Jake Sours. He has been with Nationwide for over 17 years.

7. Hyas Group

- Quarterly Performance Report For QE 9/30/2022
Jayson Davidson from Hyas Group presented the Third Quarter 2022 Performance Report. The Committee discussed current market conditions and performance for the offered Plan investment options. Markets appear to be in a similar place to where they were over the previous summer months, and the past month has brought a decent market rally that may not be sustainable. An expected decline in corporate earnings as we round out the year and move into the first quarter of next, is not priced into stocks broadly and Hyas believes markets will compress further before we conclude the current Bear market. Fixed income markets remain under pressure as the Federal Reserve continues its hawkish stance in its attempts to get current inflation levels under control.
- On Watch Funds: Schroder US Small Mid Cap Trust
At quarter-end, the Plans had one fund, the Schroder Small/Mid Cap Equity Fund, on watch. The fund continued to be in violation of performance related investment policy parameters and will remain on watch. Jayson Davidson noted that the Fund is well above benchmarks year-to-date, and Hyas continues to recommend patience as we wait for longer-term performance to move above policy benchmarks.
- Discuss transitioning to CIT version of the T. Rowe Price US Equity Research Fund (ACTION ITEM)
The CIT vehicle has a slightly lower expense ratio and small performance edge to the I

class. Hyas recommended that the Committee take action to make this change in investment vehicle. The Committee did not move the recommended action so no change will take place at this time. The Committee will revisit the approved addition of the Vanguard Target Retirement 2070 CIT and mutual fund (for the Court Plan) in this change process. The 2070 option in the target date series was not included during the previously discussed CIT option trust implementation process, as it was not an available option at the time the process began. The approved addition of the Vanguard Target Retirement 2070 CIT and mutual fund (for the Court Plan) will be addressed as part of future fund/investment option change process.

- Action Item: Transition to CIT version of the T. Rowe Price US Equity Research Fund MOTION by Dan Eilerman to approve CIT Version of the T. Rowe Price Us Equity SECOND by none

Motion failed to get a second, no vote.

- Update On Vanguard target date fund CIT vehicle and Calvert Balanced Fund I share change timing and communications

Vanguard 2070 was not rolled out at initial time of purchase. Paperwork did not include addition of 2070 fund.

- Discuss Nationwide's contract term and potential renewal (ACTION ITEM)
Nationwide Contract is not up until end of 2023, but process for RFP can take 1 year. The original 10-year contract was for January 2014 – December 2023. There is currently an option of a 5-year renewal is in the contract or there is an option to go month-to-month for 6 months. At the next meeting, Jayson Davidson will give a breakdown of his clients, asset sizes, bid date and their pricing.

No Action was taken at this time.

- Legal And Regulatory Updates
The elective deferral limit for 457 plans will increase to \$22,500 and the age 50 catch up will rise to \$7,500 in 2023.

8. Items for Future Agendas

- Administrative Expense Account pro-rata participant distribution
- Consider small account balance distributions and necessary Plan Document amendments
- Nationwide Contract Review

9. Upcoming Meetings

The next quarterly meeting is scheduled for Tuesday, February 14, 2023.

10. Adjournment

The meeting adjourned at **3:56 p.m.**

Late agenda material can be inspected in the Department of Finance between the hours of 9:00 a.m. and 4:00p.m. The Department of Finance is located in Room 225 of the Marin County Civic Center, 3501 Civic Center Drive, San Rafael.



For disability accommodations please phone **415-473-2685** (Voice), CA Relay 711, or e-mail WSorensen@marincounty.org at least five business days in advance of the event. The County will do its best to fulfill requests received with less than five business days' notice. Copies of documents are available in alternative formats, upon request.

DRAFT

County of Marin

4Q2022: Board Report



Table of Contents	Page
Section 1: Administration	3
Section 2: Plan Demographics	15
Section 3: Retirement Readiness	24
Section 4: Participant Experience	25
Section 5: County of Marin Superior Court Stats	29
Addendums:	
Service Level Agreements	
Explicit Asset Fee Report	
Your Dedicated Team	

Administration Report

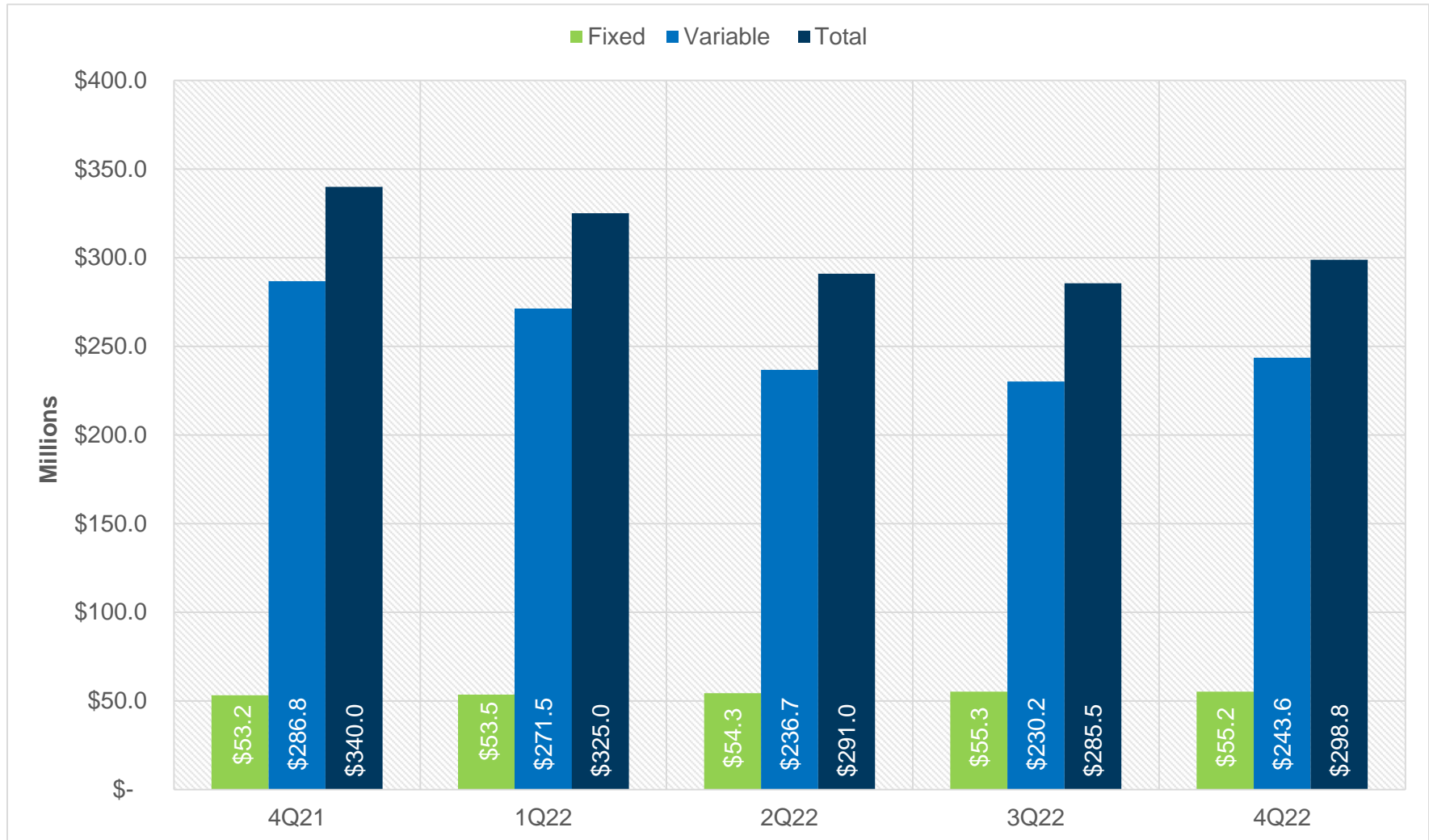
4Q22: County of Marin 457(b) Balance Sheet as of 12/31/22

	Marin 457	OBRA	TOTAL
Beginning Balance	\$278,252,644.81	\$9,633,544.22	\$287,886,189.03
Contributions/Loan Payments	\$4,038,223.10	\$394,506.38	\$4,432,729.48
Interest/Dividends/Cap Gain/Reimb	\$4,615,226.02	\$0.00	\$4,615,226.02
Gain/Loss	\$10,598,133.65	\$57,025.71	\$10,655,159.36
Distributions/Loan Disbursements	(\$5,587,375.32)	(\$186,904.24)	(\$5,774,279.56)
Charges/Fees	(\$70,940.92)	(\$2,257.52)	(\$73,198.44)
Statement Balance on 12/31/2022	\$291,845,911.34	\$9,895,914.55	\$301,741,825.89
Other Activity			
Schawb	\$3,845,020.65	\$0.00	\$3,845,020.65
Outstanding Loan Balance	\$3,111,633.51	\$0.00	\$3,111,633.51
Total Account Balance	\$298,802,565.50	\$9,895,914.55	\$308,698,480.05

4Q22: County of Marin Superior Court Balance Sheet as of 12/31/22

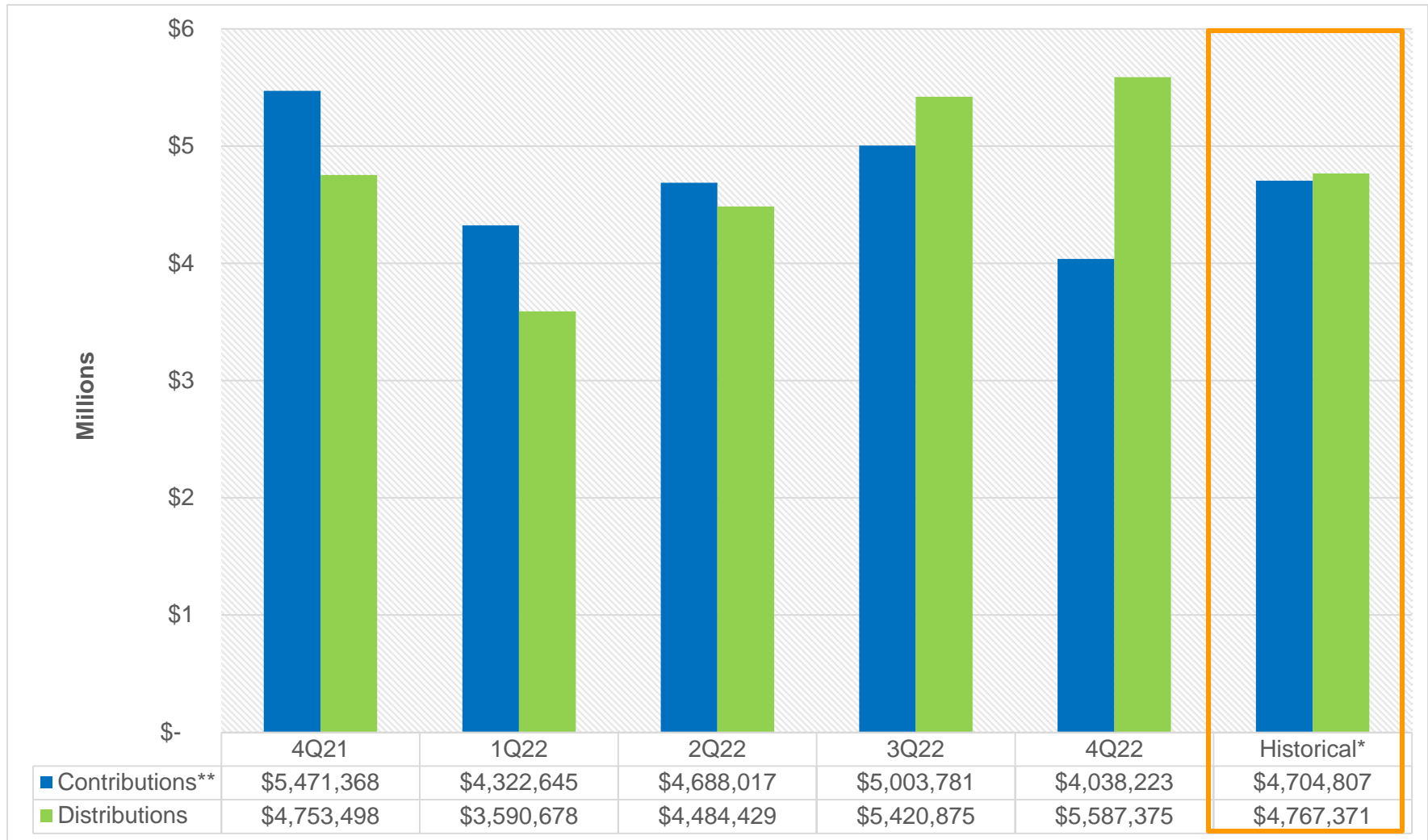
	Superior Court 457	401a	OBRA	TOTAL
Beginning Balance	\$11,125,980.69	\$56,527.87	\$103,383.74	\$11,285,892.30
Contributions/Loan Payments	\$88,850.29	\$0.00	\$3,343.57	\$92,193.86
Interest/Dividends/Cap Gain/Reimb	\$202,909.25	\$0.00	\$0.00	\$202,909.25
Gain/Loss	\$396,573.74	\$329.70	\$608.02	\$397,511.46
Distributions/Loan Disbursements	(\$75,993.71)	\$0.00	(\$2,301.88)	(\$78,295.59)
Charges/Fees	(\$2,845.41)	(\$10.03)	(\$23.72)	(\$2,879.16)
Statement Balance on 12/31/2022	\$11,735,474.85	\$56,847.54	\$105,009.73	\$11,897,332.12
Other Activity				
Schawb	\$492,324.20	\$0.00	\$0.00	\$492,324.20
Outstanding Loan Balance	\$94,115.09	\$0.00	\$0.00	\$94,115.09
Total Account Balance	\$12,321,914.14	\$56,847.54	\$105,009.73	\$12,483,771.41

457(b): County of Marin Asset Growth*



*Does not include Loans and Schwab

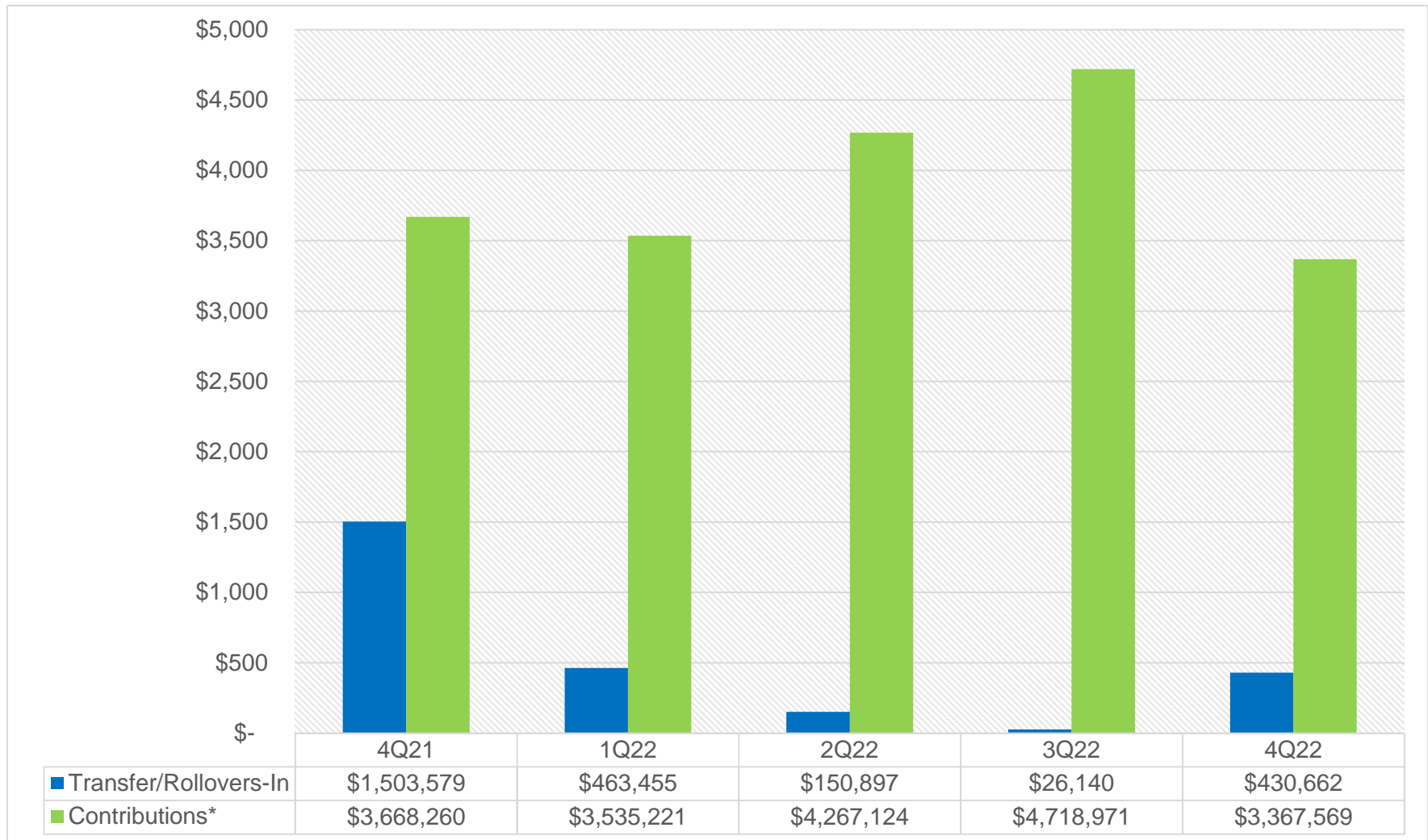
457(b): County of Marin Contributions & Distributions



*Rolling 5 quarter average

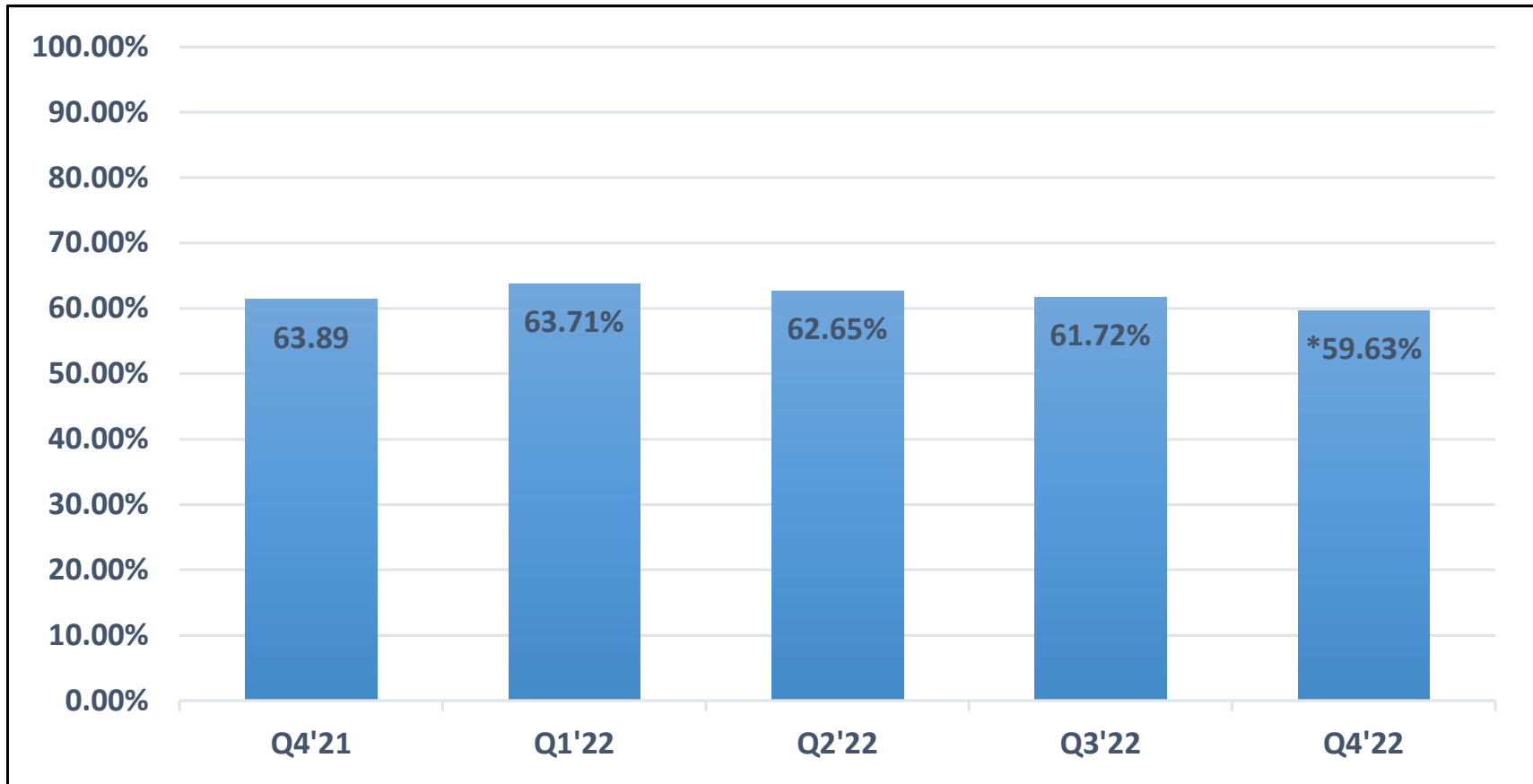
**Includes loan repayments

457(b): County of Marin Contributions Breakdown



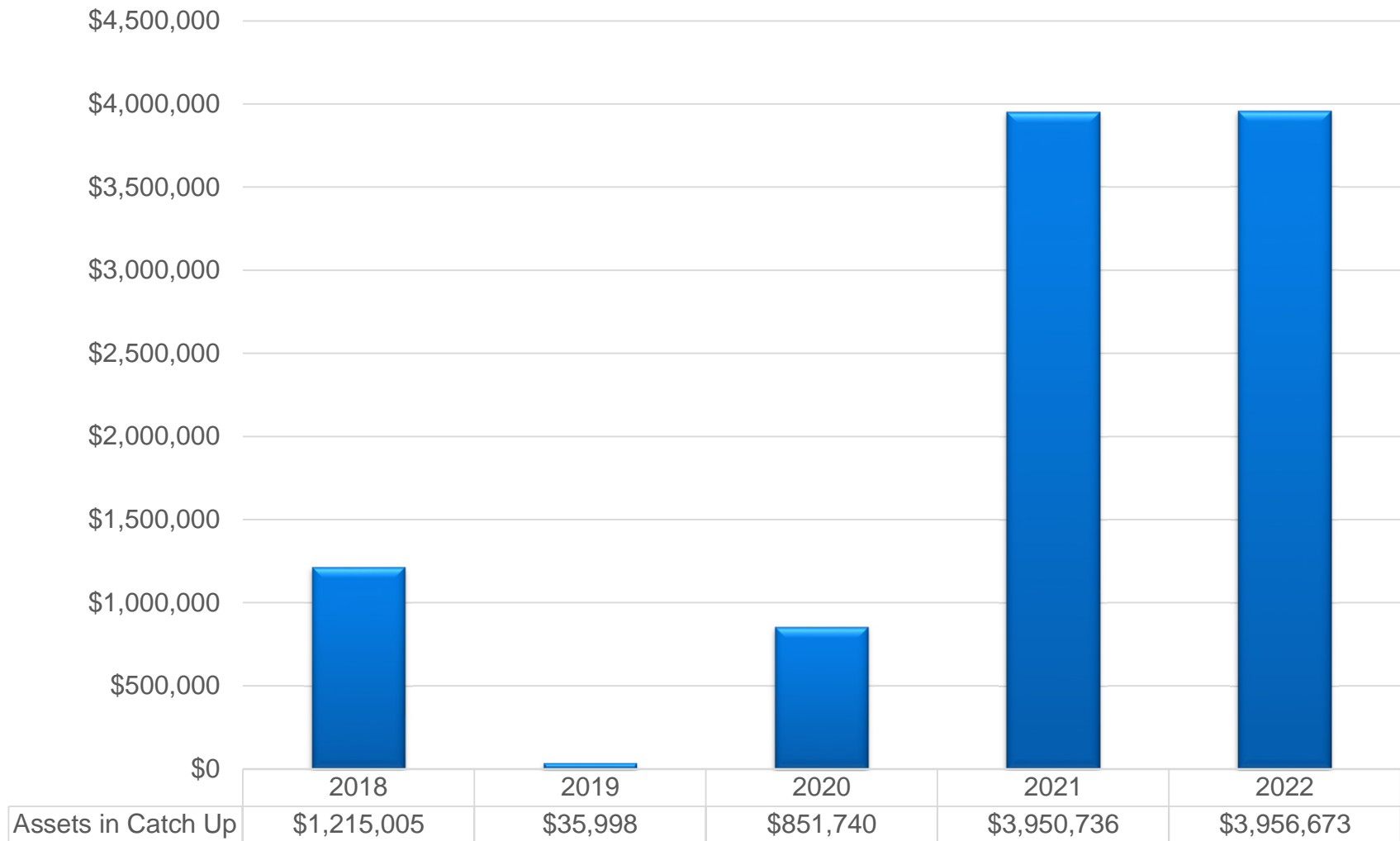
*Does not include loan repayments

457(b): County of Marin Participation Rate

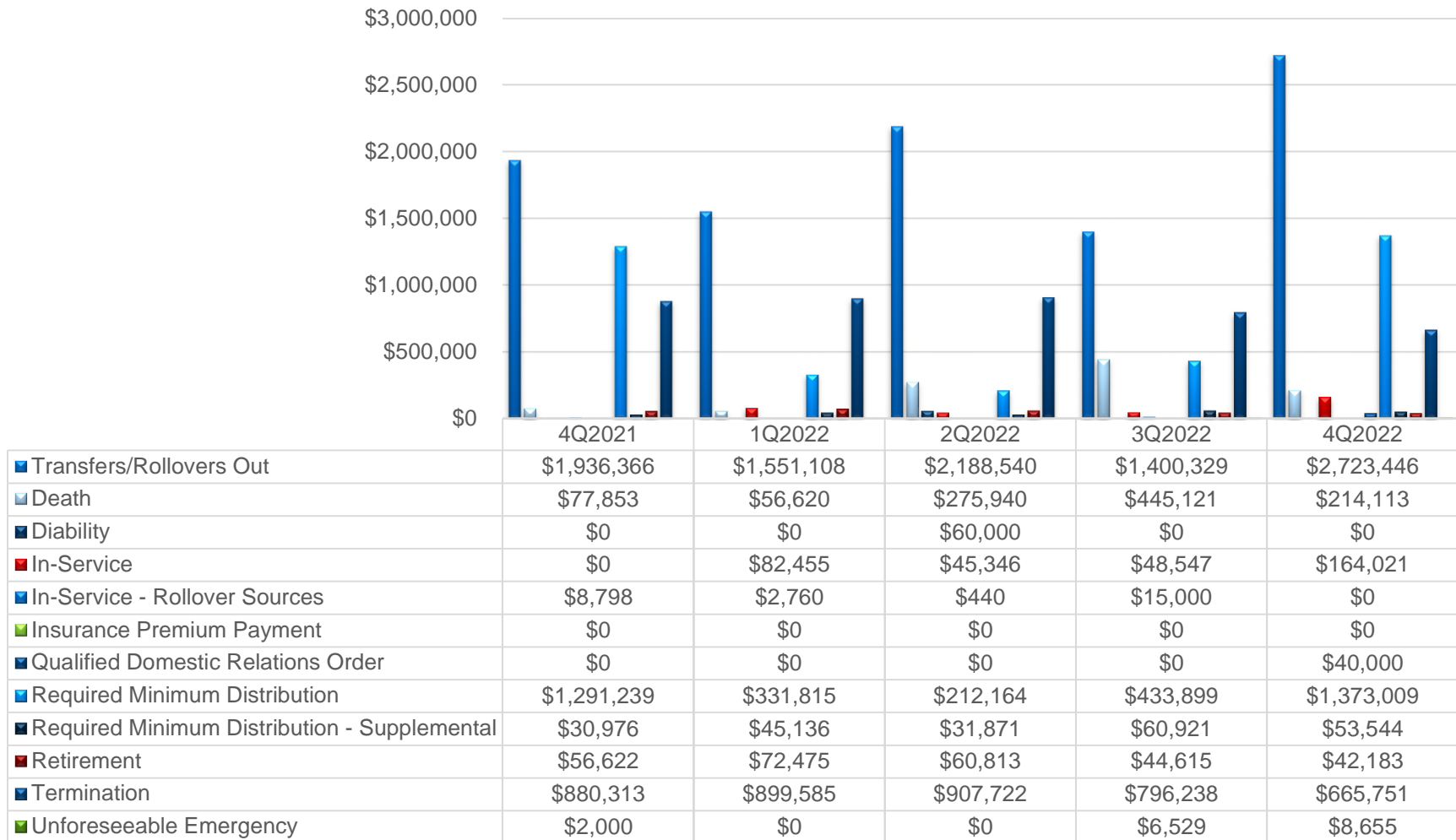


*Eligible count = 2,155

457(b) County of Marin Participants in Catch Up

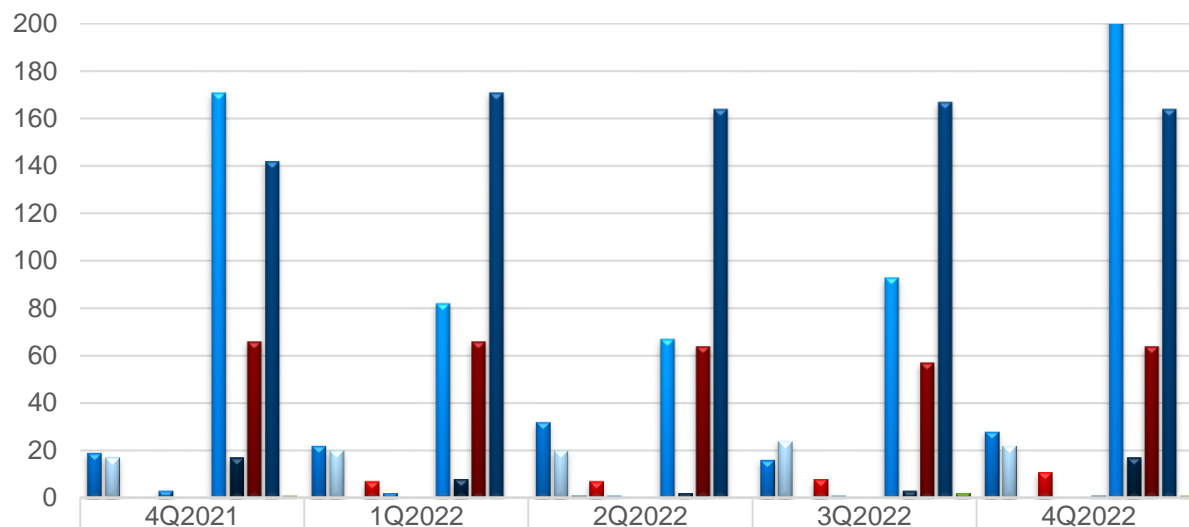


457(b): County of Marin Distribution Breakdown Dollar Amount*



*Does not include loans or internal plan to plan rollovers/transfers

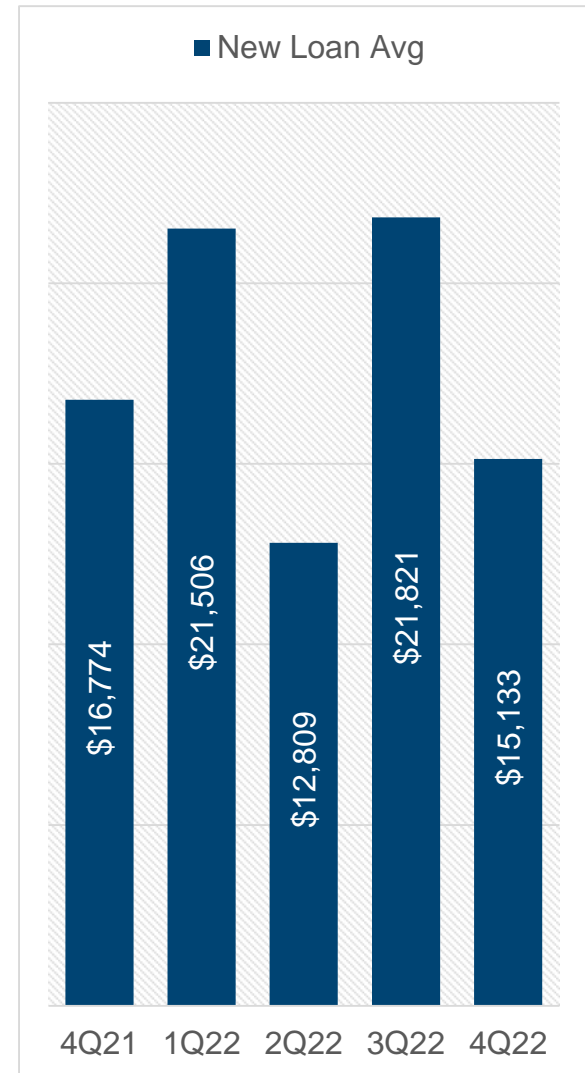
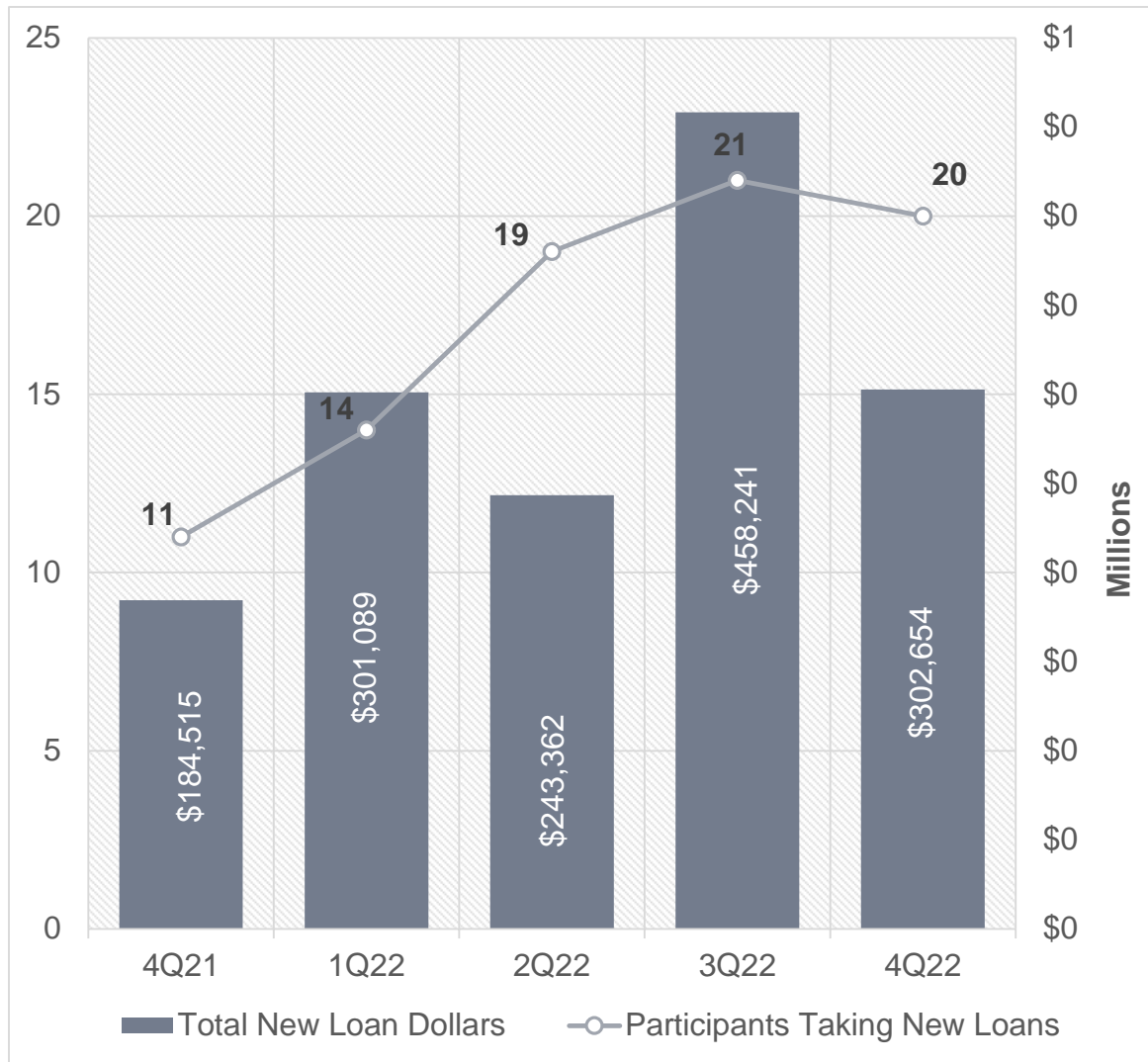
457(b): County of Marin Distribution Breakdown Transaction Amount*



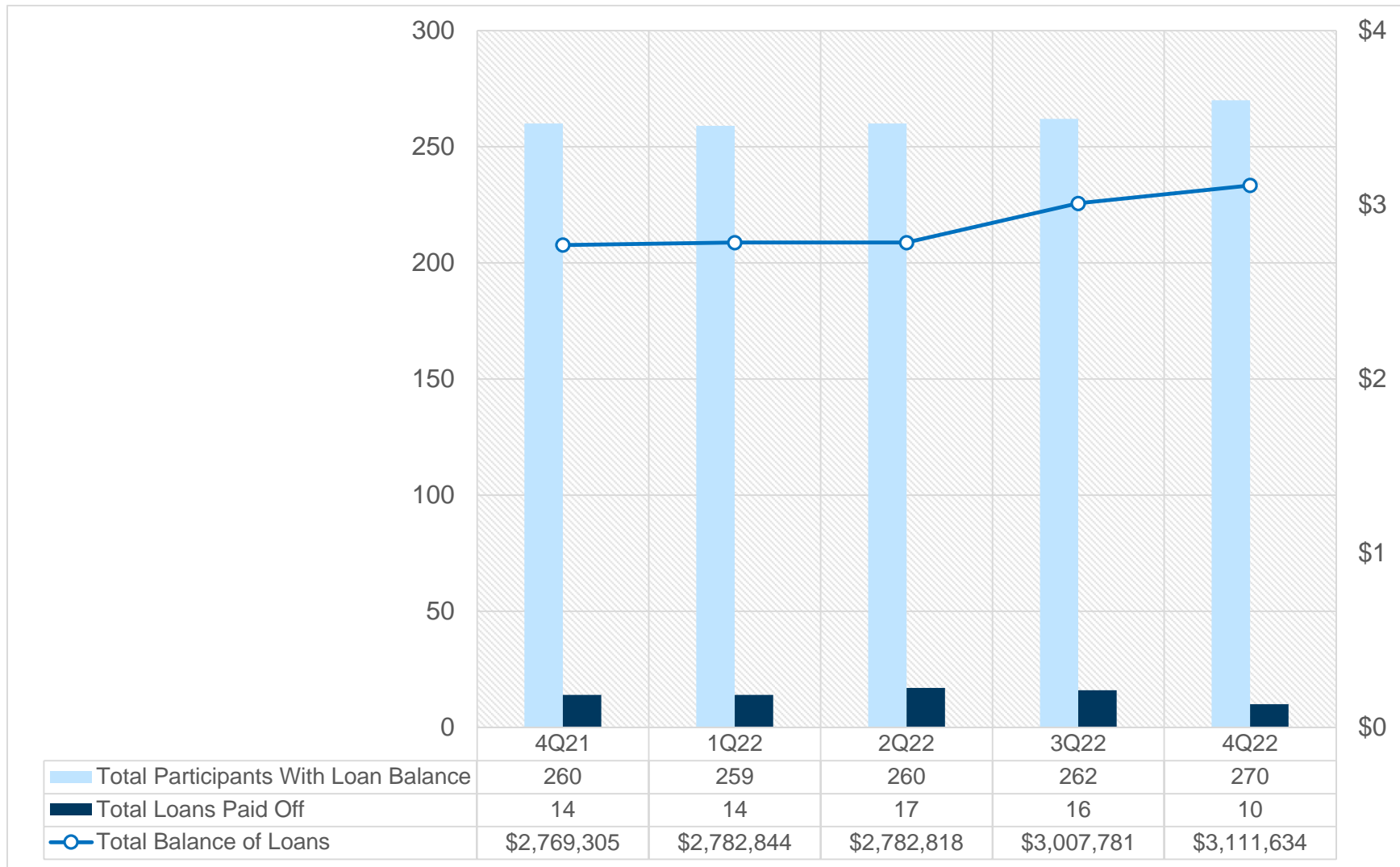
Category	4Q2021	1Q2022	2Q2022	3Q2022	4Q2022
Transfers/Rollovers Out	19	22	32	16	28
Death	17	20	20	24	22
Disability	0	0	1	0	0
In-Service	0	7	7	8	11
In-Service - Rollover Sources	3	2	1	1	0
Insurance Premium Payment	0	0	0	0	0
Qualified Domestic Relations Order	0	0	0	0	1
Required Minimum Distribution	171	82	67	93	206
Required Minimum Distribution - Supplemental	17	8	2	3	17
Retirement	66	66	64	57	64
Termination	142	171	164	167	164
Unforeseeable Emergency	1	0	0	2	1

*Does not include loans or internal plan to plan rollovers/transfers

457 (b) County of Marin Loan Activity

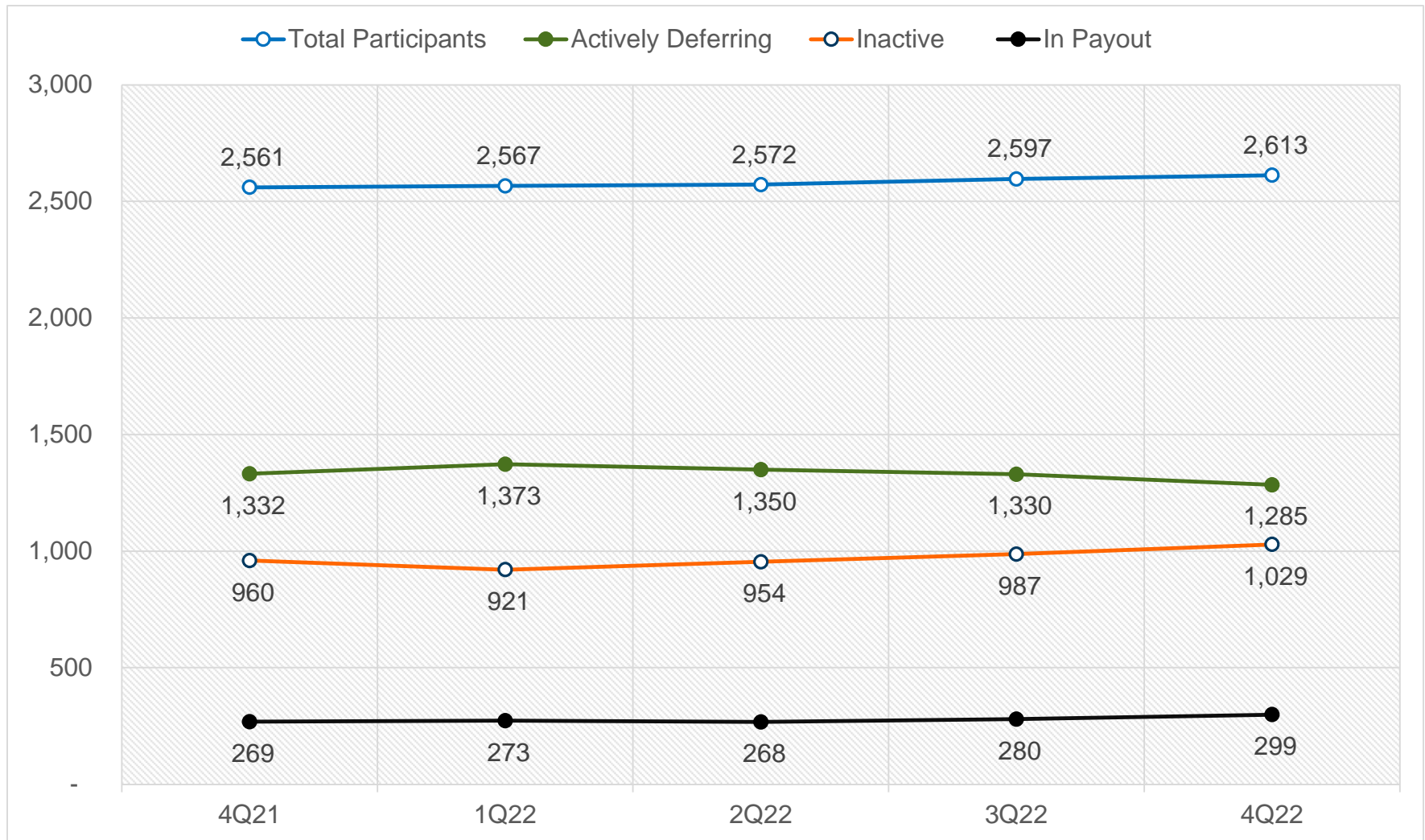


457(b) County of Marin Loans Activity Summary



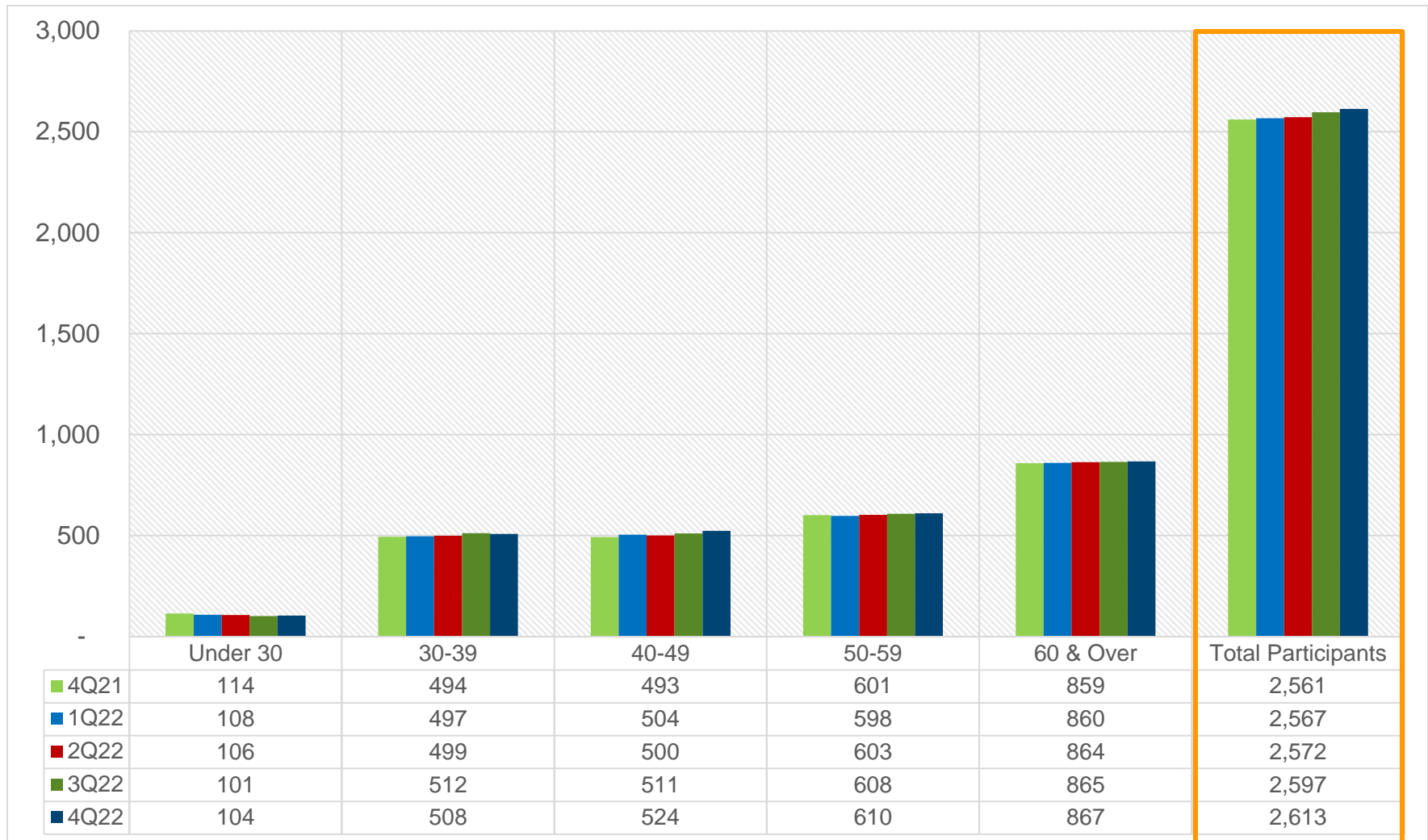
Plan Demographics

457(b) County of Marin Participation Summary

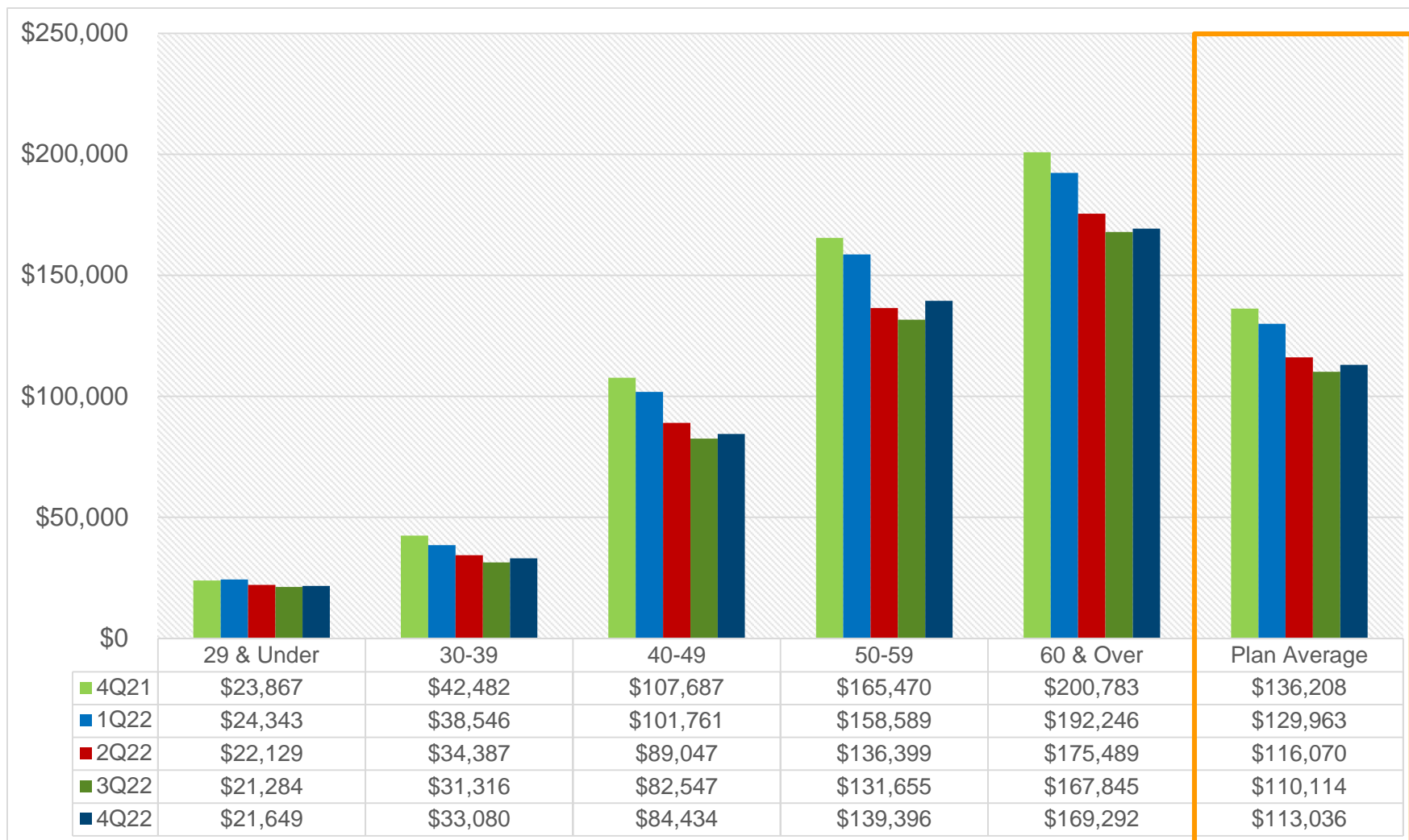


“Inactive” refers to a participant who is not contributing but not in payout

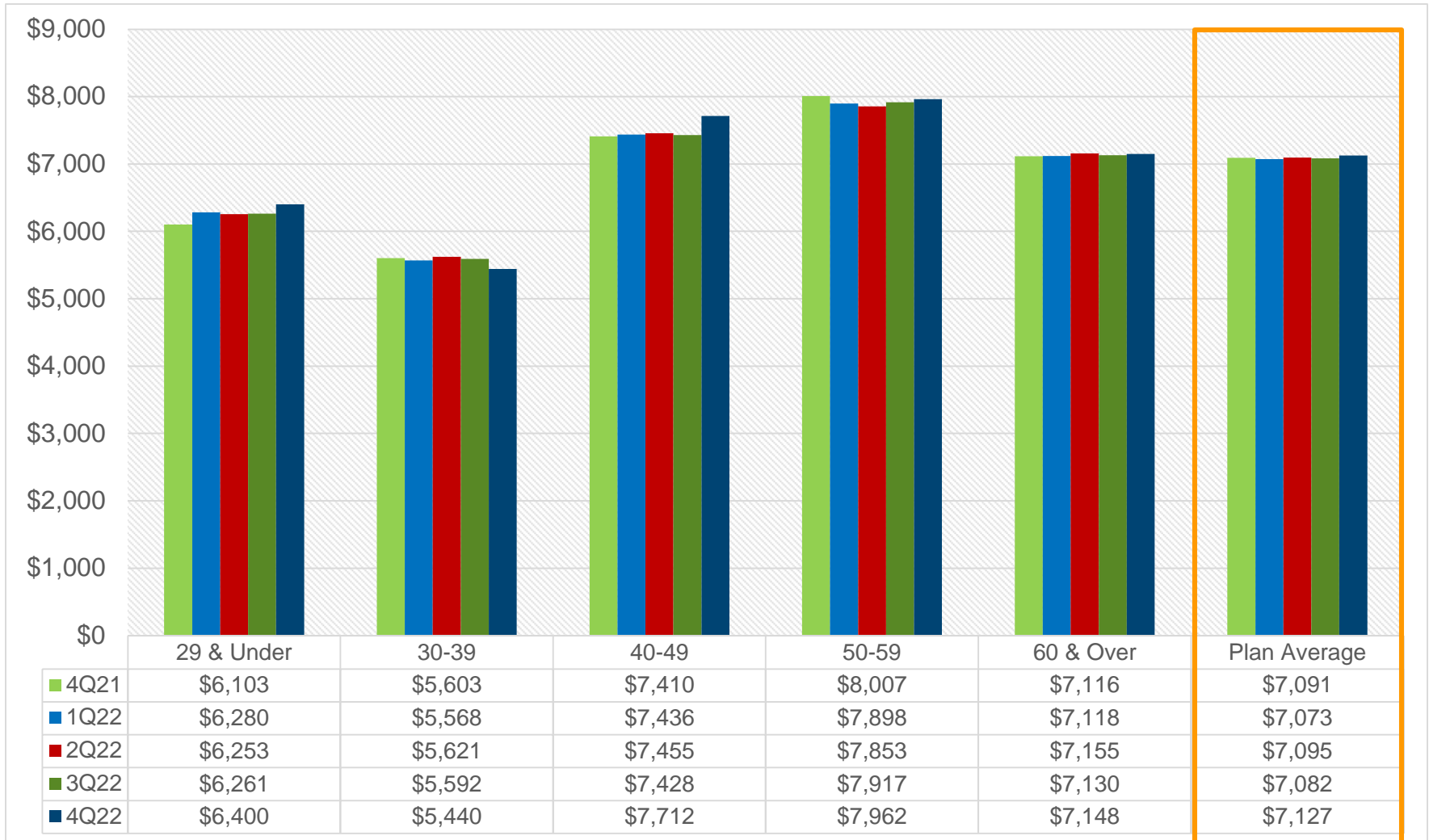
457(b) County of Marin Participant Count by Age Group



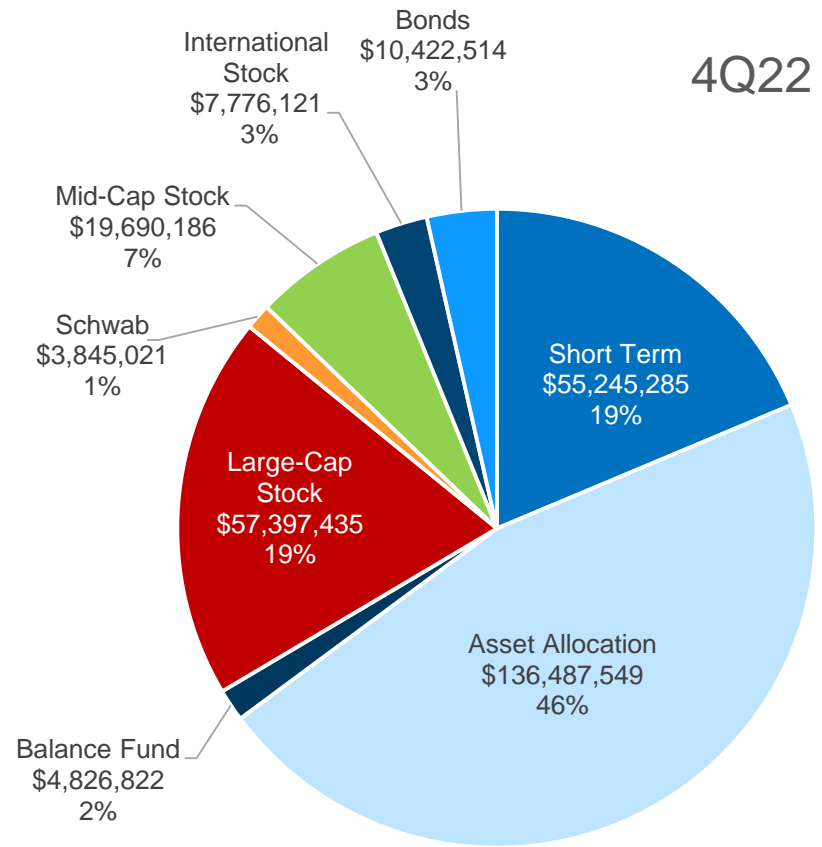
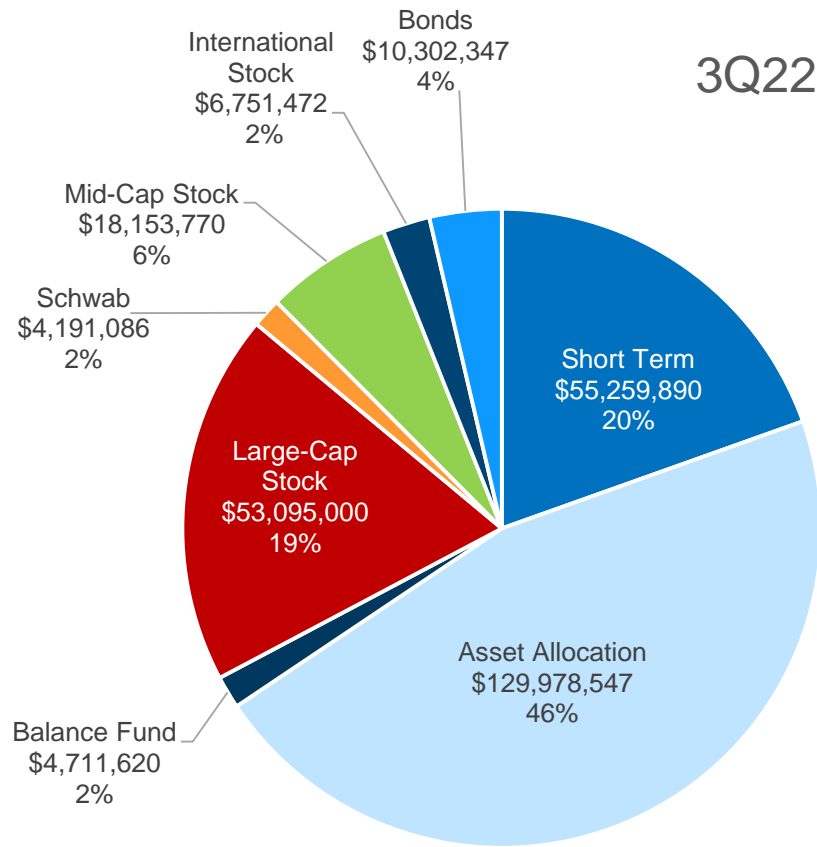
457(b) County of Marin Average Account Balance by Age Group



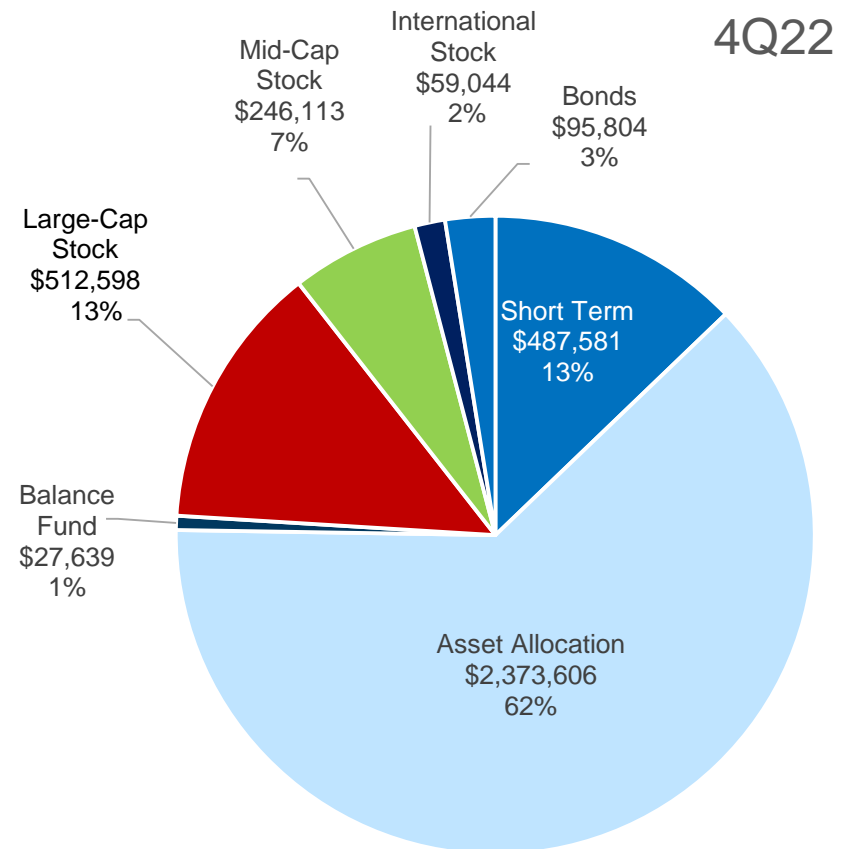
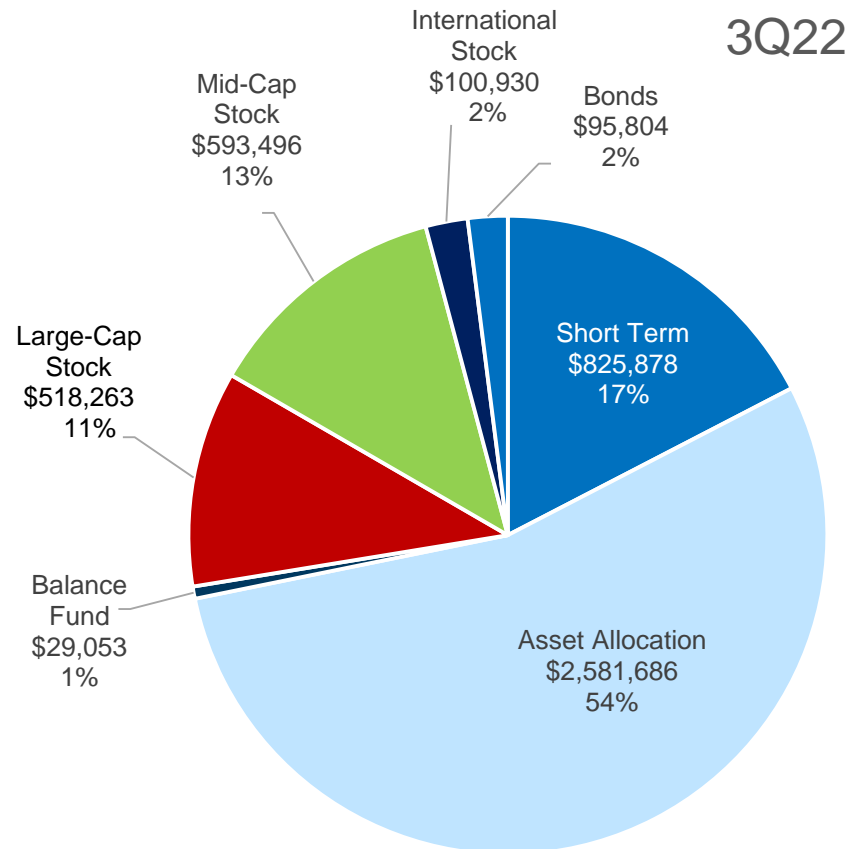
457(b) County of Marin Average Annualized Participant Contribution by Age Group



457(b) County of Marin Assets by Asset Class



457(b) County of Marin Contributions by Asset Class



457(b) County of Marin Roth Activity

	4Q21	1Q22	2Q22	3Q22	4Q22
Roth Assets	\$ 6,046,585	\$ 5,885,543	\$ 5,282,100	\$ 5,167,471	\$ 5,560,318
Contribution	\$ 242,335	\$ 237,697	\$ 503,439	\$ 138,810	\$ 157,353
Total Participants Enrolled	228	231	236	236	261

457(b) County of Marin Transfers Out YTD

Payee	Dollar Amount	# of Participants
ALLIANZ LIFE INSURANCE COMPANY	\$300,000	1
AMERICAN ENTERPRISE INVESTMENT SVCS INC	\$71,650	1
AMERIPRISE FINANCIAL SERVICES INC	\$21,952	2
ASCENSUS TRUST COMPANY	\$1,388	1
CHARLES SCHWAB & CO INC	\$476,690	6
EDWARD JONES INVESTMENTS	\$229,908	3
FIDELITY MANAGEMENT TRUST COMPANY	\$415,193	9
FIIOC	\$51,772	1
FIRST REPUBLIC BANK	\$131,874	1
GREAT-WEST TRUST COMPANY LLC	\$23,669	1
JOHN HANCOCK	\$22,477	1
JP MORGAN SECURITIES LLC	\$467,263	2
LINCOLN FINANCIAL GROUP	\$3,998	1
LPL FINANCIAL LLC	\$60,720	1
NATIONAL FINANCIAL SERVICES	\$599,382	2
NATIONWIDE	\$250,000	1
PERSHING LLC	\$72,629	2
REDWOOD CREDIT UNION	\$198,398	1
SECURITY BENEFIT LIFE INSURANCE CO	\$50,000	1
TD AMERITRADE INSTITUTIONAL	\$233,336	1
TRANSAMERICA RETIREMENT SOLUTIONS	\$73,683	1
UBS FINANCIAL SERVICES INC	\$384,701	1
UNKNOWN	\$11,315	3
US BANK	\$250,000	1
VANGUARD FIDUCIARY TRUST COMPANY	\$1,458,324	6
VOYA INSTITUTIONAL TRUST COMPANY	\$59,335	4
WELLS FARGO CLEARING SERVICES LLC	\$321,971	2
TOTAL	\$6,241,629	57

Retirement Readiness

How many participants are prepared for retirement



Online engagement

(as of 12/31/2022)

TOTAL ENROLLED PARTICIPANTS

2,613

ENROLLED PARTICIPANTS WITH AN ONLINE ACCOUNT

2,021



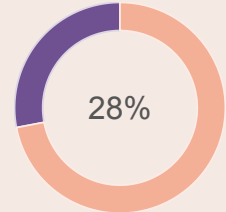
Retirement readiness

(as of 12/31/2022)

PARTICIPANTS WITH A RETIREMENT GOAL ¹

1,276

PARTICIPANTS 'ON TRACK' FOR RETIREMENT ²

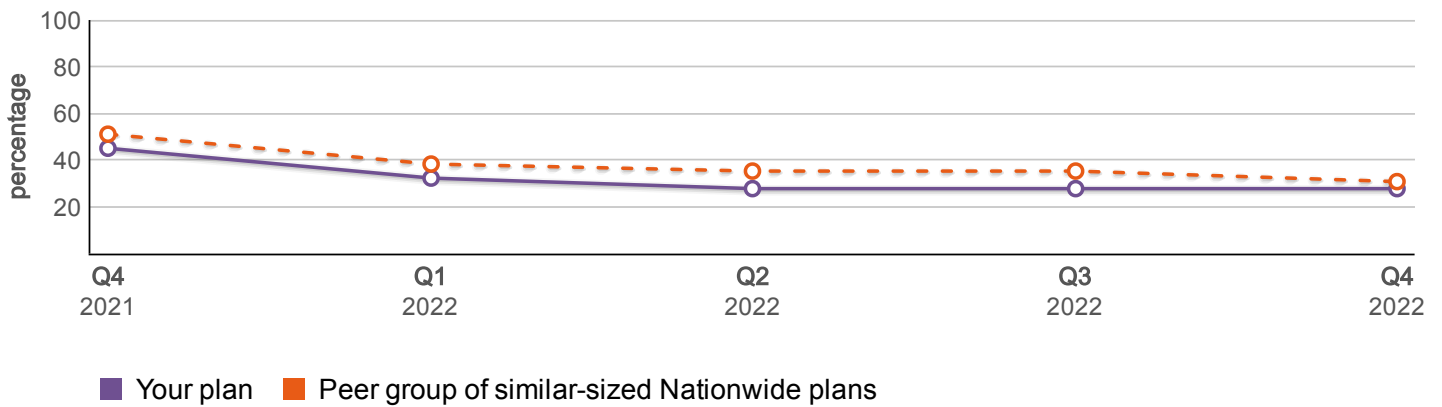


Participants who actively review their online account and use their retirement outlook tools are 4 times more likely to take action and save more for retirement.



Peer comparison

Retirement readiness peer comparison



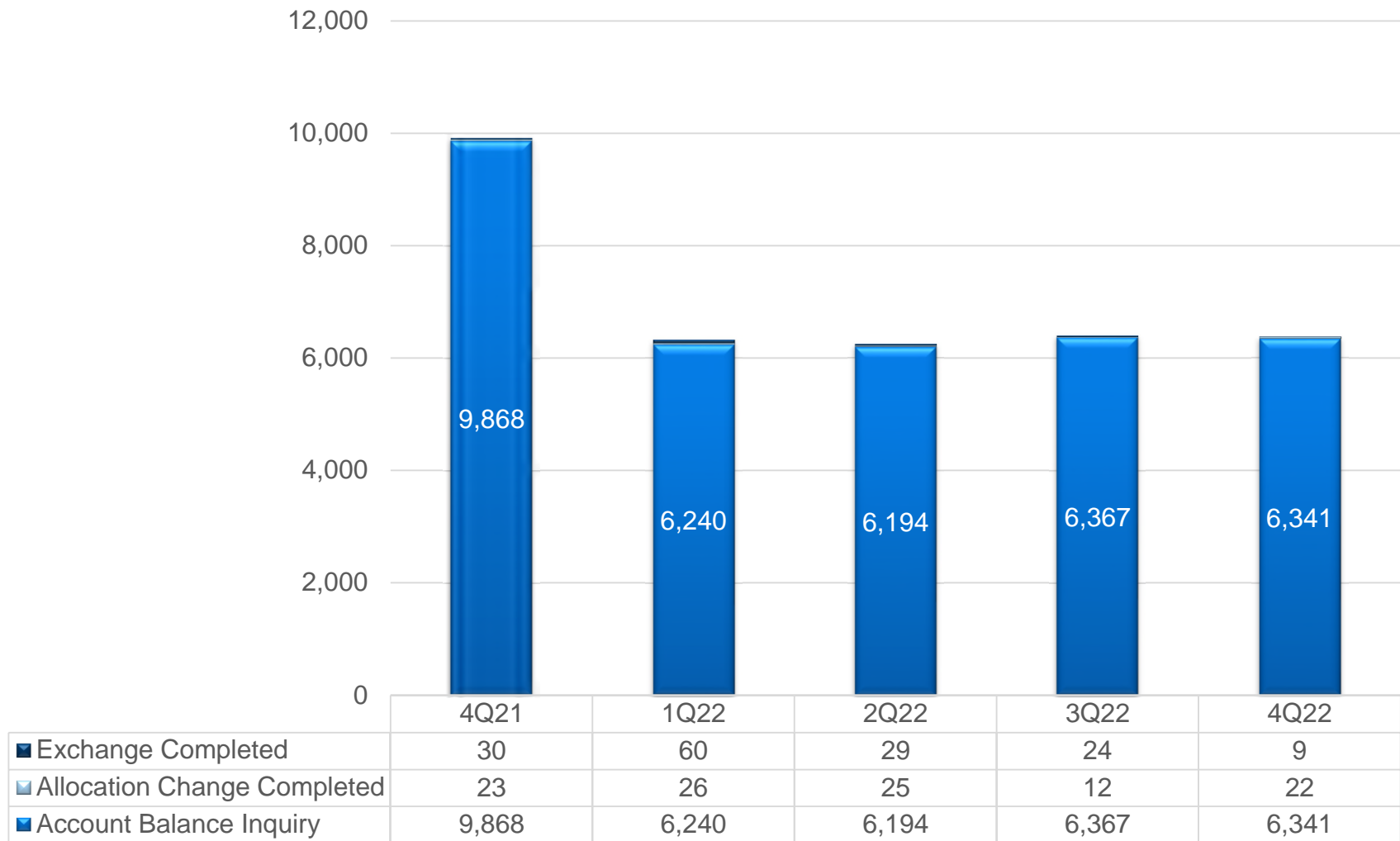
NRM-17390AO

¹ Participants with a retirement goal from My Interactive Retirement Planner®.

² Participants with a retirement goal from My Interactive Retirement Planner® and a retirement readiness score of "on track" (.915 or higher).

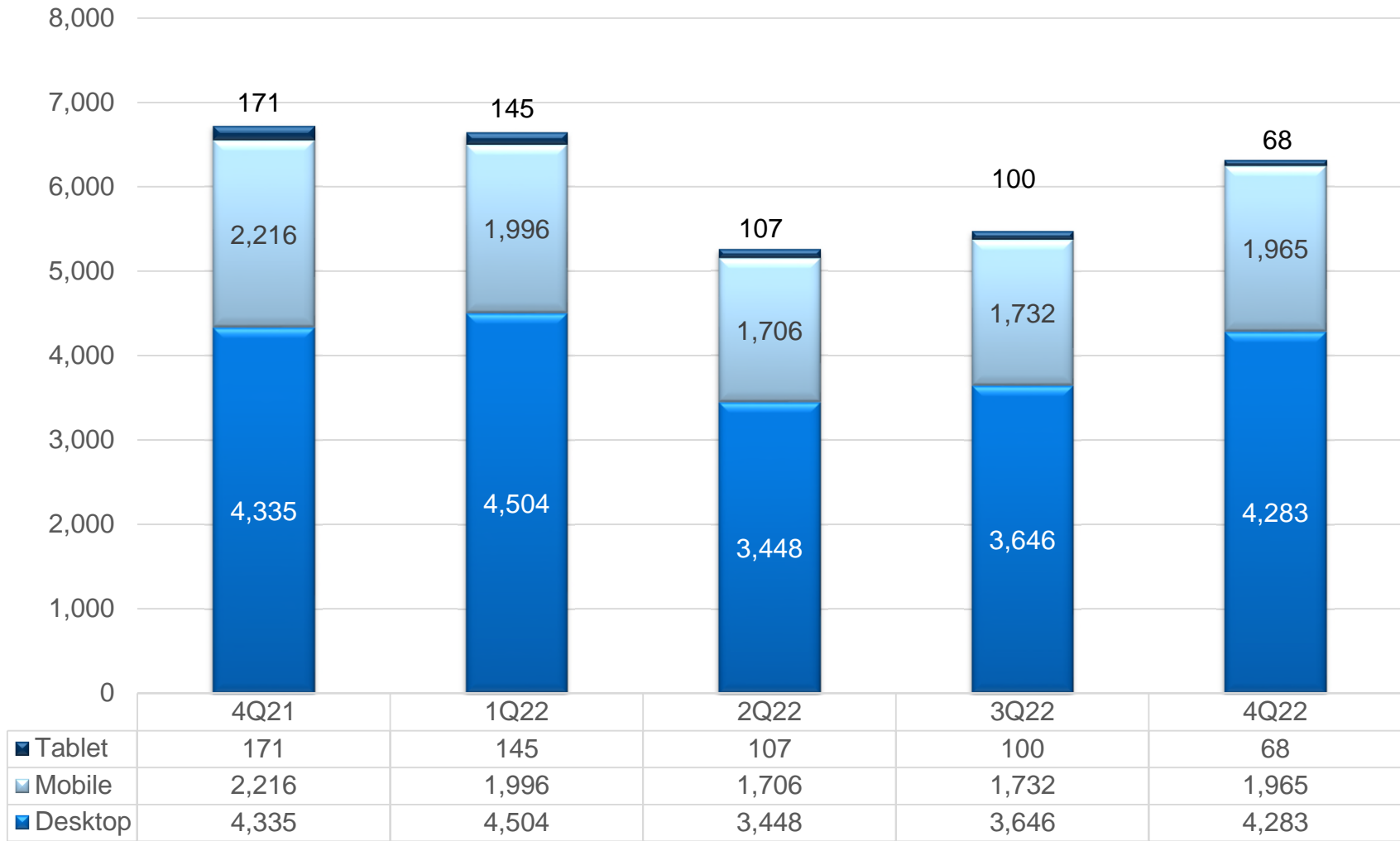
Participant Experience

457(b) County of Marin Participant Website Usage

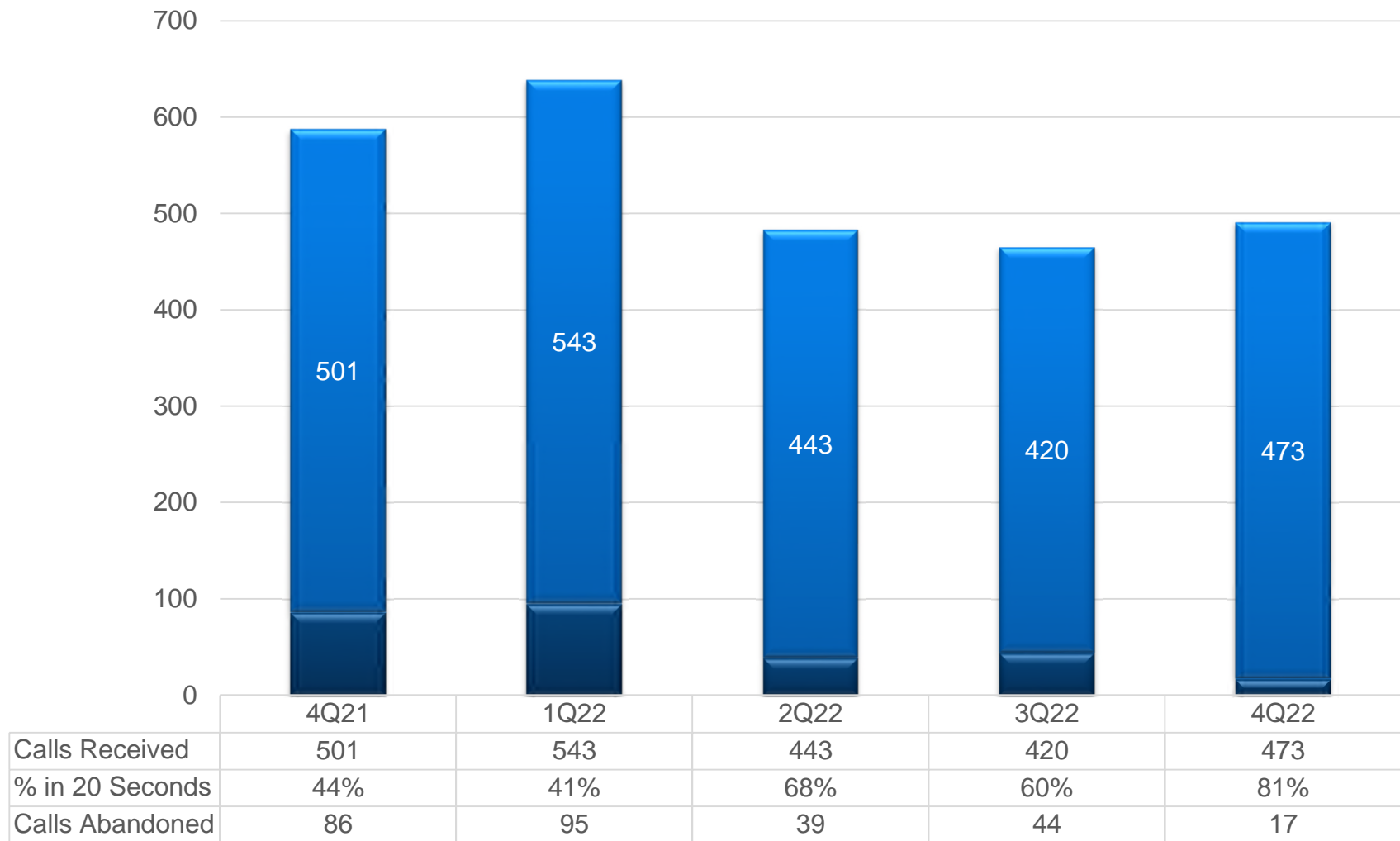


457(b) County of Marin Participant Website Device Usage

App Usage
 106 Participants logged into the App in 4Q22
 665 logins during the quarter



457(b) County of Marin Participant Call Center



County of Marin Superior Court Statistics

County of Marin Superior Court Statistics

	Q4'21	Q1'22	Q2'22	Q3'22	Q4'22
Assets (millions)	\$14.20	\$13.49	\$12.18	\$11.79	\$12.32
Deferrals (YTD) (thousands)	\$428.93	\$118.26	\$219.36	\$348.88	\$434.17
Participants	104	102	104	105	105
Active Participants	43	41	42	42	38
Enrollment	0	0	2	2	4



Addendums

Service Level Agreements

Marin County

Plan Administrator: Kim Lovell

Deliverable:	Service Level Agreement:	Penalty:	Frequency:	Q4: Met/Failed	Q4: Penalty	Q4: Comments
One-on-one Meetings	Conduct 550 1/2 hour individual meetings each full contract year.	\$1,000	Annually	Met	\$0	On Track
Group Workshops	Conduct 52 on-site group seminars each full contract year. Surveys to be provided at the end of each group meeting	\$1,000	Annually	Met	\$0	Move to virtual due to COVID-19
Participant Satisfaction Surveys	Conduct Biennial participant satisfaction survey.	\$1,000	Biennial	Met	\$0	Pending Committee Direction
Quarterly Revenue Payment	Check cut within 30 business days quarterly and delivered to plan.	\$200	Quarterly	Met	\$0	Q4 Payment of \$16,936.39 sent via ACH 1/24/2023
Plan Sponsor Statements - Mail	Plan Sponsor Statements delivered within 30 Business Days after quarter end.	\$200	Quarterly	Met	\$0	1/13/2023
Participant Statements - Mail	Participant Statements issued within 20 Business Days after quarter end.	\$200	Quarterly	Met	\$0	1/13/2023
Contributions	Payroll Contributions processed within 1 Business Day of receipt IGO.	\$200	Quarterly	Met	\$0	No incidents reported
Response Time	75% of calls are answered within 20 seconds.	\$200	Quarterly	Met	\$0	80.55%
QDRO - Processing	QDROs processed within 30 Business Days of receipt IGO.	\$200	Quarterly	Met	\$0	0 Misses
Withdrawals	Withdrawals processed within 2 Business Days of receipt IGO.	\$200	Quarterly	Met	\$0	0 Misses
Withdrawals - UEs/Hardships	UEs processed within 2 Business Days of receipt IGO.	\$200	Quarterly	Met	\$0	0 Misses
Withdrawals - Rollovers/Transfers	Rollovers & Transfers processed within 5 Business Days of receipt IGO.	\$200	Quarterly	Met	\$0	0 Misses
Loans	Loan Requests processed within 3 Business Days of receipt IGO.	\$200	Quarterly	Met	\$0	0 Misses

Total Q4 \$0.00

Explicit Asset Fee Report

1079 - Explicit Asset Fee Report

Accounting Group: 22
Plan Sponsor Name: MARIN 457/ MARIN COUNTY SUPERIOR COURT
Plan Name: MARIN 457/ MARIN COUNTY SUPERIOR COURT
Plan ID: 0041557-001/0041546-001
IRS Code: Summary of all plans
Payee: Plan Sponsor/NRS

	Plan Sponsor Fee Amount	NRS Fee Amount
October 457	\$4,963.57	\$17,371.95
October Courts	\$206.14	\$721.63
October OBRA	\$165.92	\$584.06
October Courts OBRA	\$1.75	\$6.22
SDO Adjustment	\$283.70	-\$283.70
October Total	\$5,621.08	\$18,400.16
November 457	\$5,027.24	\$17,597.53
November Courts	\$207.40	\$725.88
November OBRA	\$161.14	\$566.84
November Courts OBRA	\$1.70	\$6.03
SDO Adjustment	\$265.57	-\$265.57
November Total	\$5,663.05	\$18,630.71
December 457	\$5,017.67	\$17,562.96
December Courts	\$207.61	\$726.88
December OBRA	\$167.12	\$587.44
December Courts OBRA	\$1.78	\$6.24
SDO Adjustment	\$258.08	-\$258.08
December Total	\$5,652.26	\$18,625.44
4Q 2022 Revenue Total	\$16,936.39	\$55,656.31

Your Dedicated Team

Your Dedicated Team

Plan Sponsor Experience

John Steggell,
Managing Director
steggj2@nationwide.com
310-245-7436



Jake Sours,
Program Director
soursJ1@nationwide.com
916-708-1320



Kim Lovell,
Relationship Consultant
lovellk1@nationwide.com
614-435-2294



Lauren Ryan,
Retirement Specialist
Lauren.Ryan@nationwide.com
805-252-3193





MARIN COUNTY
457 Deferred Compensation/OBRA Plans
December 31, 2022 Performance Report

Jayson Davidson, CFA
Senior Consultant
j davidson@hyasgroup.com

~For Institutional Use Only – Not for Public Distribution~
Hyas Group is a business of Morgan Stanley

Alin Syed
Performance Analyst
a syed@hyasgroup.com

TABLE OF CONTENTS

Section 1	Market Overview
Section 2	County – 457 Deferred Compensation Plan Review
Section 3	Court – 457 Deferred Compensation Plan Review
Section 4	OBRA's – Plan Review
Section 5	Investment Performance Review
Section 6	Plan Fee/Revenue Review
Section 7	Fund Attributions

Section 1



CONSTRUCTIVE VIEWS ON PRODUCTIVITY

2022 contained no shortage of high-level events across the spectrum: military conflicts, continued pandemic, a bear market, inflation, aggressive monetary policy, and many more which continue into 2023. The importance of these notwithstanding, this article pivots to discuss a longer-term subject whose course has been influenced by 2022 and the era leading up to it: productivity. From the aftermath of the Great Financial Crisis (GFC) up to the start of COVID, productivity growth lagged longer-term averages and was not broadly dispersed throughout the myriad of sectors in the broader economy. Looking forward, factors on the supply side, which combined with demographic trends offer several avenues for new and productivity-enhancing capital expansion. After all last year's difficulties, it's nice to talk about something positive for a change!

Households and corporations still have substantially healthy balance sheets. Corporate cash levels are high, debt maturities are several years out, and leverage ratios are well below long-term trends. Banks in particular, the proverbial switch-board of capital, maintain excess capital thanks in part to controls set after the GFC. Good to know the funds are there, but who and what will the productivity come from? The US workforce is expected to get younger on average in the years to come, ushering in workers with a more natural proclivity to new technology and the potential for increased automation. This demographic transformation comes on the back of several recent years of increased venture capital funding bringing superior computing products to a more tractable labor market. More expensive financing via higher interest rates may also compel companies to leverage new technology to remain profitable.

The ingredients for productivity growth being there, where in particular might the capital expenditure money go? One of the offshoots more directly linked to the pandemic is the digitization of business models, wherein artificial intelligence and machine learning was originally substituted in for traditional R&D to help expedite the production of mRNA technologies, it has the potential for application across many other industries. Another is the adoption of hybrid or remote working, allowing increased labor mobility, reduced time lost to commuting, and more business start-ups bringing unique, new products to market. Spending on decarbonization from the Inflation Reduction Act, to come via fiscal and public/private partnership spending, also has the potential to add hundreds of billions of dollars to domestic output in new technologies. While other areas such as increases in defense and infrastructure spending also can bolster productivity, the economy-wide possibilities are varied and endless.

This article's optimistic hypotheses, which may take years to unfold, illustrate one of the benefits of a dynamic and open economy that is easily overlooked in stressful times: the potential for positive surprises. COVID's damages being what they are, many of the financial reactions to it when combined with other technological and demographic trends have the potential to positively transform economic lives for years to come. Such transformation arguably could not be as easily achieved in a more economically stagnant, sedate, or otherwise closed environment. Although the productivity gains we are hoping for are by no means guaranteed; the ingredients are there and the prospect reminds investors that the long-run can pack a lot of upside, even if the recent past has been anything but easy.¹

¹Source: Morgan Stanley Global Investment Committee Special Report by Lisa Shalett, The Next American Productivity Renaissance, January 4, 2023

GLOBAL ECONOMIC LANDSCAPE

- As expected by a consensus of forecasters, inflation as measured by CPI came down in December 2022 for a second month; 7.0% at the headline level and 6.0% at core. In turn, the Fed lowered the pace of rate hikes to 50 basis points at its December meeting, bringing the fed funds rate to 4.5%. While there is reason to be sanguine about inflation, sticky prices in services and the tightness of the labor market are wildcards which the Fed has explicitly cited as risks. Despite the Fed's hawkish rhetoric which raised the terminal rate and pushed out guidance on first rate cuts, the market discounted only 25 to 50 basis points more in hikes and aggressive rate cuts by June. With financial conditions quite loose, the Fed has room to deliver negative surprises².
- The rise in Treasury yields may well challenge the US Government's ability to finance operations. For example, as of year-end 2022, nearly 30% of US Government debt was scheduled to mature within one year and approximately another 20% has a maturity date of between one and three years. One implication is that increased borrowing costs will crowd out discretionary spending. Another is that the Treasury may seek to issue longer-term debt which, thanks to an inverted yield curve, entails lower borrowing costs³.
- According to a Federal Reserve Report in November 2022 ("What Happens in China Does Not Stay in China"), policy-driven increases in China's credit may provide a tailwind for energy and commodity prices. For example, the International Energy Agency noted that China's demand for oil dropped by the greatest amount in over three decades due to lockdowns. Factors such as a re-opening in travel, an uptick in property demand, combined with relatively low inventory levels of copper and aluminum have the potential to stoke demand⁴.

GLOBAL FINANCIAL MARKETS

- In 2022, persistent global inflationary pressures and coordinated central bank rate hikes led equities to decline to bear market lows and fixed income to experience the sharpest losses in decades. This was the first time in modern history where both US stocks and long-term bonds declined by double digits in a year. The traditional 60% stock/40% bond portfolio lost -16.1% in 2022, the worst return in more than 50 years⁵.
- The US Dollar retreated in value from its peak on September 28, 2022, suggesting that investors believe the Fed is near the end of its tightening cycle. This in turn has been viewed positively for Emerging Markets in terms of their ability to attract, compete in export markets, raise capital by issuing dollar-denominated debt, and otherwise develop economically⁶.
- Despite being viewed as an inflation-hedge, Real Estate Investment Trusts (REITs) saw their second worst year on record in 2022 (the worst being 2008), returning -24.5% versus -18.1% for the S&P 500. Although operating income growth was above historical averages, valuation metrics such as rising interest rates and credit spreads, as well as declining earnings expectations and falling private market valuations presented a formidable headwind for the sector⁷.
- Gold typically trades inversely with real, or inflation-adjusted, yields. Falling real yields support the yellow metal and rising yields on inflation-protection securities drive losses. With the 10-year US Treasury real yield having backed up by nearly 280 basis points in 2022 to 1.6% from an extremely negative

² Source: Morgan Stanley Global Investment Committee Weekly December 19, 2022

³ Source: Morgan Stanley Global Investment Committee Weekly January 9, 2023

⁴ Source: Morgan Stanley, A Few Things We're Thinking About, by Christopher Baxter, January 5, 2023

⁵ Source: Morgan Stanley, Client Commentary, January 2023

⁶ Source: Morgan Stanley, A Few Things We're Thinking About, by Christopher Baxter January 5, 2023

⁷ Source: Morgan Stanley, The REIT Cheat Sheet, North America by Ronald Kamden, January 3, 2023

position, it should have been a horrendous year for gold. However, demand has remained strong as shifting geopolitics and currency market turmoil have led central banks, especially those in China and Russia, to build their reserves⁸.

Disclosure: The views and opinions expressed in this commentary are those of the portfolio manager at the time of this writing and do not necessarily represent those of Hyas Group, Morgan Stanley, its affiliates or its other employees. Of course, these views may change without notice in response to changing circumstances and market conditions. Furthermore, this commentary contains forward-looking statements and there can be no guarantee that they will come to pass. Historical data shown represents past performance and does not guarantee comparable future results. The information and statistical data contained herein have been obtained from sources that are believed to be reliable but in no way are guaranteed by Hyas Group as to accuracy or completeness.

It is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. This material does not provide individually tailored investment advice and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it.

The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

Hyas Group, a business of Morgan Stanley.

For further information please contact Tom Breaden (tbreaden@hyasgroup.com).

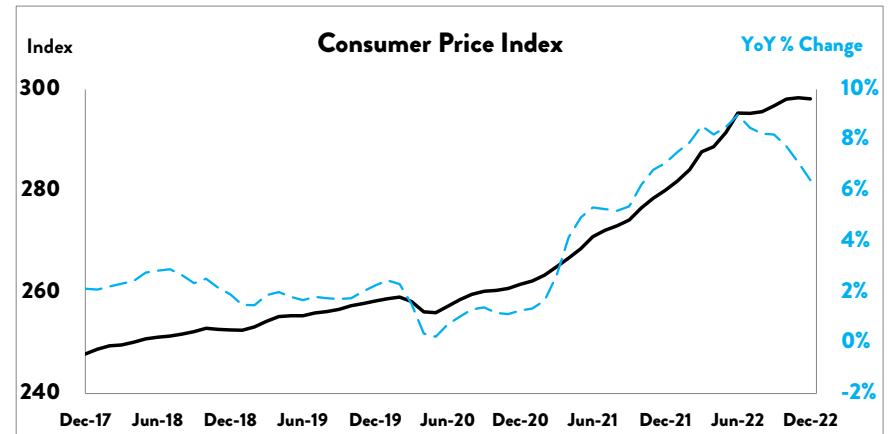
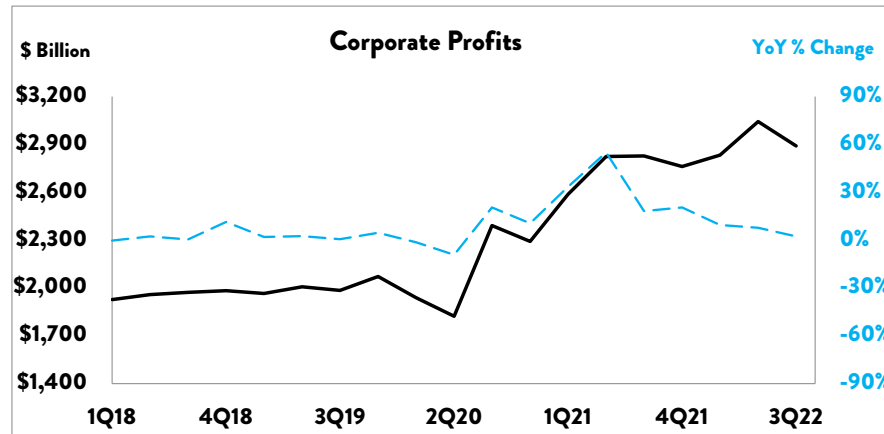
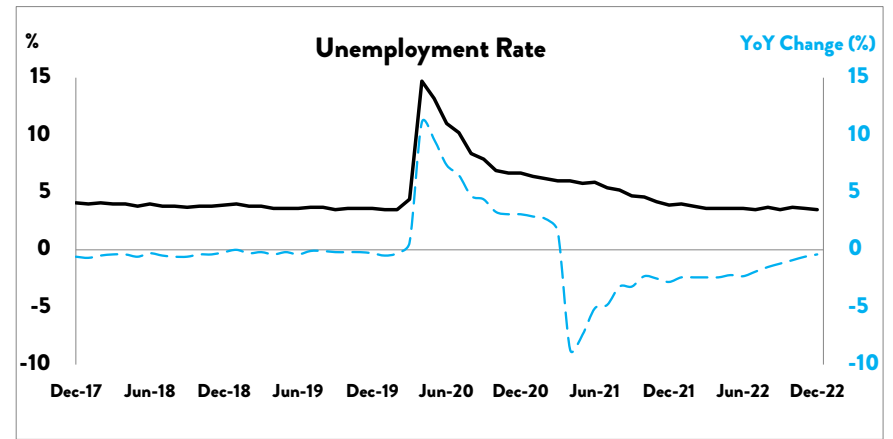
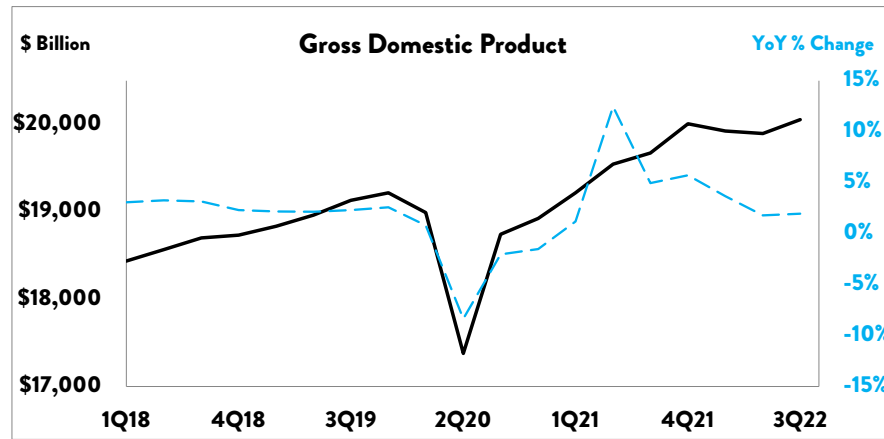
Hyas Group, 9755 SW Barnes Road, Suite 660, Portland, Oregon 97225; 503-634-1500

⁸ Source: Morgan Stanley Global Investment Committee Weekly January 3, 2023

This report is being provided for informational purposes only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change.

©Morgan Stanley, 2023 CRC 5416715- 1/23

4Q2022 Economic Data



Key: — Economic Series

- - - Year-Over-Year Change

Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	223,000	4,505,000	-20,493,000	103,567	Dec-22
Unemployment Rate	3.5%	14.7%	3.5%	4.9%	Dec-22
Median Unemployment Length (Weeks)	7.5	22.2	4.0	11.2	Dec-22
Average Hourly Earnings	\$32.82	\$32.82	\$26.73	\$29.45	Dec-22

Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$3.17	\$4.84	\$1.80	-34.5%	Dec-22
Spot Oil	\$76.44	\$114.84	\$16.55	-33.4%	Dec-22
Case-Shiller Home Price Index	304.2	316.2	204.7	48.7%*	Oct-22
Medical Care CPI	552.3	557.4	480.8	14.9%*	Dec-22

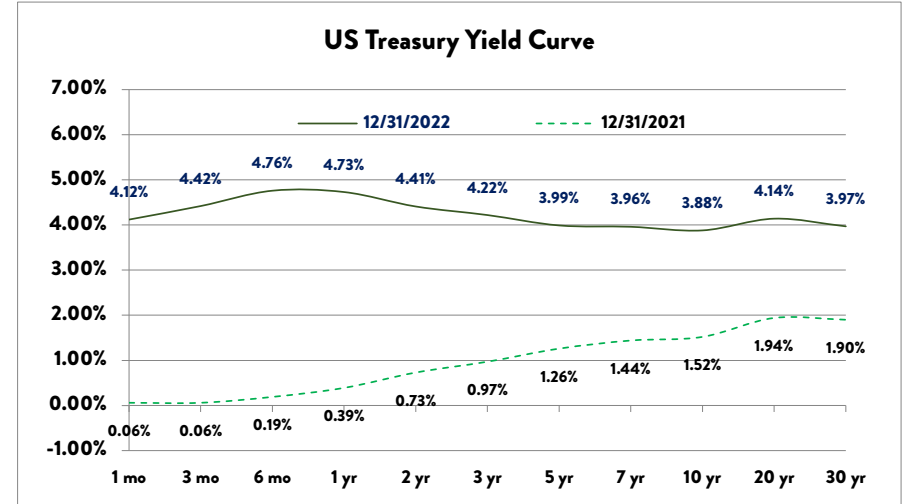
*% Off Low

Morningstar data as of 12/31/2022

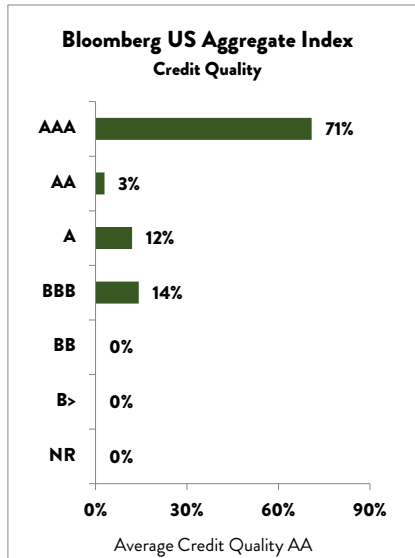
4Q2022 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	1.02%	2.05%	2.05%	0.82%	1.31%	0.79%
Bloomberg US Aggregate	1.87%	-13.01%	-13.01%	-2.71%	0.02%	1.06%
Bloomberg Short US Treasury	0.85%	0.98%	0.98%	0.66%	1.26%	0.80%
Bloomberg Int. US Treasury	1.02%	-7.77%	-7.77%	-1.39%	0.46%	0.69%
Bloomberg Long US Treasury	-0.59%	-29.26%	-29.26%	-7.40%	-2.20%	0.60%
Bloomberg US TIPS	2.04%	-11.85%	-11.85%	1.21%	2.11%	1.12%
Bloomberg US Credit	3.44%	-15.26%	-15.26%	-2.86%	0.42%	1.82%
Bloomberg US Mortgage-Backed	2.14%	-11.81%	-11.81%	-3.22%	-0.53%	0.74%
Bloomberg US Asset-Backed	0.81%	-4.30%	-4.30%	-0.11%	1.18%	1.23%
Bloomberg US 20-Yr Municipal	5.23%	-11.02%	-11.02%	-1.05%	1.37%	2.64%
Bloomberg US High Yield	4.17%	-11.19%	-11.19%	0.05%	2.31%	4.03%
Bloomberg Global	4.55%	-16.25%	-16.25%	-4.48%	-1.66%	-0.44%
Bloomberg International	6.81%	-18.70%	-18.70%	-5.94%	-3.07%	-1.64%
Bloomberg Emerging Market	6.59%	-15.26%	-15.26%	-3.89%	-0.42%	1.71%

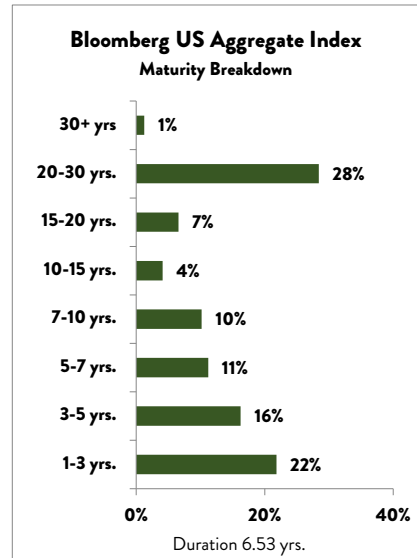
Source: Morningstar



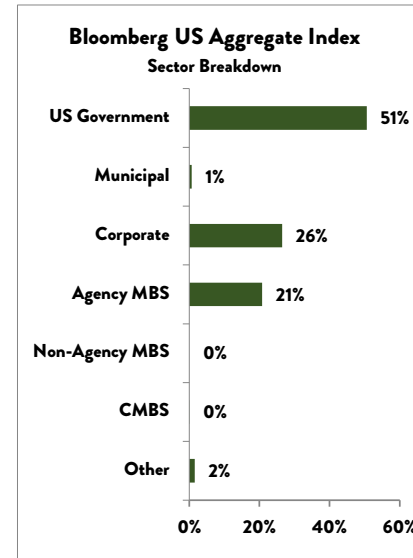
Source: Department of US Treasury



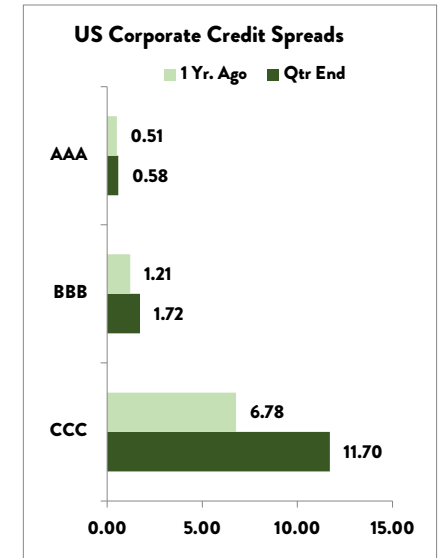
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

4Q2022 US Equity Market Data

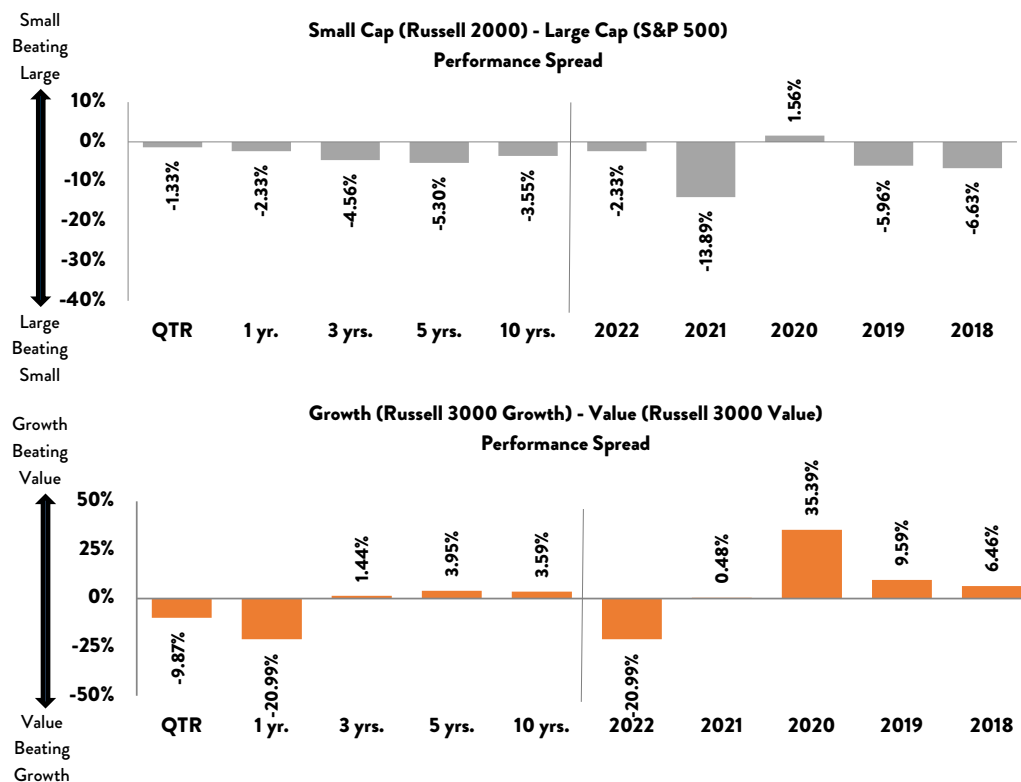
Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	QTR	YTD	1 yr.
S&P 500 Index	5%	Energy	22.81%	65.72%	65.72%
	9%	Industrials	19.22%	-5.48%	-5.48%
	3%	Materials	15.05%	-12.27%	-12.27%
	12%	Financials	13.61%	-10.53%	-10.53%
	16%	Health Care	12.80%	-1.95%	-1.95%
	7%	Consumer Staples	12.72%	-0.62%	-0.62%
	3%	Utilities	8.64%	1.57%	1.57%
	26%	Information Technology	4.74%	-28.19%	-28.19%
	3%	Real Estate	3.82%	-26.13%	-26.13%
	7%	Communication Services	-1.38%	-39.89%	-39.89%
10%	Consumer Discretionary	-10.18%	-37.03%	-37.03%	
S&P Midcap 400 Index	7%	Materials	21.92%	-2.73%	-2.73%
	14%	Consumer Discretionary	14.24%	-21.03%	-21.03%
	20%	Industrials	12.77%	-11.50%	-11.50%
	4%	Utilities	11.62%	-0.15%	-0.15%
	4%	Consumer Staples	11.59%	-0.77%	-0.77%
	4%	Energy	10.45%	36.62%	36.62%
	15%	Financials	9.57%	-3.04%	-3.04%
	12%	Information Technology	9.36%	-20.47%	-20.47%
	10%	Health Care	5.22%	-20.05%	-20.05%
	2%	Communication Services	4.31%	-20.39%	-20.39%
8%	Real Estate	3.74%	-26.35%	-26.35%	
S&P Smallcap 600 Index	5%	Energy	20.45%	47.89%	47.89%
	17%	Industrials	14.66%	-9.40%	-9.40%
	3%	Utilities	12.64%	-1.84%	-1.84%
	6%	Materials	11.51%	-6.09%	-6.09%
	13%	Consumer Discretionary	10.91%	-27.82%	-27.82%
	5%	Consumer Staples	9.76%	-6.47%	-6.47%
	8%	Real Estate	9.01%	-29.50%	-29.50%
	13%	Information Technology	8.09%	-22.36%	-22.36%
	18%	Financials	7.21%	-14.02%	-14.02%
	11%	Health Care	0.48%	-26.32%	-26.32%
2%	Communication Services	-3.18%	-34.46%	-34.46%	

Source: Morningstar

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	7.56%	-18.11%	-18.11%	7.66%	9.42%	12.56%
Russell 1000 Value	12.42%	-7.54%	-7.54%	5.96%	6.67%	10.29%
Russell 1000 Growth	2.20%	-29.14%	-29.14%	7.79%	10.96%	14.10%
Russell Mid Cap	9.18%	-17.32%	-17.32%	5.88%	7.10%	10.96%
Russell Mid Cap Value	10.45%	-12.03%	-12.03%	5.82%	5.72%	10.11%
Russell Mid Cap Growth	6.90%	-26.72%	-26.72%	3.85%	7.64%	11.41%
Russell 2000	6.23%	-20.44%	-20.44%	3.10%	4.13%	9.01%
Russell 2000 Value	8.42%	-14.48%	-14.48%	4.70%	4.13%	8.48%
Russell 2000 Growth	4.13%	-26.36%	-26.36%	0.65%	3.51%	9.20%
Russell 3000	7.18%	-19.21%	-19.21%	7.07%	8.79%	12.13%
DJ US Select REIT	4.76%	-25.96%	-25.96%	-1.37%	2.50%	5.74%



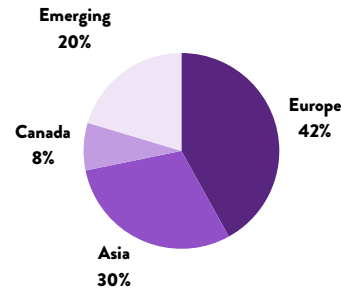
4Q2022 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	14.28%	-16.00%	-16.00%	0.07%	0.88%	3.80%
MSCI EAFE	17.34%	-14.45%	-14.45%	0.87%	1.54%	4.67%
Europe	19.35%	-15.06%	-15.06%	1.35%	1.87%	4.58%
United Kingdom	16.98%	-4.84%	-4.84%	0.32%	0.96%	3.07%
Germany	24.57%	-22.34%	-22.34%	-3.01%	-3.02%	2.66%
France	22.19%	-13.33%	-13.33%	2.53%	3.41%	6.14%
Pacific	14.13%	-13.04%	-13.04%	-0.03%	0.95%	4.89%
Japan	13.23%	-16.65%	-16.65%	-0.99%	0.23%	5.55%
Hong Kong	18.21%	-4.71%	-4.71%	-1.05%	-0.29%	4.77%
Australia	15.68%	-5.25%	-5.25%	4.07%	4.05%	3.97%
Canada	7.42%	-12.87%	-12.87%	4.95%	4.06%	3.68%
MSCI EM	9.70%	-20.09%	-20.09%	-2.69%	-1.40%	1.44%
MSCI EM Latin America	5.73%	8.92%	8.92%	-4.79%	-1.08%	-2.15%
MSCI EM Asia	10.83%	-21.11%	-21.11%	-1.31%	-0.62%	3.55%
MSCI EM Eur/Mid East	1.25%	-35.34%	-35.34%	-9.53%	-4.07%	-4.02%
MSCI ACWI Value ex-US	15.70%	-8.59%	-8.59%	0.06%	-0.05%	2.72%
MSCI ACWI Growth ex-US	12.89%	-23.05%	-23.05%	-0.40%	1.49%	4.68%
MSCI ACWI Sm Cap ex-US	13.31%	-19.97%	-19.97%	1.07%	0.67%	5.24%

Regional Exposure

MSCI ACWI ex-USA

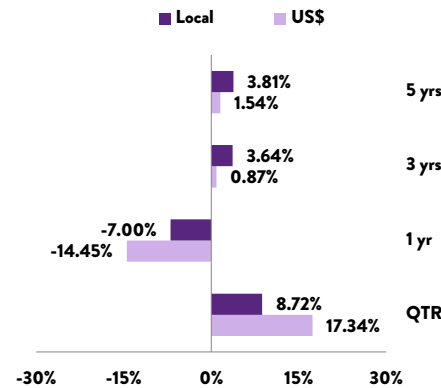


Top 10 Countries (MSCI AC World ex-USA)

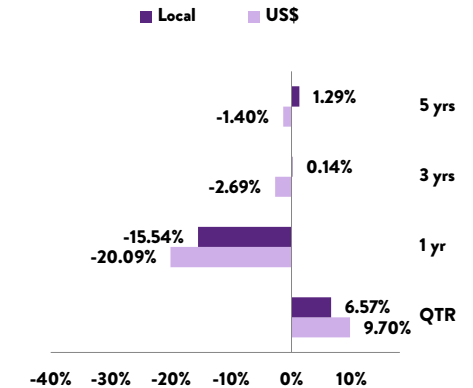
Japan	14%
UK	10%
China	9%
Canada	8%
France	8%
Switzerland	7%
Germany	5%
Australia	5%
India	4%
Taiwan	4%

Source: Morningstar

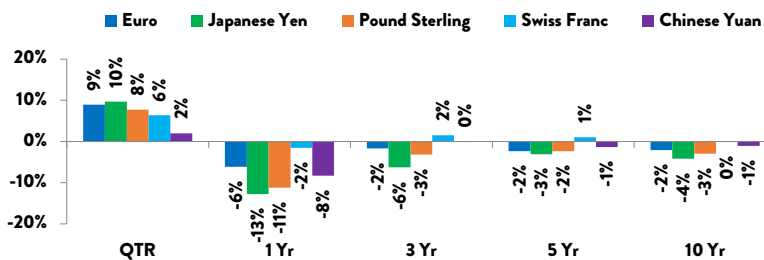
MSCI EAFE Index Return



MSCI Emerging Index Return



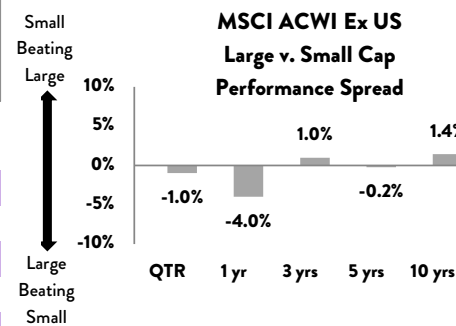
Foreign Currency v. US\$ Returns



Exchange Rates	QTR	3Q22	2Q22	1Q22	4Q21	3Q21
Japanese Yen	131.81	144.71	135.69	121.44	115.17	111.50
Euro	0.93	1.02	0.96	0.90	0.88	0.86
British Pound	0.83	0.90	0.82	0.76	0.74	0.74
Swiss Franc	0.92	0.98	0.96	0.92	0.91	0.93
Chinese Yuan	6.90	7.11	6.70	6.34	6.37	6.44

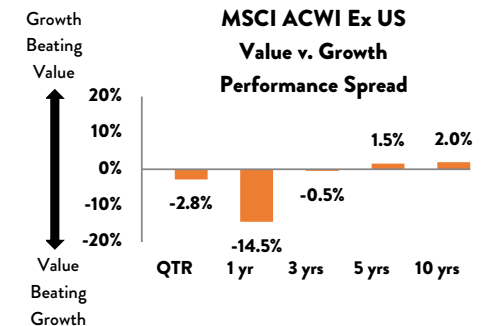
Source: Federal Reserve Bank of St. Louis

MSCI ACWI Ex US Large v. Small Cap Performance Spread



Performance Source: Morningstar

MSCI ACWI Ex US Value v. Growth Performance Spread



Historical Market Returns

Ranked by Performance

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	4Q22
Emerging Markets 39.42%	US Bonds 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Core Real Estate 14.96%	Emerging Markets 18.22%	Small Cap 38.82%	Large Cap 13.68%	Core Real Estate 13.95%	Small Cap 21.30%	Emerging Markets 37.28%	Core Real Estate 7.36%	Large Cap 31.49%	Small Cap 19.96%	Large Cap 28.71%	Commod. 16.09%	Intl 14.28%
Intl 16.65%	Global Bonds 4.79%	High Yield 58.21%	Mid Cap 25.48%	TIPS 13.56%	Mid Cap 17.28%	Mid Cap 34.76%	Mid Cap 13.21%	Large Cap 1.38%	High Yield 17.12%	Intl 27.19%	Cash 1.69%	Mid Cap 30.54%	Large Cap 18.40%	Commod. 27.11%	Core Real Estate 6.59%	Emerging Markets 9.70%
Commod. 16.23%	Cash 1.39%	Intl 41.45%	Emerging Markets 18.88%	US Bonds 7.84%	Intl 16.83%	Large Cap 32.39%	Core Real Estate 11.44%	US Bonds 0.55%	Mid Cap 13.79%	Large Cap 21.83%	US Bonds 0.01%	Small Cap 25.52%	Emerging Markets 18.31%	Mid Cap 22.58%	Cash 2.05%	Mid Cap 9.18%
Core Real Estate 14.84%	TIPS -2.35%	Mid Cap 40.48%	Commod. 16.83%	Global Bonds 5.64%	Small Cap 16.35%	Intl 15.29%	US Bonds 5.97%	Cash 0.03%	Large Cap 11.95%	Mid Cap 18.52%	Global Bonds -1.20%	Intl 21.51%	Mid Cap 17.10%	Core Real Estate 21.06%	High Yield -11.19%	Large Cap 7.56%
TIPS 11.64%	Core Real Estate -10.70%	Small Cap 27.17%	Core Real Estate 15.26%	High Yield 4.98%	Large Cap 16.00%	Global Balanced 14.46%	Small Cap 4.89%	TIPS -1.43%	Commod. 11.76	Global Balanced 15.87%	TIPS -1.26%	Global Balanced 18.86%	Global Balanced 13.93%	Small Cap 14.82%	TIPS -11.85%	Global Balanced 7.50%
Global Bonds 9.48%	Global Balanced -24.51%	Large Cap 26.46%	High Yield 15.12%	Large Cap 2.11%	High Yield 15.81%	Core Real Estate 12.95%	TIPS 3.64%	Global Balanced -1.45%	Emerging Markets 11.18%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.42%	TIPS 10.99%	Global Balanced 10.94%	US Bonds -13.01%	Small Cap 6.23%
Global Balanced 9.07%	High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Large Cap -4.38%	High Yield 14.32%	Intl 10.65%	Intl 7.82%	Intl -16.00%	Global Bonds 4.55%
US Bonds 6.97%	Small Cap -33.79%	Commod. 18.91%	Intl 11.15%	Global Balanced -0.97%	Core Real Estate 9.76%	Cash 0.07%	High Yield 2.45%	Global Bonds -3.15%	Global Balanced 5.38%	Global Bonds 7.39%	Global Balanced -5.30%	US Bonds 8.72%	Global Bonds 9.20%	TIPS 5.96%	Global Bonds -16.25%	High Yield 4.17%
Mid Cap 5.60%	Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 6.66%	Mid Cap -9.06%	TIPS 8.43%	US Bonds 7.51%	High Yield 5.28%	Global Balanced -16.40%	Commod. 2.22%
Large Cap 5.49%	Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Small Cap -11.01%	Commod. 7.69%	High Yield 7.11%	Cash 0.05%	Mid Cap -17.32%	TIPS 2.04%
Cash 4.44%	Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	Commod. -11.25%	Global Bonds 6.84%	Cash 0.37%	US Bonds -1.54%	Large Cap -18.11%	US Bonds 1.87%
High Yield 1.87%	Intl -45.53%	Cash 0.16%	Global Bonds 5.54%	Intl -13.71%	Cash 0.08%	TIPS -8.61%	Intl -3.86%	Emerging Markets -14.90%	Global Bonds 2.09%	Commod. 1.70%	Intl -14.20%	Core Real Estate 4.41%	Core Real Estate 0.35%	Emerging Markets -2.54%	Emerging Markets -20.09%	Cash 1.02%
Small Cap -1.57%	Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	Commod. -3.12%	Global Bonds -4.71%	Small Cap -20.44%	Core Real Estate -5.13%

Global Balanced is composed of 60% MSCI World Stock Index, 35% BBgBarc Global Aggregate Bond Index, and 5% US 90-Day T-Bills.

Source: Morningstar; Core Real Estate Source: NCREIF

Section 2

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Galliard Stable Value (0.12%)	-	\$55,245,285	18.5%
Metropolitan West Total Return Bond Plan	MWTSX	\$5,629,494	1.9%
Vanguard Total Bond Market Index I	VBTIX	\$4,793,020	1.6%
Total		\$65,667,799	22.0%

Large Cap	Ticker	Assets	%
T. Rowe Price U.S. Equity Research I	PCCOX	\$29,856,490	10.0%
Vanguard Institutional Index Instl	VINIX	\$27,540,945	9.2%
Total		\$57,397,435	19.2%

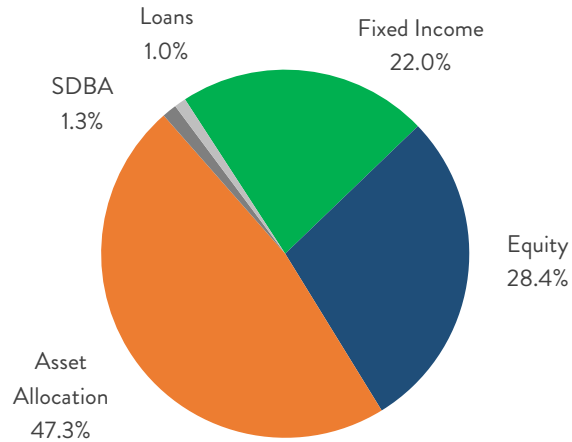
Mid Cap	Ticker	Assets	%
Schroder US Small and Mid Cap Eq Trust 3	-	\$8,850,527	3.0%
Vanguard Extended Market Index Instl	VIEIX	\$10,839,660	3.6%
Total		\$19,690,186	6.6%

International	Ticker	Assets	%
Hartford Intl Opp HLS IA	HIAOX	\$5,427,870	1.8%
Vanguard Total Intl Stock Index Adm	VTIAX	\$2,348,251	0.8%
Total		\$7,776,121	2.6%

Asset Allocation	Ticker	Assets	%
Calvert Balanced I	CBAIX	\$4,826,822	1.6%
Vanguard Target Retirement Income	VTINX	\$29,475,947	9.9%
Vanguard Target Retirement 2020	VTWNX	\$14,398,378	4.8%
Vanguard Target Retirement 2025	VTTVX	\$19,100,468	6.4%
Vanguard Target Retirement 2030	VTHRX	\$21,804,216	7.3%
Vanguard Target Retirement 2035	VTTX	\$15,654,236	5.2%
Vanguard Target Retirement 2040	VFORX	\$13,983,461	4.7%
Vanguard Target Retirement 2045	VTIVX	\$9,868,905	3.3%
Vanguard Target Retirement 2050	VFIFX	\$6,412,241	2.1%
Vanguard Target Retirement 2055	VFFVX	\$3,402,379	1.1%
Vanguard Target Retirement 2060	VTTSX	\$2,240,355	0.7%
Vanguard Target Retirement 2065	VLXVX	\$146,960	0.0%
Total		\$141,314,371	47.3%

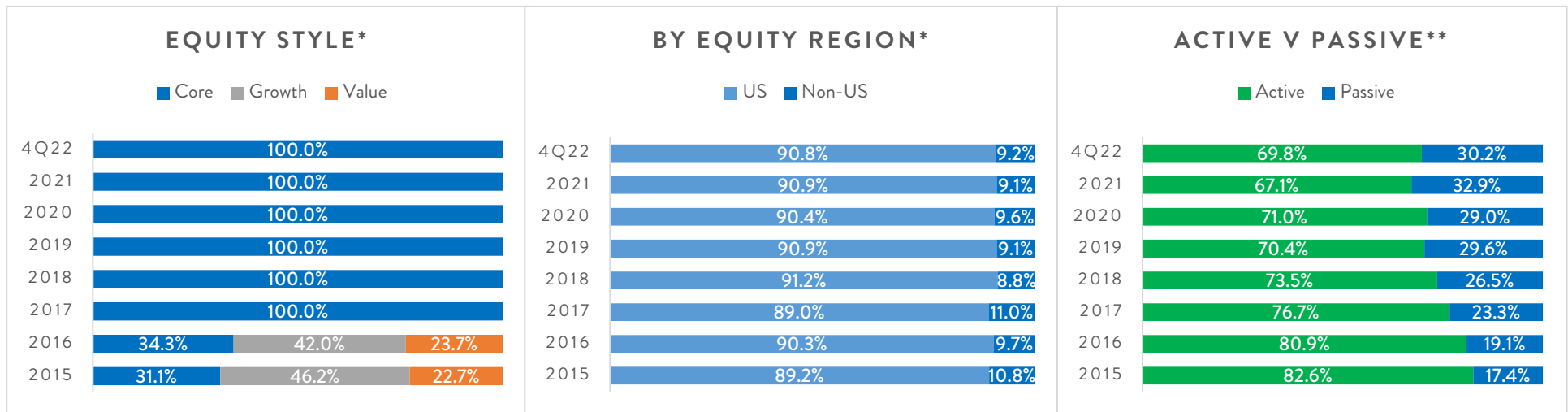
Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Assets	-	\$3,845,898	1.3%
Participant Loans	-	\$3,068,546	1.0%
Total		\$6,914,444	2.3%

TOTAL PLAN ASSETS	\$298,760,355
Administrative Account Balance	\$112,799



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	22.0%	19.0%	22.8%	20.8%	23.0%	22.9%	25.3%	24.9%
Large Cap	19.2%	20.2%	17.3%	18.6%	18.4%	19.5%	18.3%	18.8%
Mid Cap	6.6%	7.5%	6.9%	7.5%	8.0%	8.5%	6.3%	6.5%
Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	2.5%
International	2.6%	2.8%	2.6%	2.6%	2.5%	3.5%	2.9%	3.4%
Asset Allocation	47.3%	48.2%	47.9%	48.7%	46.2%	44.2%	42.7%	41.9%
SDBA	1.3%	1.6%	1.5%	0.6%	0.5%	0.3%	0.5%	0.6%
Loans	1.0%	0.8%	1.0%	1.3%	1.4%	1.2%	1.4%	1.4%



*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

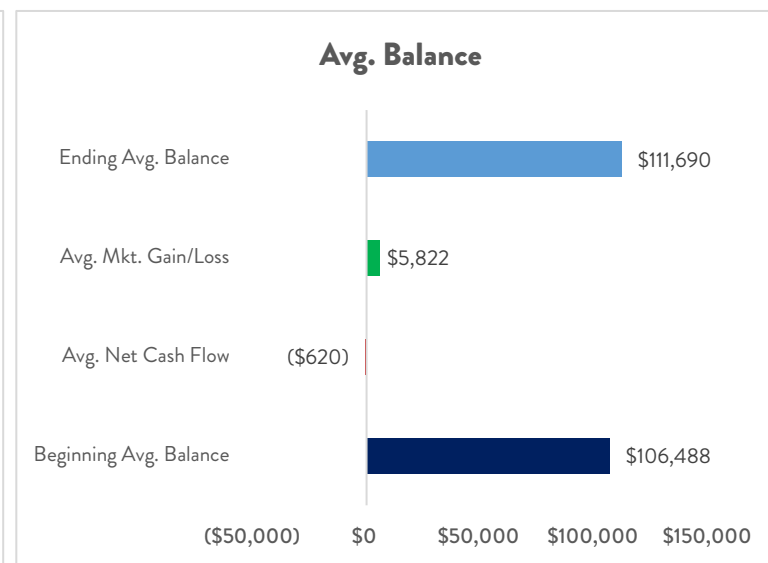
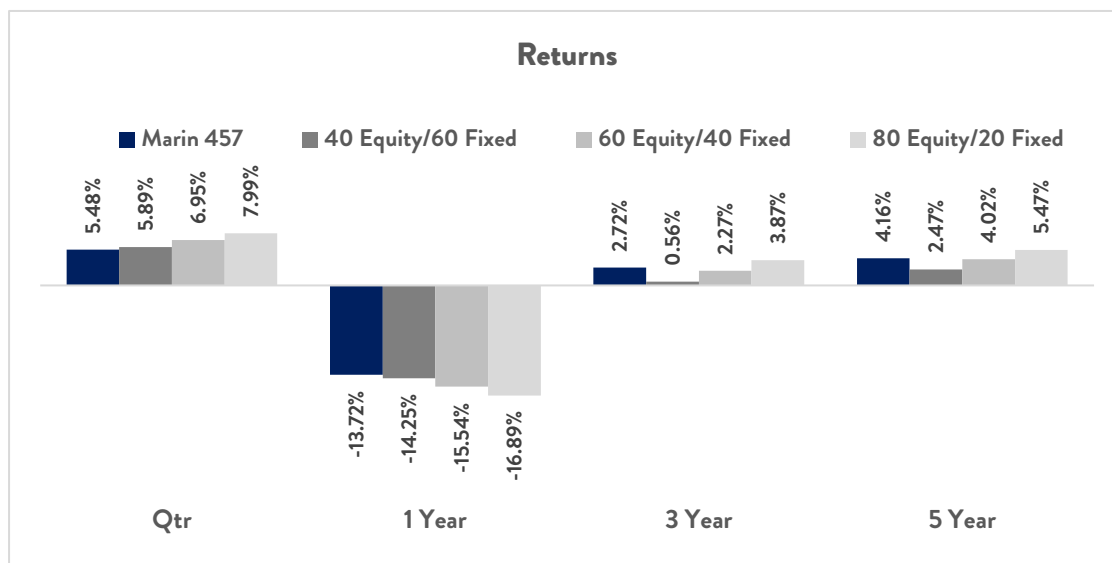
**Excludes Asset Allocation, Brokerage, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$65,562,236	\$603,811	(\$1,270,497)	\$271,586	\$500,663	\$65,667,799
Large Cap	\$53,095,000	\$543,264	(\$763,104)	\$667,261	\$3,855,014	\$57,397,435
Mid Cap	\$18,153,770	\$256,954	(\$347,377)	\$232,723	\$1,394,115	\$19,690,186
International	\$6,751,472	\$97,720	(\$87,389)	\$3,444	\$1,010,874	\$7,776,121
Asset Allocation	\$134,690,166	\$2,536,474	(\$3,189,950)	(\$1,175,013)	\$8,452,693	\$141,314,371
Total	\$278,252,645	\$4,038,223	(\$5,658,316)	\$0	\$15,213,360	\$291,845,911

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$278,252,645	(\$1,620,093)	\$15,213,360	\$291,845,911
YTD	\$339,950,739	(\$1,320,732)	(\$46,784,096)	\$291,845,911
2021	\$301,930,479	\$1,802,195	\$36,218,066	\$339,950,739
2020	\$269,564,611	(\$447,530)	\$32,813,398	\$301,930,479
2019	\$229,567,213	(\$1,789,338)	\$41,786,736	\$269,564,611
2018	\$244,039,263	(\$4,061,999)	(\$10,410,050)	\$229,567,213
2017	\$214,881,924	(\$1,015,844)	\$30,173,183	\$244,039,263
2016	\$199,984,171	\$1,340,598	\$13,557,155	\$214,881,924



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

Section 3

MARIN COUNTY SUPERIOR COURT

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Galliard Stable Value (0.12%)	-	\$2,287,551	18.6%
Metropolitan West Total Return Bond Plan	MWTSX	\$239,168	1.9%
Vanguard Total Bond Market Index I	VBTIX	\$115,695	0.9%
Total		\$2,642,413	21.5%

Large Cap	Ticker	Assets	%
T. Rowe Price U.S. Equity Research I	PCCOX	\$943,278	7.7%
Vanguard Institutional Index Instl	VINIX	\$1,692,261	13.7%
Total		\$2,635,539	21.4%

Mid Cap	Ticker	Assets	%
Schroder US Small and Mid Cap Eq Trust 3	-	\$542,986	4.4%
Vanguard Extended Market Index Instl	VIEIX	\$423,171	3.4%
Total		\$966,156	7.8%

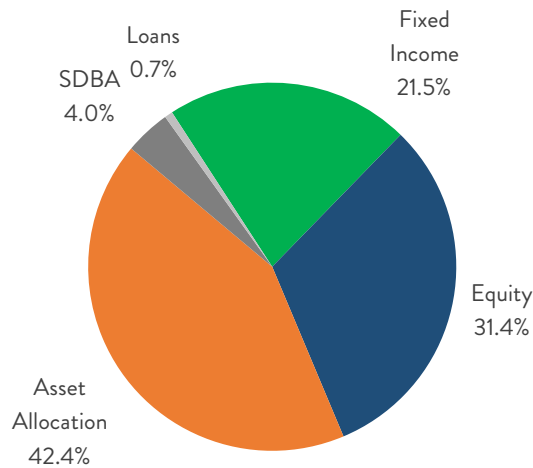
International	Ticker	Assets	%
Hartford Intl Opp HLS IA	HIAOX	\$254,986	2.1%
Vanguard Total Intl Stock Index Adm	VTIAX	\$9,300	0.1%
Total		\$264,285	2.1%

Asset Allocation	Ticker	Assets	%
Calvert Balanced I	CBAIX	\$23,085	0.2%
Vanguard Target Retirement Income	VTINX	\$924,277	7.5%
Vanguard Target Retirement 2020	VTWNX	\$1,411,499	11.5%
Vanguard Target Retirement 2025	VTTVX	\$1,270,277	10.3%
Vanguard Target Retirement 2030	VTHRX	\$301,626	2.4%
Vanguard Target Retirement 2035	VTTX	\$713,203	5.8%
Vanguard Target Retirement 2040	VFORX	\$210,094	1.7%
Vanguard Target Retirement 2045	VTIVX	\$142,891	1.2%
Vanguard Target Retirement 2050	VFIFX	\$53,305	0.4%
Vanguard Target Retirement 2055	VFFVX	\$67,875	0.6%
Vanguard Target Retirement 2060	VTTSX	\$108,949	0.9%
Vanguard Target Retirement 2065	VLXVX	\$0	0.0%
Total		\$5,227,081	42.4%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Assets	-	\$495,100	4.0%
Participant Loans	-	\$87,515	0.7%
Total		\$582,615	4.7%

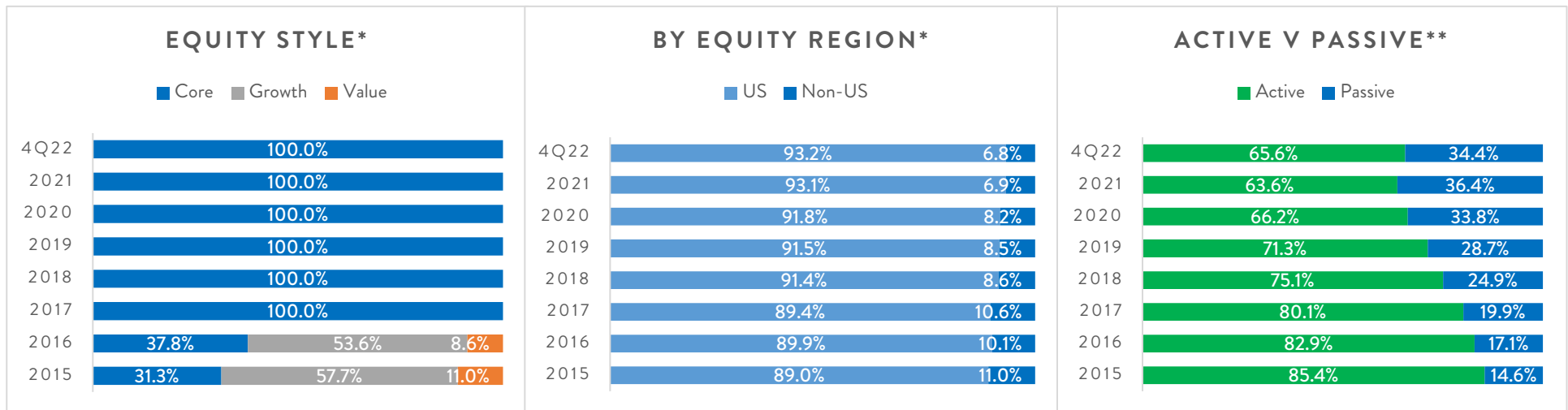
TOTAL PLAN ASSETS

\$12,318,090



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	21.5%	18.6%	20.0%	22.8%	26.0%	25.8%	27.7%	26.7%
Large Cap	21.4%	22.5%	19.3%	18.0%	16.0%	14.0%	13.4%	14.1%
Mid Cap	7.8%	8.3%	7.9%	7.4%	7.0%	7.1%	6.5%	6.4%
Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.4%
International	2.1%	2.3%	2.4%	2.4%	2.2%	2.5%	2.3%	2.6%
Asset Allocation	42.4%	41.4%	40.7%	40.7%	40.0%	41.7%	42.0%	42.3%
SDBA	4.0%	6.1%	8.7%	7.3%	6.7%	7.3%	6.3%	6.2%
Loans	0.7%	0.7%	1.0%	1.4%	2.1%	1.5%	0.9%	1.3%



*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

**Excludes Asset Allocation, Brokerage, and Loan assets

MARIN COUNTY SUPERIOR COURT

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

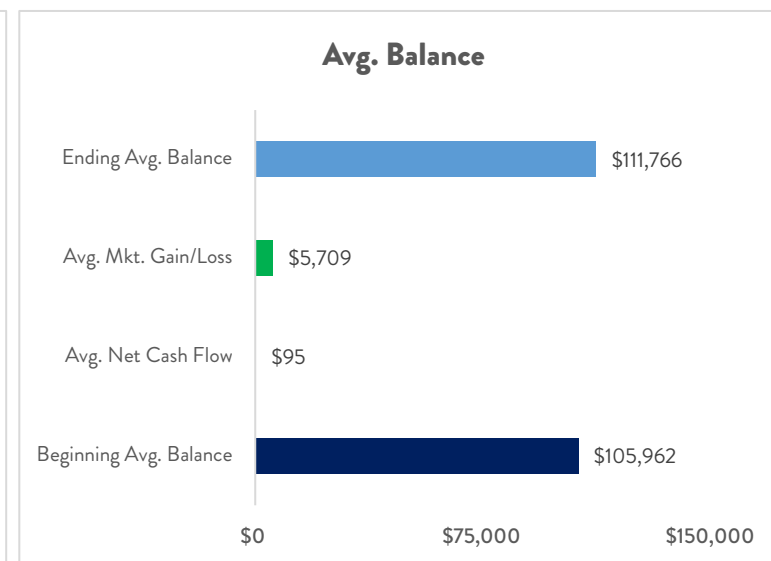
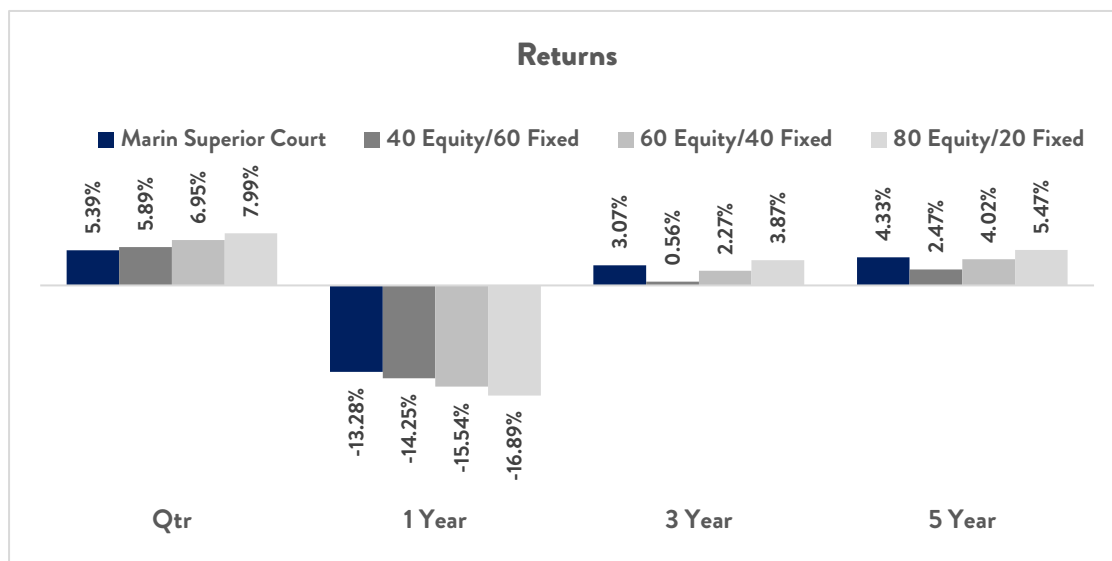
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$2,638,597	\$13,200	(\$28,901)	(\$240)	\$19,757	\$2,642,413
Large Cap	\$2,467,878	\$7,445	(\$22,490)	\$700	\$182,006	\$2,635,539
Mid Cap	\$902,958	\$1,268	(\$14,584)	(\$269)	\$76,783	\$966,156
International	\$230,103	\$1,095	(\$1,590)	(\$12)	\$34,690	\$264,285
Asset Allocation	\$4,886,445	\$65,842	(\$11,275)	(\$179)	\$286,247	\$5,227,081
Total	\$11,125,981	\$88,850	(\$78,839)	\$0	\$599,483	\$11,735,475

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$11,125,981	\$10,011	\$599,483	\$11,735,475
YTD	\$13,217,456	\$279,214	(\$1,761,195)	\$11,735,475
2021	\$11,598,712	\$144,376	\$1,474,368	\$13,217,456
2020	\$10,014,913	\$323,410	\$1,260,388	\$11,598,712
2019	\$8,398,402	\$153,629	\$1,462,882	\$10,014,913
2018	\$8,940,008	(\$217,655)	(\$323,951)	\$8,398,402
2017	\$8,389,735	(\$507,253)	\$1,057,526	\$8,940,008
2016	\$7,753,727	\$166,244	\$469,764	\$8,389,735



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

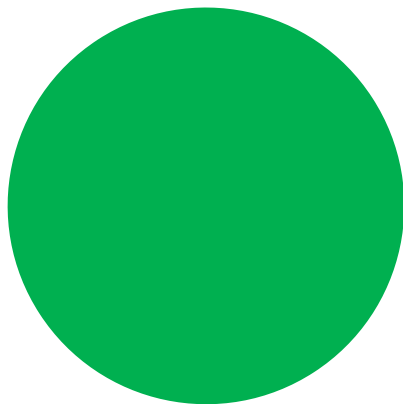
Section 4

Fixed Income	Ticker	Assets	%
Galliard Stable Value (0.12%) (PST - OBRA)	-	\$9,895,915	98.9%
Galliard Stable Value (0.12%) (Court - OBRA)	-	\$105,010	1.1%
Total		\$10,000,924	100.0%

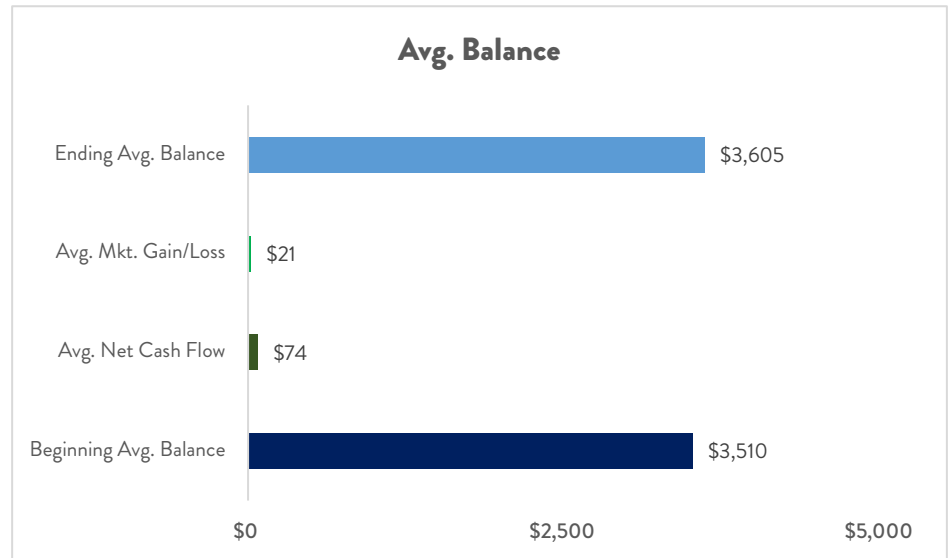
TOTAL PLAN ASSETS \$10,000,924

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$9,736,928	\$206,363	\$57,634	\$10,000,924
YTD	\$9,270,727	\$542,837	\$187,360	\$10,000,924
2021	\$8,385,904	\$725,920	\$158,902	\$9,270,727
2020	\$7,610,760	\$601,458	\$173,687	\$8,385,904
2019	\$7,053,574	\$384,329	\$172,857	\$7,610,760
2018	\$6,632,424	\$269,605	\$151,544	\$7,053,574
2017	\$6,671,277	(\$123,947)	\$85,093	\$6,632,424
2016	\$6,986,595	(\$356,973)	\$41,656	\$6,671,277



Fixed Income
100.0%



Section 5

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors	Investment Policy Status	
			On-Watch Information	Notes
Galliard Stable Value (0.12%)	Ⓟ	Ⓟ	-	
Metropolitan West Total Return Bond Plan	Ⓟ	Ⓟ	-	
Vanguard Total Bond Market Index I	Ⓟ	Ⓟ	-	
T. Rowe Price U.S. Equity Research I	Ⓟ	Ⓟ	-	
Vanguard Institutional Index Instl	Ⓟ	Ⓟ	-	
Schroder US Small and Mid Cap Eq Trust 3	●	Ⓟ	2Q21 (Performance)	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Extended Market Index Instl	Ⓟ	Ⓟ	-	
Hartford Intl Opp HLS IA	Ⓟ	Ⓟ	-	
Vanguard Total Intl Stock Index Adm	Ⓟ	Ⓟ	-	
Calvert Balanced I*	Ⓟ	Ⓟ	-	
Vanguard Target Retirement Income	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2020	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2025	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2030	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2035	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2040	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2045	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2050	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2055	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2060	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2065	Ⓟ	Ⓟ	-	

* Calvert Balanced is a Morgan Stanley affiliated fund, the Hyas Group is a business of Morgan Stanley.

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation/OBRA Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Galliard Stable Value (0.12%)	0.58	1.98	1.98	2.01	2.12	1.91	1.83	2.23	2.42	2.14	1.82	1.70
5 Yr Constant Maturity US Treasury Yield	0.99	3.00	3.00	1.46	1.81	1.68	0.85	0.54	1.96	2.75	1.91	1.44
US 90 Day T-Bill	0.99	2.01	2.01	0.80	1.28	0.78	0.04	0.36	2.06	1.94	0.93	0.32
+/- Index	(0.41)	(1.02)	(1.02)	0.55	0.31	0.23	0.98	1.69	0.46	(0.61)	(0.09)	0.26
US Stable Value	16	16	16	13	13	21	13	12	18	23	25	25
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Metropolitan West Total Return Bond Plan	1.81	-14.69	-14.69	-2.70	0.18	1.36	-1.11	9.17	9.23	0.29	3.49	2.56
Bloomberg US Aggregate Bond Index	1.87	-13.01	-13.01	-2.71	0.02	1.06	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	(0.06)	(1.68)	(1.68)	0.01	0.16	0.30	0.43	1.66	0.51	0.27	(0.05)	(0.09)
US Fund Intermediate Core-Plus Bond	50	76	76	58	41	40	64	28	51	15	77	83
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Total Bond Market Index I	1.67	-13.15	-13.15	-2.73	0.01	1.02	-1.65	7.74	8.73	-0.01	3.57	2.61
Bloomberg US Aggregate Bond Index	1.87	-13.01	-13.01	-2.71	0.02	1.06	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	(0.20)	(0.14)	(0.14)	(0.02)	(0.01)	(0.04)	(0.11)	0.23	0.01	(0.02)	0.03	(0.04)
US Fund Intermediate Core Bond	45	34	34	47	35	40	55	54	34	27	38	49
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
T. Rowe Price U.S. Equity Research I	7.05	-18.72	-18.72	7.68	9.60	12.71	28.09	19.94	32.55	-4.45	23.85	10.24
S&P 500 Index	7.56	-18.11	-18.11	7.66	9.42	12.56	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(0.51)	(0.61)	(0.61)	0.02	0.18	0.15	(0.62)	1.54	1.06	(0.06)	2.02	(1.72)
US Fund Large Blend	75	63	63	29	15	8	30	22	12	24	12	56
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Institutional Index Instl	7.55	-18.14	-18.14	7.64	9.40	12.53	28.67	18.39	31.46	-4.42	21.79	11.93
S&P 500 Index	7.56	-18.11	-18.11	7.66	9.42	12.56	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(0.01)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)	(0.04)	(0.01)	(0.02)	(0.04)	(0.04)	(0.03)
US Fund Large Blend	56	49	49	30	20	12	21	33	23	23	33	28

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation/OBRA Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Schroder US Small and Mid Cap Eq Trust 3	11.09	-12.67	-12.67	4.88	5.85	10.75	22.22	8.07	29.60	-11.10	15.59	18.80
Russell 2500 Index	7.43	-18.37	-18.37	5.00	5.89	10.03	18.18	19.99	27.77	-10.00	16.81	17.59
+/- Index	3.66	5.70	5.70	(0.12)	(0.04)	0.72	4.04	(11.92)	1.83	(1.10)	(1.22)	1.21
US Fund Mid-Cap Blend	14	20	20	72	59	19	67	79	31	46	61	22
Vanguard Extended Market Index Instl	5.12	-26.46	-26.46	3.03	4.89	9.64	12.47	32.23	28.05	-9.35	18.12	16.15
S&P Completion Index	5.07	-26.54	-26.54	2.94	4.77	9.52	12.35	32.17	27.95	-9.57	18.11	15.95
+/- Index	0.05	0.08	0.08	0.09	0.12	0.12	0.12	0.06	0.11	0.22	0.01	0.20
US Fund Mid-Cap Blend	94	98	98	87	75	58	95	3	43	29	30	42
Hartford Intl Opp HLS IA	15.11	-18.14	-18.14	2.06	1.78	5.13	7.82	20.45	26.43	-18.74	25.25	1.26
MSCI ACWI Ex-USA (Net) Index	14.28	-16.00	-16.00	0.07	0.88	3.80	7.82	10.65	21.51	-14.20	27.19	4.50
+/- Index	0.83	(2.14)	(2.14)	1.99	0.90	1.33	0.00	9.80	4.91	(4.55)	(1.94)	(3.24)
US Fund Foreign Large Blend	73	74	74	19	29	15	70	9	17	86	54	44
Vanguard Total Intl Stock Index Adm	14.67	-16.01	-16.01	0.51	1.09	4.06	8.62	11.28	21.51	-14.43	27.55	4.67
Vanguard Total International Stock Index	14.14	-16.10	-16.10	0.52	1.10	4.20	8.84	11.24	21.81	-14.62	27.41	4.72
+/- Index	0.53	0.09	0.09	(0.01)	(0.01)	(0.14)	(0.22)	0.04	(0.30)	0.18	0.14	(0.05)
US Fund Foreign Large Blend	80	52	52	53	53	59	64	40	61	40	29	12
Calvert Balanced I	4.67	-15.13	-15.13	4.02	6.37	7.66	14.58	15.75	24.05	-2.46	11.94	8.16
US Balanced Index	5.29	-15.91	-15.91	4.00	6.07	8.14	15.96	15.37	22.11	-2.26	14.26	8.21
+/- Index	(0.62)	0.78	0.78	0.02	0.30	(0.48)	(1.38)	0.38	1.95	(0.20)	(2.32)	(0.05)
US Fund Allocation--50% to 70% Equity	87	51	51	23	8	18	35	20	6	7	80	28

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation/OBRA Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement Income	3.74	-12.74	-12.74	0.34	2.30	3.62	5.25	10.02	13.16	-1.99	8.47	5.25
Vanguard Retirement Income Index	3.95	-12.44	-12.44	0.72	2.58	3.86	5.43	10.70	13.40	-1.98	8.67	5.35
+/- Index	(0.21)	(0.30)	(0.30)	(0.38)	(0.28)	(0.24)	(0.18)	(0.68)	(0.24)	(0.01)	(0.19)	(0.10)
US Fund Target-Date Retirement	62	49	49	32	32	30	64	30	48	18	50	30
Vanguard Target Retirement 2020	4.97	-14.15	-14.15	1.33	3.22	5.83	8.17	12.04	17.63	-4.24	14.08	6.95
Vanguard Retirement 2020 Index	5.12	-13.77	-13.77	1.81	3.58	6.13	8.43	12.86	17.87	-4.14	14.22	7.17
+/- Index	(0.15)	(0.38)	(0.38)	(0.48)	(0.36)	(0.30)	(0.26)	(0.82)	(0.24)	(0.10)	(0.14)	(0.22)
US Fund Target-Date 2020	69	40	40	48	37	26	62	41	32	47	23	30
Vanguard Target Retirement 2025	6.03	-15.55	-15.55	1.66	3.58	6.43	9.80	13.30	19.63	-5.15	15.94	7.48
Vanguard Retirement 2025 Index	6.16	-15.02	-15.02	2.23	4.01	6.77	10.10	14.19	19.93	-5.01	16.08	7.66
+/- Index	(0.13)	(0.53)	(0.53)	(0.57)	(0.43)	(0.34)	(0.30)	(0.89)	(0.30)	(0.14)	(0.14)	(0.18)
US Fund Target-Date 2025	40	52	52	39	31	18	47	34	20	48	22	21
Vanguard Target Retirement 2030	6.81	-16.27	-16.27	2.09	3.94	6.99	11.38	14.10	21.07	-5.86	17.52	7.85
Vanguard Retirement 2030 Index	6.92	-15.71	-15.71	2.66	4.35	7.33	11.65	14.96	21.33	-5.74	17.65	8.11
+/- Index	(0.11)	(0.56)	(0.56)	(0.57)	(0.41)	(0.34)	(0.27)	(0.86)	(0.26)	(0.12)	(0.13)	(0.26)
US Fund Target-Date 2030	39	47	47	46	39	26	54	35	37	39	37	27
Vanguard Target Retirement 2035	7.45	-16.62	-16.62	2.64	4.34	7.57	12.96	14.79	22.44	-6.58	19.12	8.26
Vanguard Retirement 2035 Index	7.41	-16.22	-16.22	3.14	4.73	7.91	13.24	15.67	22.76	-6.48	19.24	8.55
+/- Index	0.04	(0.40)	(0.40)	(0.50)	(0.39)	(0.34)	(0.28)	(0.87)	(0.33)	(0.10)	(0.12)	(0.29)
US Fund Target-Date 2035	62	38	38	52	42	30	78	38	49	31	40	32

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation/OBRA Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2040	8.20	-16.98	-16.98	3.17	4.74	8.06	14.56	15.47	23.86	-7.32	20.71	8.73
Vanguard Retirement 2040 Index	8.23	-16.51	-16.51	3.70	5.14	8.42	14.85	16.31	24.19	-7.22	20.87	8.98
+/- Index	(0.03)	(0.47)	(0.47)	(0.53)	(0.40)	(0.36)	(0.29)	(0.83)	(0.33)	(0.11)	(0.16)	(0.25)
US Fund Target-Date 2040	63	34	34	49	40	23	80	39	49	35	30	23
Vanguard Target Retirement 2045	8.89	-17.36	-17.36	3.74	5.14	8.34	16.16	16.30	24.94	-7.90	21.42	8.87
Vanguard Retirement 2045 Index	8.99	-16.84	-16.84	4.26	5.55	8.71	16.45	17.03	25.36	-7.77	21.54	9.13
+/- Index	(0.10)	(0.52)	(0.52)	(0.52)	(0.41)	(0.37)	(0.29)	(0.73)	(0.42)	(0.13)	(0.11)	(0.26)
US Fund Target-Date 2045	53	31	31	32	27	19	65	34	40	41	24	26
Vanguard Target Retirement 2050	9.23	-17.46	-17.46	3.80	5.18	8.36	16.41	16.39	24.98	-7.90	21.39	8.85
Vanguard Retirement 2050 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.50)	(0.40)	(0.36)	(0.36)	(0.79)	(0.38)	(0.13)	(0.14)	(0.28)
US Fund Target-Date 2050	44	29	29	32	28	20	70	35	45	37	31	27
Vanguard Target Retirement 2055	9.23	-17.46	-17.46	3.79	5.18	8.34	16.44	16.32	24.98	-7.89	21.38	8.88
Vanguard Retirement 2055 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.51)	(0.40)	(0.38)	(0.33)	(0.86)	(0.38)	(0.12)	(0.16)	(0.25)
US Fund Target-Date 2055	48	26	26	36	29	26	75	40	47	35	39	26
Vanguard Target Retirement 2060	9.23	-17.46	-17.46	3.79	5.18	8.34	16.44	16.32	24.96	-7.87	21.36	8.84
Vanguard Retirement 2060 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.51)	(0.40)	(0.38)	(0.33)	(0.85)	(0.40)	(0.10)	(0.18)	(0.28)
US Fund Target-Date 2060	53	25	25	38	32	50	77	41	56	30	43	23

MARIN COUNTY, CALIFORNIA

457 Deferred Compensation/OBRA Plans

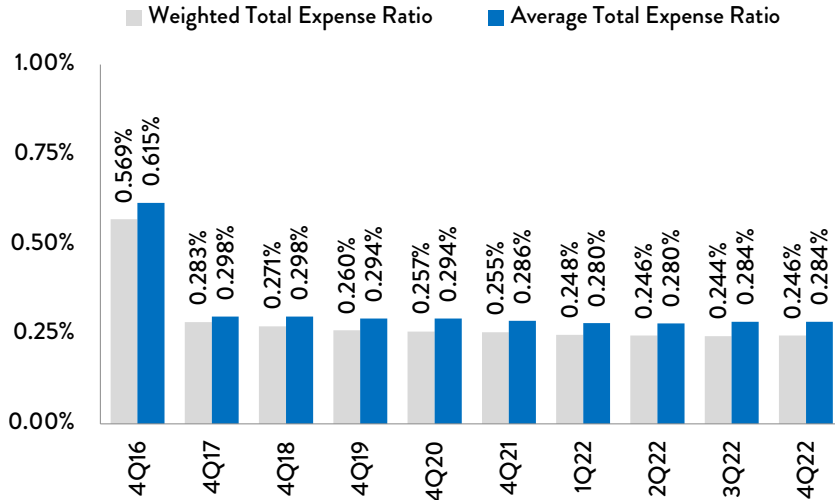
PERFORMANCE REVIEW

Fourth Quarter 2022

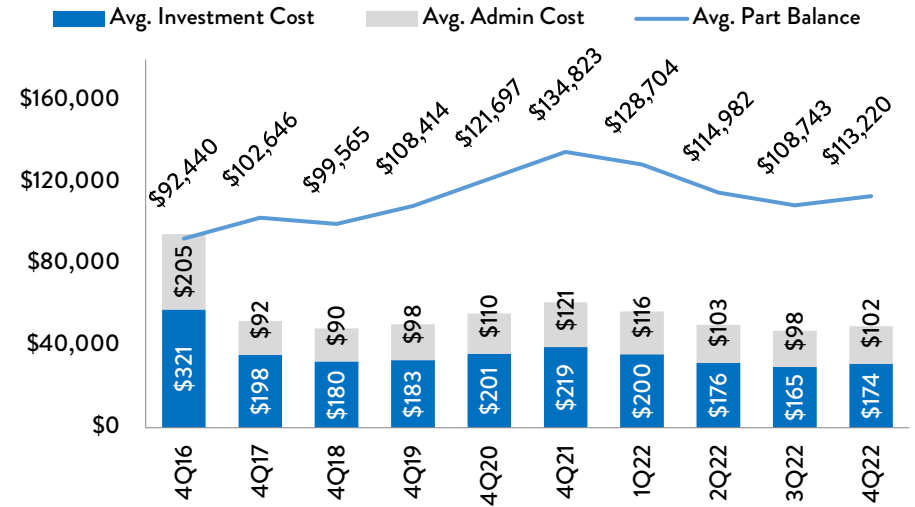
	QTR	YTD	1Yr	<i>Annualized</i>			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2065	9.24	-17.39	-17.39	3.78	5.15	-	16.46	16.17	24.96	-7.95	-	-
Vanguard Retirement 2065 Index	9.18	-17.07	-17.07	4.30	5.58	-	16.77	17.18	25.36	-7.77	-	-
+/- Index	0.06	(0.32)	(0.32)	(0.52)	(0.43)	-	(0.31)	(1.00)	(0.39)	(0.18)	-	-
US Fund Target-Date 2065+	51	18	18	31	31	-	67	56	59	12	-	-

Section 6

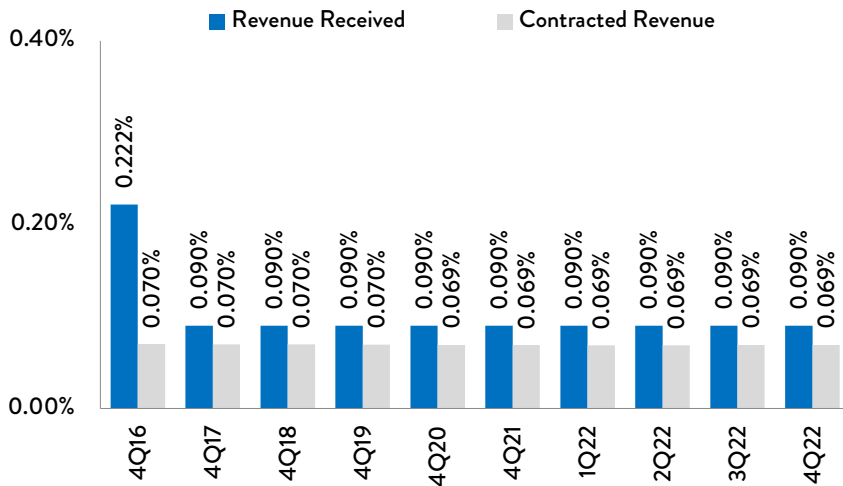
Annualized Plan Cost (%)



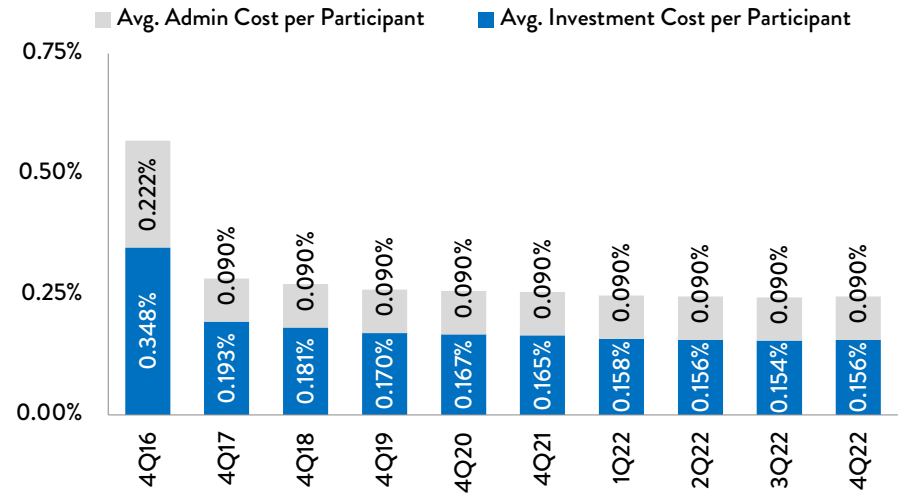
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



MARIN COUNTY, CALIFORNIA

457 Deferred Compensation Plan

PLAN FEE ANALYSIS

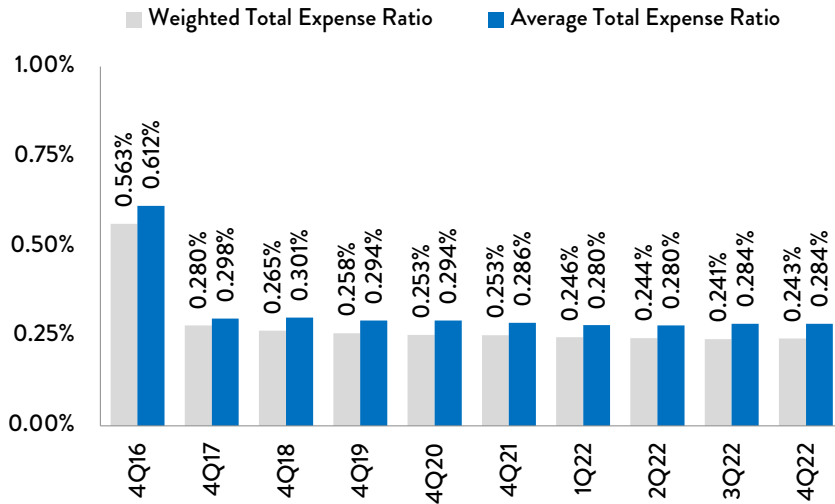
Fourth Quarter 2022

Annualized

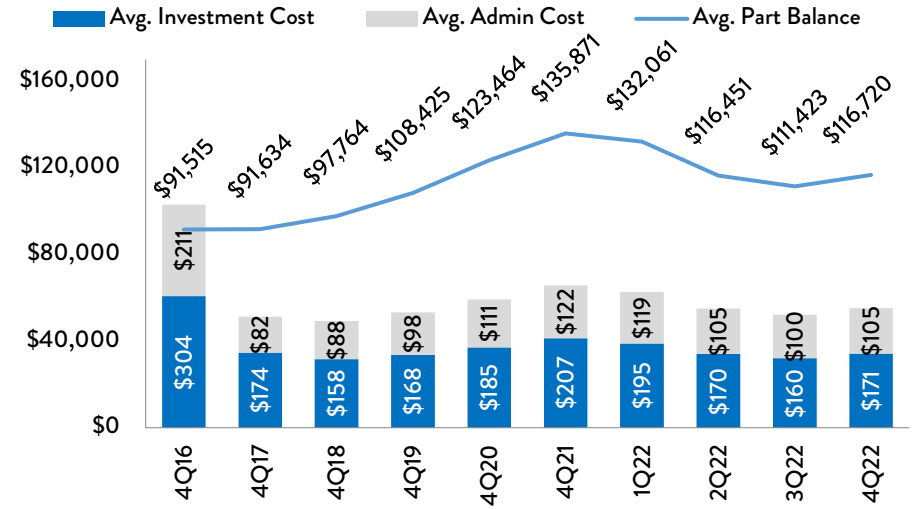
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Galliard Stable Value (0.12%)	-	\$55,245,285	0.12%	0.09%	\$66,294	\$49,721
Metropolitan West Total Return Bond Plan	MWTSX	\$5,629,494	0.36%	0.09%	\$20,266	\$5,067
Vanguard Total Bond Market Index I	VBTIX	\$4,793,020	0.04%	0.09%	\$1,678	\$4,314
T. Rowe Price U.S. Equity Research I	PCCOX	\$29,856,490	0.34%	0.09%	\$101,512	\$26,871
Vanguard Institutional Index Instl	VINIX	\$27,540,945	0.04%	0.09%	\$9,639	\$24,787
Schroder US Small and Mid Cap Eq Trust 3	-	\$8,850,527	0.75%	0.09%	\$66,379	\$7,965
Vanguard Extended Market Index Instl	VIEIX	\$10,839,660	0.05%	0.09%	\$5,420	\$9,756
Hartford Intl Opp HLS IA	HIAOX	\$5,427,870	0.74%	0.09%	\$40,166	\$4,885
Vanguard Total Intl Stock Index Adm	VTIAX	\$2,348,251	0.11%	0.09%	\$2,583	\$2,113
Calvert Balanced I	CBAIX	\$4,826,822	0.66%	0.09%	\$31,857	\$4,344
Vanguard Target Retirement Income	VTINX	\$29,475,947	0.08%	0.09%	\$23,581	\$26,528
Vanguard Target Retirement 2020	VTWNX	\$14,398,378	0.08%	0.09%	\$11,519	\$12,959
Vanguard Target Retirement 2025	VTTVX	\$19,100,468	0.08%	0.09%	\$15,280	\$17,190
Vanguard Target Retirement 2030	VTHRX	\$21,804,216	0.08%	0.09%	\$17,443	\$19,624
Vanguard Target Retirement 2035	VTTHX	\$15,654,236	0.08%	0.09%	\$12,523	\$14,089
Vanguard Target Retirement 2040	VFORX	\$13,983,461	0.08%	0.09%	\$11,187	\$12,585
Vanguard Target Retirement 2045	VTIVX	\$9,868,905	0.08%	0.09%	\$7,895	\$8,882
Vanguard Target Retirement 2050	VFIFX	\$6,412,241	0.08%	0.09%	\$5,130	\$5,771
Vanguard Target Retirement 2055	VFFVX	\$3,402,379	0.08%	0.09%	\$2,722	\$3,062
Vanguard Target Retirement 2060	VTTSX	\$2,240,355	0.08%	0.09%	\$1,792	\$2,016
Vanguard Target Retirement 2065	VLXVX	\$146,960	0.08%	0.09%	\$118	\$132
Self-Directed Brokerage Account	-	\$3,997,096	-	0.09%	-	\$3,597
TOTAL		\$295,843,008			\$454,985	\$266,259

Plan Administration Cost	Quarter	Annualized
Total Revenue (Admin Fee, 0.09%) (Hyas est):	\$67,112	\$266,259
NW Fee (Exc loan/brokerage, 0.07%) (Hyas est):	\$51,493	\$204,292
Net Excess/(Deficit) (Hyas est):	\$15,619	\$61,967

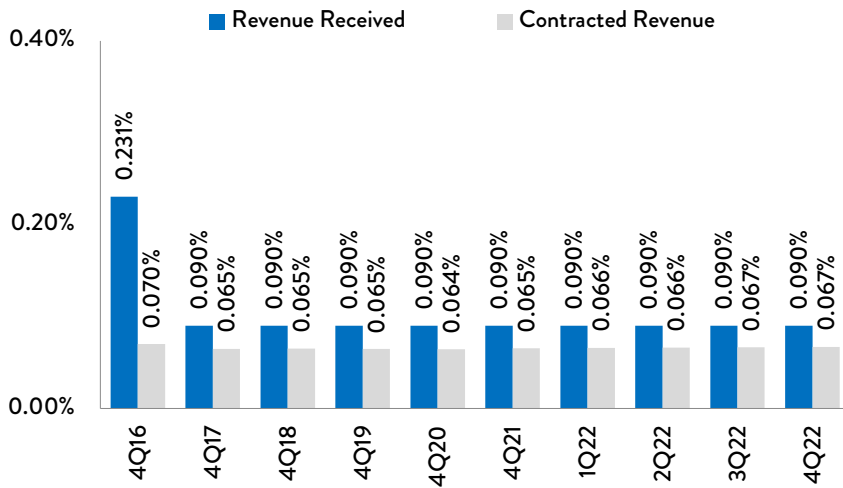
Annualized Plan Cost (%)



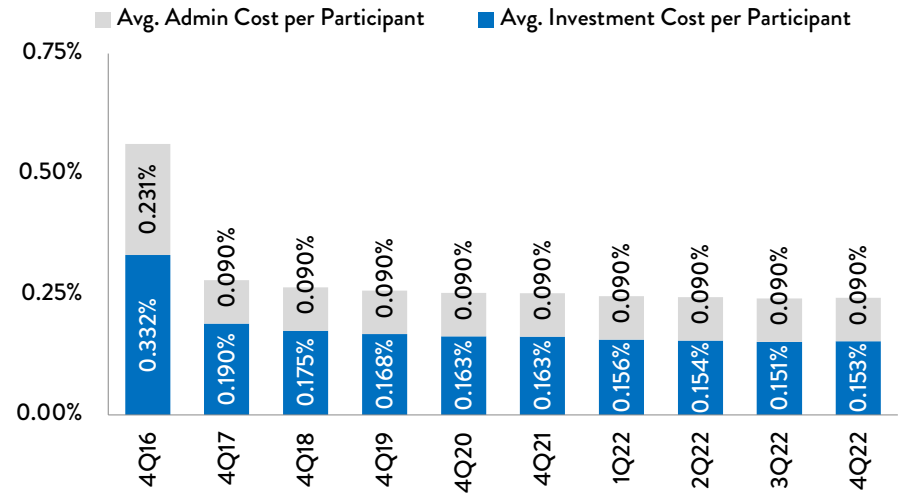
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



MARIN COUNTY SUPERIOR COURT
457 Deferred Compensation Plan

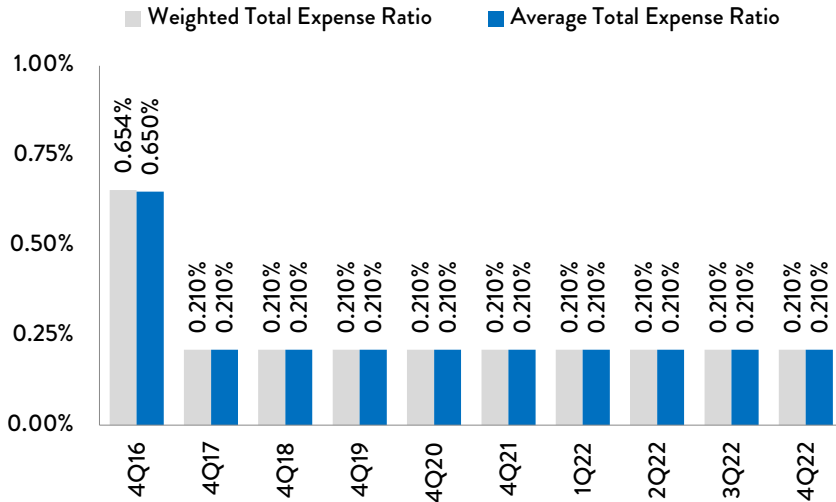
PLAN FEE ANALYSIS
Fourth Quarter 2022

Annualized

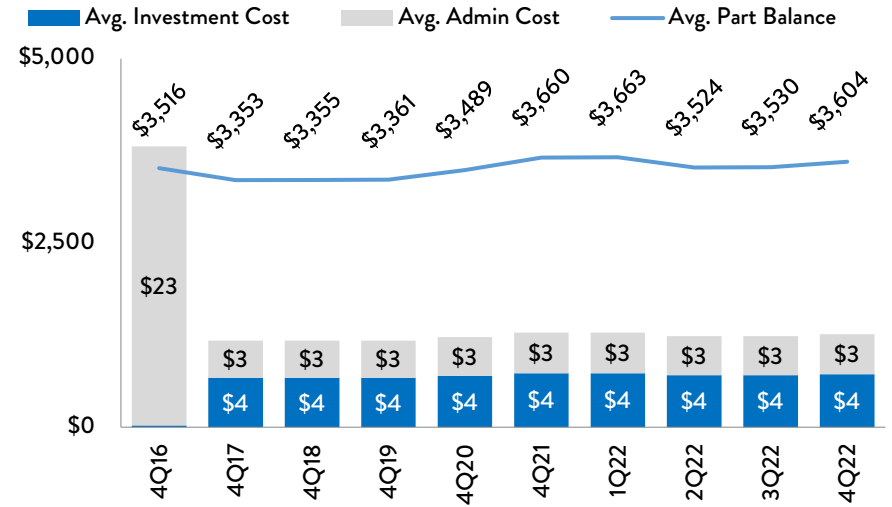
Fund	Ticker	Quarter End Assets	Net Expense		Est. Total Invest. Cost	Est. Total Admin. Cost
			Ratio	Admin Fee		
Galliard Stable Value (0.12%)	-	\$2,287,551	0.12%	0.09%	\$2,745	\$2,059
Metropolitan West Total Return Bond Plan	MWTSX	\$239,168	0.36%	0.09%	\$861	\$215
Vanguard Total Bond Market Index I	VBTIX	\$115,695	0.04%	0.09%	\$40	\$104
T. Rowe Price U.S. Equity Research I	PCCOX	\$943,278	0.34%	0.09%	\$3,207	\$849
Vanguard Institutional Index Instl	VINIX	\$1,692,261	0.04%	0.09%	\$592	\$1,523
Schroder US Small and Mid Cap Eq Trust 3	-	\$542,986	0.75%	0.09%	\$4,072	\$489
Vanguard Extended Market Index Instl	VIEIX	\$423,171	0.05%	0.09%	\$212	\$381
Hartford Intl Opp HLS IA	HIAOX	\$254,986	0.74%	0.09%	\$1,887	\$229
Vanguard Total Intl Stock Index Adm	VTIAX	\$9,300	0.11%	0.09%	\$10	\$8
Calvert Balanced I	CBAIX	\$23,085	0.66%	0.09%	\$152	\$21
Vanguard Target Retirement Income	VTINX	\$924,277	0.08%	0.09%	\$739	\$832
Vanguard Target Retirement 2020	VTWNX	\$1,411,499	0.08%	0.09%	\$1,129	\$1,270
Vanguard Target Retirement 2025	VTTVX	\$1,270,277	0.08%	0.09%	\$1,016	\$1,143
Vanguard Target Retirement 2030	VTHRX	\$301,626	0.08%	0.09%	\$241	\$271
Vanguard Target Retirement 2035	VTTHX	\$713,203	0.08%	0.09%	\$571	\$642
Vanguard Target Retirement 2040	VFORX	\$210,094	0.08%	0.09%	\$168	\$189
Vanguard Target Retirement 2045	VTIVX	\$142,891	0.08%	0.09%	\$114	\$129
Vanguard Target Retirement 2050	VFIFX	\$53,305	0.08%	0.09%	\$43	\$48
Vanguard Target Retirement 2055	VFFVX	\$67,875	0.08%	0.09%	\$54	\$61
Vanguard Target Retirement 2060	VTTSX	\$108,949	0.08%	0.09%	\$87	\$98
Vanguard Target Retirement 2065	VLXVX	\$0	0.08%	0.09%	\$0	\$0
Self-Directed Brokerage Account	-	\$520,145	-	0.09%	-	\$468
TOTAL		\$12,255,620			\$17,943	\$11,030

Plan Administration Cost	Quarter	Annualized
Total Revenue (Admin Fee, 0.09%) (Hyas est):	\$2,780	\$11,030
NW Fee (0.07% exc loan/brokerage) (Hyas est):	\$2,071	\$8,215
Net Excess/(Deficit) (Hyas est):	\$710	\$2,815

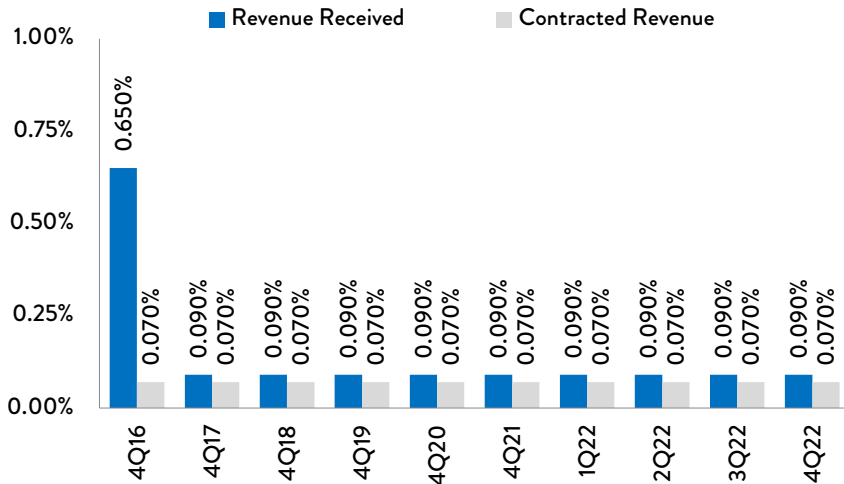
Annualized Plan Cost (%)



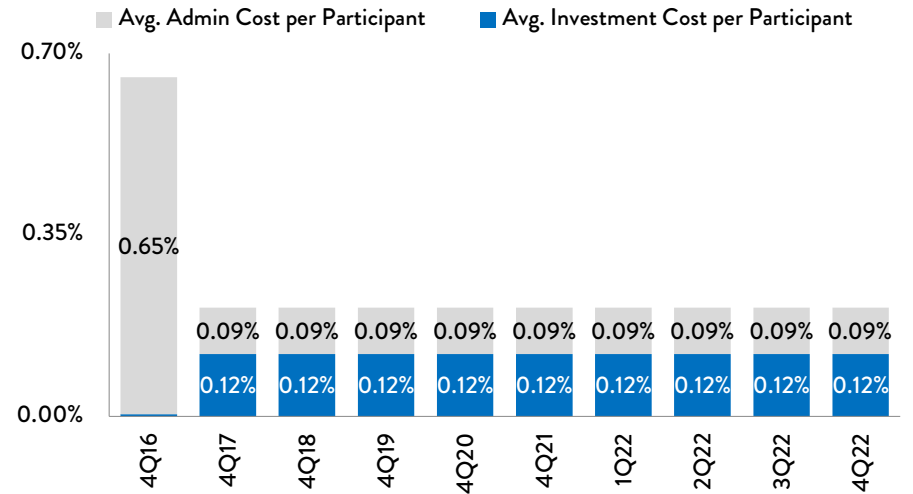
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



MARIN COUNTY, CALIFORNIA
PST-OBRA

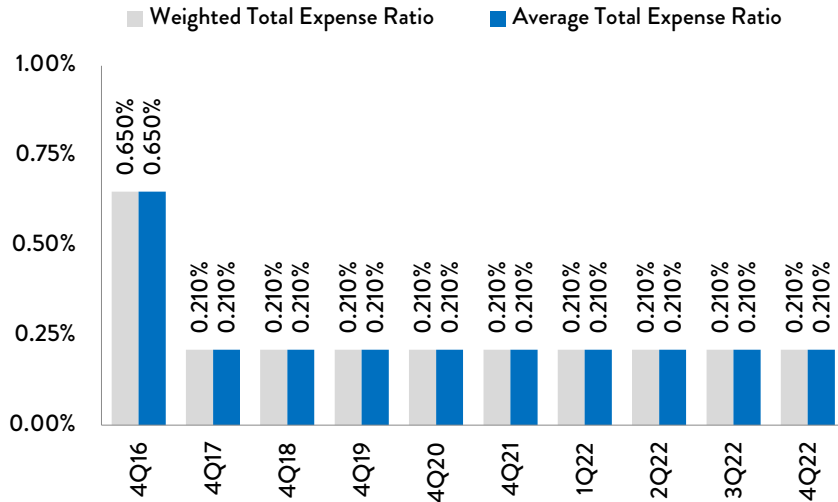
PLAN FEE ANALYSIS
Fourth Quarter 2022

Annualized

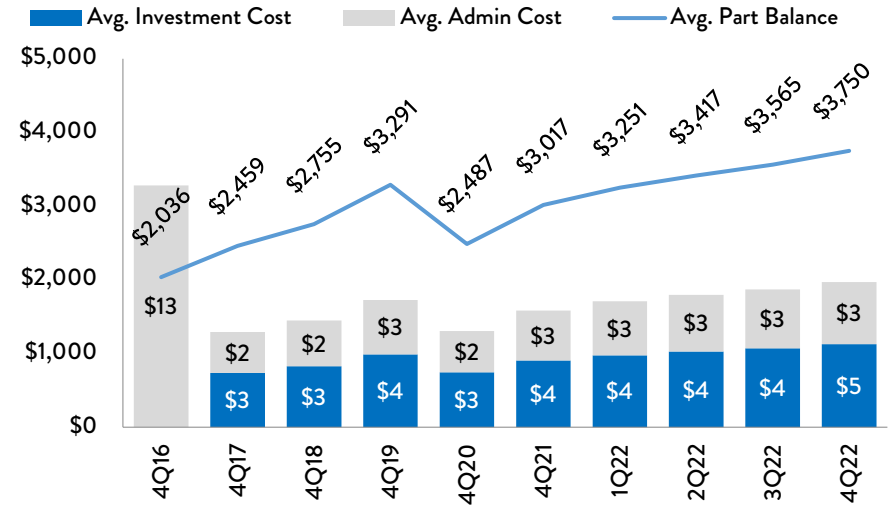
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Galliard Stable Value (0.12%) (PST - OBRA)	-	\$9,895,915	0.12%	0.09%	\$11,875	\$8,906
TOTAL		\$9,895,915			\$11,875	\$8,906

Plan Administration Cost	Quarter	Annualized
Total Revenue (Admin Fee, 0.09%) (Hyas est):	\$2,245	\$8,906
NW Fee (0.07%) (Hyas est):	\$1,746	\$6,927
Net Excess/(Deficit) (Hyas est):	\$499	\$1,979

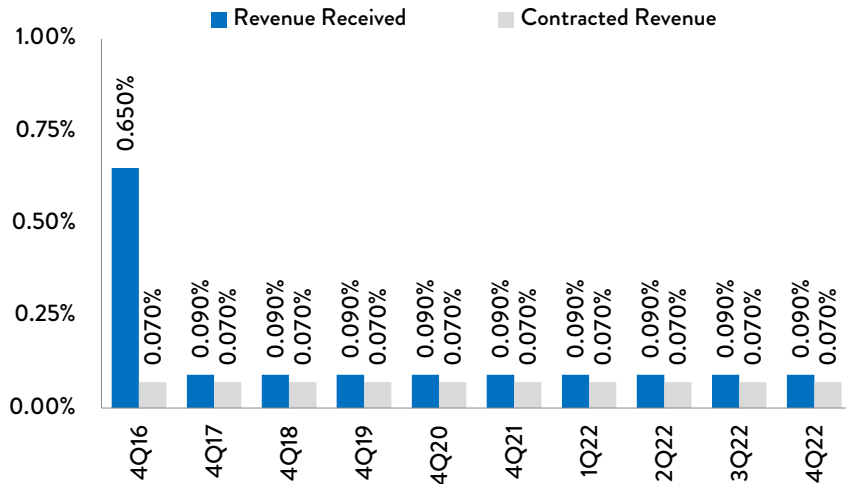
Annualized Plan Cost (%)



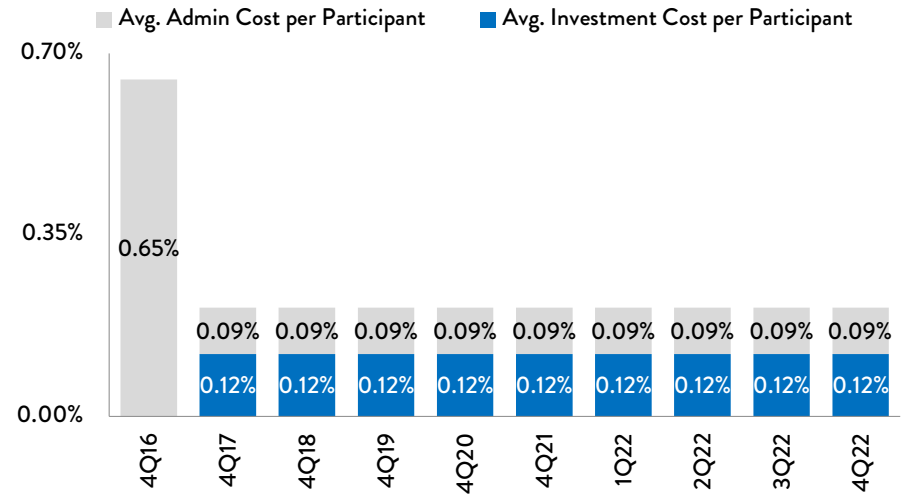
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



MARIN COUNTY SUPERIOR COURT
PST-OBRA

PLAN FEE ANALYSIS
Fourth Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Galliard Stable Value (0.12%) (Court - OBRA)	-	\$105,010	0.12%	0.09%	\$126	\$95
TOTAL		\$105,010			\$126	\$95

Plan Administration Cost	Quarter	Annualized
Total Revenue (Admin Fee, 0.09%) (Hyas est):	\$24	\$95
NW Fee (0.07%) (Hyas est):	\$19	\$74
Net Excess/(Deficit) (Hyas est):	\$5	\$21

Section 7

Calvert Balanced I (USD)

Morningstar Analyst Rating™ Neutral
07-21-2022

Overall Morningstar Rating™ ★★★★★
697 US Fund Allocation--50% to 70% Equity

Standard Index Morningstar Mod Tgt Risk TR USD

Category Index Morningstar Mod Tgt Risk TR USD

Morningstar Cat US Fund Allocation--50% to 70% Equity

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-12.50	15.20	6.50	7.83	15.75
2021	1.79	6.42	-0.05	5.82	14.58
2022	-4.92	-11.01	-4.17	4.67	-15.13

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.13	4.02	6.37	7.66	6.06
Std 12-31-2022	-15.13	—	6.37	7.66	6.06
Total Return	-15.13	4.02	6.37	7.66	6.06
+/- Std Index	-0.35	2.08	2.64	1.84	—
+/- Cat Index	-0.35	2.08	2.64	1.84	—

% Rank Cat	54	26	9	19
No. in Cat	757	697	657	490

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-25-23	2.23	0.74

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-368-2745 or visit www.calvert.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.51
12b1 Expense %	NA
Net Expense Ratio %	0.66
Gross Expense Ratio %	0.66

Risk and Return Profile

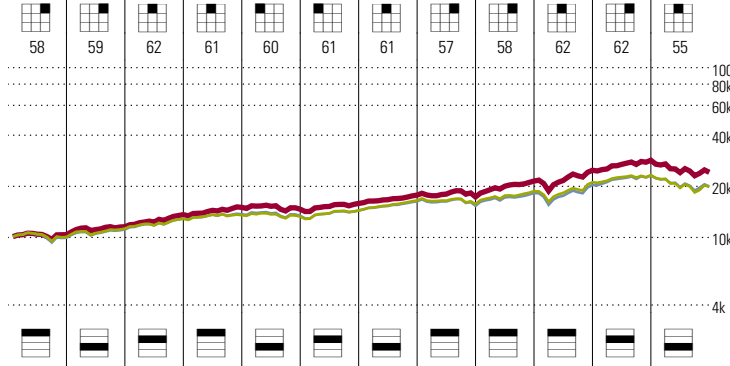
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	5★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	High	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	14.06	12.06	9.56
Mean	4.02	6.37	7.66
Sharpe Ratio	0.29	0.46	0.74

MPT Statistics	Standard Index	Best Fit Index Morningstar US Mod Tgt Alloc NR USD
Alpha	2.08	1.17
Beta	0.99	1.01
R-Squared	93.99	97.46
12-Month Yield		1.54%
Potential Cap Gains Exp		4.42%

Operations

Family:	Calvert Research and Management
Manager:	Multiple
Tenure:	10.0 Years
Objective:	Balanced



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	28.21	31.05	31.99	34.37	29.75	31.22	32.23	29.89	35.74	40.25	42.81	35.45
Total Return %	3.80	11.38	17.83	10.34	-2.43	8.16	11.94	-2.46	24.05	15.75	14.58	-15.13
+/- Standard Index	3.20	-0.67	3.52	5.45	-0.64	-0.41	-2.72	2.29	5.03	2.92	4.39	-0.35
+/- Category Index	3.20	-0.67	3.52	5.45	-0.64	-0.41	-2.72	2.29	5.03	2.92	4.39	-0.35
% Rank Cat	8	64	41	7	73	30	70	9	6	21	40	54
No. of Funds in Cat	963	936	877	866	940	810	810	775	697	673	710	757

Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	1.26	1.26	0.00
US Stocks	53.91	53.91	0.00
Non-US Stocks	1.38	1.38	0.00
Bonds	42.92	42.92	0.00
Other/Not Clsfd	0.54	0.54	0.00
Total	100.00	100.00	0.00

Equity Style	Value	Blend	Growth
Large	█	█	█
Mid	█	█	█
Small	█	█	█

Portfolio Statistics	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	27.0	1.89	1.55
P/C Ratio TTM	20.0	1.85	1.53
P/B Ratio TTM	4.8	2.31	1.57
Geo Avg Mkt Cap \$mil	148650	3.60	1.28

Fixed-Income Style	Ltd	Mod	Ext
High	█	█	█
Mid	█	█	█
Low	█	█	█

Credit Quality Breakdown 09-30-2022	Bond %
AAA	44.05
AA	7.07
A	11.51
BBB	17.08
BB	6.62
B	1.01
Below B	0.40
NR	12.26

Credit Quality Breakdown 09-30-2022	Bond %
AAA	44.05
AA	7.07
A	11.51
BBB	17.08
BB	6.62
B	1.01
Below B	0.40
NR	12.26

Regional Exposure	Stocks %	Rel Std Index
Americas	99.0	1.60
Greater Europe	1.0	0.06
Greater Asia	0.0	0.00

Share since 10-2022	Share Amount	Holdings : 59 Total Stocks , 416 Total Fixed-Income, 85% Turnover Ratio	Net Assets %
⊖	169,851	Microsoft Corp	3.87
⊖	245,008	Apple Inc	3.24
⊖	242,640	Alphabet Inc Class C	2.20
⊖	100,600	PepsiCo Inc	1.67
⊖	191,420	Amazon.com Inc	1.65
⊖	276,700	Coca-Cola Co	1.57
⊕	78,500	Visa Inc Class A	1.52
⊕	102,800	AbbVie Inc	1.48
⊖	16 mil	United States Treasury Notes 1.875%	1.31
⊖	48,400	Danaher Corp	1.18
⊖	97,000	Allstate Corp	1.16
⊖	47,200	Automatic Data Processing Inc	1.11
⊖	114,600	Intercontinental Exchange Inc	1.11
⊖	70,900	Analog Devices Inc	1.09
⊖	79,600	Walmart Inc	1.08

Sector Weightings	Stocks %	Rel Std Index
Cyclical	28.6	0.71
Basic Materials	2.5	0.47
Consumer Cyclical	9.1	0.83
Financial Services	14.4	0.87
Real Estate	2.6	0.36
Sensitive	43.4	1.21
Communication Services	8.7	1.67
Energy	1.2	0.23
Industrials	10.2	0.89
Technology	23.3	1.69
Defensive	28.0	1.17
Consumer Defensive	7.8	1.05
Healthcare	15.8	1.23
Utilities	4.4	1.19

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Hartford International Opp HLS IA (USD)

Morningstar Quantitative Rating™
 Silver^o
 11-30-2022

Overall Morningstar Rating™
 ★★ ★★
 704 US Fund Foreign Large Blend

Standard Index
 MSCI ACWI Ex USA NR USD

Category Index
 MSCI ACWI Ex USA NR USD

Morningstar Cat
 US Fund Foreign Large Blend

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-22.16	20.95	9.06	17.32	20.45
2021	0.92	4.91	-1.28	3.16	7.82
2022	-8.18	-14.17	-9.77	15.11	-18.14
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.14	2.06	1.78	5.13	5.70
Std 12-31-2022	-18.14	—	1.78	5.13	5.70
Total Return	-18.14	2.06	1.78	5.13	5.70
+/- Std Index	-2.14	1.99	0.89	1.33	—
+/- Cat Index	-2.14	1.99	0.89	1.33	—
% Rank Cat	79	16	30	15	
No. in Cat	744	704	611	422	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield	—	—

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 888-843-7824 or visit www.hartfordfunds.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.70
12b1 Expense %	NA
Net Expense Ratio %	0.74
Gross Expense Ratio %	0.74

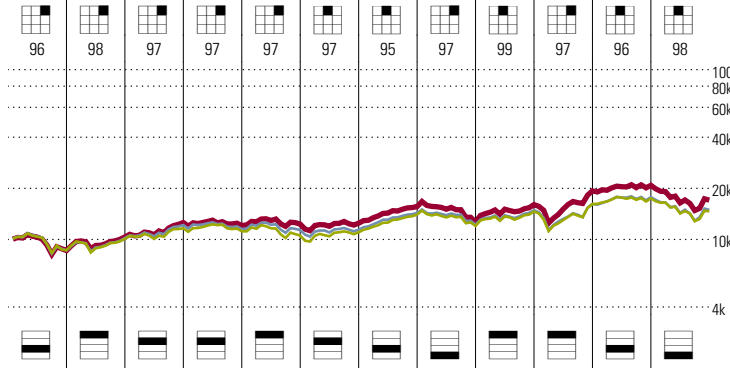
Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	3★	4★
Morningstar Risk	Avg	+Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	20.56	18.50	15.01
Mean	2.06	1.78	5.13
Sharpe Ratio	0.16	0.12	0.35

MPT Statistics	Standard Index	Best Fit Index
	MSCI ACWI Ex USA	MSCI ACWI Ex USA
	NR USD	NR USD
Alpha	2.14	2.14
Beta	1.03	1.03
R-Squared	95.41	95.41

12-Month Yield	—
Potential Cap Gains Exp	31.25%

Operations	
Family:	Hartford Mutual Funds
Manager:	Multiple
Tenure:	16.1 Years
Objective:	Foreign Stock



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	10.72	12.63	15.03	14.13	14.19	14.14	17.46	13.91	16.56	19.58	20.90	13.71
Total Return %	-13.97	20.20	21.55	-3.87	1.88	1.26	25.25	-18.74	26.43	20.45	7.82	-18.14
+/- Standard Index	-0.26	3.36	6.26	-0.01	7.54	-3.24	-1.94	-4.55	4.91	9.80	-0.01	-2.14
+/- Category Index	-0.26	3.36	6.26	-0.01	7.54	-3.24	-1.94	-4.55	4.91	9.80	-0.01	-2.14
% Rank Cat	51	22	30	29	13	42	51	91	9	7	73	79
No. of Funds in Cat	817	786	791	750	788	762	756	741	732	785	767	744

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 771 Total Stocks, 0 Total Fixed-Income, 95% Turnover Ratio	Net Assets %
Cash	1.71	1.71	0.00				
US Stocks	0.97	0.97	0.00	⊕	306,340	Novartis AG	3.20
Non-US Stocks	97.32	97.32	0.00	⊕	467,902	Unilever PLC	2.73
Bonds	0.00	0.00	0.00	⊕	162,772	AstraZeneca PLC	2.54
Other/Not Clsfd	0.00	0.00	0.00	⊕	532,120	Anglo American PLC	2.40
Total	100.00	100.00	0.00	⊖	2 mil	Iberdrola SA	2.36
				⊖	147,417	Siemens AG	2.35
				⊕	281,509	Rio Tinto PLC	2.29
				⊖	3 mil	Mitsubishi UFJ Financial Group Inc	2.28
				⊖	2 mil	BAE Systems PLC	2.03
				⊖	1 mil	Taiwan Semiconductor Manufacturing	1.90
				⊖	589,238	AXA SA	1.89
				⊖	3 mil	HSBC Holdings PLC	1.87
				⊖	216,724	Canadian Pacific Railway Ltd	1.86
				⊖	49,364	Linde PLC	1.86
				⊖	362,618	RWE AG	1.85

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	15.6	1.30	1.23
	P/C Ratio TTM	10.4	1.23	1.17
	P/B Ratio TTM	1.9	1.20	1.10
	Geo Avg Mkt Cap \$mil	54853	1.38	1.16

Fixed-Income Style	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Ltd Mod Ext	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

Credit Quality Breakdown —	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	Stocks %	Rel Std Index
Americas	8.2	0.76
Greater Europe	56.9	1.27
Greater Asia	34.9	0.79

Sector Weightings	Stocks %	Rel Std Index
Cyclical	40.7	0.96
Basic Materials	9.5	1.14
Consumer Cyclical	11.7	1.08
Financial Services	18.7	0.90
Real Estate	0.8	0.32
Sensitive	33.3	0.94
Communication Services	2.1	0.33
Energy	7.1	1.16
Industrials	14.8	1.22
Technology	9.3	0.85
Defensive	26.0	1.19
Consumer Defensive	7.9	0.90
Healthcare	13.4	1.34
Utilities	4.7	1.47

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



GALLIARD STABLE VALUE FUND AS OF 12/31/22

FUND FACTS

Actual Expense Ratio ¹	0.287%
Blended Yield (after fees) ²	2.37%
Disclosed Expense Ratio ¹	0.287%

GALLIARD STABLE RETURN FUND CORE FUND OVERVIEW AS OF 12/31/22

FUND FACTS

Inception Date	October 1, 1985
Fund Assets	\$23,012,657,467
Fund Advisor	Galliard Capital Management, Inc.
Fund Trustee	SEI Trust Company
Valuation Frequency	Daily

FUND CHARACTERISTICS

Conservative Money Markets STABLE VALUE	Moderate Bond Funds	Aggressive Stock Funds
---	------------------------	---------------------------

Effective Duration	2.85 Yrs
Number of Investment Contract Issuers	10
Number of Underlying Issues	2,823
Market to Book Value Ratio	94.1%
Annualized Turnover ³ (as of 12/31/22)	57.3%

TOP FIVE INVESTMENT CONTRACT ISSUERS

Issuer	Moody's Rating	S&P Rating
Transamerica Life Ins. Co.	A1	A+
American General Life Ins. Co.	A2	A+
Prudential Ins. Co. of America	Aa3	AA-
Royal Bank of Canada	Aa1	AA-
Metropolitan Life Ins. Co.	Aa3	AA-

FUND ALLOCATION

	Fund (%)
Security Backed Investment Contracts	95.9
Guaranteed Investment Contracts (GICs)	1.1
Cash/Equivalents	3.0

SECTOR ALLOCATION OF THE UNDERLYING FIXED INCOME PORTFOLIO

	Fund (%)
U.S. Treasury	18.4
Other U.S. Government	4.2
Corporates	27.4
Taxable Muni/Not for Profit	4.5
Agency MBS	15.6
Non-Agency MBS	0.8
CMBS	6.7
Asset Backed Securities (ABS)	16.0
Guaranteed Investment Contracts (GICs)	1.2
Cash/Equivalents	5.2

INVESTMENT OBJECTIVE

The Fund seeks safety of principal and consistency of returns while attempting to maintain minimal volatility. The Fund is designed for investors seeking more income than money market funds without the price fluctuation of stock or bond funds.

INVESTMENT STRATEGY

The Fund's underlying fixed income strategy is managed in a conservative style that utilizes a disciplined value investing process to build a high quality portfolio with broad diversification and an emphasis on risk control. Our core investment philosophy is to build a portfolio of realizable yield through bottom-up, fundamental research, utilizing a team-based approach to portfolio management. Galliard's fixed income portfolios emphasize high quality spread sectors, diversification across sectors and issuers to reduce risk, neutral duration positioning, and a laddered portfolio structure for ample natural liquidity.

The majority of the Fund's assets will be invested in fixed income portfolios that are wrapped by stable value contracts which allow fund participants to transact at book value. The Fund will hold cash in order to maintain sufficient liquidity, and may also invest in traditional GICs. The Fund utilizes high credit quality stable value contract issuers, with an emphasis on diversification.

INVESTMENT RISK

The Fund's investment contracts are designed to allow for participant transactions at book value. A principal risk of the Fund is investment contract risk. This includes the risk that the issuer will default on its obligation under the contract or that another event of default may occur under the contract rendering it invalid; that the contract will lapse before a replacement contract with favorable terms can be secured; or that the occurrence of certain other events including employer-initiated events, could cause the contract to lose its book value withdrawal features. These risks may result in a loss in value to a contract holder. Other primary risks include default risk, which is the possibility that instruments the Fund holds will not meet scheduled interest and/or principal payments; interest rate risk, which includes the risk of reinvesting cash flows at lower interest rates; and liquidity risk, which includes the effect of very large unexpected withdrawals on the Fund's total value. The occurrence of any of these events could cause the Fund to lose value.

INVESTMENT PERFORMANCE

Annualized Performance	4Q'22 ⁴	YTD ⁴	1 Year	3 Year	5 Year	10 Year				
Galliard Stable Value Fund (after fees) ²	0.58	1.98	1.98	2.01	2.12	1.91				
50% FTSE 3-Mo T-Bill + 50% ICE BofA 1-3 Yr Tsy Index ⁵	0.80	(1.10)	(1.10)	0.15	1.01	0.71				
FTSE 3-Month T-Bill ⁶	0.87	1.50	1.50	0.71	1.25	0.74				
Calendar Year Performance	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Galliard Stable Value Fund (after fees) ²	1.98	1.83	2.23	2.42	2.14	1.82	1.70	1.63	1.55	1.75
50% FTSE 3-Mo T-Bill + 50% ICE BofA 1-3 Yr Tsy Index ⁵	(1.10)	(0.25)	1.84	2.90	1.72	0.63	0.58	0.29	0.33	0.20
Citigroup 3-Month T-Bill ⁶	1.50	0.05	0.58	2.25	1.86	0.84	0.27	0.03	0.03	0.05
Consumer Price Index ⁶	6.84	7.04	1.36	2.29	1.67	2.11	2.07	0.73	0.76	1.51

Past performance is not an indication of how the investment will perform in the future.

1: Actual expense ratio is based on the Fund's most recent quarter end and may differ from "Disclosed Expense Ratio" which represents the maximum operating expenses per the Fund's Disclosure document.

2: The Fund's blended yield is the weighted average of all of the investment contracts' individual crediting rates and the yield on the cash equivalents held by the Fund as of the date reported. Performance is net of all fees and includes all income, realized and unrealized capital gains and compounding and have been rounded to the nearest basis point. The inception date of Galliard Stable Value Fund B is 12/1/98. In order to illustrate historical performance, Fund B's expenses have been applied to Galliard Stable Return Fund Core for the periods prior to 12/1/98. Galliard Stable Return Fund Core has been in existence since 1985.

3: Please refer to the Fund's Disclosure Booklet at www.galliard.com for information regarding methodology of turnover calculation.

4: Returns for periods less than one year are not annualized.

5: While it is believed that the benchmark used here represents an appropriate point of comparison for the Fund referenced above, prospective investors should be aware that the volatility of the above referenced benchmark or index may be substantially different from that of the Fund; and holdings in the Fund may differ significantly from the benchmark or index if the investment guidelines and criteria are different than the Fund.

6: Economic Indices provided for informational purposes only. Consumer Price Index as reported on 1/3/23.



ABOUT GALLIARD

Galliard specializes in stable value and fixed income management and currently manages \$92.0 billion in assets for institutional investors. The firm is headquartered in Minneapolis.

*SEI Trust Company (the “Trustee”) serves as the Trustee of the Fund and maintains ultimate fiduciary authority over the management of, and the investments made, in the Fund. The Fund is part of a Collective Investment Trust (the “Trust”) operated by the Trustee. The Trustee is a trust company organized under the laws of the Commonwealth of Pennsylvania and wholly owned subsidiary of SEI Investments Company (SEI). The Trust is not a mutual fund, as defined under the investment company act of 1940, as amended.

A collective investment trust fund (CIT) is a pooled investment vehicle that is exempt from SEC registration as an investment company under Section 3(c)(11) of the Investment Company Act of 1940 and maintained by a bank or trust company for the collective investment of qualified retirement plans. The Fund is managed by SEI Trust Company, the trustee, based on the investment advice of Galliard Capital Management. Galliard receives no management fee for its role as Investment Advisor.

FOR MORE INFORMATION

Contact your plan administrator

Metropolitan West Total Return Bd Plan (USD)

Morningstar Analyst Rating™ **Gold** **Overall Morningstar Rating™** **★★★** **Standard Index** Bloomberg US **Category Index** Bloomberg US **Morningstar Cat** US Fund Intermediate Core-Plus Bond
 12-22-2022 563 US Fund Intermediate Core-Plus Bond Agg Bond TR USD Universal TR USD Core-Plus Bond

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	2.26	4.12	1.24	1.28	9.17
2021	-2.91	1.82	0.14	-0.10	-1.11
2022	-6.24	-5.71	-5.22	1.81	-14.69
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.69	-2.70	0.18	1.36	2.25
Std 12-31-2022	-14.69	—	0.18	1.36	2.25
Total Return	-14.69	-2.70	0.18	1.36	2.25
+/- Std Index	-1.68	0.01	0.15	0.30	—
+/- Cat Index	-1.69	-0.16	0.00	0.03	—
% Rank Cat	80	64	45	41	
No. in Cat	621	563	511	368	

	Subsidized	Unsubsidized
7-day Yield 01-27-23	3.55	—
30-day SEC Yield 12-31-22	4.54	0.00

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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.

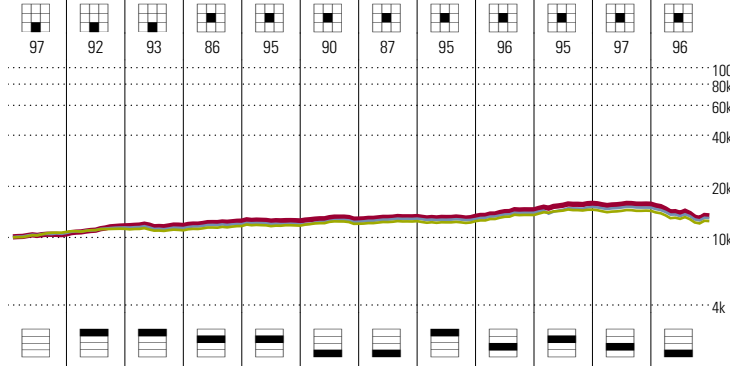
Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-241-4671 or visit www.mwamllc.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.35
12b1 Expense %	NA
Net Expense Ratio %	0.36
Gross Expense Ratio %	0.36

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	6.46	5.50	4.30
Mean	-2.70	0.18	1.36
Sharpe Ratio	-0.52	-0.18	0.15

MPT Statistics	Standard Index	Best Fit Index Morningstar US Core Plus Bd TR USD
Alpha	0.38	0.22
Beta	1.10	1.11
R-Squared	98.44	99.04
12-Month Yield		3.02%
Potential Cap Gains Exp		-6.55%

Operations	
Family:	Metropolitan West Funds
Manager:	Multiple
Tenure:	25.8 Years
Objective:	Corporate Bond - General



History	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	No. of Funds in Cat							
2011	9.79	10.27	9.94	10.28	10.00	9.91	10.03	9.78	10.29	10.49	10.23	8.48	NAV/Price
2012	4.92	11.54	0.45	6.16	0.25	2.56	3.49	0.29	9.23	9.17	-1.11	-14.69	Total Return %
2013	-2.92	7.33	2.47	0.19	-0.30	-0.09	-0.05	0.27	0.51	1.66	0.44	-1.68	+/- Standard Index
2014	-2.48	6.01	1.79	0.60	-0.18	-1.35	-0.60	0.54	-0.06	1.59	0.00	-1.69	+/- Category Index
2015	—	7	17	27	31	83	78	17	53	27	64	80	% Rank Cat
2016	—	467	500	510	528	561	597	617	613	602	605	621	No. of Funds in Cat

Portfolio Analysis 12-31-2022		Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Asset Allocation %							1 Total Stocks, 1,588 Total Fixed-Income, 467% Turnover Ratio	
Cash	-13.93	4.76	18.70					
US Stocks	0.09	0.09	0.00					
Non-US Stocks	0.00	0.00	0.00	✳	3,608 mil	United States Treasury Notes 3.875%	5.71	
Bonds	113.84	114.77	0.93	⊖	3,133 mil	United States Treasury Notes 4.5%	4.99	
Other/Not Clsfd	0.00	0.00	0.00	⊖	2,012 mil	United States Treasury Notes 3.875%	3.19	
Total	100.00	119.62	19.62		2,595 mil	United States Treasury Bonds 2%	2.96	
					2,363 mil	United States Treasury Bonds 2.375%	2.88	

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat	Value	Blend	Growth	Large Mid Small	High Mid Low
	P/E Ratio TTM	—	—	—	747 mil				
	P/C Ratio TTM	—	—	—	422 mil				
	P/B Ratio TTM	—	—	—	458 mil				
	Geo Avg Mkt Cap \$mil	—	—	—	436 mil				
Fixed-Income Style									
	Avg Eff Maturity			8.36	372 mil				
	Avg Eff Duration			6.82	364 mil				
	Avg Wtd Coupon			3.52	310 mil				
	Avg Wtd Price			89.59	304 mil				

Credit Quality Breakdown 12-31-2022		Bond %
AAA		54.17
AA		6.06
A		13.33
BBB		17.33
BB		3.43
B		1.62
Below B		3.97
NR		0.09

Regional Exposure		Stocks %	Rel Std Index
Americas		—	—
Greater Europe		—	—
Greater Asia		—	—

Sector Weightings		Stocks %	Rel Std Index
Cyclical		—	—
Basic Materials		—	—
Consumer Cyclical		—	—
Financial Services		—	—
Real Estate		—	—
Sensitive		—	—
Communication Services		—	—
Energy		—	—
Industrials		—	—
Technology		—	—
Defensive		—	—
Consumer Defensive		—	—
Healthcare		—	—
Utilities		—	—

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



T. Rowe Price U.S. Equity Research I (USD)

Morningstar Quantitative Rating™
Gold
 11-30-2022

Overall Morningstar Rating™
 ★★★
 1,223 US Fund Large Blend

Standard Index
 S&P 500 TR USD

Category Index
 Russell 1000 TR USD

Morningstar Cat
 US Fund Large Blend

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.79	20.64	9.25	13.44	19.94
2021	5.51	8.79	0.74	10.78	28.09
2022	-4.73	-16.45	-4.61	7.05	-18.72
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.72	7.68	9.60	—	11.90
Std 12-31-2022	-18.72	—	9.60	—	11.90
Total Return	-18.72	7.68	9.60	12.71	11.90
+/- Std Index	-0.61	0.02	0.18	0.15	—
+/- Cat Index	0.41	0.34	0.47	0.34	—
% Rank Cat	62	31	17	8	—
No. in Cat	1358	1223	1116	818	—

	Subsidized	Unsubsidized
7-day Yield 01-27-23	0.00	—
30-day SEC Yield	—	—

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 800-638-5660 or visit www.troweprice.com.

Fees and Expenses

Sales Charges

Front-End Load % NA

Deferred Load % NA

Fund Expenses

Management Fees % 0.32

12b1 Expense % NA

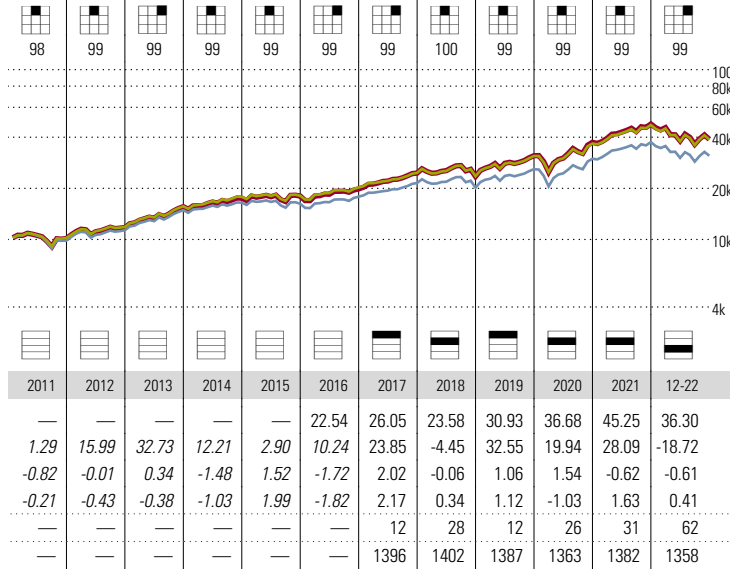
Net Expense Ratio % 0.34

Gross Expense Ratio % 0.34

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	5★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	High
Standard Deviation	21.45	18.95	15.00
Mean	7.68	9.60	12.71
Sharpe Ratio	0.41	0.51	0.82

MPT Statistics	Standard Index	Best Fit Index S&P 500 TR USD
Alpha	-0.02	-0.02
Beta	1.01	1.01
R-Squared	99.74	99.74
12-Month Yield	—	—
Potential Cap Gains Exp	—	34.00%



Investment Style
 Equity Stocks %

Growth of \$10,000

- T. Rowe Price U.S. Equity Research I: 38,879
- Category Average: 31,104
- Standard Index: 38,680

Performance Quartile (within category)

History

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	—	—	—	—	—	22.54	26.05	23.58	30.93	36.68	45.25	36.30
Total Return %	1.29	15.99	32.73	12.21	2.90	10.24	23.85	-4.45	32.55	19.94	28.09	-18.72
+/- Standard Index	-0.82	-0.01	0.34	-1.48	1.52	-1.72	2.02	-0.06	1.06	1.54	-0.62	-0.61
+/- Category Index	-0.21	-0.43	-0.38	-1.03	1.99	-1.82	2.17	0.34	1.12	-1.03	1.63	0.41
% Rank Cat	—	—	—	—	—	—	12	28	12	26	31	62
No. of Funds in Cat	—	—	—	—	—	—	1396	1402	1387	1363	1382	1358

Portfolio Analysis 12-31-2022

Asset Allocation %

	Net %	Long %	Short %
Cash	0.10	0.59	0.49
US Stocks	96.89	96.89	0.00
Non-US Stocks	3.01	3.01	0.00
Bonds	0.00	0.00	0.00
Other/Not Clsfd	0.00	0.00	0.00
Total	100.00	100.49	0.49

Equity Style

Value	Blend	Growth
Large	—	—
Mid	—	—
Small	—	—

Portfolio Statistics

	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	19.6	1.03	1.07
P/C Ratio TTM	15.3	1.08	1.03
P/B Ratio TTM	3.7	1.03	0.89
Geo Avg Mkt Cap \$mil	162233	1.01	0.77

Fixed-Income Style

Ltd	Mod	Ext
High	—	—
Mid	—	—
Low	—	—

Credit Quality Breakdown — Bond %

AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure

	Stocks %	Rel Std Index
Americas	97.8	0.99
Greater Europe	2.2	2.04
Greater Asia	0.0	0.00

Share Chg since 09-2022

Share Amount	Holdings :	Net Assets %
—	264 Total Stocks , 0 Total Fixed-Income, 28% Turnover Ratio	—
—	5 mil Apple Inc	5.86
—	3 mil Microsoft Corp	5.80
—	3 mil Amazon.com Inc	2.38
—	2 mil Alphabet Inc Class C	1.91
—	364,406 UnitedHealth Group Inc	1.70
+	521,984 Berkshire Hathaway Inc Class B	1.42
—	1 mil NVIDIA Corp	1.35
—	2 mil Alphabet Inc Class A	1.31
—	714,935 Visa Inc Class A	1.31
+	831,135 Johnson & Johnson	1.29
+	1 mil Exxon Mobil Corp	1.27
—	356,393 Eli Lilly and Co	1.15
—	397,642 The Home Depot Inc	1.11
+	934,904 JPMorgan Chase & Co	1.10
+	217,409 Broadcom Inc	1.07

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	29.4	1.02
Basic Materials	2.3	0.95
Consumer Cyclical	10.2	1.07
Financial Services	14.3	1.03
Real Estate	2.6	0.93
Sensitive	43.4	0.97
Communication Services	7.0	0.97
Energy	4.9	0.93
Industrials	8.0	0.89
Technology	23.4	1.02
Defensive	27.2	1.02
Consumer Defensive	7.6	0.99
Healthcare	16.4	1.03
Utilities	3.3	1.02

Operations

Family:	T. Rowe Price	Base Currency:	USD	Purchase Constraints:	—
Manager:	Multiple	Ticker:	PCCOX	Incept:	11-29-2016
Tenure:	8.0 Years	ISIN:	US87282F1021	Type:	MF
Objective:	Growth	Minimum Initial Purchase:	\$500,000	Total Assets:	\$12,044.22 mil

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Share class 3 | Data as of 09.30.2020

Fund objectives and investment policy

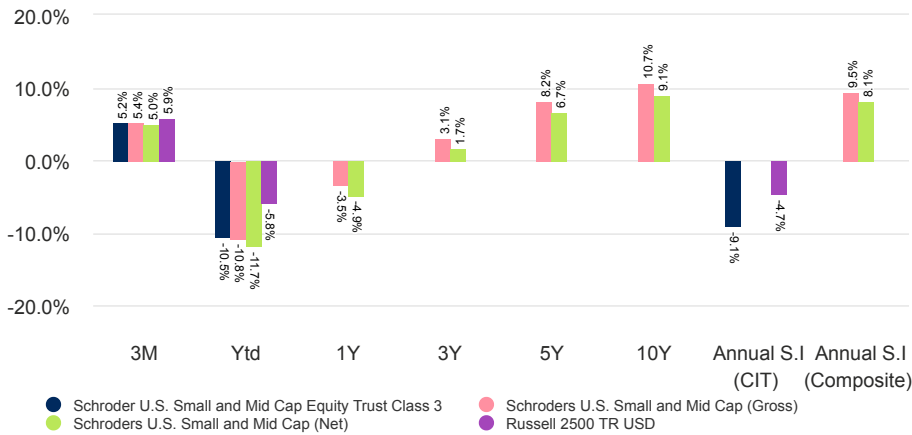
Seeks capital appreciation through a flexible core investment style. Stock selection driven by fundamental research. Portfolio construction built from stocks within three categories; (mispriced growth), capital preservation potential (Steady Eddies) and capital growth (turnarounds). The combination has historically helped reduce volatility versus benchmarks and tends to offer a level of protection in down markets versus its benchmark.

SEI Trust Company (the "Trustee") serves as the Trustee of the Schroder US Small and Mid Cap Equity Trust (the "Trust") and maintains ultimate fiduciary authority over the management of, and the investments made, in the Trust. The Trust is part of a Collective Investment Trust operated by the Trustee. The Trustee is a trust company organized under the laws of the Commonwealth of Pennsylvania and wholly owned subsidiary of SEI Investments Company (SEI). The Trust is not a mutual fund, as defined under the investment company act of 1940, as amended.

Share class performance (%)

Average Annualized	3 months	YTD	1 year	3 years	5 years	10 years	Annual S. I. (CIT)	Annual S. I. (Composite)
Share class (Net)	5.21	-10.53	-	-	-	-	-9.10	-
Composite (Gross)	5.36	-10.76	-3.45	3.14	8.24	10.70	-	9.55
Composite (Net)	4.97	-11.74	-4.88	1.74	6.71	9.10	-	8.12
Benchmark	5.88	-5.82	-	-	-	-	-4.66	-

Performance (%)



Portfolio facts & statistics

Portfolio manager	Robert Kaynor
Portfolio launch date	12.16.2019
Weighted average market cap	Portfolio: 6.44 Benchmark: 3.90
Number of holdings	90
Benchmark	Russell 2500 TR USD
Composite	Schroders U.S. Small and Mid Cap
Active share (%)	91.7
Tracking error (%) (5y)	4.3
Total expense	0.75%
Return on equity	7.21
Price to book	0.42
Price to earnings	Portfolio: 24.2 Benchmark: 61.8

Please refer to <https://www.schroders.com/en/us/glossary/> for definitions.

Number of holdings and Price to earnings are based on a quarterly lag.

CIT inception: 12.16.2019; Composite inception: 12.10.2004;

Performance shown above reflects that of the Schroder US Small and Mid Cap Equity Trust, Class 3 Shares, net of fees (the "Trust"), as well as the Schroder US SMID Cap Equity Composite, both on a gross of fees, and net of fees, basis (collectively, "Representative Accounts"). Schroders has managed the Representative Accounts since December 10, 2004. Net of fees returns reflect a model fee based deduction using the highest retail management fee of 0.75%. Actual fees paid by investors of the Trust and those institutional accounts in the composite may be higher or lower than this amount. Though the investment strategy employed by the Trust is materially similar to that of the Representative Account performance, the Representative Accounts do not represent historical performance of the Trust and is not a guarantee of nor is it necessarily indicative of future performance of the Trust. Performance shown reflects past performance, which is no guarantee of future results. The principal value and investment return will fluctuate so that you may have a gain or loss when you sell your units. Performance for periods less than one year is not annualized. The performance information herein has been presented by the Trust's Investment Adviser at the request of SEI Trust Company. GIPS Compliance: Schroders claims compliance with the Global Investment Performance Standards GIPS® and has been independently verified for the periods January 1, 1996 to December 31, 2018. The performance of the Representative Accounts has been examined for the periods January 1, 2008 to December 31, 2018. Verification and performance examination reports are available upon request. Index: The Russell 2500 Index features 2,500 stocks that cover the small and mid cap market capitalizations. The Russell 2500 is a market cap weighted index that includes the smallest 2,500 companies covered in the Russell 3000 universe of United States-based listed equities. Source: Morningstar, portfolio performance net of fees unless otherwise indicated.

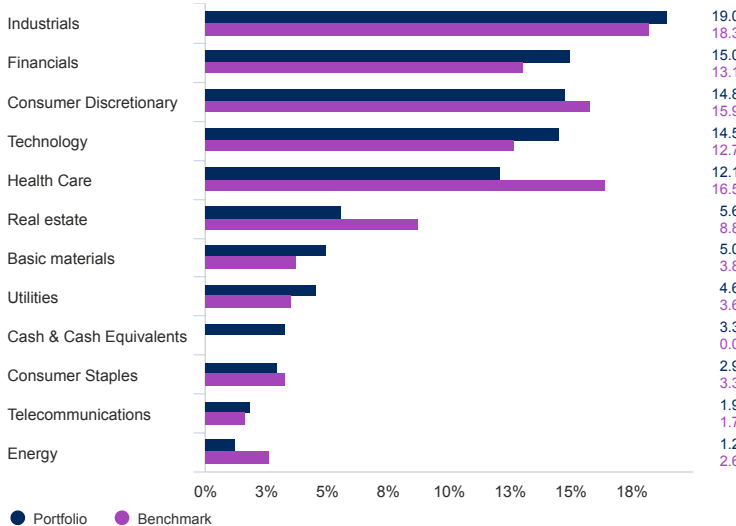
Share class 3 | Data as of 09.30.2020

Risk considerations

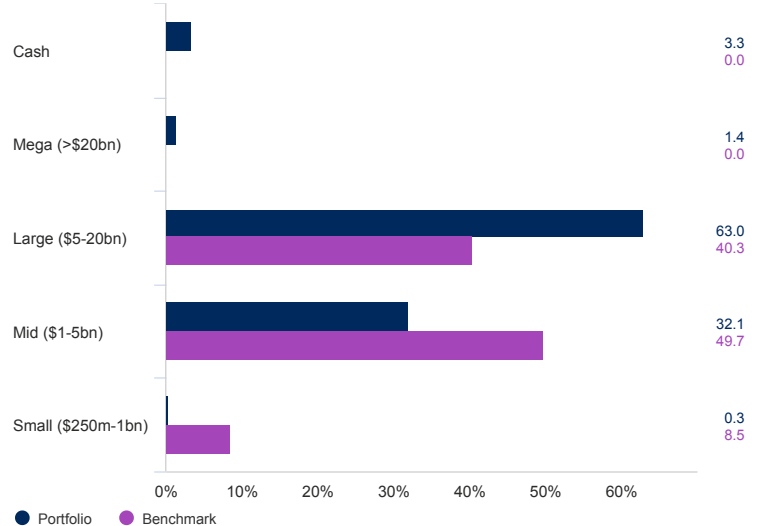
All investments involve risks including the risk of possible loss of principal. The market value of the portfolio may decline as a result of a number of factors, including adverse economic and market conditions, prospects of stocks in the portfolio, changing interest rates, and real or perceived adverse competitive industry conditions. Investments in small and medium capitalization companies generally carry a greater risk than is customarily associated with larger capitalization companies, which may include, for example, less public information, more limited financial resources and product lines, greater volatility, higher risk of failure than larger companies and less liquidity.

Asset allocation

Portfolio composition (%)



Market capitalization (%)



Top 10 holdings (%)

Holding name	%
Catalent Inc	2.2
Assurant Inc	2.2
Entegris Inc	1.8
Fortune Brands Home & Security Inc	1.8
Advance Auto Parts Inc	1.8
Masimo Corp	1.7
Terminix Global Holdings Inc	1.6
PerkinElmer Inc	1.6
Pentair PLC	1.6
PTC Inc	1.6

Source: Schroders. All data and statistics as of 09.30.2020. The percentages shown in the table are the weights, by market capitalization, of stocks and allocations held in the Trust's portfolio and/or the Index. May not add to 100% due to cash allocation and/or rounding. Portfolio composition is subject to change over time. **NOT FDIC INSURED | MAY LOSE VALUE | NO BANK GUARANTEE**

Important information: Please note this material alone does not comply with all of the disclosure requirements for an ERISA "section 404(c) plan," as described in the Department of Labor regulations under section 404(c), nor does it contain all of the disclosure required by Rule 404a-5. Plan sponsors intending to comply with those regulations will need to provide the plan participants with additional information. The information provided in this presentation does not constitute individual investment advice for a participant or investor, is only informational in nature and should not be used by a participant or investor as a primary basis for making an investment decision. The Trust is structured as a bank collective trust and, as such, is exempt from registration as an investment company under the Investment Company Act of 1940. The Trust is managed by SEI Trust Company, the trustee, based on the investment advice of Schroder Investment Management North America Inc. (SIMNA), the investment adviser to the Trust, and sub-advised by Schroder Investment Management North America Limited (SIMNA Ltd; collectively, SIMNA and SIMNA Ltd are referred to as "Schroders" herein). FS-CIT-USSMID-PS

Vanguard Extended Market Index Instl (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Gold **★★** **S&P 500 TR USD** **Russell Mid Cap Growth TR USD** **US Fund Mid-Cap Growth**
 08-10-2022 534 US Fund Mid-Cap Growth

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-27.99	31.15	9.87	27.44	32.23
2021	7.79	7.12	-3.27	0.70	12.47
2022	-9.33	-20.67	-2.73	5.12	-26.46
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-26.46	3.03	4.89	9.64	8.11
Std 12-31-2022	-26.46	—	4.89	9.64	8.11
Total Return	-26.46	3.03	4.89	9.64	8.11
+/- Std Index	-8.35	-4.63	-4.54	-2.93	—
+/- Cat Index	0.26	-0.82	-2.76	-1.77	—
% Rank Cat	44	70	81	72	
No. in Cat	586	534	499	389	

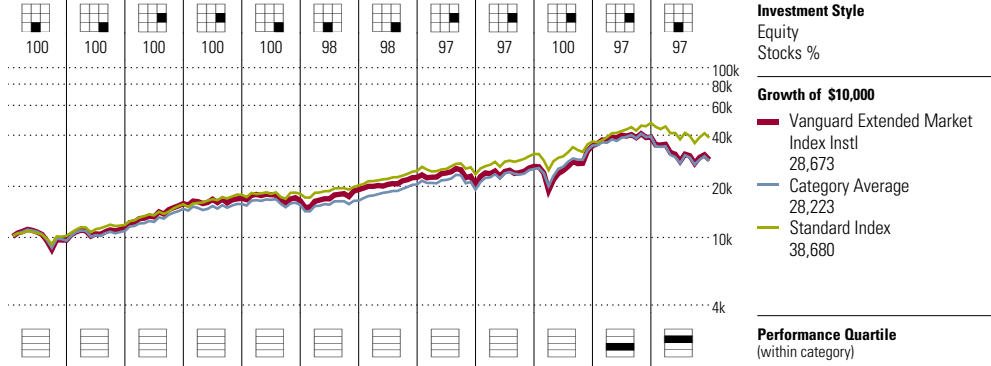
	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	1.35	1.35

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 888-809-8102 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.04
12b1 Expense %	NA
Net Expense Ratio %	0.05
Gross Expense Ratio %	0.05

Risk and Return Profile				
	3 Yr	5 Yr	10 Yr	
Morningstar Rating™	2★	2★	2★	
Morningstar Risk	+Avg	+Avg	+Avg	
Morningstar Return	-Avg	-Avg	-Avg	
	3 Yr	5 Yr	10 Yr	
Standard Deviation	26.94	23.52	18.66	
Mean	3.03	4.89	9.64	
Sharpe Ratio	0.21	0.26	0.54	

MPT Statistics	Standard Index	Best Fit Index
	Morningstar US Sml	Morningstar US Sml
	Brd Grt Ext TR USD	Brd Grt Ext TR USD
Alpha	-4.56	2.76
Beta	1.18	1.04
R-Squared	85.71	97.45
12-Month Yield		1.16%
Potential Cap Gains Exp		28.24%



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22	History
NAV/Price	39.34	45.86	62.75	66.60	63.58	72.72	84.75	75.69	95.60	124.74	138.69	100.84	NAV/Price
Total Return %	-3.57	18.50	38.42	7.56	-3.24	16.15	18.12	-9.35	28.05	32.23	12.47	-26.46	Total Return %
+/- Standard Index	-5.69	2.50	6.04	-6.13	-4.62	4.19	-3.71	-4.97	-3.43	13.83	-16.24	-8.35	+/- Standard Index
+/- Category Index	-1.92	2.70	2.68	-4.34	-3.04	8.82	-7.15	-4.60	-7.42	-3.36	-0.26	0.26	+/- Category Index
% Rank Cat	—	—	—	—	—	—	—	—	—	—	56	44	% Rank Cat
No. of Funds in Cat	—	—	—	—	—	—	—	—	—	—	588	586	No. of Funds in Cat

Portfolio Analysis 12-31-2022									
Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	3,624 Total Stocks, 0 Total Fixed-Income, 19% Turnover Ratio		Net Assets %
Cash	2.57	2.57	0.00						
US Stocks	96.30	96.30	0.00						
Non-US Stocks	1.13	1.13	0.00	⊖	10 mil	Blackstone Inc			0.88
Bonds	0.00	0.00	0.00	⊖	27 mil	Uber Technologies Inc			0.84
Other/Not Clsfd	0.00	0.00	0.00	⊖	4 mil	Palo Alto Networks Inc			0.71
Total	100.00	100.00	0.00	⊖	4 mil	Snowflake Inc Ordinary Shares - Cl			0.67
				⊖	2 mil	Lululemon Athletica Inc			0.63
				⊖	3 mil	Cheniere Energy Inc			0.63
				⊕	7 mil	Block Inc Class A			0.57
				⊖	3 mil	Workday Inc Class A			0.57
				⊖	5 mil	Airbnb Inc Ordinary Shares - Class			0.55
				⊖	12 mil	Marvell Technology Inc			0.53
				⊕	2 mil	Alnylam Pharmaceuticals Inc			0.50
				⊖	6 mil	Apollo Global Management Inc Class			0.47
				⊖	8 mil	KKR & Co Inc Ordinary Shares			0.45
				⊕	3 mil	Ferguson PLC			0.45
				⊖	3 mil	Horizon Therapeutics PLC			0.44

Equity Style				Portfolio Statistics			
Value	Blend	Growth		Port Avg	Rel Index	Rel Cat	
Large			P/E Ratio TTM	12.3	0.65	0.48	⊖
Mid			P/C Ratio TTM	10.8	0.76	0.56	⊕
Small			P/B Ratio TTM	2.2	0.62	0.55	⊖
			Geo Avg Mkt Cap \$mil	5365	0.03	0.34	⊖

Fixed-Income Style			Credit Quality Breakdown		
Ltd	Mod	Ext	AAA	AA	A
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—

Sector Weightings			Stocks %	Rel Std Index
Cyclical			37.7	1.31
Basic Materials			3.8	1.53
Consumer Cyclical			11.5	1.20
Financial Services			15.1	1.09
Real Estate			7.3	2.61
Sensitive			43.2	0.97
Communication Services			3.7	0.51
Energy			5.0	0.96
Industrials			14.2	1.57
Technology			20.3	0.88
Defensive			19.1	0.72
Consumer Defensive			3.2	0.42
Healthcare			13.7	0.86
Utilities			2.2	0.69

Operations			
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VIEIX
Tenure:	25.1 Years	ISIN:	US9229088847
Objective:	Growth	Minimum Initial Purchase:	\$5 mil
		Purchase Constraints:	—
		Incept:	07-07-1997
		Type:	MF
		Total Assets:	\$14,404.30 mil

Vanguard Institutional Index I (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Gold **★★★★** **S&P 500 TR USD** **Russell 1000 TR USD** **US Fund Large Blend**
 02-22-2022 1,223 US Fund Large Blend

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.60	20.55	8.92	12.15	18.39
2021	6.18	8.54	0.57	11.02	28.67
2022	-4.60	-16.11	-4.89	7.55	-18.14
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.14	7.64	9.40	12.53	9.85
Std 12-31-2022	-18.14	—	9.40	12.53	9.85
Total Return	-18.14	7.64	9.40	12.53	9.85
+/- Std Index	-0.03	-0.03	-0.03	-0.03	—
+/- Cat Index	0.99	0.29	0.26	0.16	—
% Rank Cat	52	33	24	13	
No. in Cat	1358	1223	1116	818	

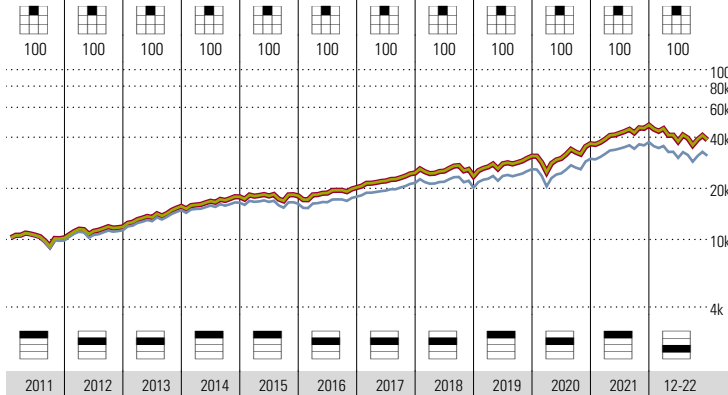
	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	1.70	1.70

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 888-809-8102 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg
Standard Deviation	21.17	18.69	14.77
Mean	7.64	9.40	12.53
Sharpe Ratio	0.41	0.50	0.82

MPT Statistics	Standard Index	Best Fit Index S&P 500 TR USD
Alpha	-0.02	-0.02
Beta	1.00	1.00
R-Squared	100.00	100.00
12-Month Yield		1.71%
Potential Cap Gains Exp		68.18%



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	115.04	130.52	169.28	188.67	186.62	203.83	243.46	227.55	290.23	331.47	405.79	321.63
Total Return %	2.09	15.98	32.35	13.65	1.37	11.93	21.79	-4.42	31.46	18.39	28.67	-18.14
+/- Standard Index	-0.02	-0.02	-0.04	-0.04	-0.01	-0.03	-0.04	-0.04	-0.02	-0.01	-0.04	-0.03
+/- Category Index	0.59	-0.44	-0.76	0.41	0.45	-0.12	0.10	0.36	0.04	-2.57	2.21	0.99
% Rank Cat	17	35	42	18	20	27	29	27	24	37	23	52
No. of Funds in Cat	1786	1686	1559	1568	1606	1409	1396	1402	1387	1363	1382	1358

Portfolio Analysis 12-31-2022		Share Chg since 11-2022	Share Amount	Holdings : 503 Total Stocks, 0 Total Fixed-Income, 3% Turnover Ratio	Net Assets %
Asset Allocation %	Net %	Long %	Short %		
Cash	0.44	0.44	0.00		
US Stocks	98.44	98.44	0.00		
Non-US Stocks	1.12	1.12	0.00	104 mil	Apple Inc 6.02
Bonds	0.00	0.00	0.00	52 mil	Microsoft Corp 5.54
Other/Not Clsfd	0.00	0.00	0.00	62 mil	Amazon.com Inc 2.31
Total	100.00	100.00	0.00	13 mil	Berkshire Hathaway Inc Class B 1.73
Equity Style	Value	Blend	Growth	42 mil	Alphabet Inc Class A 1.63
Portfolio Statistics	P/E Ratio TTM	19.0	1.00	7 mil	UnitedHealth Group Inc 1.54
	P/C Ratio TTM	14.2	1.00	37 mil	Alphabet Inc Class C 1.46
	P/B Ratio TTM	3.6	1.00	18 mil	Johnson & Johnson 1.43
	Geo Avg Mkt Cap \$mil	161357	1.00	29 mil	Exxon Mobil Corp 1.41
Fixed-Income Style	Avg Eff Maturity	—	—	20 mil	JPMorgan Chase & Co 1.22
	Avg Eff Duration	—	—	17 mil	NVIDIA Corp 1.13
	Avg Wtd Coupon	—	—	17 mil	Procter & Gamble Co 1.11
	Avg Wtd Price	—	—	11 mil	Visa Inc Class A 1.05
		—	—	19 mil	Tesla Inc 1.03
		—	—	7 mil	The Home Depot Inc 1.00

Sector Weightings	Stocks %	Rel Std Index
Cyclical	28.7	1.00
Basic Materials	2.5	1.00
Consumer Cyclical	9.6	1.00
Financial Services	13.8	1.00
Real Estate	2.8	1.00
Sensitive	44.6	1.00
Communication Services	7.3	1.00
Energy	5.2	1.00
Industrials	9.1	1.00
Technology	23.0	1.00
Defensive	26.7	1.00
Consumer Defensive	7.6	1.00
Healthcare	15.9	1.00
Utilities	3.2	1.00

Operations			
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VINIX
Tenure:	22.1 Years	ISIN:	US9220401007
Objective:	Growth and Income	Minimum Initial Purchase:	\$5 mil
		Purchase Constraints:	—
		Incept:	07-31-1990
		Type:	MF
		Total Assets:	\$225,477.38 mil

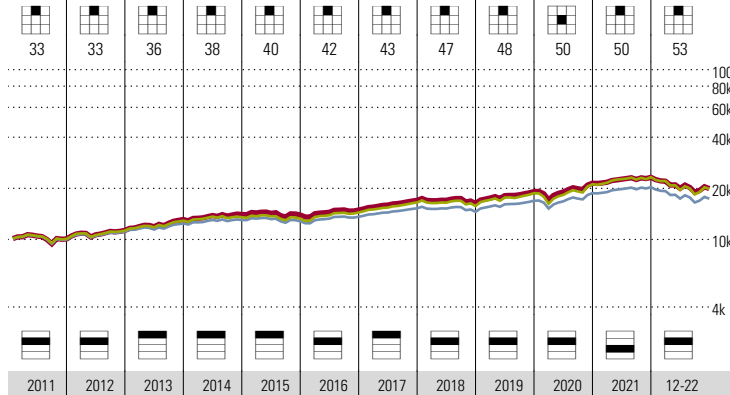
©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Target Retirement 2020 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** **Morningstar Mod** **Morningstar** **US Fund Target-Date**
 02-24-2022 140 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2020 2020

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-10.76	11.40	4.48	7.86	12.04
2021	1.28	4.20	-0.41	2.91	8.17
2022	-5.06	-9.20	-5.12	4.97	-14.15
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.15	1.33	3.22	5.83	5.52
Std 12-31-2022	-14.15	—	3.22	5.83	5.52
Total Return	-14.15	1.33	3.22	5.83	5.52
+/- Std Index	0.62	-0.62	-0.51	0.01	—
+/- Cat Index	2.62	0.39	0.20	0.67	—
% Rank Cat	39	55	44	29	
No. in Cat	150	140	121	55	



Investment Style	Morningstar Cat
Fixed-Income	US Fund Target-Date
Bond %	2020
Growth of \$10,000	
Vanguard Target Retirement 2020 Fund	19,918
Category Average	17,385
Standard Index	19,843
Performance Quartile (within category)	
History	
NAV/Price	25.36
Total Return %	-14.15
+/- Standard Index	0.62
+/- Category Index	2.62
% Rank Cat	39
No. of Funds in Cat	150

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.73	2.73

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile	
	3 Yr 5 Yr 10 Yr
	140 funds 121 funds 55 funds
Morningstar Rating™	3★ 3★ 4★
Morningstar Risk	Avg Avg Avg
Morningstar Return	Avg Avg +Avg
	3 Yr 5 Yr 10 Yr
Standard Deviation	11.48 9.95 8.17
Mean	1.33 3.22 5.83
Sharpe Ratio	0.10 0.23 0.63
MPT Statistics	Standard Index Best Fit Index
	Morningstar Lifetime Mod 2030 TR USD
Alpha	-0.55 -0.13
Beta	0.83 0.75
R-Squared	98.73 98.91
12-Month Yield	2.52%
Potential Cap Gains Exp	7.18%

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
21.69	23.83	27.11	28.46	27.15	28.26	31.38	28.63	32.53	34.29	31.02	25.36
0.60	12.35	15.85	7.11	-0.68	6.95	14.08	-4.24	17.63	12.04	8.17	-14.15
0.01	0.31	1.54	2.22	1.11	-1.62	-0.58	0.52	-1.39	-0.78	-2.02	0.62
-1.14	-0.18	2.87	1.24	1.20	-0.71	1.29	-0.08	-0.10	-1.28	-0.87	2.62
32	36	18	1	23	29	17	42	28	46	68	39
205	208	222	228	237	221	234	250	233	178	171	150

Portfolio Analysis 12-31-2022		Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Asset Allocation %							10,589 Total Stocks , 17,357 Total Fixed-Income, 14% Turnover Ratio	
Cash		3.63	6.10	2.46				
US Stocks		24.81	24.81	0.00				
Non-US Stocks		17.03	17.03	0.00	⊖	1,361 mil	Vanguard Total Bond Market II Idx	31.67
Bonds		54.50	54.54	0.04	⊕	58 mil	Vanguard Total Stock Mkt Idx Instl	25.18
Other/Not Clsfd		0.03	0.03	0.00	⊖	419 mil	Vanguard Total Intl Stock Index Inv	17.34
Total		100.00	102.50	2.50	⊖	218 mil	Vanguard Total Intl Bd II Idx Instl	13.77
					⊕	186 mil	Vanguard Shrt-Term Infl-Prot Sec I	10.81

Equity Style		Portfolio Statistics			Port Avg	Rel Index	Rel Cat
Value	Blend	Growth					
P/E Ratio TTM			14.7	1.03	0.95		
P/C Ratio TTM			11.0	1.02	0.95		
P/B Ratio TTM			2.2	1.07	0.92		
Geo Avg Mkt Cap \$mil			56280	1.36	0.88		

Fixed-Income Style		Avg Eff Maturity	7.65
		Avg Eff Duration	5.95
		Avg Wtd Coupon	2.11
		Avg Wtd Price	90.94

Credit Quality Breakdown 12-31-2022		Bond %
AAA		64.68
AA		7.96
A		14.19
BBB		12.50
BB		0.00
B		0.00
Below B		0.37
NR		0.31

Regional Exposure		Stocks %	Rel Std Index
Americas		63.3	1.02
Greater Europe		17.9	0.98
Greater Asia		18.8	0.94

Sector Weightings		Stocks %	Rel Std Index
Cyclical		35.1	0.88
Basic Materials		5.0	0.93
Consumer Cyclical		10.3	0.93
Financial Services		16.3	0.99
Real Estate		3.5	0.49
Sensitive		41.1	1.14
Communication Services		6.4	1.22
Energy		5.4	1.00
Industrials		11.5	1.00
Technology		17.9	1.29
Defensive		23.8	0.99
Consumer Defensive		7.4	0.99
Healthcare		13.2	1.03
Utilities		3.1	0.85

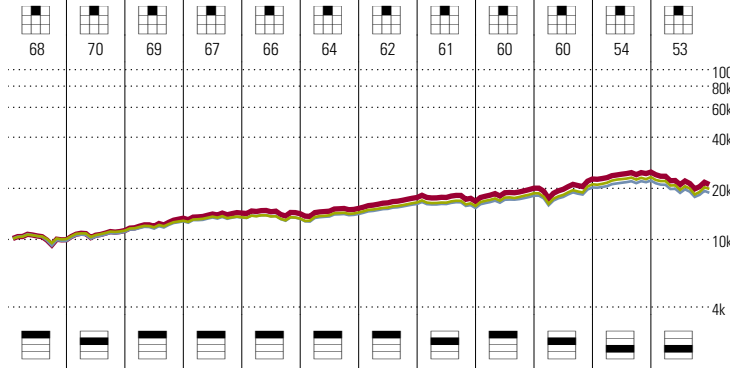
Operations		Base Currency:		Purchase Constraints:	
Family:	Vanguard	USD		—	
Manager:	Multiple	Ticker:	VTWVX	Incept:	06-07-2006
Tenure:	9.9 Years	ISIN:	US92202E8057	Type:	MF
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000	Total Assets:	\$40,163.66 mil



Vanguard Target Retirement 2025 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** **Morningstar Mod** **Morningstar** **US Fund Target-Date**
 02-24-2022 195 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2025 2025
 2025 TR USD

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-12.95	13.20	5.17	9.33	13.30
2021	1.86	4.79	-0.65	3.55	9.80
2022	-5.51	-10.72	-5.59	6.03	-15.55
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.55	1.66	3.58	6.43	6.13
Std 12-31-2022	-15.55	—	3.58	6.43	6.13
Total Return	-15.55	1.66	3.58	6.43	6.13
+/- Std Index	-0.77	-0.29	-0.16	0.61	—
+/- Cat Index	2.03	0.62	0.37	0.64	—
% Rank Cat	52	46	39	18	
No. in Cat	219	195	170	102	



Investment Style	Morningstar Cat
Equity	US Fund Target-Date
Stocks %	2025
Growth of \$10,000	
Vanguard Target Retirement 2025 Fund	21,049
Category Average	18,821
Standard Index	19,843
Performance Quartile (within category)	
History	
NAV/Price	
Total Return %	
+/- Standard Index	
+/- Category Index	
% Rank Cat	
No. of Funds in Cat	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.36	2.36

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile				
	3 Yr	5 Yr	10 Yr	
Morningstar Rating™	3★	3★	4★	
Morningstar Risk	Avg	Avg	Avg	
Morningstar Return	Avg	Avg	+Avg	
	3 Yr	5 Yr	10 Yr	
Standard Deviation	13.38	11.61	9.43	
Mean	1.66	3.58	6.43	
Sharpe Ratio	0.13	0.25	0.62	
MPT Statistics	Standard Index	Best Fit Index Morningstar		
		Lifetime Mod 2030 TR USD		
Alpha	-0.27	0.22		
Beta	0.97	0.87		
R-Squared	99.13	99.19		
12-Month Yield	2.19%			
Potential Cap Gains Exp	9.02%			

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22	
12.27	13.59	15.75	16.53	15.62	16.35	18.50	17.01	19.84	21.54	20.34	16.68	NAV/Price
-0.37	13.29	18.14	7.17	-0.85	7.48	15.94	-5.15	19.63	13.30	9.80	-15.55	Total Return %
-0.96	1.25	3.83	2.28	0.94	-1.09	1.28	-0.39	0.60	0.47	-0.39	-0.77	+/- Standard Index
-0.61	-0.37	1.87	1.13	1.21	-0.91	1.40	-0.25	0.26	-0.37	-0.30	2.03	+/- Category Index
16	43	24	4	24	23	21	42	22	40	57	52	% Rank Cat
145	154	181	185	206	195	208	226	232	214	220	219	No. of Funds in Cat

Portfolio Analysis 12-31-2022									
Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	10,797 Total Stocks , 17,220 Total Fixed-Income, 14% Turnover Ratio	Net Assets %	
Cash	3.25	5.43	2.17						
US Stocks	31.78	31.78	0.00						
Non-US Stocks	22.27	22.27	0.00	⊕	133 mil	Vanguard Total Stock Mkt Idx Instl		32.26	
Bonds	42.66	42.70	0.03	⊕	2,159 mil	Vanguard Total Bond Market II Idx		28.14	
Other/Not Clsfd	0.03	0.03	0.00	⊖	978 mil	Vanguard Total Intl Stock Index Inv		22.68	
				⊖	343 mil	Vanguard Total Intl Bd II Idx Instl		12.13	
Total	100.00	102.21	2.21	⊕	107 mil	Vanguard Shrt-Term Infl-Prot Sec I		3.48	

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat	Sector Weightings	Stocks %	Rel Std Index
Value Blend Growth	P/E Ratio TTM	14.7	1.03	0.95	Cyclical	35.2	0.88
Large Mid Small	P/C Ratio TTM	11.0	1.01	0.95	Basic Materials	5.1	0.93
	P/B Ratio TTM	2.2	1.06	0.92	Consumer Cyclical	10.3	0.93
	Geo Avg Mkt Cap \$mil	55908	1.36	0.85	Financial Services	16.3	0.99
					Real Estate	3.5	0.49
					Sensitive	41.1	1.14
					Communication Services	6.4	1.22
					Energy	5.4	1.00
					Industrials	11.5	1.00
					Technology	17.8	1.29
					Defensive	23.8	0.99
					Consumer Defensive	7.4	0.99
					Healthcare	13.2	1.03
					Utilities	3.1	0.85

Fixed-Income Style			Credit Quality Breakdown 12-31-2022		Bond %
Ltd	Mod	Ext	AAA	AA	60.10
			AA	A	8.97
			A	BBB	16.03
			BBB	BB	14.15
			BB	B	0.00
			B	Below B	0.00
			Below B	NR	0.41
			NR		0.34

Regional Exposure		
Stocks %	Rel Std Index	
Americas	62.9	1.02
Greater Europe	18.1	1.00
Greater Asia	19.0	0.95

Operations			
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VTTVX
Tenure:	9.9 Years	ISIN:	US92202E4098
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000
		Purchase Constraints:	—
		Incept:	10-27-2003
		Type:	MF
		Total Assets:	\$71,647.29 mil

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Target Retirement 2030 Fund (USD)

Morningstar Analyst Rating™ **Silver** **Overall Morningstar Rating™** **★★★★** **Standard Index** **Category Index** **Morningstar Cat**
 02-24-2022 195 US Fund Target-Date 2030 Tgt Risk TR USD Morningstar Mod Lifetime Mod 2030 TR USD US Fund Target-Date 2030

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-14.76	14.58	5.70	10.52	14.10
2021	2.49	5.25	-0.78	4.06	11.38
2022	-5.65	-11.67	-5.93	6.81	-16.27
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.27	2.09	3.94	6.99	6.02
Std 12-31-2022	-16.27	—	3.94	6.99	6.02
Total Return	-16.27	2.09	3.94	6.99	6.02
+/- Std Index	-1.49	0.15	0.20	1.17	—
+/- Cat Index	1.67	0.71	0.40	0.48	—
% Rank Cat	44	51	45	25	
No. in Cat	221	195	170	96	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.21	2.21

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	NA
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

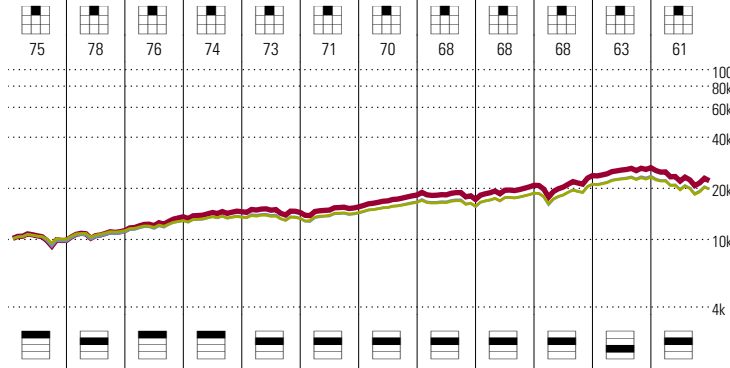
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
Standard Deviation	14.76	12.85	10.42
Mean	2.09	3.94	6.99
Sharpe Ratio	0.16	0.26	0.62

MPT Statistics	Standard Index	Best Fit Index
Alpha	0.15	0.13
Beta	1.07	0.87
R-Squared	99.20	99.22
12-Month Yield		2.04%
Potential Cap Gains Exp		7.70%

Operations

Family:	Vanguard	Base Currency:	USD	Purchase Constraints:	—
Manager:	Multiple	Ticker:	VTHRX	Incept:	06-07-2006
Tenure:	9.9 Years	ISIN:	US92202E8883	Type:	MF
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000	Total Assets:	\$76,003.52 mil



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	20.92	23.38	27.64	29.04	27.72	29.20	33.63	30.82	36.45	40.55	38.42	31.37
Total Return %	-1.27	14.24	20.49	7.17	-1.03	7.85	17.52	-5.86	21.07	14.10	11.38	-16.27
+/- Standard Index	-1.86	2.20	6.18	2.28	0.76	-0.72	2.87	-1.10	2.05	1.28	1.19	-1.49
+/- Category Index	-0.04	-0.43	0.85	1.16	1.27	-1.41	0.93	-0.03	-0.17	0.41	-0.31	1.67
% Rank Cat	22	38	25	5	31	32	34	37	32	38	61	44
No. of Funds in Cat	205	208	222	228	237	221	234	239	241	224	221	221

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 10,900 Total Stocks , 17,014 Total Fixed-Income, 11% Turnover Ratio	Net Assets %
Cash	3.00	4.87	1.87				
US Stocks	36.73	36.73	0.00	⊕	163 mil	Vanguard Total Stock Mkt Idx Instl	37.27
Non-US Stocks	25.90	25.90	0.00	⊕	1,207 mil	Vanguard Total Intl Stock Index Inv	26.38
Bonds	34.34	34.37	0.03	⊕	2,005 mil	Vanguard Total Bond Market II Idx	24.64
Other/Not Clsfd	0.04	0.04	0.00	⊖	312 mil	Vanguard Total Intl Bd II Idx Instl	10.42
Total	100.00	101.90	1.90				

Equity Style

Value	Blend	Growth
Large	High	Med
Mid	Med	Small
Small	Low	High

Portfolio Statistics

	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.7	1.03	0.93
P/C Ratio TTM	11.0	1.01	0.93
P/B Ratio TTM	2.2	1.06	0.88
Geo Avg Mkt Cap \$mil	55786	1.35	0.81

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Low	High	Med

Credit Quality Breakdown 12-31-2022

	Bond %
AAA	57.06
AA	9.60
A	17.26
BBB	15.28
BB	0.00
B	0.00
Below B	0.44
NR	0.36

Regional Exposure

	Stocks %	Rel Std Index
Americas	62.8	1.01
Greater Europe	18.2	1.00
Greater Asia	19.1	0.96

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.2	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.0	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.8	1.29
Defensive	23.7	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Target Retirement 2035 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod Morningstar US Fund Target-Date
 02-24-2022 188 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2035 2035
 2035 TR USD

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-16.52	15.90	6.29	11.62	14.79
2021	3.17	5.65	-0.87	4.55	12.96
2022	-5.66	-12.41	-6.09	7.45	-16.62
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.62	2.64	4.34	7.57	6.83
Std 12-31-2022	-16.62	—	4.34	7.57	6.83
Total Return	-16.62	2.64	4.34	7.57	6.83
+/- Std Index	-1.84	0.69	0.61	1.75	—
+/- Cat Index	1.14	0.69	0.37	0.43	—
% Rank Cat	37	55	49	29	
No. in Cat	212	188	167	99	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.23	2.23

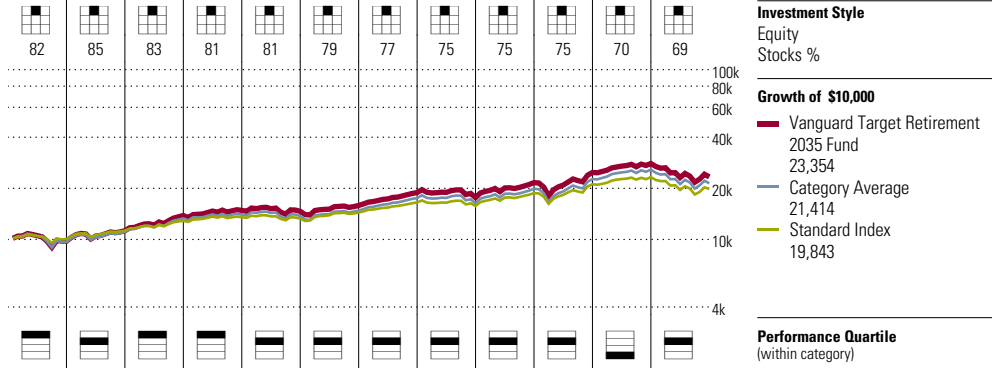
Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 The performance data quoted represents past performance and does not guarantee future results. The investment 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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile	
	3 Yr 5 Yr 10 Yr
Morningstar Rating™	3★ 3★ 4★
Morningstar Risk	-Avg -Avg -Avg
Morningstar Return	Avg Avg +Avg
	3 Yr 5 Yr 10 Yr
Standard Deviation	16.04 14.03 11.40
Mean	2.64 4.34 7.57
Sharpe Ratio	0.19 0.28 0.63

MPT Statistics	
	Standard Index Best Fit Index
	Morningstar
	Lifetime Mod 2035
	TR USD
Alpha	0.69 0.66
Beta	1.16 0.95
R-Squared	99.08 99.34
12-Month Yield	2.07%
Potential Cap Gains Exp	10.78%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.9 Years
Objective:	Asset Allocation
Base Currency:	USD
Ticker:	VTTHX
ISIN:	US92202E5087
Minimum Initial Purchase:	\$1,000



History													
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22	NAV/Price
NAV/Price	12.51	14.09	16.98	17.84	16.84	17.74	20.69	18.82	22.52	25.22	23.84	19.35	NAV/Price
Total Return %	-2.24	15.16	22.82	7.24	-1.26	8.26	19.12	-6.58	22.44	14.79	12.96	-16.62	Total Return %
+/- Standard Index	-2.83	3.12	8.52	2.35	0.53	-0.31	4.46	-1.82	3.41	1.97	2.77	-1.84	+/- Standard Index
+/- Category Index	0.04	-0.20	0.79	1.44	1.32	-1.80	0.60	0.24	-0.60	1.41	-0.67	1.14	+/- Category Index
% Rank Cat	19	40	23	10	37	32	35	32	42	43	79	37	% Rank Cat
No. of Funds in Cat	139	154	181	185	205	195	208	221	229	207	213	212	No. of Funds in Cat

Portfolio Analysis 12-31-2022	
Asset Allocation %	Net % Long % Short %
Cash	3.07 4.54 1.47
US Stocks	40.81 40.81 0.00
Non-US Stocks	28.85 28.85 0.00
Bonds	27.24 27.26 0.02
Other/Not Clsfd	0.04 0.04 0.00
Total	100.00 101.50 1.50
Share Chg since 11-2022	Share Amount Holdings : 10,927 Total Stocks , 16,712 Total Fixed-Income, 9% Turnover Ratio
⊕	178 mil Vanguard Total Stock Mkt Idx Instl 41.41
⊕	1,323 mil Vanguard Total Intl Stock Index Inv 29.39
⊕	1,570 mil Vanguard Total Bond Market II Idx 19.62
⊖	241 mil Vanguard Total Intl Bd II Idx Instl 8.18

Equity Style		Portfolio Statistics		Sector Weightings	
Value Blend Growth	P/E Ratio TTM 14.7 1.03 0.94	Stocks %	Rel Std Index		
Large Mid Small	P/C Ratio TTM 11.0 1.01 0.94	Cyclical	35.2	0.88	
	P/B Ratio TTM 2.2 1.06 0.91	Basic Materials	5.1	0.94	
	Geo Avg Mkt Cap \$mil 55738 1.35 0.86	Consumer Cyclical	10.3	0.93	
		Financial Services	16.3	0.99	
		Real Estate	3.5	0.49	
		Sensitive	41.0	1.14	
		Communication Services	6.4	1.22	
		Energy	5.4	1.00	
		Industrials	11.5	1.00	
		Technology	17.8	1.29	
		Defensive	23.7	0.99	
		Consumer Defensive	7.4	0.99	
		Healthcare	13.2	1.03	
		Utilities	3.1	0.85	

Credit Quality Breakdown 12-31-2022	
AAA	57.19
AA	9.54
A	17.21
BBB	15.26
BB	0.00
B	0.00
Below B	0.44
NR	0.36

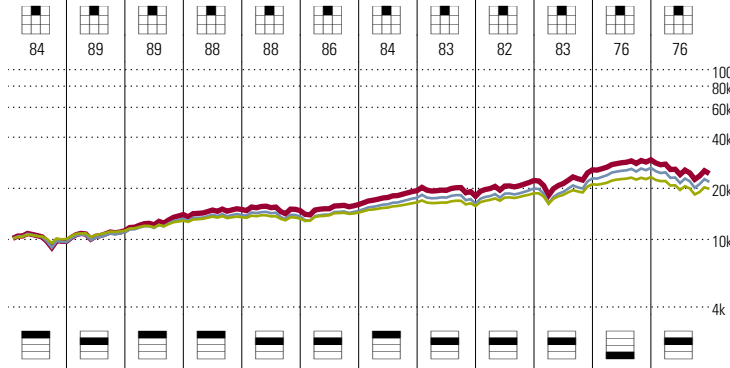
Regional Exposure	
Americas	62.7 1.01
Greater Europe	18.2 1.00
Greater Asia	19.1 0.96

Purchase Constraints:	
Incept:	10-27-2003
Type:	MF
Total Assets:	\$74,832.71 mil

Vanguard Target Retirement 2040 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod Morningstar US Fund Target-Date
 02-24-2022 189 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2040 2040
 2040 TR USD

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-18.25	17.29	6.80	12.76	15.47
2021	3.82	6.11	-0.98	5.02	14.56
2022	-5.66	-13.17	-6.33	8.20	-16.98
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.98	3.17	4.74	8.06	6.59
Std 12-31-2022	-16.98	—	4.74	8.06	6.59
Total Return	-16.98	3.17	4.74	8.06	6.59
+/- Std Index	-2.20	1.23	1.01	2.24	—
+/- Cat Index	0.39	0.64	0.38	0.50	—
% Rank Cat	36	50	45	26	
No. in Cat	216	189	170	96	



Investment Style	Growth of \$10,000	Performance Quartile
Equity Stocks %	Vanguard Target Retirement 2040 Fund 24,438	(within category)
	Category Average 21,819	
	Standard Index 19,843	
History	NAV/Price	
	Total Return %	
	+/- Standard Index	
	+/- Category Index	
	% Rank Cat	
	No. of Funds in Cat	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.24	2.24

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	-Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
Standard Deviation	17.33	15.22	12.34
Mean	3.17	4.74	8.06
Sharpe Ratio	0.22	0.29	0.62

MPT Statistics	Standard Index	Best Fit Index
Alpha	1.24	-0.60
Beta	1.25	0.86
R-Squared	98.83	99.42
12-Month Yield		2.09%
Potential Cap Gains Exp		10.64%

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
20.50	23.18	28.32	29.76	28.45	30.21	35.77	32.31	39.13	44.27	42.03	34.00
-2.55	15.56	24.37	7.15	-1.59	8.73	20.71	-7.32	23.86	15.47	14.56	-16.98
-3.14	3.52	10.07	2.26	0.21	0.16	6.05	-2.57	4.83	2.65	4.37	-2.20
0.30	-0.15	1.32	1.63	1.25	-1.88	0.84	0.33	-0.49	2.38	-0.80	0.39
19	31	15	12	43	27	25	37	43	40	81	36
202	204	218	227	237	221	234	239	241	218	215	216

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 11,009 Total Stocks , 16,177 Total Fixed-Income, 7% Turnover Ratio	Net Assets %
Cash	2.93	4.01	1.08				
US Stocks	45.21	45.21	0.00				
Non-US Stocks	31.81	31.81	0.00	⊕	170 mil	Vanguard Total Stock Mkt Idx Instl	45.88
Bonds	20.01	20.03	0.02	⊖	1,261 mil	Vanguard Total Intl Stock Index Inv	32.40
Other/Not Clsfd	0.04	0.04	0.00	⊕	1,000 mil	Vanguard Total Bond Market II Idx	14.45
Total	100.00	101.10	1.10	⊖	152 mil	Vanguard Total Intl Bd II Idx Instl	5.98

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	14.7	1.03	0.95
	P/C Ratio TTM	11.0	1.01	0.95
	P/B Ratio TTM	2.2	1.06	0.92
	Geo Avg Mkt Cap \$mil	55828	1.35	0.89

Fixed-Income Style	Avg Eff Maturity	8.83
	Avg Eff Duration	6.74
	Avg Wtd Coupon	2.49
	Avg Wtd Price	89.69

Credit Quality Breakdown 12-31-2022	Bond %
AAA	57.27
AA	9.50
A	17.18
BBB	15.25
BB	0.00
B	0.00
Below B	0.43
NR	0.36

Regional Exposure	Stocks %	Rel Std Index
Americas	62.8	1.02
Greater Europe	18.2	1.00
Greater Asia	19.0	0.95

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.2	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.0	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.8	1.29
Defensive	23.7	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

Operations			
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VFORX
Tenure:	9.9 Years	ISIN:	US92202E8701
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000
		Purchase Constraints:	—
		Incept:	06-07-2006
		Type:	MF
		Total Assets:	\$64,733.14 mil

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Target Retirement 2045 Fund (USD)

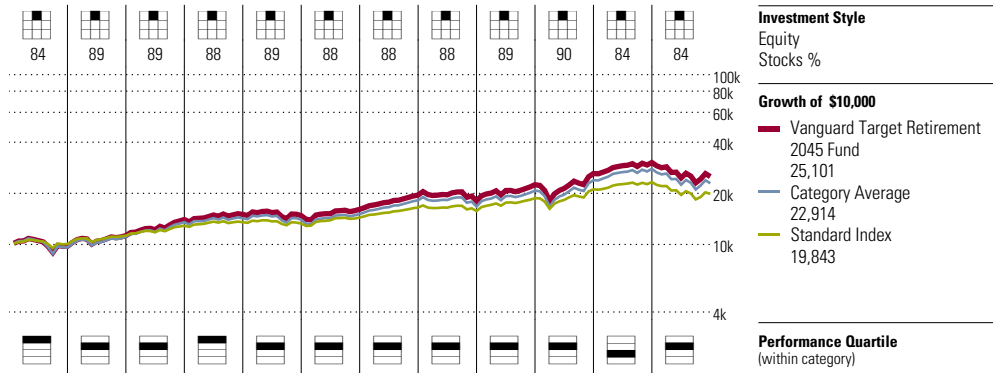
Morningstar Analyst Rating™ **Silver** **Overall Morningstar Rating™** **★★★★** **Standard Index** **Category Index** **Morningstar Cat**
 02-24-2022 188 US Fund Target-Date 2045 Tgt Risk TR USD Morningstar Mod Lifetime Mod 2045 US Fund Target-Date 2045 TR USD

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.88	18.70	7.36	13.90	16.30
2021	4.47	6.55	-1.08	5.49	16.16
2022	-5.67	-13.93	-6.51	8.89	-17.36

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.36	3.74	5.14	8.34	7.40
Std 12-31-2022	-17.36	—	5.14	8.34	7.40
Total Return	-17.36	3.74	5.14	8.34	7.40
+/- Std Index	-2.58	1.79	1.41	2.52	—
+/- Cat Index	-0.29	0.82	0.56	0.64	—

% Rank Cat	31	37	34	21
No. in Cat	212	188	167	98



	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.26	2.26

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	NA
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
Standard Deviation	18.64	16.33	13.04
Mean	3.74	5.14	8.34
Sharpe Ratio	0.24	0.31	0.62

MPT Statistics	Standard Index	Best Fit Index MSCI ACWI NR USD
Alpha	1.84	-0.15
Beta	1.34	0.92
R-Squared	98.52	99.59
12-Month Yield		2.11%
Potential Cap Gains Exp		13.04%

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	2.74	3.44	0.70			11,049 Total Stocks , 15,130 Total Fixed-Income, 5% Turnover Ratio	
US Stocks	49.60	49.60	0.00			Vanguard Total Stock Mkt Idx Instl	50.34
Non-US Stocks	34.74	34.74	0.00	+	174 mil	Vanguard Total Intl Stock Index Inv	35.38
Bonds	12.88	12.89	0.01	-	1,286 mil	Vanguard Total Bond Market II Idx	9.33
Other/Not Clsfd	0.04	0.04	0.00	+	603 mil	Vanguard Total Intl Bd II Idx InsI	3.82
Total	100.00	100.71	0.71	-	91 mil		

Equity Style

Value	Blend	Growth	Large	Mid	Small

Portfolio Statistics

	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.7	1.03	0.95
P/C Ratio TTM	11.0	1.01	0.95
P/B Ratio TTM	2.2	1.06	0.92
Geo Avg Mkt Cap \$mil	55909	1.36	0.90

Fixed-Income Style

Ltd	Mod	Ext	High	Mid	Low

Credit Quality Breakdown 12-31-2022

	Bond %
AAA	57.37
AA	9.45
A	17.14
BBB	15.24
BB	0.00
B	0.00
Below B	0.43
NR	0.36

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.2	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.1	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.8	1.29
Defensive	23.8	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

Regional Exposure

	Stocks %	Rel Std Index
Americas	62.9	1.02
Greater Europe	18.1	1.00
Greater Asia	19.0	0.95

Operations

Family:	Vanguard	Base Currency:	USD	Purchase Constraints:	—
Manager:	Multiple	Ticker:	VTIVX	Incept:	10-27-2003
Tenure:	9.9 Years	ISIN:	US92202E6077	Type:	MF
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000	Total Assets:	\$60,448.67 mil

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Target Retirement 2050 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod Morningstar US Fund Target-Date
 02-24-2022 189 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2050 2050
 2050 TR USD

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.86	18.67	7.35	14.01	16.39
2021	4.53	6.61	-1.11	5.63	16.41
2022	-5.65	-14.21	-6.64	9.23	-17.46

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.46	3.80	5.18	8.36	6.79
Std 12-31-2022	-17.46	—	5.18	8.36	6.79
Total Return	-17.46	3.80	5.18	8.36	6.79
+/- Std Index	-2.68	1.85	1.45	2.54	—
+/- Cat Index	-0.55	0.76	0.56	0.68	—

% Rank Cat	29	36	37	22
No. in Cat	213	189	170	95

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-27-23	2.26	2.26

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.83	16.47	13.12
Mean	3.80	5.18	8.36
Sharpe Ratio	0.25	0.31	0.62

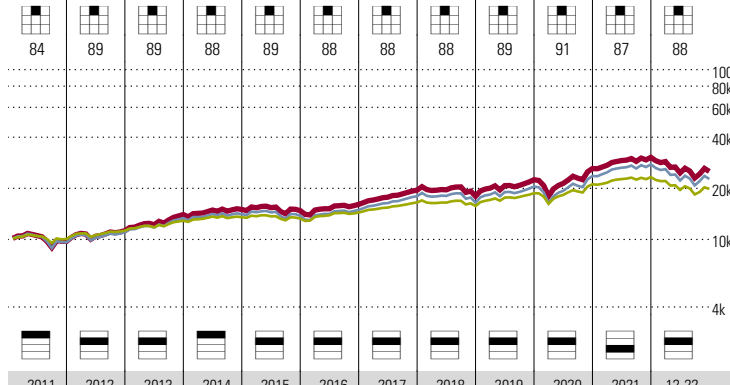
MPT Statistics

	Standard Index	Best Fit Index
Alpha	1.90	-0.11
Beta	1.35	0.93
R-Squared	98.59	99.62

12-Month Yield	2.12%
Potential Cap Gains Exp	9.24%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	9.9 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	20.41	23.09	28.19	29.62	28.49	30.39	36.20	32.52	39.77	45.45	46.90	37.80
Total Return %	-2.54	15.58	24.34	7.18	-1.58	8.85	21.39	-7.90	24.98	16.39	16.41	-17.46
+/- Standard Index	-3.13	3.54	10.04	2.29	0.22	0.28	6.73	-3.14	5.96	3.57	6.22	-2.68
+/- Category Index	0.93	-0.35	1.51	2.18	1.62	-2.04	0.61	0.51	-0.10	3.48	-0.19	-0.55
% Rank Cat	14	44	30	16	45	29	38	37	47	37	74	29
No. of Funds in Cat	168	177	202	212	226	213	230	239	241	217	215	213

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	2.66	3.18	0.52			11,057 Total Stocks , 14,138 Total Fixed-Income, 4% Turnover Ratio	
US Stocks	51.79	51.79	0.00	⊕	147 mil	Vanguard Total Stock Mkt Idx Instl	52.56
Non-US Stocks	36.23	36.23	0.00	⊖	1,078 mil	Vanguard Total Intl Stock Index Inv	36.90
Bonds	9.27	9.28	0.01	⊖	346 mil	Vanguard Total Bond Market II Idx	6.67
Other/Not Clsfd	0.04	0.04	0.00	⊖	53 mil	Vanguard Total Intl Bd II Idx Instl	2.79
Total	100.00	100.52	0.52				

Equity Style

Value	Blend	Growth	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.7	1.03	0.95		
P/C Ratio TTM	11.0	1.01	0.95		
P/B Ratio TTM	2.2	1.06	0.92		
Geo Avg Mkt Cap \$mil	55933	1.36	0.92		

Fixed-Income Style

Ltd	Mod	Ext	High	Med	Low
Avg Eff Maturity					8.83
Avg Eff Duration					6.75
Avg Wtd Coupon					2.49
Avg Wtd Price					—

Credit Quality Breakdown 12-31-2022

	Bond %
AAA	57.15
AA	9.56
A	17.23
BBB	15.27
BB	0.00
B	0.00
Below B	0.44
NR	0.36

Regional Exposure

	Stocks %	Rel Std Index
Americas	62.9	1.02
Greater Europe	18.1	1.00
Greater Asia	19.0	0.95

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.2	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.1	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.8	1.29
Defensive	23.8	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

Vanguard Target Retirement 2055 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod Morningstar US Fund Target-Date
 02-24-2022 188 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2055 2055
 2055 TR USD

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.89	18.64	7.38	13.97	16.32
2021	4.54	6.61	-1.11	5.65	16.44
2022	-5.69	-14.19	-6.63	9.23	-17.46

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.46	3.79	5.18	8.34	8.97
Std 12-31-2022	-17.46	—	5.18	8.34	8.97
Total Return	-17.46	3.79	5.18	8.34	8.97
+/- Std Index	-2.68	1.84	1.44	2.52	—
+/- Cat Index	-0.53	0.79	0.62	0.75	—

% Rank Cat	24	38	39	25
No. in Cat	212	188	167	80

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-27-23	2.26	2.26

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.83	16.46	13.11
Mean	3.79	5.18	8.34
Sharpe Ratio	0.25	0.31	0.62

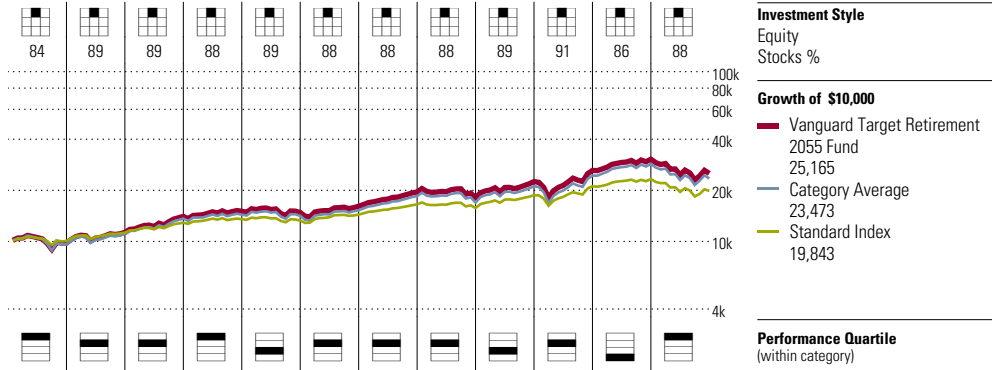
MPT Statistics

	Standard Index	Best Fit Index
Alpha	1.89	-0.12
Beta	1.35	0.93
R-Squared	98.60	99.63

12-Month Yield	2.10%
Potential Cap Gains Exp	2.34%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	9.9 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	21.86	24.80	30.35	31.98	30.83	32.91	39.23	35.30	43.19	49.34	52.22	42.17
Total Return %	-2.27	15.58	24.33	7.19	-1.72	8.88	21.38	-7.89	24.98	16.32	16.44	-17.46
+/- Standard Index	-2.86	3.54	10.02	2.31	0.07	0.31	6.72	-3.13	5.95	3.50	6.25	-2.68
+/- Category Index	1.48	-0.42	1.84	2.45	1.62	-2.03	0.43	0.68	-0.07	3.41	-0.06	-0.53
% Rank Cat	9	48	36	16	53	27	48	37	51	41	78	24
No. of Funds in Cat	235	102	130	156	238	193	206	221	229	207	213	212

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	2.76	3.27	0.51			11,057 Total Stocks , 14,118 Total Fixed-Income, 4% Turnover Ratio	
US Stocks	51.79	51.79	0.00	⊕	91 mil	Vanguard Total Stock Mkt Idx Instl	52.56
Non-US Stocks	36.17	36.17	0.00	⊖	670 mil	Vanguard Total Intl Stock Index Inv	36.83
Bonds	9.24	9.25	0.01	⊕	216 mil	Vanguard Total Bond Market II Idx	6.68
Other/Not Clsfd	0.04	0.04	0.00	⊖	33 mil	Vanguard Total Intl Bd II Idx Instl	2.75
Total	100.00	100.52	0.52				

Equity Style

Value	Blend	Growth	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.7	1.03	0.96		
P/C Ratio TTM	11.0	1.01	0.96		
P/B Ratio TTM	2.2	1.06	0.94		
Geo Avg Mkt Cap \$mil	55967	1.36	0.93		

Fixed-Income Style

Ltd	Mod	Ext	High	Med	Low
Avg Eff Maturity					8.83
Avg Eff Duration					6.74
Avg Wtd Coupon					2.49
Avg Wtd Price					—

Credit Quality Breakdown 12-31-2022

Credit Quality	Bond %
AAA	57.33
AA	9.47
A	17.16
BBB	15.25
BB	0.00
B	0.00
Below B	0.43
NR	0.36

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	63.0	1.02
Greater Europe	18.1	0.99
Greater Asia	18.9	0.95

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.2	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.1	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.8	1.29
Defensive	23.8	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

Vanguard Target Retirement 2060 Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™**
Silver ★★★★★
 02-24-2022 183 US Fund Target-Date 2060

Standard Index
 Morningstar Mod Tgt Risk TR USD

Category Index
 Morningstar Lifetime Mod 2060 TR USD

Morningstar Cat
 US Fund Target-Date 2060

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.86	18.61	7.39	13.96	16.32
2021	4.54	6.61	-1.11	5.66	16.44
2022	-5.68	-14.19	-6.64	9.23	-17.46

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.46	3.79	5.18	8.34	8.59
Std 12-31-2022	-17.46	—	5.18	8.34	8.59
Total Return	-17.46	3.79	5.18	8.34	8.59

	+/- Std Index	+/- Cat Index
	-2.68	1.84
	1.44	2.52
	-0.48	0.86
	0.71	0.85

% Rank Cat	25	43	46	1
No. in Cat	212	183	157	1

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.26	2.26

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	183 funds	157 funds	1 funds
Morningstar Rating™	4★	4★	—
Morningstar Risk	-Avg	-Avg	—
Morningstar Return	Avg	Avg	—

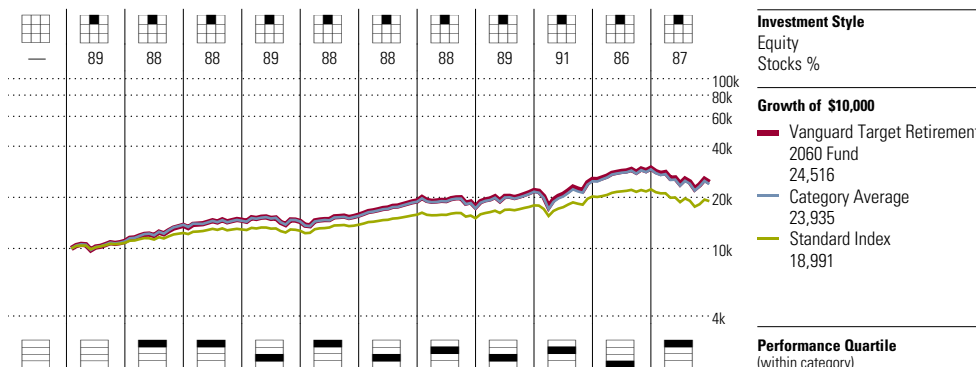
	3 Yr	5 Yr	10 Yr
Standard Deviation	18.81	16.45	13.11
Mean	3.79	5.18	8.34
Sharpe Ratio	0.25	0.31	0.62

MPT Statistics	Standard Index	Best Fit Index MSCI ACWI NR USD
Alpha	1.89	-0.12
Beta	1.35	0.93
R-Squared	98.59	99.62

12-Month Yield	2.09%
Potential Cap Gains Exp	-2.09%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	9.9 Years
Objective:	Asset Allocation



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	21.81	26.75	28.20	27.21	29.04	34.63	31.18	38.16	43.59	48.04	38.83	
Total Return %	—	24.35	7.16	-1.68	8.84	21.36	-7.87	24.96	16.32	16.44	-17.46	
+/- Standard Index	—	10.04	2.27	0.11	0.27	6.70	-3.11	5.93	3.50	6.25	-2.68	
+/- Category Index	—	2.17	2.63	1.80	-2.03	0.30	0.82	0.00	3.43	0.12	-0.48	
% Rank Cat	—	1	1	71	21	53	34	66	42	81	25	
No. of Funds in Cat	—	1	9	43	106	160	201	216	257	208	212	

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	2.89	3.40	0.51			11,057 Total Stocks , 14,102 Total Fixed-Income, 3% Turnover Ratio	
US Stocks	51.79	51.79	0.00			Vanguard Total Stock Mkt Idx Instl	52.56
Non-US Stocks	36.07	36.07	0.00	⊕	46 mil	Vanguard Total Intl Stock Index Inv	36.73
Bonds	9.22	9.22	0.01	⊖	338 mil	Vanguard Total Bond Market II Idx	6.63
Other/Not Clsfd	0.04	0.04	0.00	⊕	108 mil	Vanguard Total Intl Bd II Idx Instl	2.78
Total	100.00	100.52	0.52		17 mil		

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat	Sector Weightings	Stocks %	Rel Std Index
Value Blend Growth	P/E Ratio TTM	14.7	1.03	0.95	Cyclical	35.2	0.88
	P/C Ratio TTM	11.0	1.01	0.95	Basic Materials	5.1	0.93
	P/B Ratio TTM	2.2	1.06	0.92	Consumer Cyclical	10.3	0.93
	Geo Avg Mkt Cap \$mil	56014	1.36	0.90	Financial Services	16.3	0.99
					Real Estate	3.5	0.49
Fixed-Income Style	Avg Eff Maturity	8.83			Sensitive	41.1	1.14
	Avg Eff Duration	6.75			Communication Services	6.4	1.22
	Avg Wtd Coupon	2.49			Energy	5.4	1.00
	Avg Wtd Price	—			Industrials	11.5	1.00
					Technology	17.8	1.29
					Defensive	23.8	0.99
					Consumer Defensive	7.4	0.99
					Healthcare	13.2	1.03
					Utilities	3.1	0.85

Credit Quality Breakdown 12-31-2022	Bond %
AAA	57.15
AA	9.56
A	17.23
BBB	15.27
BB	0.00
B	0.00
Below B	0.44
NR	0.36

Regional Exposure	Stocks %	Rel Std Index
Americas	63.0	1.02
Greater Europe	18.1	0.99
Greater Asia	18.9	0.95

Base Currency:	USD	Purchase Constraints:	—
Ticker:	VTTX	Incept:	01-19-2012
ISIN:	US92202E8396	Type:	MF
Minimum Initial Purchase:	\$1,000	Total Assets:	\$15,318.32 mil

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Vanguard Target Retirement 2065 Fund (USD)

Morningstar Analyst Rating™ **Silver**
02-24-2022

Overall Morningstar Rating™ ★★★★★
51 US Fund Target-Date 2065+

Standard Index
Morningstar Mod Tgt Risk TR USD

Category Index
Morningstar Lifetime Mod 2060 TR USD

Morningstar Cat
US Fund Target-Date 2065+

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.92	18.59	7.36	13.95	16.17
2021	4.55	6.61	-1.11	5.66	16.46
2022	-5.63	-14.20	-6.60	9.24	-17.39

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.39	3.78	5.15	—	6.42
Std 12-31-2022	-17.39	—	5.15	—	6.42
Total Return	-17.39	3.78	5.15	—	6.42
+/- Std Index	-2.62	1.83	1.42	—	—
+/- Cat Index	-0.41	0.85	0.69	—	—

% Rank Cat	16	47	49	—
No. in Cat	162	51	14	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-26-23	2.25	2.25

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	—	—
Morningstar Risk	Low	—	—
Morningstar Return	Avg	—	—

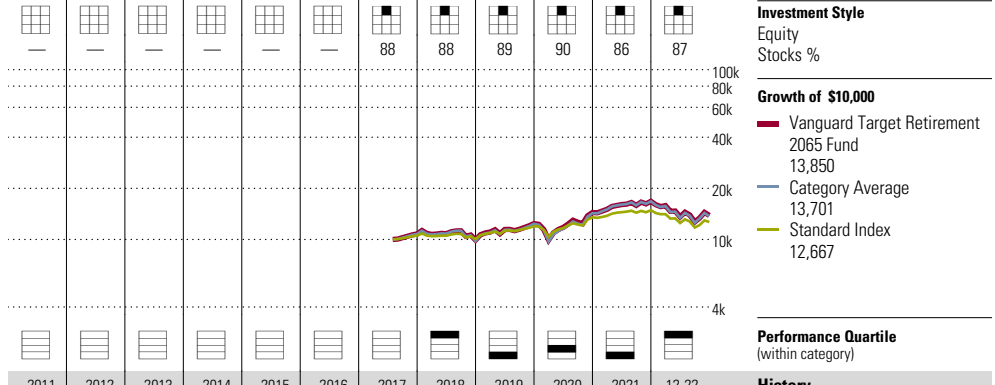
	3 Yr	5 Yr	10 Yr
Standard Deviation	18.82	16.46	—
Mean	3.78	5.15	—
Sharpe Ratio	0.24	0.31	—

MPT Statistics

	Standard Index	Best Fit Index MSCI ACWI NR USD
Alpha	1.88	-0.13
Beta	1.35	0.93
R-Squared	98.58	99.63
12-Month Yield	—	2.00%
Potential Cap Gains Exp	—	-11.77%

Operations

Family:	Vanguard	Base Currency:	USD	Purchase Constraints:	—
Manager:	Multiple	Ticker:	VLVXX	Incept:	07-12-2017
Tenure:	5.5 Years	ISIN:	US92202E6804	Type:	MF
Objective:	Asset Allocation	Minimum Initial Purchase:	\$1,000	Total Assets:	\$3,616.97 mil



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
NAV/Price	—	—	—	—	—	—	—	—	—	—	—	—
Total Return %	—	—	—	—	—	—	—	—	—	—	—	—
+/- Standard Index	—	—	—	—	—	—	—	—	—	—	—	—
+/- Category Index	—	—	—	—	—	—	—	—	—	—	—	—
% Rank Cat	—	—	—	—	—	—	—	—	—	—	—	—
No. of Funds in Cat	—	—	—	—	—	—	—	—	—	—	—	—

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 11,057 Total Stocks , 14,082 Total Fixed-Income, 2% Turnover Ratio	Net Assets %
Cash	3.02	3.56	0.54	—	—	—	—
US Stocks	52.24	52.24	0.00	—	—	—	—
Non-US Stocks	35.64	35.64	0.00	+	11 mil	Vanguard Total Stock Mkt Idx Instl	53.03
Bonds	9.06	9.07	0.01	+	79 mil	Vanguard Total Intl Stock Index Inv	36.28
Other/Not Clsfd	0.04	0.04	0.00	-	25 mil	Vanguard Total Bond Market II Idx	6.32
Total	100.00	100.55	0.55	-	4 mil	Vanguard Total Intl Bd II Idx Instl	2.93

Equity Style

Value	Blend	Growth	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.8	1.04	0.98	—	—
P/C Ratio TTM	11.0	1.02	0.98	—	—
P/B Ratio TTM	2.2	1.07	0.96	—	—
Geo Avg Mkt Cap \$mil	56401	1.37	0.95	—	—

Fixed-Income Style

Ltd	Mod	Ext	High	Med	Low
Avg Eff Maturity	—	—	8.83	—	—
Avg Eff Duration	—	—	6.77	—	—
Avg Wtd Coupon	—	—	2.47	—	—
Avg Wtd Price	—	—	—	—	—

Credit Quality Breakdown 12-31-2022

	Bond %
AAA	56.15
AA	10.05
A	17.61
BBB	15.37
BB	0.00
B	0.00
Below B	0.47
NR	0.36

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.5	1.03
Greater Europe	17.8	0.98
Greater Asia	18.7	0.94

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.1	0.88
Basic Materials	5.0	0.93
Consumer Cyclical	10.3	0.93
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.1	1.14
Communication Services	6.4	1.22
Energy	5.4	1.00
Industrials	11.5	1.00
Technology	17.9	1.29
Defensive	23.8	0.99
Consumer Defensive	7.4	0.99
Healthcare	13.2	1.03
Utilities	3.1	0.85

Vanguard Target Retirement Income Fund (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod Morningstar US Fund Target-Date
 02-24-2022 145 US Fund Target-Date Tgt Risk TR USD Lifetime Mod Incm Retirement Retirement

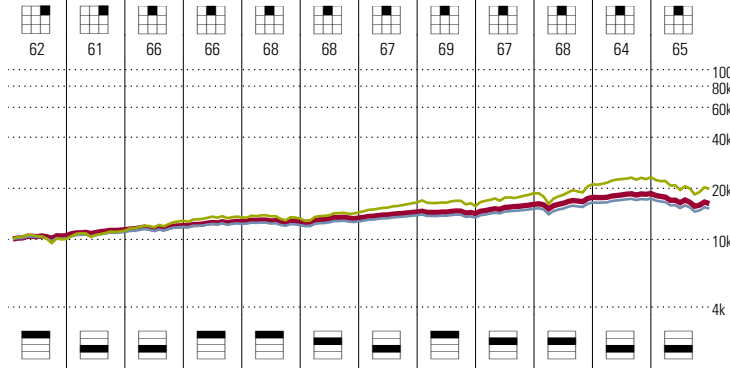
Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-5.91	7.84	3.12	5.15	10.02
2021	0.08	3.23	-0.13	2.01	5.25
2022	-4.77	-7.37	-4.64	3.74	-12.74
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-12.74	0.34	2.30	3.62	4.57
Std 12-31-2022	-12.74	—	2.30	3.62	4.57
Total Return	-12.74	0.34	2.30	3.62	4.57
+/- Std Index	2.03	-1.60	-1.43	-2.20	—
+/- Cat Index	-0.50	-1.11	-0.65	-0.20	—
% Rank Cat					
	54	38	36	40	
No. in Cat					
	161	145	127	81	

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-27-23	2.91	2.91

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile	
	3 Yr 5 Yr 10 Yr
	145 funds 127 funds 81 funds
Morningstar Rating™	4★ 4★ 3★
Morningstar Risk	Avg Avg Avg
Morningstar Return	Avg Avg Avg
	3 Yr 5 Yr 10 Yr
Standard Deviation	8.59 7.16 5.62
Mean	0.34 2.30 3.62
Sharpe Ratio	-0.02 0.17 0.52
MPT Statistics	
	Standard Index Best Fit Index Morningstar US Mod Con Tgt Alloc NR USD
Alpha	-1.37 -0.61
Beta	0.61 0.84
R-Squared	94.85 98.74
12-Month Yield	2.70%
Potential Cap Gains Exp	3.19%



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22	History
NAV/Price	11.53	12.19	12.50	12.91	12.45	12.81	13.55	12.75	14.05	14.93	14.46	12.24	NAV/Price
Total Return %	5.25	8.23	5.87	5.54	-0.17	5.25	8.47	-1.99	13.16	10.02	5.25	-12.74	Total Return %
+/- Standard Index	4.66	-3.82	-8.44	0.65	1.62	-3.32	-6.18	2.77	-5.87	-2.80	-4.94	2.03	+/- Standard Index
+/- Category Index	1.12	-0.56	-0.58	1.45	1.12	-0.73	-0.07	0.21	-0.11	-0.54	-2.37	-0.50	+/- Category Index
% Rank Cat	9	67	56	19	7	41	62	21	49	36	65	54	% Rank Cat
No. of Funds in Cat	260	281	293	272	172	171	175	187	183	168	167	161	No. of Funds in Cat

Portfolio Analysis 12-31-2022		Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	4.06	6.91	2.84				10,036 Total Stocks , 17,492 Total Fixed-Income, 19% Turnover Ratio	
US Stocks	16.93	16.93	0.00					
Non-US Stocks	11.88	11.88	0.00		1,446 mil	Vanguard Total Bond Market II Idx	36.94	
Bonds	67.11	67.15	0.04		36 mil	Vanguard Total Stock Mkt Idx Instl	17.18	
Other/Not Clsfd	0.02	0.02	0.00		260 mil	Vanguard Shrt-Term Infl-Prot Sec I	16.60	
Total	100.00	102.88	2.89		229 mil	Vanguard Total Intl Bd II Idx Instl	15.92	
					266 mil	Vanguard Total Intl Stock Index Inv	12.10	

Equity Style		Portfolio Statistics			Port Avg	Rel Index	Rel Cat
Value	Blend	P/E Ratio TTM	14.7	1.03	0.98		
Large	Mid	P/C Ratio TTM	11.0	1.01	0.99		
Small	Small	P/B Ratio TTM	2.2	1.06	0.98		
		Geo Avg Mkt Cap \$mil	55881	1.35	0.97		

Fixed-Income Style		Avg Eff Maturity	7.36
Ltd	Mod	Avg Eff Duration	5.75
High	Mid	Avg Wtd Coupon	2.03
Med	Low	Avg Wtd Price	91.25

Credit Quality Breakdown 12-31-2022		Bond %
AAA		66.70
AA		7.48
A		13.38
BBB		11.80
BB		0.00
B		0.00
Below B		0.34
NR		0.29

Regional Exposure		Stocks %	Rel Std Index
Americas		62.9	1.02
Greater Europe		18.1	1.00
Greater Asia		19.0	0.95

Sector Weightings		Stocks %	Rel Std Index
Cyclical		35.2	0.88
Basic Materials		5.1	0.93
Consumer Cyclical		10.3	0.93
Financial Services		16.3	0.99
Real Estate		3.5	0.49
Sensitive		41.0	1.14
Communication Services		6.4	1.22
Energy		5.4	1.00
Industrials		11.5	1.00
Technology		17.8	1.29
Defensive		23.8	0.99
Consumer Defensive		7.4	0.99
Healthcare		13.2	1.03
Utilities		3.1	0.85

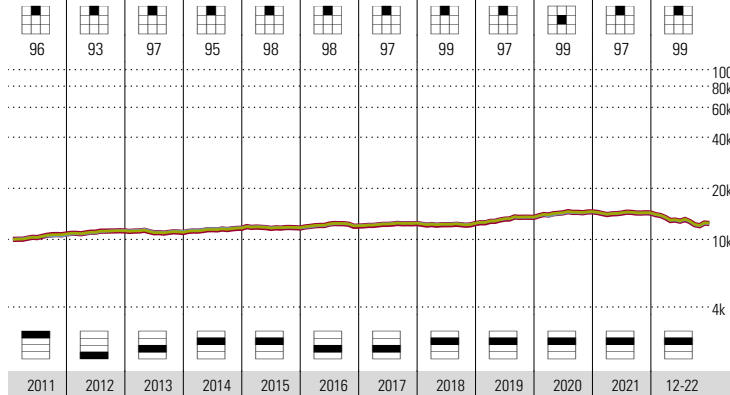
Operations		Base Currency:	USD	Purchase Constraints:	—
Family:	Vanguard	Ticker:	VTINX	Incept:	10-27-2003
Manager:	Multiple	ISIN:	US92202E1029	Type:	MF
Tenure:	9.9 Years	Minimum Initial Purchase:	\$1,000	Total Assets:	\$36,654.33 mil
Objective:	Asset Allocation				



Vanguard Total Bond Market Index I (USD)

Morningstar Analyst Rating™ **Gold** **Overall Morningstar Rating™** **★★★** **Standard Index** **Category Index** **Morningstar Cat**
 06-30-2022 405 US Fund Intermediate Core Bond Bloomberg US Agg Bond TR USD Bloomberg US Agg Bond TR USD US Fund Intermediate Core Bond

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	3.28	2.98	0.62	0.67	7.74
2021	-3.61	2.00	0.11	-0.08	-1.65
2022	-5.98	-4.71	-4.65	1.67	-13.15
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-13.15	-2.73	0.01	1.02	4.22
Std 12-31-2022	-13.15	—	0.01	1.02	4.22
Total Return	-13.15	-2.73	0.01	1.02	4.22
+/- Std Index	-0.14	-0.02	-0.01	-0.04	—
+/- Cat Index	-0.14	-0.02	-0.01	-0.04	—
% Rank Cat	40	41	32	36	
No. in Cat	453	405	372	275	



Investment Style	Fixed-Income	Bond %
Growth of \$10,000	Vanguard Total Bond Market Index I	12,416
	Category Average	12,374
	Standard Index	12,484
Performance Quartile (within category)		
History	NAV/Price	9.48
	Total Return %	-13.15
	+/- Standard Index	-0.14
	+/- Category Index	-0.14
	% Rank Cat	40
	No. of Funds in Cat	453

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-27-23	4.01	4.13

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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 call 888-809-8102 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	NA
Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	Avg
Standard Deviation	5.89	5.13	4.19
Mean	-2.73	0.01	1.02
Sharpe Ratio	-0.58	-0.24	0.07

MPT Statistics	Standard Index	Best Fit Index
Alpha	0.00	0.00
Beta	1.01	1.01
R-Squared	99.66	99.66
12-Month Yield		2.53%
Potential Cap Gains Exp		2.82%

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22	History
11.00	11.09	10.56	10.87	10.64	10.65	10.75	10.45	11.05	11.62	11.19	9.48	NAV/Price
7.72	4.18	-2.14	5.90	0.41	2.61	3.57	-0.01	8.73	7.74	-1.65	-13.15	Total Return %
-0.12	-0.03	-0.11	-0.06	-0.14	-0.04	0.03	-0.02	0.01	0.23	-0.11	-0.14	+/- Standard Index
-0.12	-0.03	-0.11	-0.06	-0.14	-0.04	0.03	-0.02	0.01	0.23	-0.11	-0.14	+/- Category Index
11	83	67	30	28	62	55	30	33	45	50	40	% Rank Cat
1195	1165	1079	1038	1042	985	986	1019	430	415	423	453	No. of Funds in Cat

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings :	Net Assets %
Cash	1.34	1.34	0.00			0 Total Stocks , 14,388 Total Fixed-Income, 69% Turnover Ratio	
US Stocks	0.00	0.00	0.00				
Non-US Stocks	0.00	0.00	0.00		1,932 mil	United States Treasury Notes 0.75%	0.62
Bonds	98.62	98.77	0.15	⊖	1,470 mil	United States Treasury Notes 2%	0.49
Other/Not Clsfd	0.03	0.03	0.00		1,536 mil	United States Treasury Notes 1.25%	0.47
Total	100.00	100.15	0.15	⊕	1,630 mil	United States Treasury Notes 1.375%	0.47
					1,658 mil	United States Treasury Notes 0.875%	0.47
				⊖	1,399 mil	United States Treasury Notes 2.75%	0.45
					1,304 mil	United States Treasury Notes 2%	0.45
				⊕	1,478 mil	United States Treasury Notes 1.875%	0.45
				⊕	1,463 mil	United States Treasury Notes 1.25%	0.42
				⊕	1,278 mil	United States Treasury Notes 2.875%	0.42
					1,230 mil	United States Treasury Notes 1.5%	0.41
				⊕	1,326 mil	United States Treasury Notes 1.625%	0.40
				⊕	1,093 mil	United States Treasury Notes 4.125%	0.40
				⊖	1,258 mil	United States Treasury Notes 1.5%	0.39
					1,088 mil	United States Treasury Notes 3%	0.38

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	—	—	—
	P/C Ratio TTM	—	—	—
	P/B Ratio TTM	—	—	—
	Geo Avg Mkt Cap \$mil	—	—	—

Fixed-Income Style	Value	Rel Index	Rel Cat
Ltd Mod Ext	Avg Eff Maturity	8.90	—
	Avg Eff Duration	6.47	—
	Avg Wtd Coupon	—	—
	Avg Wtd Price	89.94	—

Credit Quality Breakdown 12-31-2022	Bond %
AAA	70.98
AA	2.94
A	11.97
BBB	14.14
BB	0.00
B	0.00
Below B	0.00
NR	-0.03

Regional Exposure	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Sector Weightings	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

Operations

Family:	Vanguard	Base Currency:	USD	Purchase Constraints:	—
Manager:	Joshua Barrickman	Ticker:	VBPIX	Incept:	09-18-1995
Tenure:	9.9 Years	ISIN:	US9219375048	Type:	MF
Objective:	Income	Minimum Initial Purchase:	\$5 mil	Total Assets:	\$88,261.90 mil

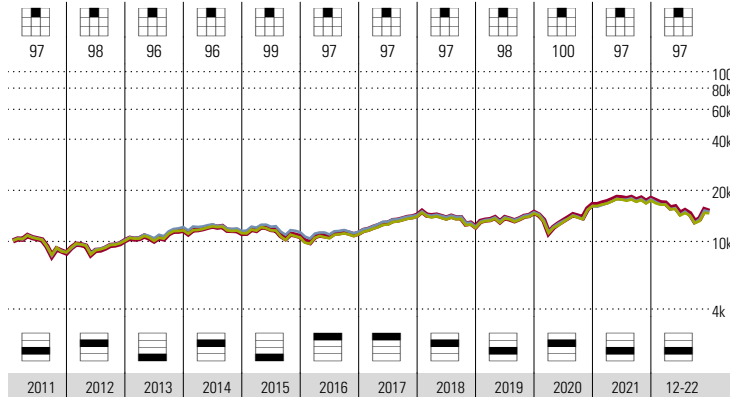
©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Vanguard Total Intl Stock Index Admiral (USD)

Morningstar Analyst Rating™ **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
Gold **★★★** MSCI ACWI Ex MSCI ACWI Ex US Fund Foreign Large
 12-02-2022 704 US Fund Foreign Large Blend USA NR USD USA NR USD Blend

Performance 12-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-24.30	18.11	6.48	16.90	11.28
2021	3.94	5.52	-3.00	2.11	8.62
2022	-6.08	-12.86	-10.51	14.67	-16.01
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.01	0.51	1.09	4.06	4.02
Std 12-31-2022	-16.01	—	1.09	4.06	4.02
Total Return	-16.01	0.51	1.09	4.06	4.02
+/- Std Index	-0.01	0.43	0.21	0.26	—
+/- Cat Index	-0.01	0.43	0.21	0.26	—
% Rank Cat	57	53	56	60	
No. in Cat	744	704	611	422	



Investment Style	Equity	Stocks %
Growth of \$10,000		
Vanguard Total Intl Stock Index Admiral	15,043	
Category Average	14,943	
Standard Index	14,638	
Performance Quartile (within category)		
History		
NAV/Price		
Total Return %		
+/- Standard Index		
+/- Category Index		
% Rank Cat		
No. of Funds in Cat		

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield	—	—

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 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 call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.10
12b1 Expense %	NA
Net Expense Ratio %	0.11
Gross Expense Ratio %	0.11

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
704 funds	611 funds	422 funds	
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	20.32	17.79	14.79
Mean	0.51	1.09	4.06
Sharpe Ratio	0.08	0.07	0.29
MPT Statistics	Standard Index	Best Fit Index	
	MSCI ACWI Ex USA	NR USD	
Alpha	0.56	0.56	
Beta	1.03	1.03	
R-Squared	98.73	98.73	
12-Month Yield	—		
Potential Cap Gains Exp	-14.38%		

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
21.84	25.05	28.01	26.00	24.24	24.63	30.52	25.37	29.87	32.46	34.20	27.86
-14.52	18.21	15.14	-4.17	-4.26	4.67	27.55	-14.43	21.51	11.28	8.62	-16.01
-0.82	1.38	-0.14	-0.31	1.40	0.18	0.36	-0.24	0.00	0.63	0.80	-0.01
-0.82	1.38	-0.14	-0.31	1.40	0.18	0.36	-0.24	0.00	0.63	0.80	-0.01
60	49	83	33	79	12	23	50	52	30	68	57
817	786	791	750	788	762	756	741	732	785	767	744

Portfolio Analysis 12-31-2022		Net Assets %						
Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 7,732 Total Stocks, 0 Total Fixed-Income, 5% Turnover Ratio	Net Assets %	
Cash	2.40	2.46	0.05					
US Stocks	0.68	0.68	0.00					
Non-US Stocks	96.81	96.81	0.00	⊖	319 mil	Taiwan Semiconductor Manufacturing	1.31	
Bonds	0.00	0.00	0.00	⊖	36 mil	Nestle SA	1.17	
Other/Not Clsfd	0.11	0.11	0.00	⊖	80 mil	Tencent Holdings Ltd	0.96	
Total	100.00	100.05	0.05	⊖	5 mil	ASML Holding NV	0.83	
				⊖	9 mil	Roche Holding AG	0.82	
Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat				
Value Blend Growth	P/E Ratio TTM	11.7	0.98	0.92	⊖	21 mil	Novo Nordisk A/S Class B	0.80
Large Mid Small	P/C Ratio TTM	8.3	0.98	0.93	⊖	63 mil	Samsung Electronics Co Ltd	0.78
	P/B Ratio TTM	1.5	0.95	0.87	⊖	94 mil	Shell PLC	0.75
	Geo Avg Mkt Cap \$mil	25156	0.63	0.53	⊖	20 mil	AstraZeneca PLC	0.75
					⊖	27 mil	Novartis AG	0.69
Fixed-Income Style	Avg Eff Maturity	—	—	—	⊖	3 mil	LVMH Moet Hennessy Louis Vuitton SE	0.68
Ltd Mod Ext	Avg Eff Duration	—	—	—	⊖	161 mil	Toyota Motor Corp	0.62
High Mid Low	Avg Wtd Coupon	—	—	—	⊖	200 mil	Alibaba Group Holding Ltd Ordinary	0.62
	Avg Wtd Price	—	—	—	⊖	67 mil	BHP Group Ltd	0.59
					⊖	31 mil	TotalEnergies SE	0.55

Sector Weightings		Stocks %	Rel Std Index
Cyclical		43.0	1.01
Basic Materials		8.6	1.03
Consumer Cyclical		11.1	1.02
Financial Services		19.8	0.95
Real Estate		3.5	1.36
Sensitive		36.2	1.02
Communication Services		5.8	0.93
Energy		5.7	0.94
Industrials		13.6	1.12
Technology		11.0	1.00
Defensive		20.9	0.95
Consumer Defensive		8.0	0.92
Healthcare		9.6	0.96
Utilities		3.2	1.01

Operations			
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VTIAX
Tenure:	14.4 Years	ISIN:	US9219098186
Objective:	Foreign Stock	Minimum Initial Purchase:	\$3,000
		Purchase Constraints:	—
		Incept:	11-29-2010
		Type:	MF
		Total Assets:	\$55,564.64 mil

Standardized and Tax Adjusted Returns Disclosure Statement

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 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>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

Retail Money Market Funds (designated by an "L"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 12-31-2022

Standardized Returns (%)	7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Calvert Balanced I	—	—	-15.13	6.37	7.66	6.06	02-26-1999	NA	NA	0.66	0.66	NA
Hartford International Opp HLS IA	—	—	-18.14	1.78	5.13	5.70	07-02-1990	NA	NA	0.74	0.74	NA
Metropolitan West Total Return Bd Plan	—	—	-14.69	0.18	1.36	2.25	07-29-2011	NA	NA	0.36	0.36	NA
T. Rowe Price U.S. Equity Research I	—	—	-18.72	9.60	—	11.90	11-29-2016	NA	NA	0.34	0.34	NA
Vanguard Extended Market Index Instl	—	—	-26.46	4.89	9.64	8.11	07-07-1997	NA	NA	0.05	0.05	NA
Vanguard Institutional Index I	—	—	-18.14	9.40	12.53	9.85	07-31-1990	NA	NA	0.04	0.04	NA
Vanguard Target Retirement 2020 Fund	—	—	-14.15	3.22	5.83	5.52	06-07-2006	NA	NA	0.08	0.08	NA

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Annualized returns 12-31-2022													
Standardized Returns (%)	7-day Yield	7-day Yield	1Yr	5Yr	10Yr	Since	Inception	Max Front	Max Back	Net Exp	Gross Exp	Max	
	Subsidized	Unsubsidized				Inception	Date						Load %
	as of date	as of date											
Vanguard Target Retirement 2025 Fund	—	—	-15.55	3.58	6.43	6.13	10-27-2003	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2030 Fund	—	—	-16.27	3.94	6.99	6.02	06-07-2006	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2035 Fund	—	—	-16.62	4.34	7.57	6.83	10-27-2003	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2040 Fund	—	—	-16.98	4.74	8.06	6.59	06-07-2006	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2045 Fund	—	—	-17.36	5.14	8.34	7.40	10-27-2003	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2050 Fund	—	—	-17.46	5.18	8.36	6.79	06-07-2006	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2055 Fund	—	—	-17.46	5.18	8.34	8.97	08-18-2010	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2060 Fund	—	—	-17.46	5.18	8.34	8.59	01-19-2012	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement 2065 Fund	—	—	-17.39	5.15	—	6.42	07-12-2017	NA	NA	0.08	0.08	NA	
Vanguard Target Retirement Income Fund	—	—	-12.74	2.30	3.62	4.57	10-27-2003	NA	NA	0.08	0.08	NA	
Vanguard Total Bond Market Index I	—	—	-13.15	0.01	1.02	4.22	09-18-1995	NA	NA	0.04	0.04	NA	
Vanguard Total Intl Stock Index Admiral	—	—	-16.01	1.09	4.06	4.02	11-29-2010	NA	NA	0.11	0.11	NA	
Bloomberg US Agg Bond TR USD			-13.01	0.02	1.06	—	01-03-1980						
Bloomberg US Universal TR USD			-12.99	0.18	1.33	—	12-31-1998						
Morningstar Lifetime Mod 2020 TR USD			-16.77	3.02	5.16	—	02-18-2009						
Morningstar Lifetime Mod 2025 TR USD			-17.58	3.20	5.79	—	02-18-2009						
Morningstar Lifetime Mod 2030 TR USD			-17.94	3.54	6.51	—	02-18-2009						
Morningstar Lifetime Mod 2035 TR USD			-17.75	3.97	7.14	—	02-18-2009						
Morningstar Lifetime Mod 2040 TR USD			-17.37	4.36	7.55	—	02-18-2009						
Morningstar Lifetime Mod 2045 TR USD			-17.06	4.58	7.70	—	02-18-2009						
Morningstar Lifetime Mod 2050 TR USD			-16.91	4.62	7.68	—	02-18-2009						
Morningstar Lifetime Mod 2055 TR USD			-16.93	4.55	7.59	—	02-18-2009						
Morningstar Lifetime Mod 2060 TR USD			-16.98	4.46	—	—	06-23-2014						
Morningstar Lifetime Mod Incm TR USD			-12.24	2.95	3.82	—	02-18-2009						
Morningstar Mod Tgt Risk TR USD			-14.77	3.73	5.82	—	02-18-2009						
Morningstar US Core Bd TR USD			-12.99	—	—	—	05-01-2019						
Morningstar US Core Plus Bd TR USD			—	—	—	—	01-12-2022						
Morningstar US Mod Con Tgt Alloc NR USD			-14.06	—	—	—	06-30-2020						
Morningstar US Mod Tgt Alloc NR USD			-15.32	—	—	—	06-30-2020						
Morningstar US Sml Brd Grt Ext TR USD			-26.74	—	—	—	12-21-2020						
MSCI ACWI Ex USA NR USD			-16.00	0.88	3.80	—	01-01-2001						
MSCI ACWI NR USD			-18.36	5.23	7.98	—	01-01-2001						
MSCI EAFE NR USD			-14.45	1.54	4.67	—	03-31-1986						
Russell 1000 TR USD			-19.13	9.13	12.37	—	12-31-1978						
Russell Mid Cap Growth TR USD			-26.72	7.64	11.41	—	02-01-1995						
S&P 500 TR USD			-18.11	9.42	12.56	—	01-30-1970						
USTREAS T-Bill Auction Ave 3 Mon			2.13	1.34	0.82	—	02-28-1941						
Return after Tax (%)	On Distribution						On Distribution and Sales of Shares						
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception				
Calvert Balanced I	-15.84	4.98	5.69	4.64	02-26-1999	-8.82	4.63	5.45	4.41				
Hartford International Opp HLS IA	-22.66	-0.11	3.75	4.13	07-02-1990	-8.72	0.92	3.62	4.05				
Metropolitan West Total Return Bd Plan	-15.68	-1.20	0.04	0.82	07-29-2011	-8.67	-0.35	0.52	1.19				
T. Rowe Price U.S. Equity Research I	-19.13	8.75	—	10.53	11-29-2016	-11.05	7.34	—	9.10				
Vanguard Extended Market Index Instl	-26.67	4.51	9.18	7.32	07-07-1997	-15.53	3.74	7.77	6.60				
Vanguard Institutional Index I	-18.77	8.50	11.72	9.12	07-31-1990	-10.28	7.37	10.28	8.49				
Vanguard Target Retirement 2020 Fund	-15.36	1.25	4.34	4.39	06-07-2006	-7.92	2.33	4.38	4.26				
Vanguard Target Retirement 2025 Fund	-16.29	2.05	5.15	5.18	10-27-2003	-8.95	2.64	4.89	4.84				
Vanguard Target Retirement 2030 Fund	-16.88	2.52	5.82	5.14	06-07-2006	-9.40	2.96	5.40	4.75				
Vanguard Target Retirement 2035 Fund	-17.25	2.87	6.35	5.96	10-27-2003	-9.57	3.31	5.90	5.53				
Vanguard Target Retirement 2040 Fund	-17.58	3.28	6.90	5.73	06-07-2006	-9.79	3.66	6.36	5.29				
Vanguard Target Retirement 2045 Fund	-17.97	3.89	7.29	6.63	10-27-2003	-9.98	3.97	6.59	6.07				
Vanguard Target Retirement 2050 Fund	-18.00	4.06	7.41	6.05	06-07-2006	-10.08	3.99	6.61	5.47				
Vanguard Target Retirement 2055 Fund	-17.96	4.19	7.50	8.21	08-18-2010	-10.11	3.97	6.62	7.28				

©2023 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Annualized returns 12-31-2022

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares			
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception
Vanguard Target Retirement 2060 Fund	-17.94	4.38	7.61	7.90	01-19-2012	-10.12	3.93	6.60	6.87
Vanguard Target Retirement 2065 Fund	-17.85	4.61	—	5.88	07-12-2017	-10.09	3.92	—	4.94
Vanguard Target Retirement Income Fund	-13.67	0.94	2.44	3.43	10-27-2003	-7.40	1.47	2.49	3.28
Vanguard Total Bond Market Index I	-14.01	-1.00	-0.06	2.55	09-18-1995	-7.75	-0.37	0.33	2.61
Vanguard Total Intl Stock Index Admiral	-16.73	0.27	3.10	3.00	11-29-2010	-9.18	0.70	2.90	2.83

Mutual Fund Detail Report

Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share class(es) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefitting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a “best fit” index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund’s benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio’s sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund’s portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund’s shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund’s average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund’s portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund’s prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund’s prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund’s purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

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 investment products 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 investment products are likely to perform relative to a benchmark over the long term on a risk adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process; price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group’s expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group’s expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group’s expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar 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 <http://global.morningstar.com/equitydisclosure>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (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 investment product

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

- Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance--Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.
- Quantitative Parent pillar:** Intended to be comparable to Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).
- Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).
- Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance--Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/managerdisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Ave), and the bottom 10% Low (Low). Morningstar Return is

measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (-Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Style Analysis

The Morningstar Style Box reveals a fund's investment style as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box matrix indicates the weighted average style of the portfolio.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories- "High", "Medium", and "Low", and there are three interest rate sensitivity categories- "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocr/ocr-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied. Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed_income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which

corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Funds with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less.; (ii) "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values, : (i) "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, "Extensive" is assigned to portfolios with effective durations of more than 6 years. Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such

stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the stocks included in these sectors generally have betas greater than 1. The Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility

of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experience if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and

are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses

are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

Bloomberg US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. Bloomberg Indexes and its associated data, Copyright © 2023 Bloomberg Index Services Limited. Bloomberg® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg does not approve or endorse this material or guarantee the accuracy or completeness of any information herein, nor does Bloomberg make any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, Bloomberg shall not have any liability or responsibility for injury or damages arising in connection therewith. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

Bloomberg US Universal TR USD

BarCap U.S. Universal Bond Index: The U.S. Universal Index mirrors the increasingly popular "Core Plus" choice set used by many U.S.-dollar investors. It is the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, the non-

ERISA portion of the CMBS Index, and the CMBS High Yield Index. Municipal debt, private placements, and non-dollar-denominated issues are excluded from the Universal Index. The constituents displayed for this index are from the following proxy: iShares Core Total USD Bond Market ETF.

Morningstar Lifetime Mod 2020 TR USD

The Morningstar Lifetime Moderate 2020 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about ten years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2025 TR USD

The Morningstar Lifetime Moderate 2025 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 15 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2030 TR USD

The Morningstar Lifetime Moderate 2030 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 20 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2035 TR USD

The Morningstar Lifetime Moderate 2035 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 25 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2040 TR USD

The Morningstar Lifetime Moderate 2040 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 30 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2045 TR USD

The Morningstar Lifetime Moderate 2045 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 35 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2050 TR USD

The Morningstar Lifetime Moderate 2050 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 40 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2055 TR USD

The Morningstar Lifetime Moderate 2055 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 45 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2060 TR USD

The index measures the performance of a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a US investor who has a target maturity date of 2060. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar Lifetime Mod Incm TR USD

The Morningstar Lifetime Moderate Income Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is at least ten years into retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Mod Tgt Risk TR USD

The Morningstar Moderate Target Risk Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in a static allocation appropriate for U.S. investors who seek average exposure to equity market risk and returns.

Morningstar US Core Bd TR USD

The index measures the performance of fixed-rate, investment-grade USD-denominated securities with maturities greater than one year. It is market-capitalization weighted. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar US Core Plus Bd TR USD

The index measures the performance of USD-denominated investment-grade and high-yield debt securities. It is a market-capitalization weighted composite of the Morningstar US Core Bond Index and the Morningstar US High Yield Index. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar US Mod Con Tgt Alloc NR USD

The Morningstar Target Allocation Index family consists of indexes that offer a diversified mix of stocks and bonds created for local investors to benchmark their allocation funds. Morningstar's Category classification system defines the level of equity and bond exposure for each index. The Morningstar US Moderately Conservative Target Allocation Index seeks 40% exposure to global equity markets.

Morningstar US Mod Tgt Alloc NR USD

The Morningstar Target Allocation Index family consists of indexes that offer a diversified mix of stocks and bonds created for local investors to benchmark their allocation funds. Morningstar's Category classification system defines the level of equity and bond exposure for each index. The Morningstar US Moderate Target Allocation Index seeks 60% exposure to global equity markets.

Morningstar US Sml Brd Grt Ext TR USD

The index provides a comprehensive depiction of the performance and fundamental characteristics of the Small Growth segment of U.S. equity markets. It targets stocks representing the faster growing half of the U.S. small-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

MSCI ACWI Ex USA NR USD

The MSCI AC World ex USA is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. The index consists of 48 developed and emerging market country indices. The returns we publish for the index are total returns, which

include reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ex US ETF.

MSCI ACWI NR USD

The index measures the performance of the large and mid cap segments of all country markets. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information. The constituents displayed for this index are from the following proxy: Schwab International Index Fund®.

Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000 ETF.

Russell Mid Cap Growth TR USD

Tracks the companies within the Russell Midcap Index with higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap Growth ETF.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon

Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

Important Disclosures:

The material in this Report is not to be reproduced or distributed to any other persons (other than professional advisors of the investors) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public.

This information is being provided as a service of your Hyas Group Consultant and does not supersede or replace your customer account statement provided by your custodian ("Custodial Statement"). Information in this Report may vary from the information in your Custodial Statement as a result of differences in accounting procedures, reporting dates, or valuation methodologies of certain securities. The market values reflected in this Report may vary slightly from the market values in your Custodial Statement. The information in this Report is as of the date(s) noted and subject to daily market fluctuation.

Sources of Information. Material in this Report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness, or timeliness. The performance produced herein is calculated utilizing custodian data downloads and manually entered material. Although we take every precaution to ensure accuracy, we are not able to guarantee complete accuracy.

No Tax or Legal Advice. When Hyas Group, its affiliates and Hyas Group Consultants provide "investment advice" regarding a retirement or welfare benefit plan account, an individual retirement account or a Coverdell education savings account ("Retirement Account"), Hyas Group is a "fiduciary" as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. When Hyas Group provides investment education or otherwise does not provide "investment advice", Hyas Group will not be considered a "fiduciary" under ERISA and/or the Code. Tax laws are complex and subject to change. Hyas Group does not provide tax or legal advice.

Key Asset Class Risk Disclosures. Investing involves market risk, including possible loss of principal. Please refer to Hyas Group's Form ADV Brochure for more information about the risks associated with certain investment products. The Hyas Group's Form ADV Brochure is available upon request.

ALL MUTUAL FUND PRODUCTS AND EXCHANGE-TRADED FUNDS ARE SOLD BY PROSPECTUS, WHICH CONTAINS MORE COMPLETE INFORMATION ABOUT A FUND, ITS EXPENSES AND MATERIAL RISKS RELATED TO THAT FUND'S INVESTMENT STRATEGY.

PLEASE CONTACT YOUR HYAS GROUP CONSULTANT FOR A COPY OF A FUND'S PROSPECTUS.

PLEASE READ THE PROSPECTUS AND CONSIDER THE FUND'S INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES CAREFULLY BEFORE INVESTING. THE PROSPECTUS CONTAINS THIS AND OTHER IMPORTANT INFORMATION ABOUT THE FUND.

Performance. Performance results illustrated herein do not reflect a deduction of any investment advisory fees charged by Hyas Group or any investment manager but do include the fund's internal expenses. Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest, and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

The underlying fund's internal expenses (also known as the expense ratio) generally covers investment management fees, marketing, and distribution fees (also known as 12b-1 fees) and other operating expenses of the fund. The expense ratios being displayed for mutual funds reflect each fund's prospectus "net" expenses as provided by Morningstar. Such "net" expenses are subject to change and may increase at any time.

To learn more about the Hyas Group advisory services, please see the Hyas Group ADV Brochure for more information. It is available from your Hyas Group Consultant.

Performance data quoted is historical. Past performance does not guarantee future results. Current performance may be higher or lower than the performance quoted. You can obtain performance data current to the most recent month-end for each fund by visiting the fund company website. The investment return and principal value of an investment will fluctuate such that an investor's shares, when redeemed, may be worth more or less than their original cost. Total returns include reinvestment of dividends and capital gains and are net of all fund fees and expenses.

Performance figures are based on Net Asset Value (NAV) within a qualified retirement plan. If an individual were to purchase shares outside of a qualified plan, they would likely be subject to all, or a portion of, any applicable sales charges. These charges would lower the performance indicated above.

Each fund's performance may, from time to time, have been affected significantly by material market and economic conditions, including interest rates, market trends, and general business and economic cycles, which may or may not be repeated in the future. Also, keep in mind that any double-digit returns are highly unusual and cannot be sustained. Such returns are primarily achieved during favorable market conditions.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns include the reinvestment of all dividends, but do not reflect the payment of transaction costs, advisory fees or expenses that are associated with an investment. The indices selected by Hyas Group to measure performance are representative of broad asset classes. Hyas Group retains the right to change representative indices at any time. Performance of indices may be more or less volatile than any investment product. The risk of loss in value of a specific investment is not the same as the risk of loss in a broad market index. Therefore, the historical returns of an index will not be the same as the historical returns of a particular investment a client selects. Past performance does not guarantee future results.

The "Investment Policy Statement Compliance Report" indicates funds that are on the Plan's Watch List, as based on investment monitoring criteria which is provided to Hyas Group by the plan sponsor. The plan sponsor should inform its Hyas Group Consultant of any changes to the plan's investment policy.

Fund data provided by Morningstar.

Peer Groups. Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client's investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

Peer Group Ranking Methodology. A percentile rank denotes the value of a product in which a certain percent of observations falls within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value. The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Hyas Group, a business of Morgan Stanley. © Morgan Stanley, 2023.

Marin County 457 Deferred Compensation /OBRA Plans
Recordkeeping Fee Review - February 2023

FEE SUMMARY

Client Type		Plan Assets	Participant Count	Average Balance	RK Fee (annual)
Fixed Account	Average	\$275,955,900	3,700	\$81,751	0.029%
	Median	\$249,275,629	3,933	\$71,324	0.029%
Proprietary Stable Value	Average	\$241,839,401	2,269	\$105,605	0.030%
	Median	\$242,568,619	2,731	\$98,330	0.030%
Non-Proprietary Stable Value	Average	\$1,078,675,225	8,421	\$125,260	0.045%
	Median	\$1,078,675,225	8,421	\$125,260	0.045%
Non-Proprietary Stable Value (Galliard)	Marin County 457	\$285,368,094	2,597	\$107,144	0.07%
	OBRA	\$9,736,928	2,758	\$3,530	
	Court	\$11,761,769	105	\$105,962	

For illustrative purposes only. Data as of 9.30.2022. Data for comparable sized Hyas Group public sector plans.

Marin County 457 Deferred Compensation /OBRA Plans

Recordkeeping Fee Review - February 2023

(ranked)

Client	Plan Type	Recordkeeper	Plan Assets	Part Count	Average Balance	RK Fee (annual)	Fixed Option
California County	457	Nationwide	\$196,775,663	1,348	\$139,592	0.02%	Fixed Account
Oregon City	457	Voya	\$249,845,642	2,321	\$107,646	0.023%	
California County	457	Nationwide	\$452,566,442	6,448	\$69,515	0.023%	
California County	457	Nationwide	\$310,411,745	4,717	\$63,057	0.025%	
California County	457	Nationwide	\$230,029,481	4,496	\$50,015	0.025%	
California County	457	Nationwide	\$214,499,301	3,370	\$62,082	0.028%	
Missouri Public Safety	457	Nationwide	\$125,905,197	1,784	\$69,877	0.03%	
California City	457	Nationwide	\$460,393,632	4,960	\$90,707	0.03%	
Washington City	457	Nationwide	\$248,705,616	2,532	\$97,863	0.03%	
New York County	457	Valic	\$286,320,472	5,882	\$48,677	0.03%	
California County	457	Nationwide	\$408,936,686	5,492	\$72,770	0.04%	
California Public Safety	457	Nationwide	\$127,080,926	1,049	\$109,209	0.04%	
		Average	\$275,955,900	3,700	\$81,751	0.029%	
		Median	\$249,275,629	3,933	\$71,324	0.029%	
Washington City	457	MissionSquare	\$445,866,656	3,151	\$140,779	0.019%	Proprietary Stable Value
Washington City	457	MissionSquare	\$105,662,029	1,115	\$94,764	0.025%	
Alaska Special District	401(k)	Empower	\$103,963,341	719	\$142,845	0.027%	
Washington City	457	MissionSquare	\$242,568,619	2,438	\$98,330	0.03%	
California County	457	MissionSquare	\$213,277,532	2,731	\$76,978	0.03%	
California City	457	MissionSquare	\$355,129,198	3,161	\$110,179	0.03%	
Arizona City	457	Empower	\$133,979,742	1,610	\$81,047	0.03%	
California City	457	Empower	\$320,689,382	2,739	\$114,833	0.039%	
Texas City	401(k)	MissionSquare	\$255,418,111	2,757	\$90,692	0.04%	
		Average	\$241,839,401	2,269	\$105,605	0.030%	
		Median	\$242,568,619	2,731	\$98,330	0.030%	
Washington City	457	Nationwide	\$1,405,900,447	10,861	\$126,714	0.03%	Non-Proprietary Stable Value
California City	457	MissionSquare	\$751,450,003	5,980	\$123,807	0.06%	
		Average	\$1,078,675,225	8,421	\$125,260	0.045%	Non-Proprietary Stable Value
		Median	\$1,078,675,225	8,421	\$125,260	0.045%	
Marin County	457	Nationwide	\$285,368,094	2,597	\$107,144	0.07%	Non-Proprietary Stable Value (Galliard)
Marin County	OBRA		\$9,736,928	2,758	\$3,530		
Marin County Superior Court	457		\$11,761,769	105	\$105,962		



HYAS GROUP

SECURE ACT PROVISIONS 2.0

2023

Mandatory Provisions	Notes	Effective
107 – Increase in Age for RMDs	In 2023 age goes from 72 to 73 and then to 75 in 2033.	Immediately but in phases
302 – Decrease in Excise Tax	Reduces the penalty for failure to take RMDs from 50% to 25% of the shortfall (drops to 10% if corrected in two years).	Immediately
303 – Retirement Savings Lost & Found	Requires the establishment of an online searchable database that would enable retirement savers who may have lost track of their accounts to search for the contact information of their plan administrator.	01/01/2025
306 – Eliminates the First Day of the Month Rule	Eliminates the unique rule for 457 plan enrollment and contribution changes.	Immediately
309 – Exclusion of Certain Disability-related First Responder Retirement Payments	First responders are permitted to exclude service-connected disability payments from their gross taxable income after reaching retirement age.	01/01/2027
325 – Eliminates Roth RMDs	Removes the required distribution rules for Roth contributions within retirement plans (but the after-death RMDs still apply).	01/01/2024
338 – Annual Paper Benefit Statement	Annual paper benefit statement unless participant has specifically requested electronic delivery.	01/01/2026
603 – After-tax Catch-up Contributions	Requires that all catch-up contributions be made as Roth contributions (participants whose prior year's wages were less than \$145,000 are exempt).	01/01/2024

Optional Provisions	Notes	Effective
109 – Higher Catch-up Limits	Increases to \$10,000 or 150% of the catch-up amount in 2024 for participants age 60 to 63.	01/01/2025
110 – Matching of Student Loan Payments	Allows qualified student loan payments to be treated as retirement plan deferrals for matching purposes.	01/01/2024
115 - Penalty-free Emergency Expenses	Plans can offer distributions with no early withdrawal penalty for "unforeseeable or immediate financial needs relating to necessary or personal family emergency expenses." Distributions cannot exceed \$1,000, a participant may take only one such distribution per calendar year, Plan administrators can rely on participant's self-certification of eligibility, and participants can repay a distribution within three years.	01/01/2024
127 – Emergency Savings Linked to DC Plans	Allows employers to offer their non-highly compensated employees and pension-linked emergency savings account as part of their deferred compensation program. Employers may automatically enroll employees at 3% or less (capped at \$2,500) on an after-tax basis.	01/01/2024
304 - Increase in De Minimis Amount	Raises the small account cash-out limit from \$5,000 to \$7,000.	01/01/2024
312 – Self-certifying Hardships	Plans sponsors can rely on participants to state that they incurred an unforeseeable emergency, that the amount of the request is not in excess of the amount required to satisfy the financial need, and that the participant has no alternative means reasonably available to satisfy such financial needs.	Immediately
314 – Penalty-free Withdrawals in the Event of Domestic Abuse	Plans that aren't subject to IRC's qualified joint and survivor and preretirement-survivor annuity requirements can offer distributions with no early withdrawal penalty to victims of domestic abuse. Distributions cannot exceed the lesser of \$10,000 (indexed after 2024) or 50% of the participant's vested benefit, distributions must be made within one year of the date on which the participant is a victim of domestic abuse by a spouse or domestic partner, Plan administrators can rely on participant's self-certification of eligibility, and participants can repay a distribution within three years.	01/01/2024
326 – Penalty-free Withdrawals for Terminal Illness	Plans can offer distributions with no early withdrawal penalty to participants certified by a physician as having a condition reasonably expected to result in death within 84 months after the date of certification. Statute does not limit amount or number of distributions that can be made available, and distributions can be repaid within three years.	Immediately
328 - Distributions to Retired Public Safety Officers for Health & Long-Term Care Premiums	These distributions no longer have to be paid directly to the insurer.	Immediately

329 – Change to Early Withdrawal Penalty	Extends the exception of the 10% early withdrawal penalty to public safety who have separated from service and have 25 years of service.	Immediately
330 – Change to Early Withdrawal Penalty	Similar to the above, this expands the public safety definition to include certain corrections officers.	Immediately
331 – Disaster Relief	Distributions up to \$22,000 per federally-declared disaster with no early penalty and option to repay over three years. Temporary max loan cap at \$100,000.	Immediately
604 – After-tax Match	Participants may be able to designate some or all employer matching contributions as Roth contributions.	Immediately

Appendix

Section 107 – Increase in Age for Required Beginning Date for Mandatory Distributions: Increases the age at which required minimum distributions (“RMDs”) from retirement plans must commence from age 72 to age 73 in 2023 and to age 75 in 2033 (“RMD Age”). Specifically, the RMD Age is (a) age 70 ½ for individuals born before July 1, 1949, (b) age 72 for individuals born after June 30, 1949, but before 1951, (c) age 73 for individuals born after 1950, but before 1960, or (d) age 75 for all others – note, apparent drafting error in the statutory language, makes it unclear when age 75 starts to apply in lieu of age 73, but it appears age 75 is intended to apply if born after 1959. Effective for distributions made after December 31, 2022, for individuals who attain age 72 after that date.

Section 109 – Higher Catch-up Limit to Apply at Age 60, 61, 62 and 63: Increases the catch-up contribution limit for non-SIMPLE plans for individuals aged 60 to 63 to the greater of (i) \$10,000 per year, or (ii) 150% of the regular catch-up contribution amount in 2024 (as indexed for inflation). The catch-up contribution limit for SIMPLE plans is similarly increased for individuals ages 60 – 63 to the greater of (i) \$5,000 per year, or (ii) 150% of the regular catch-up amount in 2025 (as indexed for inflation), beginning for taxable years beginning after December 31, 2024.

Section 110 – Treatment of Student Loan Payments as Elective Deferrals for Purposes of Matching Contributions: Allows for employer contributions made on behalf of employees for “qualified student loan repayments” to be treated as matching contributions to 401(k) plans, 403(b) plans, SIMPLE IRAs, and governmental 457(b) plans. With respect to nondiscrimination testing, such plans are permitted to separately test the employees who receive matching contributions on student loan repayments. Effective for plan years beginning after December 31, 2023.

Section 115 – Withdrawals for Certain Emergency Expenses: Allows one penalty tax-free withdrawal within a 3-year period up to \$1,000 per year for “unforeseeable or immediate financial needs relating to personal or family emergency expenses.” Such withdrawal may be repaid within the 3-year period and if so repaid, more than one withdrawal may be permitted within the 3-year period. Effective for distributions made after December 31, 2023.

Section 127 – Emergency Savings Accounts Linked to Individual Account Plans: Allows employers to offer their employees (excluding highly compensated employees) a pension-linked emergency savings account as part of a defined contributions plan. Employers may automatically opt employees into these accounts at no more than 3% of their salary, and the portion of an account attributable to the employee’s contribution is capped at \$2,500 (or a lower as set by the employer). Contributions are made on a Roth-like basis and are treated as elective deferrals for purposes of matching contributions with an annual matching cap set at the maximum account balance (\$2,500 or lower as set by the employer). Requires employer matching contributions be made to the individual’s defined contribution plan account rather than to the emergency savings account. At separation

from service, employees are permitted to roll the emergency savings account into a Roth defined contribution plan or an IRA. Effective for plan years beginning after December 31, 2023.

Section 302 – Reduction in Excise Tax on Certain Accumulations in Qualified Retirement Plans: Reduces the excise tax penalty for failure to take RMDs from 50% to 25% of the shortfall. Such excise tax is further reduced to 10% if the individual corrects the shortfall during a 2-year window. Effective for taxable years beginning after the date of enactment.

Section 303 – Retirement Savings Lost and Found: Directs the DOL to create a national online searchable lost and found database to collect information on benefits owed to missing, lost or non-responsive participants and beneficiaries in tax-qualified defined benefit and defined contribution retirement plans to assist such plan participants and beneficiaries in locating their benefits and the contact information of their plan administrator. Requires plan to report certain information to the DOL regarding former employees whose benefits have not been paid out. Directs the DOL to create such database no later than 2 years after the date of enactment.

Section 304 – Updating Dollar Limit for Mandatory Distributions: Increases the amount that employers may, without participant consent, distribute and rollover from a participant's workplace retirement account into an IRA from \$5,000 to \$7,000. Effective for distributions made after December 31, 2023.

Section 306 – Eliminate the “first day of the month” requirement for governmental section 457(b) plans. Under current law, participants in a governmental 457(b) plan must request changes in their deferral rate prior to the beginning of the month in which the deferral will be made. This rule does not exist for other defined contribution plans. Section 306 allows such elections to be made at any time prior to the date that the compensation being deferred is available. Section 306 is effective for taxable years beginning after the date of enactment of this Act.

Section 309 – Exclusion of certain disability-related first responder treatment payments. Section 309 permits first responders to exclude service-connected disability pension payments from gross income after reaching retirement age. Section 309 is effective for amounts received in taxable years beginning after December 31, 2026.

Section 312 – Employer May Rely on Employee Certifying that Deemed Hardship Distribution Conditions are Met: Allows for plan sponsors to rely on “participant self-certification” that the participant had an event that constitutes hardship for purposes of taking emergency hardship withdrawals from a 401(k) plan or a 403(b) plan. Plan administrators are also permitted to rely on such participant's self-certification that the amount of such hardship distribution is not in excess of the amount required to satisfy the financial need and that the participant has no alternative means reasonably available to the to satisfy such financial needs. Similar rules apply for purposes of unforeseeable emergency distributions from governmental 457(b) plans. Effective for plan years beginning after the date of enactment.

Section 314 – Penalty Free Withdrawal from Retirement Plans for Individual Case of Domestic Abuse: Where a participant is a domestic abuse survivor, that participant may take a penalty tax-free withdrawal up to the lesser of (i) \$10,000 (indexed for inflation), or (ii) 50% of their account value with the option to repay such amounts within a 3-year timeframe. Effective for distributions made after December 31, 2023.

Section 325 – Roth Plan Distribution Rules: Eliminates the lifetime minimum distribution requirement for designated Roth accounts under qualified retirement plans (but the after-death required minimum distribution rules continue to apply). Under the current law, such exemption was previously limited to Roth IRAs (but not designated Roth accounts held in 401(k) and other plans). Generally effective for tax years beginning after December 31, 2023, although not with respect to distributions required before January 1, 2024.

Section 326 – Exception to Penalty on Early Distributions from Qualified Plans for Individuals with a Terminal Illness: Creates an exception to the 10% early withdrawal penalty for those participants with a terminal illness. Requires a physician certify that such participant has an illness or condition that is reasonably expected to result in death within 84 months. Effective on the date of enactment.

Section 328 – Repeal of Direct Payment Requirement on Exclusion from Gross Income of Distributions from Governmental Plans for Health and Long-Term Care Insurance: Eliminates the requirement that, in order to be excluded from gross income (up to \$3,000), distributions made from a governmental retirement plan that are used to pay for

certain eligible public safety officers health insurance premiums be paid directly from such plan. Permits governmental retirement plans to pay for qualified health insurance premiums by making distributions directly to either the insurer or to the participant. If the plan makes such distributions to the participant, such participant must include a self-certification that such funds did not exceed the amount paid for premiums when filing their tax return for that year. Effective for distributions made after the date of enactment.

Section 329 - Modification of eligible age for exemption from early withdrawal penalty. The 10 percent additional tax on early distributions from tax preferred retirement savings plans does not apply to a distribution from a governmental plan to a public safety officer who is at least age 50. Section 329 extends the exception to public safety officers with at least 25 years of service with the employer sponsoring the plan and is effective for distributions made after the date of enactment of this Act.

Section 330 - Exemption from early withdrawal penalty for certain State and local government corrections employees. Section 330 extends the public safety officer exception to the 10 percent early distribution tax to corrections officers who are employees of state and local governments, effective for distributions made after the date of enactment of this Act.

Section 331 – Special Rules for use of Retirement Funds in connection with Qualified Federally Declared Disasters: Establishes permanent special rules governing plan distributions and loans in cases of qualified federally declared disasters. Permits up to \$22,000 to be distributed from employer retirement plans or IRAs for affected individuals. Creates an exemption to the 10% early distribution penalty tax for such distributions. Effective for disasters occurring on or after January 26, 2021.

Section 338 – Requirement to Provide Paper Statements in Certain Cases: Amends the relevant provisions of ERISA related to pension benefit statements to require plan sponsors of defined contribution plans to provide at least one paper statement to plan participants each calendar year and, with respect to defined benefit plans, to provide at least one paper statement every 3 years. Permits exceptions to these pension benefit statement rules for plans that allow employees to opt into e-delivery statements if the plan follows the conditions of the 2002 safe harbor. Directs the DOL to update the relevant sections of their regulations and corresponding guidance by December 1, 2024. Effective for plan years beginning after December 31, 2025.

Section 603 – Elective Deferrals Generally Limited to Regular Contribution Limit: Requires that all catch-up contributions to 401(a) qualified plans, 403(b) plans, and governmental 457(b) plans be made on a Roth basis, with an exception made for those employees whose prior year wages do not exceed \$145,000 (indexed for inflation). SIMPLE and SEP IRAs are excluded from this requirement. Effective for taxable years beginning after December 31, 2023.

Section 604 – Optional Treatment of Employer Matching or Nonelective Contributions as Roth Contributions: Allows a 401(a) qualified plan, 403(b) plan, or governmental 457(b) plan to provide participants with the option of treating employer matching and non-elective contributions as Roth contributions. Matching and nonelective Roth contributions must be 100% vested at the time of such contribution. Effective for contributions made after the date of enactment.

When Hyas Group, its affiliates and Hyas Group Consultants provide “investment advice” regarding a qualified retirement plan account, Hyas Group is a “fiduciary” as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), and/or the Internal Revenue Code of 1986 (the “Code”), as applicable. When Hyas Group provides investment education or otherwise does not provide “investment advice”, Hyas Group will not be considered a “fiduciary” under ERISA and/or the Code. Tax laws are complex and subject to change. Hyas Group does not provide tax or legal advice. Consult with your tax advisors and attorneys before taking action on such matters.

This newsletter is being provided for informational purposes only. The information and opinions presented in this newsletter do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change. Hyas Group is a business of Morgan Stanley.

Hyas Group is not implying an affiliation, sponsorship, endorsement with/of the third party or that any monitoring is being done by Hyas Group of any information contained within the web site. Hyas Group is not responsible for the information contained on the third-party web site or the use of or inability to use such site. Nor do we guarantee their accuracy and completeness.