



**AGENDA REGULAR MEETING 457
DEFERRED COMPENSATION PLAN,
401(a) DEFINED CONTRIBUTION PLAN,
AND RETIREMENT HEALTH SAVINGS
PROGRAM COMMITTEE 9:00 A.M.
January 30, 2023**

COMMITTEE MEMBERS
James Olson, Chair
Kevin Brown, Vice Chair
Michael Nichelini
Mike Malone
Rekha Nayar
Brisa Long
Terrance Davis

NOTICE: Members of the Public will be able to participate in-person or remotely via Zoom. City Hall and the Council Chambers will be open to members of the public 30 minutes prior to the start of the meeting.

IMPORTANT NOTICE REGARDING JANUARY 30, 2023 457 DEFERRED COMPENSATION PLAN, 401(a) DEFINED CONTRIBUTION PLAN, AND RETIREMENT HEALTH SAVINGS PROGRAM COMMITTEE MEETING

This AGENDA contains a brief general description of each item to be considered. The posting of the recommended actions does not indicate what action may be taken. If comments come to the Deferred Compensation Plan, 401(a) Defined Contribution Plan, and Retirement Health Savings Program Committee without prior notice and are not listed on the AGENDA, no specific answers or response should be expected at this meeting per State law.

Pursuant to Government Code Section 5495.3 (The Brown Act), members of the public shall be afforded the opportunity to speak on any agenda item of interest to them provided they are first recognized by the presiding officer. Members of the public wishing to be so recognized are requested to submit a completed speaker card to the Executive Secretary of the Committee prior to the consideration of the item.

Those wishing to address the Committee on any matter for which another opportunity to speak is not provided on the AGENDA but which is within the jurisdiction of the Committee to resolve may come forward to the podium during the "COMMUNITY FORUM" portion of the AGENDA.

PUBLIC COMMENT: Members of the Public may provide public comments during the Deferred Compensation Plan, 401(a) Defined Contribution Plan, and Retirement Health Savings Program Committee Meeting in person or via ZOOM (<https://ZoomRegular.Cityofvallejo.net>), or via phone, by dialing (669) 900-6833.

For additional instructions on how to speak remotely during public comment, please visit, www.cityofvallejo.net/publiccomment

VIEW THE MEETING:

There are four different ways you can view this public meeting:

- In Person
- Watch Vallejo local channel 28
- Stream from the City website: www.cityofvallejo.net/Streaming
- Join the Zoom webinar: <https://ZoomRegular.Cityofvallejo.net>

Notice of Availability of Public Records: All public records relating to an open session item, which are not exempt from disclosure pursuant to the Public Records Act, that are distributed to a majority of the Committee will be available for public inspection at the City Clerk's Office, 555 Santa Clara Street, Vallejo, CA at the same time that the public records are distributed or made available to the Deferred Compensation Plan, 401(a) Defined Contribution Plan, and Retirement Health Savings Program Committee. Such documents may also be available on the City of Vallejo website subject to staff's ability to post the documents prior to the meeting. Information may be obtained by calling (707) 648-4527, TDD (707) 649-3562.



In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Human Resources Department at Human.Resources@cityofvallejo.net. Notification at least 48 hours prior to a meeting will enable the City to make reasonable arrangements to ensure accessibility to that meeting. [28 CFR.35.102.35.104 ADA Title II]

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **ROLL CALL**
4. **REPORTS**
5. **COMMUNITY FORUM**

*The Community Forum is an opportunity to address the Committee on any matter for which another opportunity to speak is not provided on the agenda, and which is within the jurisdiction of the Committee to resolve. Any interested members of the public desiring to communicate with the Deferred Compensation Plan, 401(a) Defined Contribution Plan, and Retirement Health Savings Program Committee as part of the Community Forum may do so in person by submitting a completed speaker's card to the Committee's Executive Secretary or via ZOOM:(<https://ZoomRegular.Cityofvallejo.net>), Option to join by phone: Dial (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press * 9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit, www.cityofvallejo.net/publiccomment. In person speakers will be recognized first. When called upon, each speaker should step to the podium, state his/her name for the record. The conduct of the community forum shall be limited to a maximum of fifteen (15) minutes, with each speaker limited to a maximum of three minutes pursuant to Vallejo Municipal Code Section 2.02.300.*

6. **CONSENT CALENDAR AND APPROVAL OF AGENDA**

A. **Approval of Minutes**

Recommendation: Approval of the minutes from the July 18, 2023 meeting.

7. **PRESENTATION**

A. **Presentation by Shawn Baker and Timothy Oster, MissionSquare**

Presentation: Shawn Baker and Timothy Oster to present:

- Data Analytics update
- 2023 Strategy
- New technology and status of call center update
- Secure Act 2.0

B. **Presentation by Vincent Galindo, Hyas Group**

Presentation: Vincent Galindo to present:

- Fourth Quarter 2022 Performance Review – data as of December 31, 2022
- Review Investment Policy Statement Basics presentation
- Review updated Investment Policy Statement
- Legal and regulatory updates

8. ACTION ITEM(S)

*NOTICE: Members of the public wishing to address the Committee on Action Calendar Items may do so in person by submitting a completed speakers card to the Executive Secretary or via ZOOM (<https://ZoomRegular.Cityofvallejo.net>), or via phone, by dialing (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press *9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit, www.cityofvallejo.net/publiccomment. Each speaker is limited to five minutes pursuant to Vallejo Municipal Code Section 2.02.420. In person speakers will be recognized first.*

A. Approve New Members

Recommendation: Approve new members to the Committee (Attachment A)

B. Approve New Meeting Dates

Recommendation: Move meetings to last Monday of April, July, and October to accommodate quarterly data collection for Hyas and Mission Square.

9. FUTURE AGENDA ITEMS

A. IPS and other governance documents

B. Fiduciary education

C. Goals and objectives

10. ADJOURNMENT

ADDITIONAL CITY INFORMATION

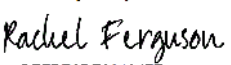
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Sign up to receive City Communications via e-mail (www.cityofvallejo.net/living/connect)

Sign up to receive City updates and get connected with your neighbors on Nextdoor (www.nextdoor.com)

I, Rachel Ferguson, Executive Secretary, do hereby certify that we have caused a true copy of the above notice and agenda to be delivered to each of the members of the *Deferred Compensation Plan, 401(1) Defined Contribution Plan, and Retirement Health Savings Program Committee*, at the time and in the manner prescribed by law and that this agenda was posted at City Hall, 555 Santa Clara Street, CA at 5:00 p.m., Thursday, January 26, 2023.

DocuSigned by:

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Rachel Ferguson, Executive Secretary

**457 DEFERRED COMPENSATION
PLAN, 401(a) DEFINED
CONTRIBUTION PLAN, AND
RETIREMENT HEALTH SAVINGS
PROGRAM COMMITTEE
REGULAR MEETING
MINUTES
9:00 A.M.
July 18, 2022**

1. CALL TO ORDER

The meeting was called to order by Committee Chair Olsen at 9:06 a.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Committee Members Present: Committee Member Long, Davis, Olsen

Alternates Present: Alternate French

Committee Members Absent: Committee Member Malone, Nayar, Nichelini, Brown,

Alternates Absent: Alternate Alberti, Jaksch, Rolley, and Ackley

Staff Present: Interim Secretary Valdez, Manny Angel Information Systems Specialist, and Sr. Personnel Analyst Valerie Fisher

4. REPORTS

a. Report from Secretary to the Committee – None

5. COMMUNITY FORUM

Speakers: None.

6. CONSENT CALENDAR AND APPROVAL OF AGENDA

a. Approval of Minutes

Recommendation: Approval of the minutes from the April 18, 2022, meeting.

Interim Secretary asked if there was any discussion needed for the review and approval of the April 18, 2022, minutes.

Action: In a roll call vote, carried unanimously to approve the minutes as submitted.

7. PRESENTATION

a. Presentation by Shawn Baker and Chad Parilla with MissionSquare

Recommendation: Presentation by Shawn Baker and Chad Parilla to present a review of Q2 onsite service stats, review the plan data and to review enhancements for participants and plan sponsors.

Shawn Baker, Regional Vice President from Mission Square introduced Chad Parilla, as City of Vallejo's Representative who provides onsite education for the deferred compensation program along with many other tasks. City of

Vallejo employees can always reach out to Mr. Parilla for any assistance.

Mr. Baker then went into discussion about the plan activities over the last 6 months. Explaining what the participants have been doing in spite of COVID and all meetings had to go virtual. In spite of this MissionSquare has kept busy working with the City of Vallejo employees. They met with 68 employees (virtually), they provided some trainings, and conducted 2 consultations. There were 13 new enrollments and had a 60% increase in plan contributions and about 12,000 logins.

Mr. Baker went on to discuss how MissionSquare is focusing on Financial Wellness for employees to improve the financial outlook and retirement readiness.

Mr. Baker stated that MissionSquare will continue to educate participants on time the market volatility.

b. Presentation by Vincent Galindo, Hyas Group

Recommendation: Presentation by Vincent Galindo on the 2nd Performance review date as of June 30, 2022 (Hyas Group)

Vincent Galindo of the Hyas Group provided an introduction of himself and the Hyas Group for those new members to the Committee. He conveyed that the Hyas Group role is that of a fiduciary and therefore an advocate for the participants. While there may be some overlap with MissionSquare, their role is independent.

Mr. Galindo provided a quick overview on:

- market commentary
- the current fund lineup overview
- on-watch funds: MissionSquare PLUS Fund and the Vanguard US Growth Fund.
- Fee and Revenue analysis
- Legal and regulatory updates

8. ACTION ITEM(S)

a. Approve New Members to the Committee -

- Rachel Ferguson
- Natalie Peterson

In a roll call vote, carried unanimously to approve new committee members.

b. Vote on NADGCA Conference Attendance – Select members to attend and approve expenditure for the conference.

- Rachel Ferguson was selected, and the expenditure was approved for up to \$6,000.

In a roll call vote, carried unanimously to approve Rachel Ferguson as the attendee and approve expenditure not to exceed \$6,000.

c. Vote on whether to take Action On-Watch Funds – As of today the Plus Fund is on-watch. Mr. Galindo recommended keeping on watch for this quarter and then to discuss next quarter.

Committee Member Davis asked how long should a fund be on watch?

Mr. Galindo stated it is not uncommon to keep watch on funds for up to a year but recommends that 3-4 quarters would be best in this instance.

In a roll call vote, carried unanimously to keep the Plus Fund on-watch this quarter and review again next quarter.

9. FUTURE AGENDA ITEMS

- a. Presentation on Roth vs 457 – what are the advantages and what are other agencies doing?

10. ADJOURNMENT

Action: Moved by Chair Olsen, and seconded by Alternate Member French, and carried unanimously by Committee Members to adjourn the meeting.

The meeting was adjourned at 10:13 a.m.

JAMES OLSON, CHAIRPERSON

ATTEST:

RACHEL FERGUSON, EXECUTIVE SECRETARY



City of Vallejo

2022 Plan Review and 2023 Strategy

Date: Monday, January 30th, 2023

Presented by: MissionSquare Retirement



MissionSquare
RETIREMENT



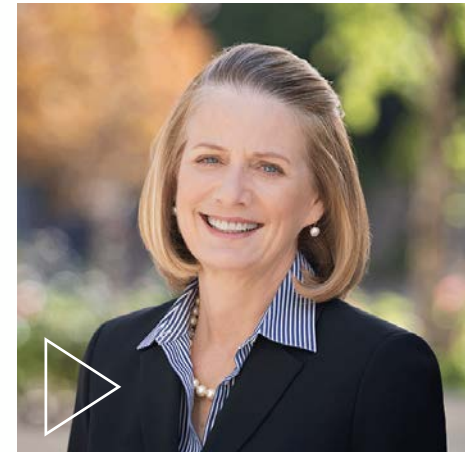
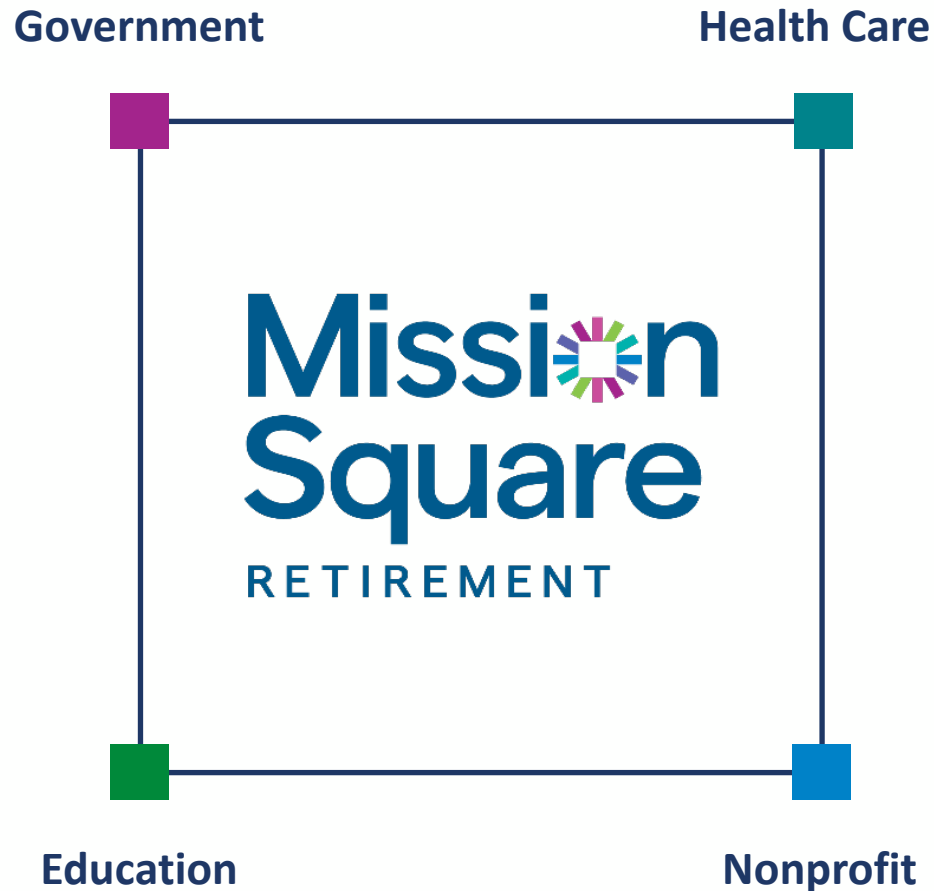


Invest in a shared sense of service™

We celebrate **50 years of helping public service employees** achieve their retirement goals. And for 50 years, our mission has been the same.
Thank you for letting us serve you.



The Mission and the Square



A message from
CEO & President
Lynne Ford

Our Approach



Provide Positive
Experiences



Serve More
Employees



Deliver the Right
Products, Services,
& Solutions



Promote Long-Term
Financial Wellness



Your Team



Plan Oversight & Strategy

Timothy Oster | Vice President, Relationship Management
toster@missionsq.org | 202-962-6938

Your contact for strategic planning and results.



Employee Outreach & Education (Temporary)

Bryan Wilhelm | Retirement Plans Specialist
bwilhelm@missionsq.org | 202-759-7003

Your contact for the participant experience.



Employee Outreach & Education Oversight

Shawn Baker | Regional Vice President
sbaker@missionsq.org | 202-759-7014

Your contact for the participant experience oversight.



Agenda



2022 Plan Review

Accomplishments & Results



2023 Strategy

Participant Engagement



Quarterly Insights

Legislative Updates, Trends, & Research



Tech Corner

Technology Updates



2022 Plan Review

MissionSquare
RETIREMENT



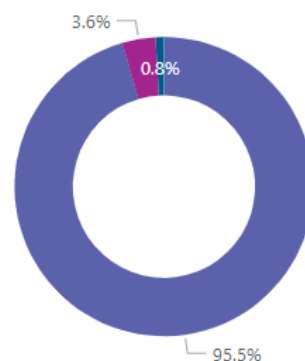
Plan Results

Visual Analytics for Your Plan

As of Date: 12/31/2022

Balance Summary

Balance
\$47.3M
Participant Accounts
1,074



Plan

- 457 (300439) CITY OF VALLEJO
- RHS (803523) CITY OF VALLEJO
- 401 (107519) CITY OF VALLEJO (FPDP)
- 401 (107517) CITY OF VALLEJO

Trust Details

Plan	Balance	Forfeiture	Conversion	Expense	Loan Balance	Total Trust Assets	Participant Accounts
457 (300439) CITY OF VALLEJO	\$45,140,909	\$0	\$0	\$43,455	\$929,306	\$46,113,670	504
RHS (803523) CITY OF VALLEJO	\$1,701,645	\$0	\$0	\$0		\$1,701,645	535
401 (107519) CITY OF VALLEJO (FPDP)	\$389,750	\$0	\$0	\$676	\$10,859	\$401,285	34
401 (107517) CITY OF VALLEJO	\$35,710	\$0	\$0	\$61		\$35,771	1
Total	\$47,268,014	\$0	\$0	\$44,192	\$940,166	\$48,252,371	1,074

[Summary](#)[Summary Details](#)[Trust Details](#)



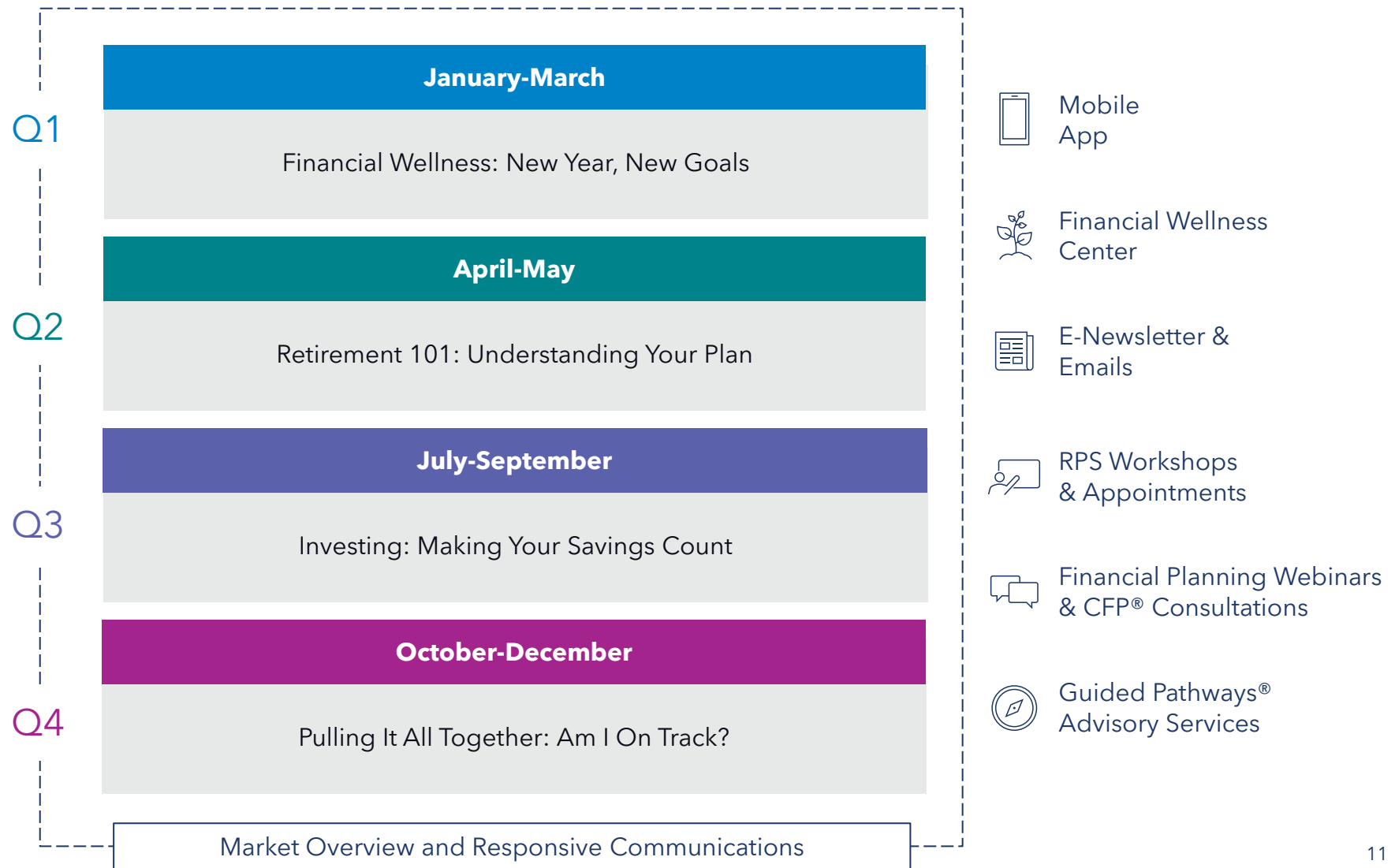
Plan Education and Outreach

Education	124 RPS Consultations	1 RPS Webinars	4 CFP® Consultations	36 CFP® Webinars
Participation & Savings	24 457(b) Enrollments	26% Increase in Plan Contributions	24% Increase in Participant Contributions	6 Roll Ins (Worth \$240K)
Financial Wellness	39 Increase in Account Logins			
Retention	97% Retention Rate	15 Roll Outs (Worth \$1.5M)		



2023 Strategy

Goal Based Programs



Focusing On: Financial Wellness

January-March

Financial Wellness

An opportunity to set goals that build financial wellness along the retirement journey.

- New year, new start to building financial security
- Explore the Financial Wellness Center with articles, videos, calculators, and more
- Decide how much you need for retirement, select investments that fit your goals, and increase your contributions for maximum savings
- Spotlight on America Saves Week



Mobile App



Financial Wellness Center



E-Newsletter & Emails



RPS Workshops & Appointments



Financial Planning Webinars & CFP® Consultations



Guided Pathways® Advisory Services



February 20th - 24th is America Saves Week, an annual opportunity for employees to support their financial health and goals.

www.missionsq.org/americasaves

Mission Square
RETIREMENT





Financial Planning Webinars

Help participants journey to and through retirement.

CERTIFIED FINANCIAL PLANNER™ professionals provide participants with clear and personalized guidance toward a more secure and confident financial future.

View the schedule:

[2023 Schedule \(Pacific\)](#)

Sign up for webinars: www.missionsq.org/cfpwebinars



Financial Wellness Center





Quarterly Insights

MissionSquare
RETIREMENT



Washington Perspective

MissionSquare Advocacy and Thought Leadership

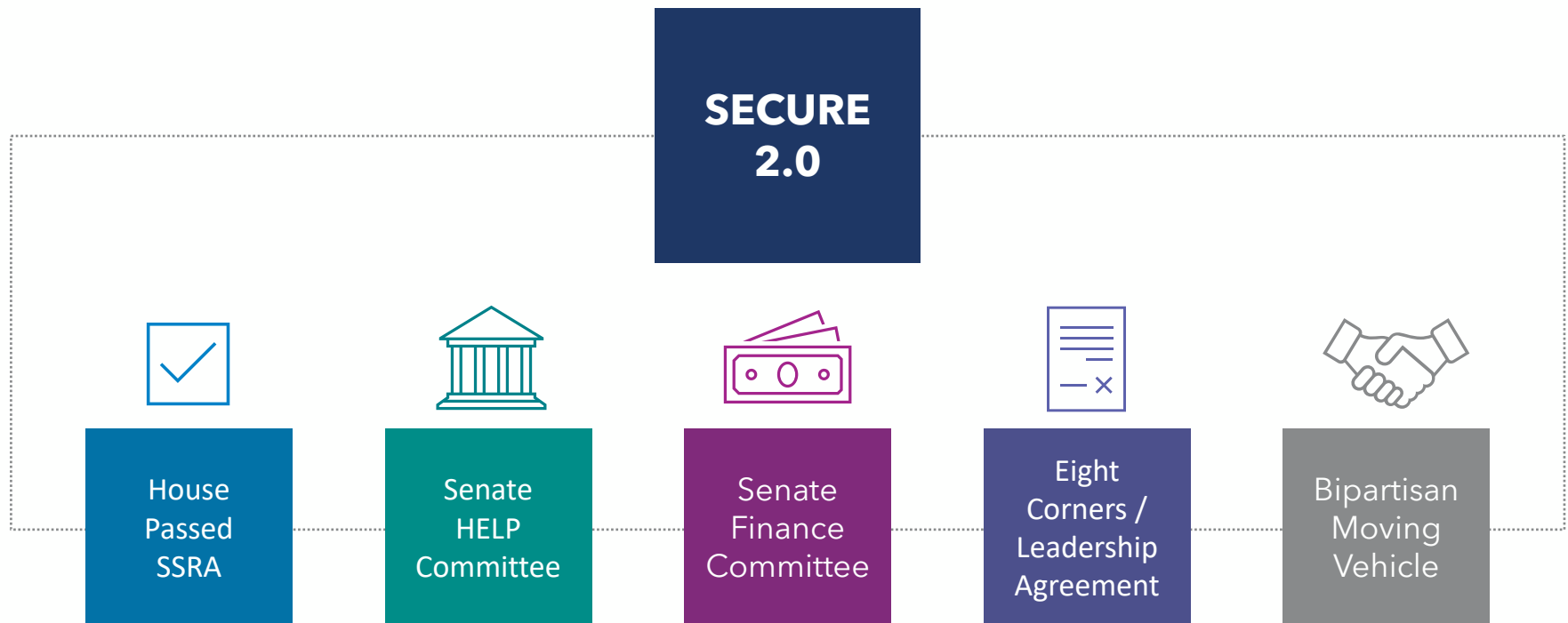
www.missionsq.org/washingtonperspective 



Washington
Perspective

SECURE 2.0

Getting to Implementation



Secure 2.0

Provisions Requiring Immediate Attention

Increase in RMD Age

- Increased to age 73 effective 2023
- Those attaining age 72 in 2022 or earlier unaffected
- Increases to age 75 in 2033

Catch-up Contributions Must be Roth

- Age-based catch-up contributions must be Roth, starting in 2024
- Employees with wages of less than \$145k (indexed) in prior year exempt
- 457(b), 401(k) and 403(b) plans will need to add designated Roth account feature (or prohibit catch-up contributions)
- Special catch-up contribution rules for 457(b) and 403(b) plans exempt

Secure 2.0

Provisions Affecting Many Governmental Plans

	Optional?	Effective
Self-certification for unforeseeable emergency withdrawal - May rely on certification that the emergency meets a type described in regulations - May rely on certification withdrawal is not in excess of need - Also available for 401(k) and 403(b) hardship distributions (safe-harbor)	Yes	2023
Eliminate “first day of the month” rule for 457(b) plans Any pay after election can be contributed	Yes	2023
RMDs for designated Roth accounts - No longer required while participant is still alive - Aligns with rules for Roth IRAs	*	2024

*While not technically required, we expect most/all plans will adopt.



Secure 2.0

Provisions Affecting Many Governmental Plans

	Optional?	Effective
Higher catch-up contribution limit - For those age 60, 61, 62, and 63 - Catch up is greater of \$10,000 (indexed) or 150% of the regular catch-up - Available for 401(k), 403(b), and 457(b) plans	*	2025
Long-term part-time coverage rule - Reduced from three years to two years - Impacts grandfathered government 401(k) plans only	No	2025

*While not technically required, we expect most/all plans will adopt.

Secure 2.0

Key New Plan Design Options

Both available in 2024

Emergency savings withdrawal feature

- Optional feature is structured similar to the qualified birth or adoption distribution ("QBAD") for DC plans and IRAs
- One emergency distribution per year up to \$1,000 and requires replenishment before subsequent withdrawal
- Participant self-certifies need
- 10% penalty waived
- Bill contains additional 10% penalty waivers for terminal illness and victims of domestic abuse

In-plan dedicated emergency savings account

- Up to \$2,500 emergency savings account inside the DC plan
- Contributions are Roth and must be invested in principal preservation investments. Counts against contribution limits. No employer contributions
- Generally, amounts may be withdrawn at anytime, penalty free. No certification from participant required
- HCEs may not participate
- Must ensure state law allows

Secure 2.0

Key New Plan Design Options

Matching contributions on student loan repayments

- Plan may “match” in the plan amounts paid for student loans as if contributed to the plan
- Available for 401(k), 403(b), 457(b), and SIMPLE IRA
- Employer contribution is treated similar to regular matching contributions for nondiscrimination
- Employee may self-certify loan repayment
- Effective in 2024

Employer contributions as Roth

- 401(k), 403(b) and 457(b) can allow employee to elect to have employer contributions made as Roth (taxable now)
- Available for matching and nonelective employer contributions
- Contribution must be vested
- Effective on enactment

Secure 2.0

Government Worker Specific Provisions

Partial income exclusion for plan payments to disabled police, firefighters, EMTs

- Annual limit is the amount of workmen's compensation payments received by the individual during the 12-month period immediately preceding the date on which the individual attains retirement age
- Applies in 2027

Expansion of 10% additional tax exception for public safety officers at age 50

- Also available for an individual with 25 years of service under the plan
- Available for corrections and forensic security officers
- Firefighters (even if privately employed)
- Effective immediately

Exclusion (up to \$3000) for health insurance payments for retired public safety

- No longer required to be paid directed to health plan (employee would attest on tax return)
- Effective immediately



2023 Contribution Limits

Elective deferral limits for 457 and 401(k) plans increase

Limitations (457)	2023	2022	2021
Annual Deferral Limit	\$22,500	\$20,500	\$19,500
"Pre-Retirement" Catch-Up Limit	\$22,500 (\$45,000 total)	\$20,500 (\$41,000 total)	\$19,500 (\$39,000 total)
"Age 50" Catch-Up Limit	\$7,500 (\$30,000 total)	\$6,500 (\$27,000 total)	\$6,500 (\$26,000 total)

Limitations (401(k))	2023	2022	2021
401 Defined Contribution Plans – Annual (\$415(c)(1)(a))	\$66,000	\$61,000	\$58,000
401 Defined Benefit Plans – Maximum Annual Benefit* (\$415(b)(1)(a))	\$265,000	\$245,000	\$230,000
401 Annual Compensation Limit** (non-grandfather / grandfather) (\$401(a)(17))	\$330,000 / \$490,000	\$305,000 / \$450,000	\$290,000 / \$430,000
Annual Deferral Limit for 401(k) Plans (\$402(g))	\$22,500	\$20,500	\$19,500
401(k) "Age 50" Catch-Up Limit (\$414(v))	\$7,500 (\$30,000 total)	\$6,500 (\$27,000 total)	\$6,500 (\$26,000 total)

[More details on the retirement plan limits are available from the IRS](#)

* Special limitations apply to defined benefit plans. Please contact your defined benefit plan administrator should you require additional information.

** OBRA 1993 provided a governmental exception for the maximum compensation limit that grandfathers certain employees under the 1993 compensation limit of \$235,840. Employees eligible to participate in a governmental plan, utilizing the ICMA-RC plan document, prior to January 1, 1994, are subject to the maximum compensation limit of \$235,840 as indexed and shown above as the "grandfather" limit. Employees eligible to participate in a governmental plan, utilizing the ICMA-RC plan document, after January 1, 1994, are subject to the maximum compensation limit of \$150,000 as indexed and shown above as "non-grandfather" limit.



Tech Corner



Transition and New Experience Update

Answering Your Frequently Asked Questions

Why did you transition to a new system?

- Changes were made to upgrade our technology and keep MissionSquare well-positioned to serve you for the next 50 years.

When did the transition occur?

- We transitioned your accounts to our new recordkeeping system in early October 2022.

What have you learned?

- Call Center volumes were higher than anticipated due to enhanced security features.
- Retirees would have benefited from additional outreach to answer questions and provide support.
- Payroll challenges occurred due to customization of data formats and bank changes.



Transition and New Experience Update

Answering Your Frequently Asked Questions

What is the path forward?

- **Call Center staffing** increased, and new hires have received additional training.
- **Secure account features** now include the ability to reset credentials online, reducing the need to call for support.
- Our **Plan Health Dashboard** will help you measure success and health of your plan, with benchmark comparisons. MissionSquare will recommend solutions to help you improve plan outcomes.
- The **Financial Wellness Center** provides your participants a personalized experience, interactive education resources, and gamification, to help your employees reach their retirement goals.

Employer Resource Center

Your Guide to the Technology, Processes, and Services Here to Help You and Your Employees

www.missionsq.org/EmployerResourceCenter



Welcome!

Employer Resource Center

The MissionSquare Retirement Employer Resource Center is a guide to the technology, processes, and services that are here to help you and your employees.

New! CEO and President Lynne Ford provides an update regarding our transition to a new, modern, and scalable technology. [Read the Update](#)





Questions?





CITY OF VALLEJO
457(b), 401(a), and RHS Plans
December 31, 2022 Performance Report

Vincent Galindo
Senior Consultant
vgalindo@hyasgroup.com

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Hyas Group is a business of Morgan Stanley

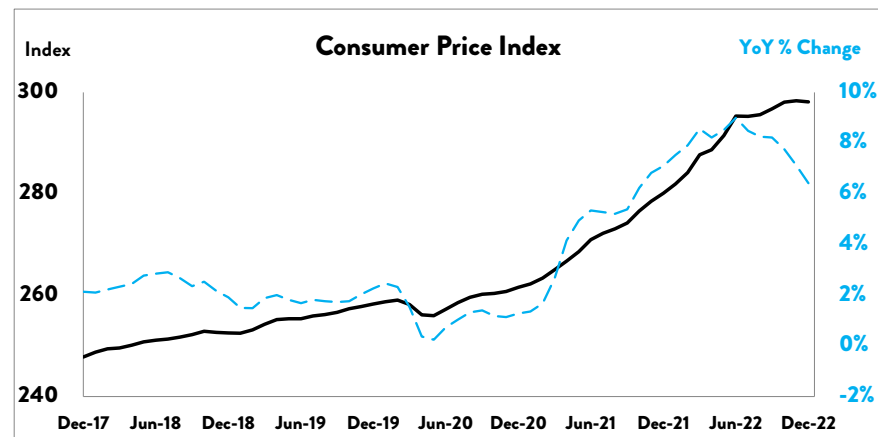
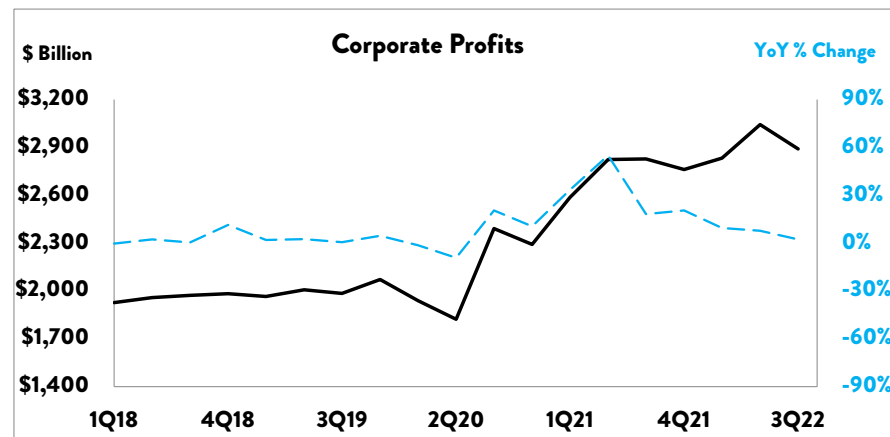
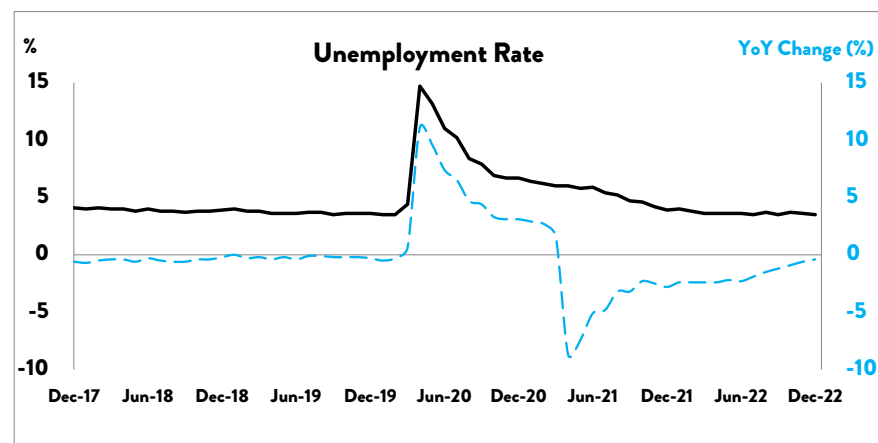
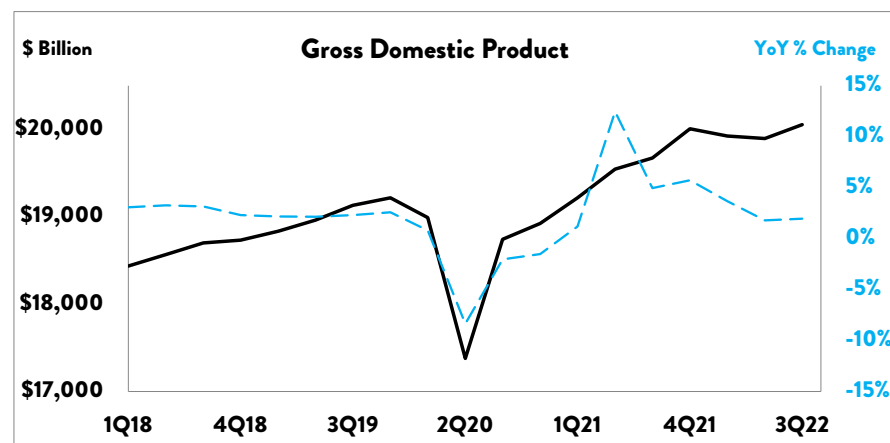
Geoff Hildreth
Performance Analyst
ghildreth@hyasgroup.com

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Section 5	Fund Attributions

Section 1

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

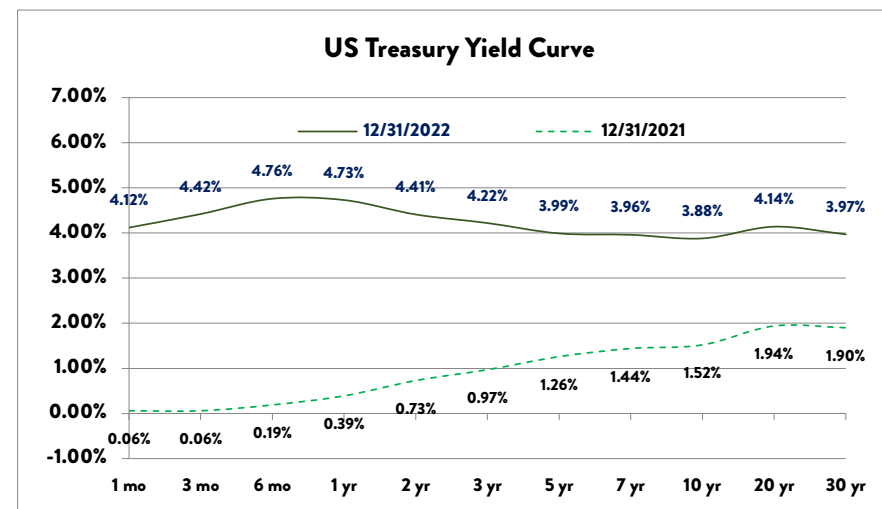
*% Off Low

Morningstar data as of 12/31/2022

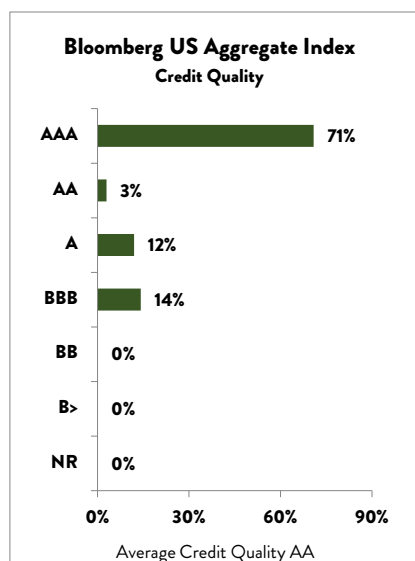
4Q2022 Bond Market Data

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%

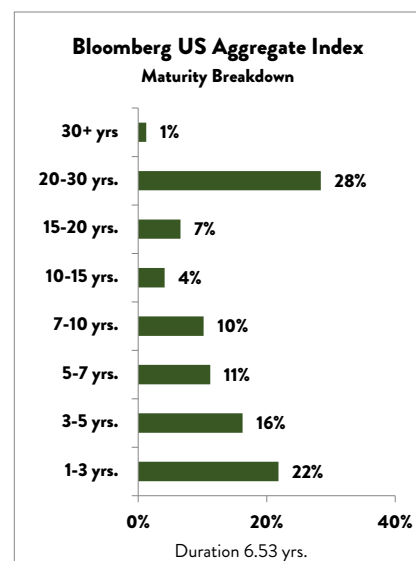
Source: Morningstar



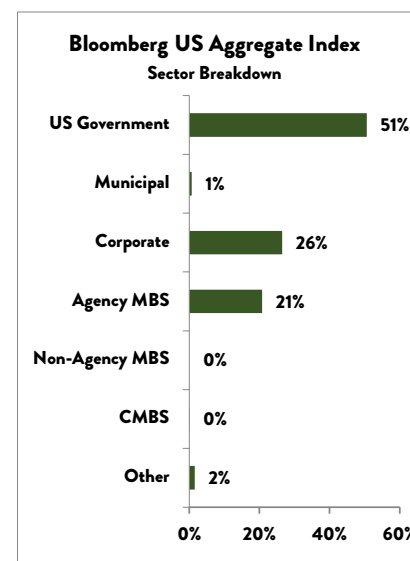
Source: Department of US Treasury



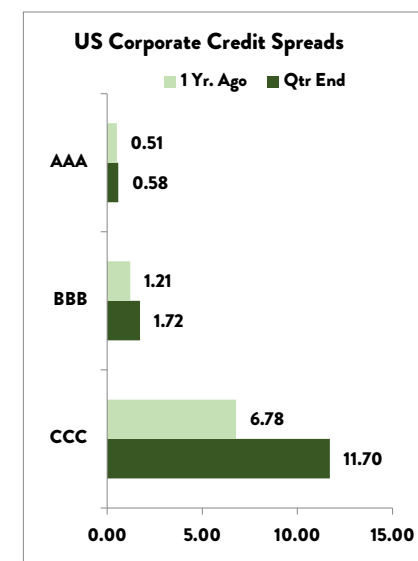
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

4Q2022 US Equity Market Data

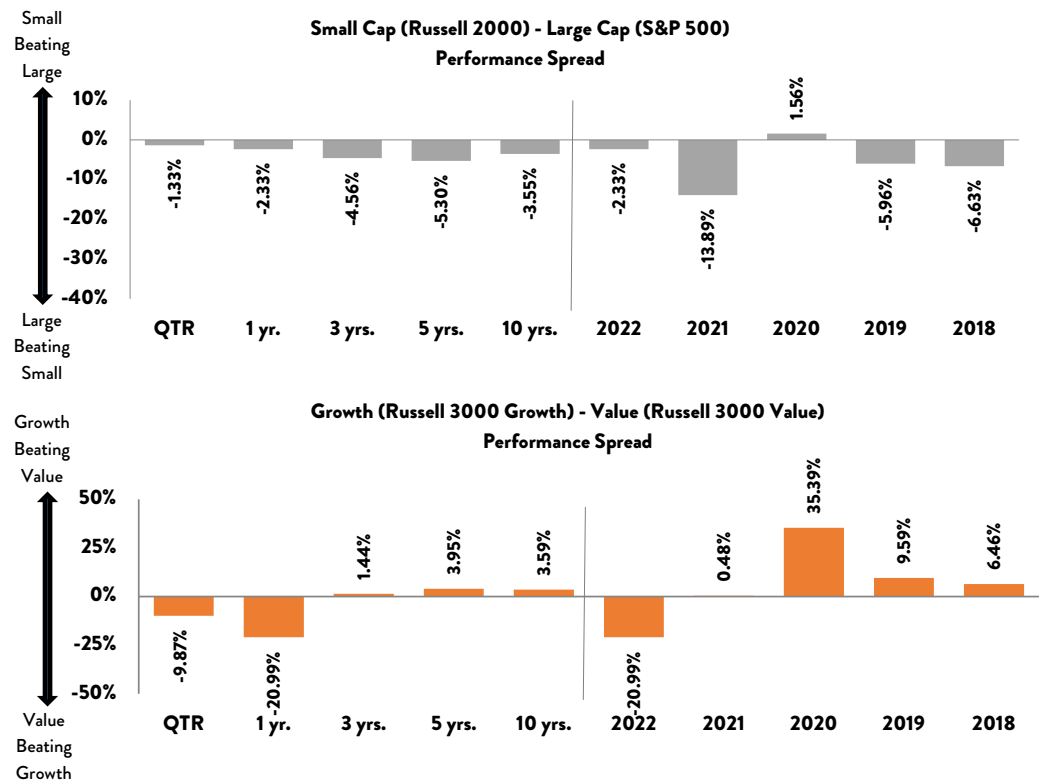
Sectors Weights/Returns (ranked by quarter performance)

	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	Wgt.	Sector	QTR	YTD	1 yr.
	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%
S&P Smallcap 600 Index	Wgt.	Sector	QTR	YTD	1 yr.
	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%

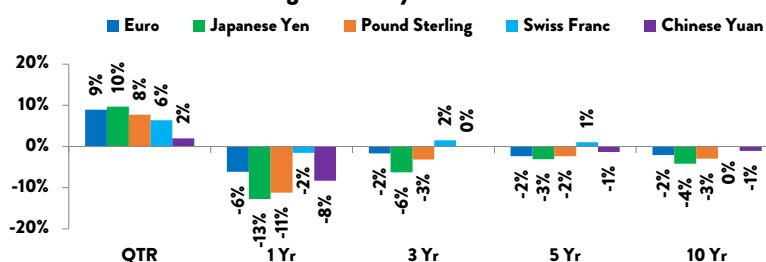


4Q2022 International Market Data

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%

Foreign Currency v. US\$ Returns

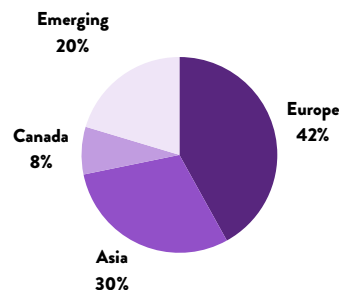


Exchange Rates	QTR	3Q22	2Q22	1Q22	4Q21	3Q21
Japanese Yen	131.81	144.71	135.69	121.44	115.17	111.50
Euro	0.93	1.02	0.96	0.90	0.88	0.86
British Pound	0.83	0.90	0.82	0.76	0.74	0.74
Swiss Franc	0.92	0.98	0.96	0.92	0.91	0.93
Chinese Yuan	6.90	7.11	6.70	6.34	6.37	6.44

Source: Federal Reserve Bank of St. Louis

Regional Exposure

MSCI ACWI ex-USA



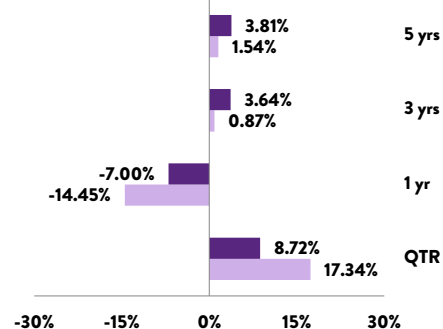
Top 10 Countries (MSCI AC World ex-USA)

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

Source: Morningstar

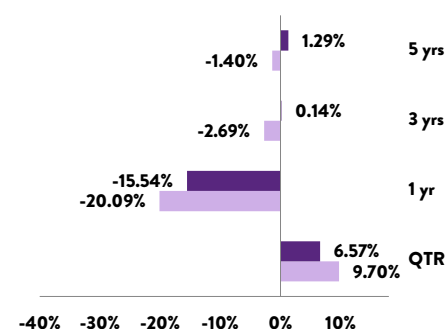
MSCI EAFE Index Return

Local US\$



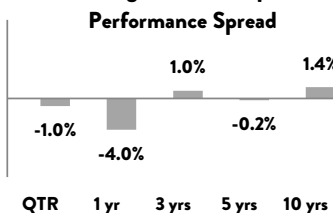
MSCI Emerging Index Return

Local US\$



MSCI ACWI Ex US Large v. Small Cap Performance Spread

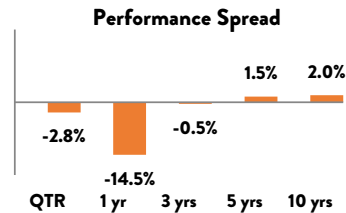
Small Beating Large
Large Beating Small



Performance Source: Morningstar

MSCI ACWI Ex US Value v. Growth Performance Spread

Growth Beating Value
Value Beating Growth



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

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Section 2

CITY OF VALLEJO, CA
457(b) Deferred Compensation Plan

PLAN ASSET ALLOCATION
Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
MissionSquare PLUS Fund R10	-	\$13,011,445	28.2%
Fidelity US Bond Index	FXNAX	\$1,936,175	4.2%
Sterling Capital Total Return Bond R6	STRDX	\$2,192,017	4.8%
Total		\$17,139,637	37.2%

Large Cap	Ticker	Assets	%
MFS Value R6	MEIKX	\$2,003,571	4.3%
Fidelity 500 Index	FXAIX	\$5,302,280	11.5%
Vanguard US Growth Adm	VWUAX	\$4,482,732	9.7%
Total		\$11,788,584	25.6%

Mid Cap	Ticker	Assets	%
Allspring Special Mid Cap Value Fund	WFPRX	\$615,227	1.3%
Fidelity Mid Cap Index	FSMDX	\$1,304,049	2.8%
MFS Mid Cap Growth R6	OTCKX	\$1,051,852	2.3%
Total		\$2,971,128	6.4%

Small Cap	Ticker	Assets	%
Fidelity Small Cap Index	FSSNX	\$1,663,708	3.6%
Total		\$1,663,708	3.6%

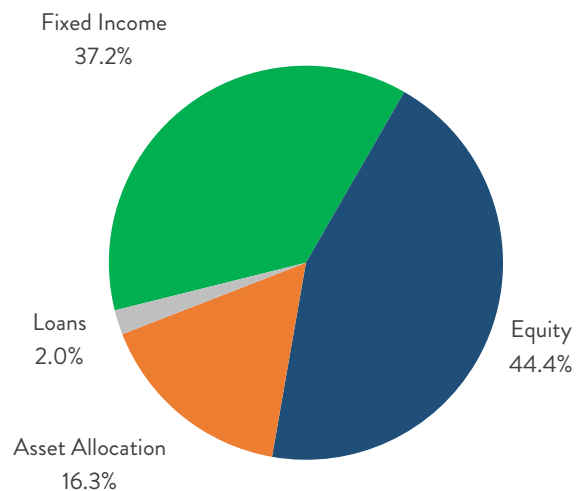
International	Ticker	Assets	%
Vanguard International Value Inv	VTRIX	\$676,854	1.5%
Fidelity Total International Index	FTIHX	\$2,546,905	5.5%
Vanguard International Growth Adm	VWILX	\$827,027	1.8%
Total		\$4,050,786	8.8%

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$227,518	0.5%
Vanguard Target Retirement 2020	VTWNX	\$129,076	0.3%
Vanguard Target Retirement 2025	VTTVX	\$1,020,578	2.2%
Vanguard Target Retirement 2030	VTHRX	\$1,119,769	2.4%
Vanguard Target Retirement 2035	VTTHX	\$1,904,280	4.1%
Vanguard Target Retirement 2040	VFORX	\$779,679	1.7%
Vanguard Target Retirement 2045	VTIVX	\$703,678	1.5%
Vanguard Target Retirement 2050	VFIFX	\$1,033,454	2.2%
Vanguard Target Retirement 2055	VFFVX	\$445,216	1.0%
Vanguard Target Retirement 2060	VTTSX	\$154,040	0.3%
Vanguard Target Retirement 2065	VLXVX	\$9,778	0.0%
Total		\$7,527,066	16.3%

Miscellaneous	Ticker	Assets	%
Participant Loans	-	\$929,306	2.0%
Total		\$929,306	2.0%

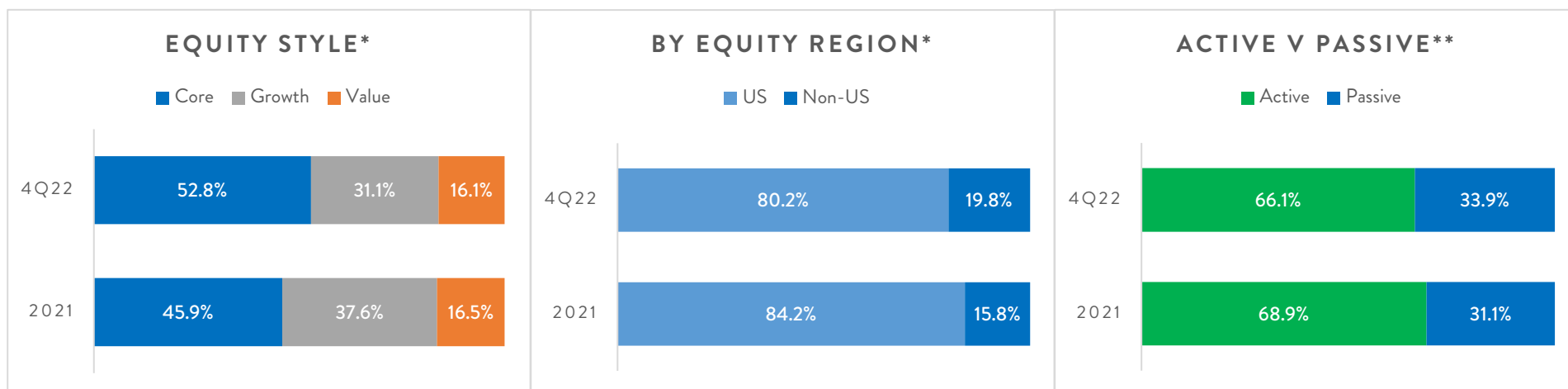
TOTAL PLAN ASSETS **\$46,070,216**

Admin Allowance Account Balance \$43,455



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	37.2%	33.7%	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	25.6%	31.0%	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	6.4%	7.2%	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	3.6%	4.0%	N/A	N/A	N/A	N/A	N/A	N/A
International	8.8%	7.9%	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	16.3%	15.4%	N/A	N/A	N/A	N/A	N/A	N/A
Loans	2.0%	0.8%	N/A	N/A	N/A	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, and Loan assets

**Excludes Asset Allocation, and Loan assets

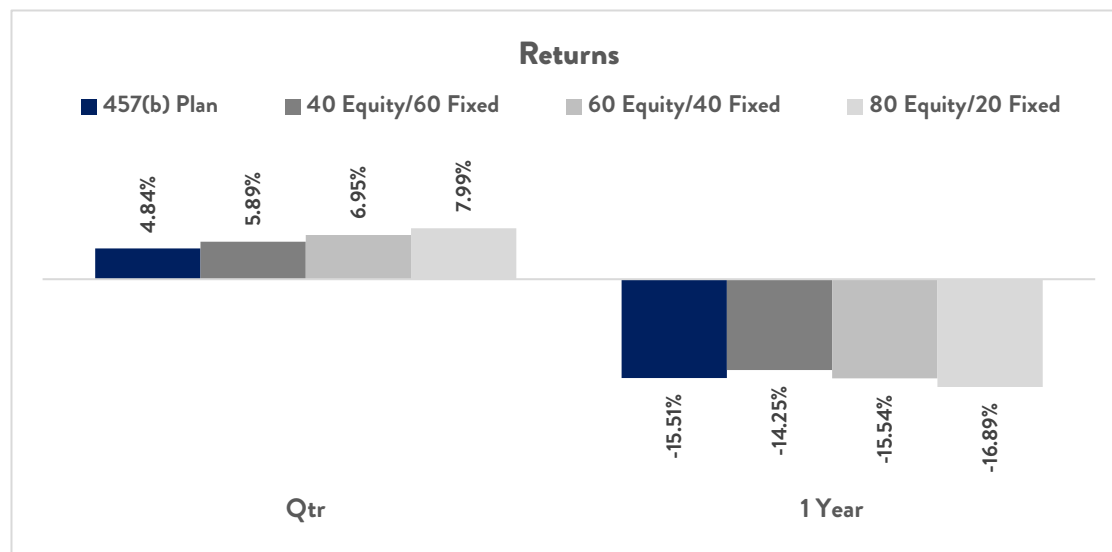
PLAN LEVEL CASH FLOWS

	Beginning Value*	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$17,215,037	\$111,077	(\$245,528)	(\$73,745)	\$132,796	\$17,139,637
Large Cap	\$11,050,222	\$134,181	(\$75,627)	\$112,538	\$567,270	\$11,788,584
Mid Cap	\$2,732,860	\$42,757	(\$13,541)	(\$45,595)	\$254,647	\$2,971,128
Small Cap	\$1,519,263	\$14,820	(\$10,471)	\$46,152	\$93,945	\$1,663,708
International	\$3,454,597	\$66,457	(\$17,832)	\$35,620	\$511,943	\$4,050,786
Asset Allocation	\$6,733,285	\$395,313	(\$39,811)	(\$74,968)	\$513,247	\$7,527,066
Total	\$42,705,264	\$764,604	(\$402,810)	\$3	\$2,073,848	\$45,140,909

HISTORICAL PLAN CASH FLOWS

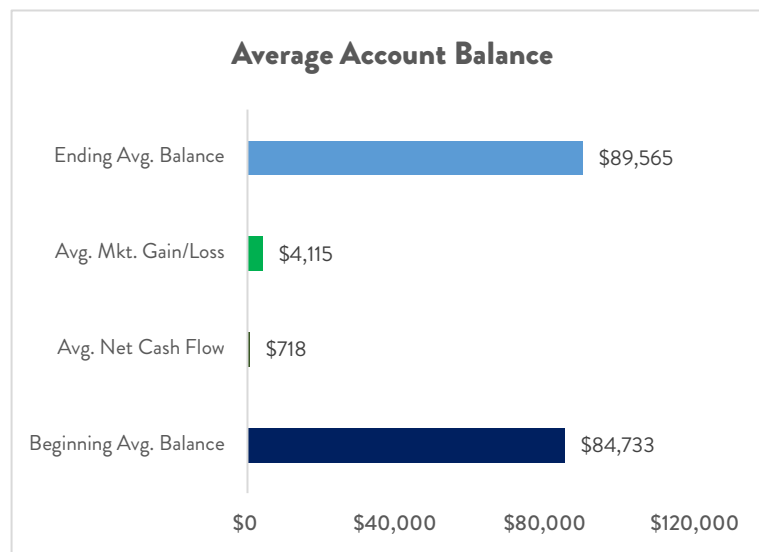
	Beginning Value*	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$42,705,264	\$361,797	\$2,073,848	\$45,140,909
YTD	\$53,098,741	\$242,294	(\$8,200,126)	\$45,140,909
2021	N/A	N/A	N/A	\$53,098,741
2020	N/A	N/A	N/A	N/A
2019	N/A	N/A	N/A	N/A
2018	N/A	N/A	N/A	N/A

*For reporting purposes, 4Q22 beginning value has been adjusted to reflect removal of administrative expense account values from MissionSquare total plan reporting.



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global

Aggregate Bond (rebalanced quarterly)



CITY OF VALLEJO, CA
401(a) Defined Contribution Plans

PLAN ASSET ALLOCATION
Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
MissionSquare PLUS Fund R10	-	\$53,066	12.2%
Fidelity US Bond Index	FXNAX	\$40,762	9.3%
Sterling Capital Total Return Bond R6	STRDX	\$14,111	3.2%
Total		\$107,940	24.7%

Large Cap	Ticker	Assets	%
MFS Value R6	MEIKX	\$178	0.0%
Fidelity 500 Index	FXAIX	\$55,919	12.8%
Vanguard US Growth Adm	VWUAX	\$53,918	12.4%
Total		\$110,015	25.2%

Mid Cap	Ticker	Assets	%
Allspring Special Mid Cap Value Fund	WFPRX	\$77	0.0%
Fidelity Mid Cap Index	FSMDX	\$24,766	5.7%
MFS Mid Cap Growth R6	OTCKX	\$2,297	0.5%
Total		\$27,140	6.2%

Small Cap	Ticker	Assets	%
Fidelity Small Cap Index	FSSNX	\$242	0.1%
Total		\$242	0.1%

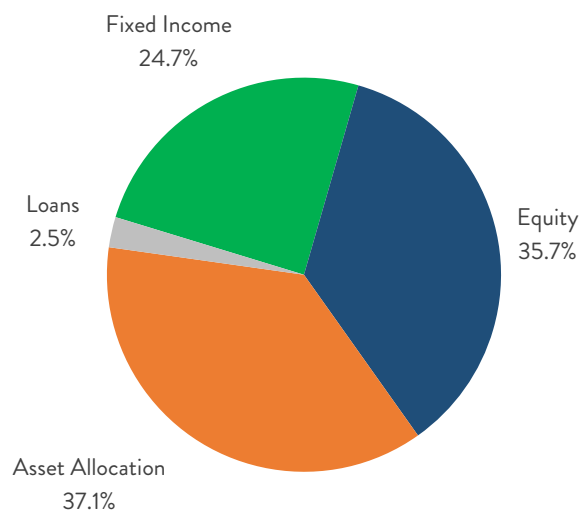
International	Ticker	Assets	%
Vanguard International Value Inv	VTRIX	\$177	0.0%
Fidelity Total International Index	FTIHX	\$17,518	4.0%
Vanguard International Growth Adm	VWILX	\$752	0.2%
Total		\$18,446	4.2%

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$0	0.0%
Vanguard Target Retirement 2020	VTWNX	\$8,305	1.9%
Vanguard Target Retirement 2025	VTTVX	\$4,431	1.0%
Vanguard Target Retirement 2030	VTHRX	\$105,613	24.2%
Vanguard Target Retirement 2035	VTTHX	\$12,552	2.9%
Vanguard Target Retirement 2040	VFORX	\$13,829	3.2%
Vanguard Target Retirement 2045	VTIVX	\$9,043	2.1%
Vanguard Target Retirement 2050	VFIFX	\$5,566	1.3%
Vanguard Target Retirement 2055	VFFVX	\$2,339	0.5%
Vanguard Target Retirement 2060	VTTSX	\$0	0.0%
Vanguard Target Retirement 2065	VLXVX	\$0	0.0%
Total		\$161,678	37.1%

Miscellaneous	Ticker	Assets	%
Participant Loans	-	\$10,859	2.5%
Total		\$10,859	2.5%

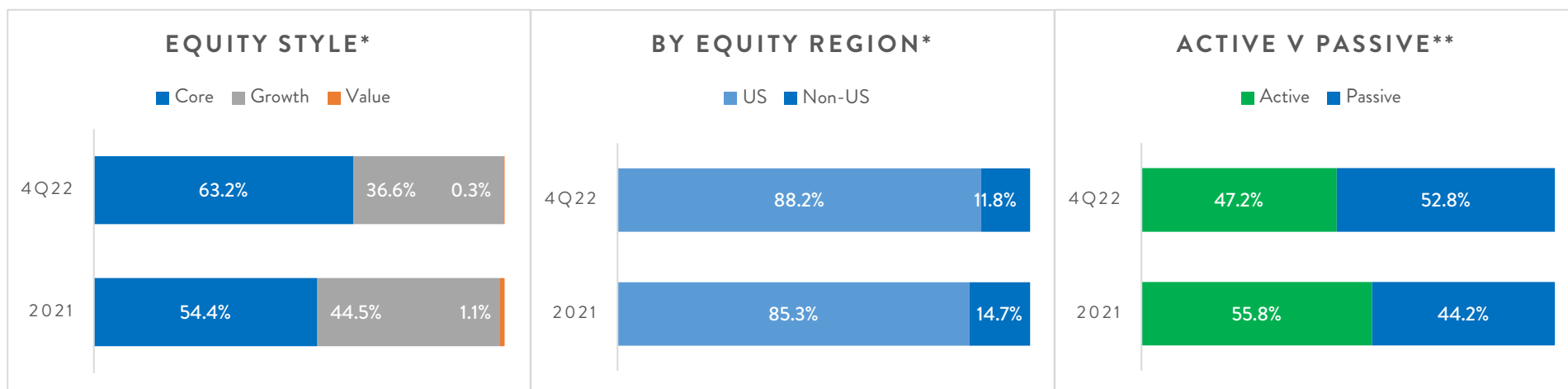
TOTAL PLAN ASSETS **\$436,320**

Admin Allowance Account Balance \$737



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	24.7%	23.7%	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	25.2%	30.3%	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	6.2%	4.7%	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	0.1%	0.0%	N/A	N/A	N/A	N/A	N/A	N/A
International	4.2%	6.0%	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	37.1%	35.3%	N/A	N/A	N/A	N/A	N/A	N/A
Loans	2.5%	0.0%	N/A	N/A	N/A	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, and Loan assets

**Excludes Asset Allocation, and Loan assets

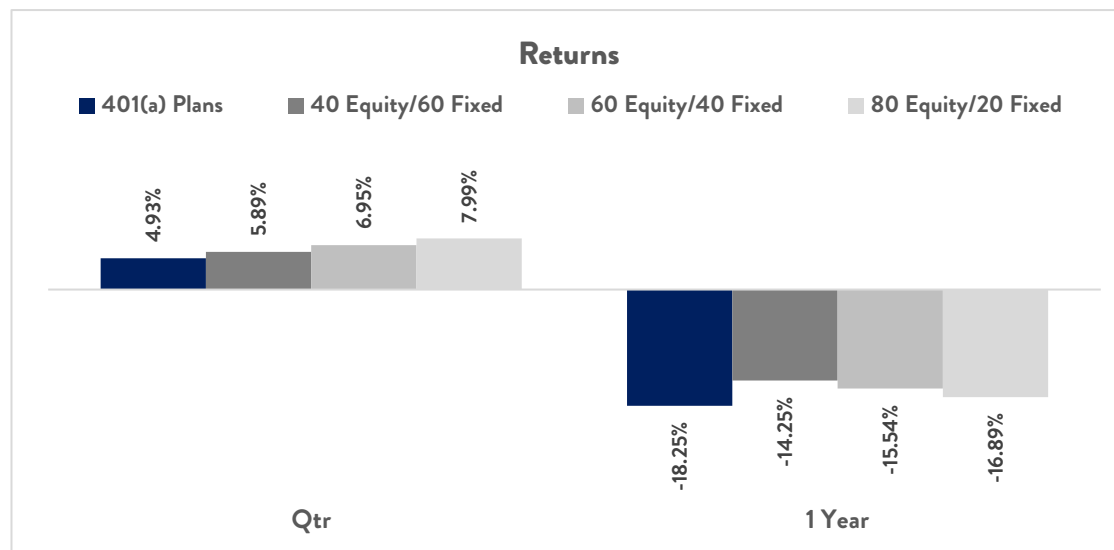
PLAN LEVEL CASH FLOWS

	Beginning Value*	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$108,427	\$0	(\$1,420)	(\$242)	\$1,175	\$107,940
Large Cap	\$106,280	\$0	(\$37)	\$193	\$3,580	\$110,015
Mid Cap	\$24,822	\$0	(\$10)	\$85	\$2,244	\$27,140
Small Cap	\$198	\$0	(\$0)	\$32	\$12	\$242
International	\$16,149	\$0	(\$12)	(\$67)	\$2,377	\$18,446
Asset Allocation	\$149,332	\$1,810	(\$49)	\$0	\$10,584	\$161,678
Total	\$405,208	\$1,810	(\$1,528)	\$0	\$19,970	\$425,460

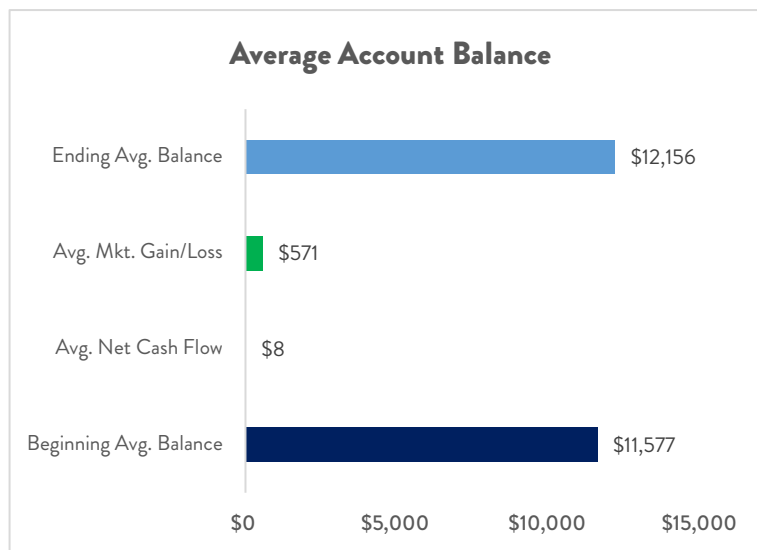
HISTORICAL PLAN CASH FLOWS

	Beginning Value*	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$405,208	\$282	\$19,970	\$425,460
YTD	\$481,818	\$35,957	(\$92,315)	\$425,460
2021	N/A	N/A	N/A	\$481,818
2020	N/A	N/A	N/A	N/A
2019	N/A	N/A	N/A	N/A
2018	N/A	N/A	N/A	N/A

*For reporting purposes, 4Q22 beginning value has been adjusted to reflect removal of administrative expense account values from MissionSquare total plan reporting.



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



CITY OF VALLEJO, CA

Retirement Health Savings Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
MissionSquare PLUS Fund S11	-	\$21,075	1.2%
Fidelity US Bond Index	FXNAX	\$289	0.0%
Sterling Capital Total Return Bond R6	STRDX	\$0	0.0%
Total		\$21,364	1.3%

Large Cap	Ticker	Assets	%
MFS Value R6	MEIKX	\$65	0.0%
Fidelity 500 Index	FXAIX	\$40,986	2.4%
Vanguard US Growth Adm	VWUAX	\$52,425	3.1%
Total		\$93,477	5.5%

Mid Cap	Ticker	Assets	%
Allspring Special Mid Cap Value Fund	WFPRX	\$41	0.0%
Fidelity Mid Cap Index	FSMDX	\$19,656	1.2%
MFS Mid Cap Growth R6	OTCKX	\$733	0.0%
Total		\$20,430	1.2%

Small Cap	Ticker	Assets	%
Fidelity Small Cap Index	FSSNX	\$2,904	0.2%
Total		\$2,904	0.2%

International	Ticker	Assets	%
Vanguard International Value Inv	VTRIX	\$0	0.0%
Fidelity Total International Index	FTIHX	\$14,653	0.9%
Vanguard International Growth Adm	VWILX	\$0	0.0%
Total		\$14,653	0.9%

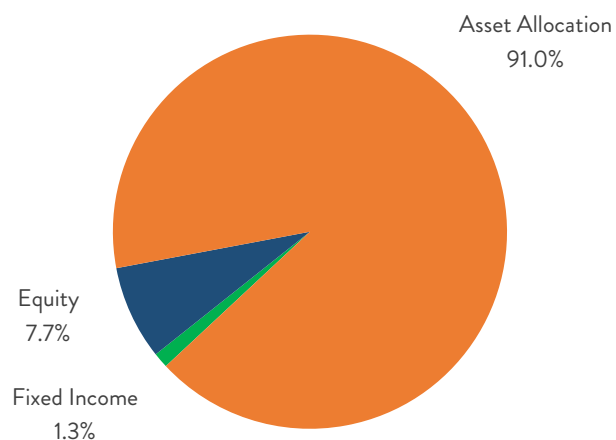
Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$5,152	0.3%
Vanguard Target Retirement 2020	VTWNX	\$54,697	3.2%
Vanguard Target Retirement 2025	VTTVX	\$142,694	8.4%
Vanguard Target Retirement 2030	VTHRX	\$152,932	9.0%
Vanguard Target Retirement 2035	VTTHX	\$164,776	9.7%
Vanguard Target Retirement 2040	VFORX	\$272,601	16.0%
Vanguard Target Retirement 2045	VTIVX	\$271,553	16.0%
Vanguard Target Retirement 2050	VFIFX	\$313,690	18.4%
Vanguard Target Retirement 2055	VFFVX	\$150,292	8.8%
Vanguard Target Retirement 2060	VTTSX	\$19,693	1.2%
Vanguard Target Retirement 2065	VLXVX	\$738	0.0%
Total		\$1,548,817	91.0%

TOTAL PLAN ASSETS

\$1,701,645

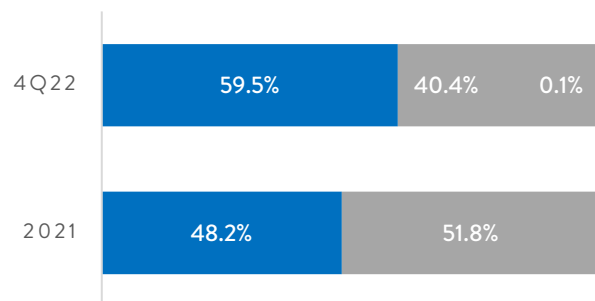
HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	1.3%	0.2%	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	5.5%	6.4%	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	1.2%	0.6%	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	0.2%	0.1%	N/A	N/A	N/A	N/A	N/A	N/A
International	0.9%	0.4%	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	91.0%	92.3%	N/A	N/A	N/A	N/A	N/A	N/A



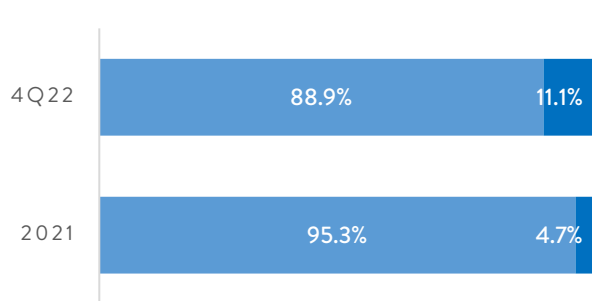
EQUITY STYLE*

■ Core ■ Growth ■ Value



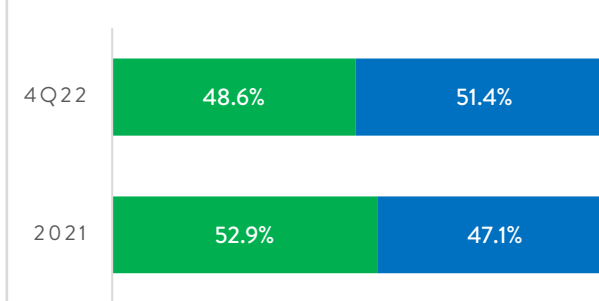
BY EQUITY REGION*

■ US ■ Non-US



ACTIVE V PASSIVE**

■ Active ■ Passive



*Excludes Fixed Income and Asset Allocation assets

**Excludes Asset Allocation assets

CITY OF VALLEJO, CA

Retirement Health Savings Plan

PLAN ASSET ALLOCATION

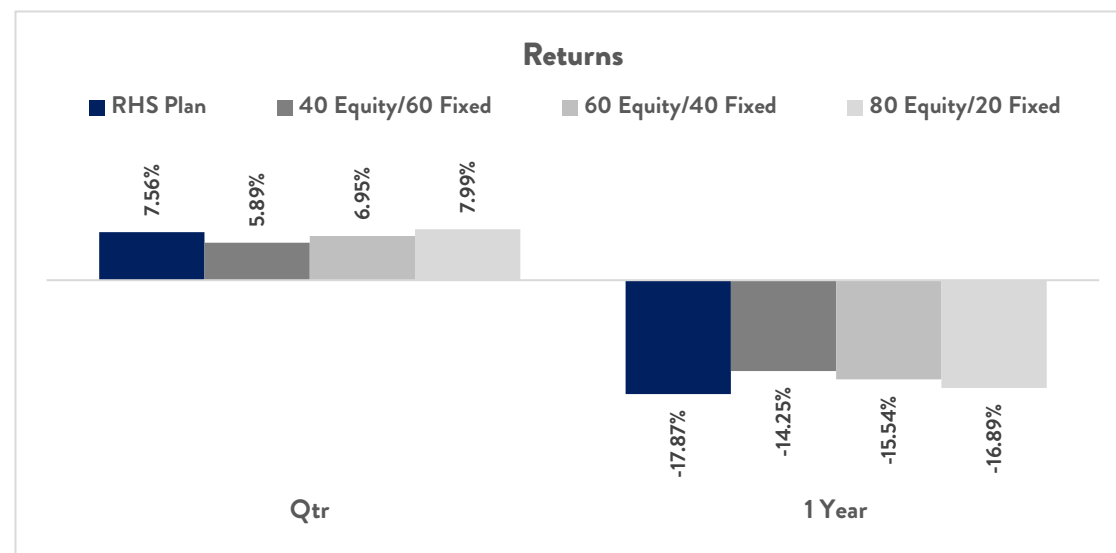
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$20,233	\$1,088	(\$63)	(\$9)	\$115	\$21,364
Large Cap	\$85,209	\$6,123	(\$285)	\$208	\$2,222	\$93,477
Mid Cap	\$18,327	\$468	(\$51)	\$14	\$1,671	\$20,430
Small Cap	\$2,502	\$228	(\$8)	\$32	\$151	\$2,904
International	\$12,323	\$698	(\$34)	(\$163)	\$1,829	\$14,653
Asset Allocation	\$1,383,817	\$60,571	(\$6,862)	(\$82)	\$111,373	\$1,548,817
Total	\$1,522,410	\$69,177	(\$7,303)	\$0	\$117,361	\$1,701,645

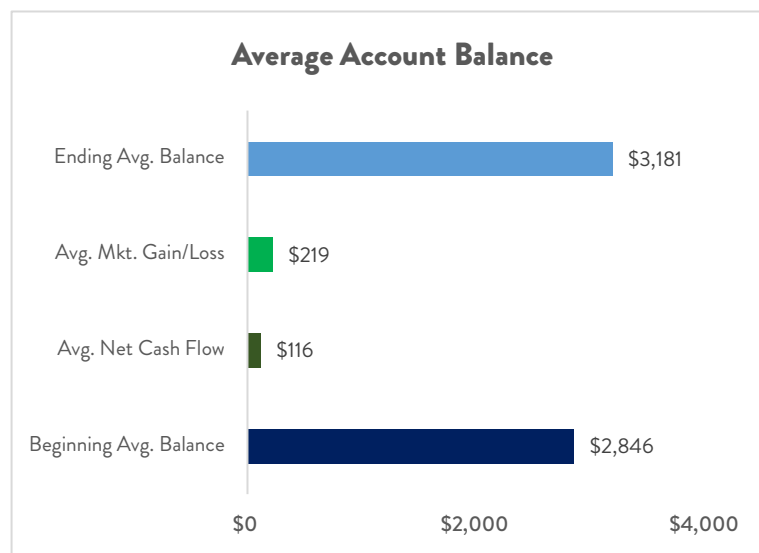
HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$1,522,410	\$61,873	\$117,361	\$1,701,645
YTD	\$1,778,538	\$246,659	(\$323,552)	\$1,701,645
2021	N/A	N/A	N/A	\$1,778,538
2020	N/A	N/A	N/A	N/A
2019	N/A	N/A	N/A	N/A
2018	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global

Aggregate Bond (rebalanced quarterly)



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Section 3

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CITY OF VALLEJO, CA

457(b), 401(a), and RHS Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
MissionSquare PLUS Fund R10	0.55	1.97	1.97	2.03	2.16	2.06	1.89	2.22	2.45	2.27	2.12	1.98
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
+/- Index	(0.44)	(1.03)	(1.03)	0.57	0.35	0.38	1.04	1.68	0.50	(0.48)	0.21	0.54
US Stable Value	24	17	17	12	10	13	10	12	16	13	8	7
MissionSquare PLUS Fund S11	0.55	1.96	1.96	1.93	2.16	2.06	1.89	2.22	2.45	2.27	2.12	1.98
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
+/- Index	(0.44)	(1.04)	(1.04)	0.47	0.35	0.38	1.04	1.68	0.49	(0.48)	0.21	0.54
US Stable Value	24	19	19	13	10	13	10	12	16	13	8	7
Fidelity US Bond Index	1.68	-13.03	-13.03	-2.72	-0.02	1.01	-1.79	7.80	8.48	0.01	3.50	2.52
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	(0.19)	(0.02)	(0.02)	(0.01)	(0.04)	(0.05)	(0.25)	0.29	(0.23)	0.00	(0.04)	(0.13)
US Fund Intermediate Core Bond	43	29	29	46	38	42	65	50	48	26	43	55
Sterling Capital Total Return Bond R6	1.57	-13.15	-13.15	-2.08	0.48	1.58	-1.12	9.35	9.37	-0.27	4.33	3.75
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	(0.30)	(0.14)	(0.14)	0.63	0.46	0.52	0.42	1.84	0.65	(0.28)	0.79	1.10
US Fund Intermediate Core Bond	57	34	34	15	11	6	28	15	18	42	10	12
MFS Value R6	13.60	-5.80	-5.80	7.15	7.64	11.29	25.55	4.03	30.18	-9.78	17.86	14.25
Russell 1000 Value Index	12.42	-7.54	-7.54	5.96	6.67	10.29	25.16	2.80	26.54	-8.27	13.66	17.34
+/- Index	1.18	1.74	1.74	1.19	0.97	1.00	0.39	1.23	3.64	(1.51)	4.20	(3.09)
US Fund Large Value	30	53	53	46	35	17	57	35	6	67	30	52

CITY OF VALLEJO, CA

457(b), 401(a), and RHS Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Fidelity 500 Index	7.56	-18.13	-18.13	7.65	9.41	12.55	28.69	18.40	31.47	-4.40	21.81	11.97
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	0.00	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	0.00	(0.01)	(0.02)	(0.02)	0.01
US Fund Large Blend	56	49	49	30	20	11	21	33	22	22	32	27
Vanguard US Growth Adm	-0.65	-39.58	-39.58	2.55	7.72	12.23	12.45	58.74	33.51	0.75	31.74	-0.59
Russell 1000 Growth Index	2.20	-29.14	-29.14	7.79	10.96	14.10	27.60	38.49	36.39	-1.51	30.21	7.08
+/- Index	(2.85)	(10.44)	(10.44)	(5.24)	(3.24)	(1.87)	(15.15)	20.24	(2.88)	2.26	1.53	(7.66)
US Fund Large Growth	85	90	90	75	61	41	85	8	41	25	27	81
Allspring Special Mid Cap Value Fund	14.08	-4.50	-4.50	8.33	8.45	11.93	28.80	3.36	35.68	-13.02	11.27	21.68
Russell Mid Cap Value Index	10.45	-12.03	-12.03	5.82	5.72	10.11	28.34	4.96	27.06	-12.29	13.34	20.00
+/- Index	3.63	7.53	7.53	2.51	2.73	1.82	0.46	(1.60)	8.62	(0.74)	(2.07)	1.69
US Fund Mid-Cap Value	8	18	18	21	5	3	47	43	2	42	80	20
Fidelity Mid Cap Index	9.21	-17.28	-17.28	5.89	7.10	10.95	22.56	17.11	30.51	-9.05	18.47	13.86
Russell Mid Cap Index	9.18	-17.32	-17.32	5.88	7.10	10.96	22.58	17.10	30.54	-9.06	18.52	13.80
+/- Index	0.03	0.04	0.04	0.01	0.00	(0.01)	(0.02)	0.01	(0.03)	0.01	(0.05)	0.07
US Fund Mid-Cap Blend	51	67	67	53	30	16	66	24	24	25	26	57
MFS Mid Cap Growth R6	7.13	-28.29	-28.29	3.59	9.19	12.39	14.17	35.80	37.93	1.21	26.39	4.75
Russell Mid Cap Growth Index	6.90	-26.72	-26.72	3.85	7.64	11.41	12.73	35.59	35.47	-4.75	25.27	7.33
+/- Index	0.23	(1.57)	(1.57)	(0.26)	1.55	0.98	1.44	0.21	2.46	5.96	1.12	(2.58)
US Fund Mid-Cap Growth	31	50	50	55	18	15	40	49	21	10	39	53

CITY OF VALLEJO, CA

457(b), 401(a), and RHS Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

				Annualized									
		QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity Small Cap Index		6.25	-20.27	-20.27	3.15	4.22	9.17	14.71	19.99	25.71	-10.88	14.85	21.63
	Russell 2000 Index	6.23	-20.44	-20.44	3.10	4.13	9.01	14.82	19.96	25.52	-11.01	14.65	21.31
	+/- Index	0.02	0.17	0.17	0.05	0.09	0.16	(0.11)	0.03	0.18	0.14	0.20	0.32
	US Fund Small Blend	89	79	79	73	61	48	89	12	36	34	26	46
		QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard International Value Inv		15.76	-11.66	-11.66	1.30	1.36	4.31	7.97	8.99	20.39	-14.52	27.96	4.46
	MSCI ACWI Ex-USA Value (Net) Index	15.70	-8.59	-8.59	0.06	-0.05	2.72	10.46	-0.77	15.71	-13.97	22.66	8.92
	+/- Index	0.06	(3.07)	(3.07)	1.24	1.41	1.59	(2.49)	9.76	4.68	(0.55)	5.30	(4.46)
	US Fund Foreign Large Value	86	69	69	43	22	26	88	5	23	20	10	31
		QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity Total International Index		14.78	-16.28	-16.28	0.29	0.96	-	8.47	11.07	21.48	-14.38	27.63	-
	MSCI ACWI Ex-USA IMI (Net) Index	14.15	-16.58	-16.58	0.20	0.85	3.98	8.53	11.12	21.63	-14.76	27.81	4.41
	+/- Index	0.63	0.30	0.30	0.09	0.11	-	(0.06)	(0.04)	(0.16)	0.37	(0.18)	-
	US Fund Foreign Large Blend	78	55	55	58	58	-	65	42	62	39	27	-
		QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard International Growth Adm		12.62	-30.79	-30.79	3.14	4.75	7.84	-0.74	59.74	31.48	-12.58	43.16	1.84
	MSCI ACWI Ex-USA Growth (Net) Index	12.89	-23.05	-23.05	-0.40	1.49	4.68	5.09	22.20	27.34	-14.43	32.01	0.12
	+/- Index	(0.27)	(7.74)	(7.74)	3.54	3.26	3.16	(5.83)	37.54	4.14	1.84	11.15	1.72
	US Fund Foreign Large Growth	71	82	82	8	9	5	87	2	23	34	7	16
		QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
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

CITY OF VALLEJO, CA

457(b), 401(a), and RHS Plans

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
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
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
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
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
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
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
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
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
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

CITY OF VALLEJO, CA

457(b), 401(a), and RHS Plans

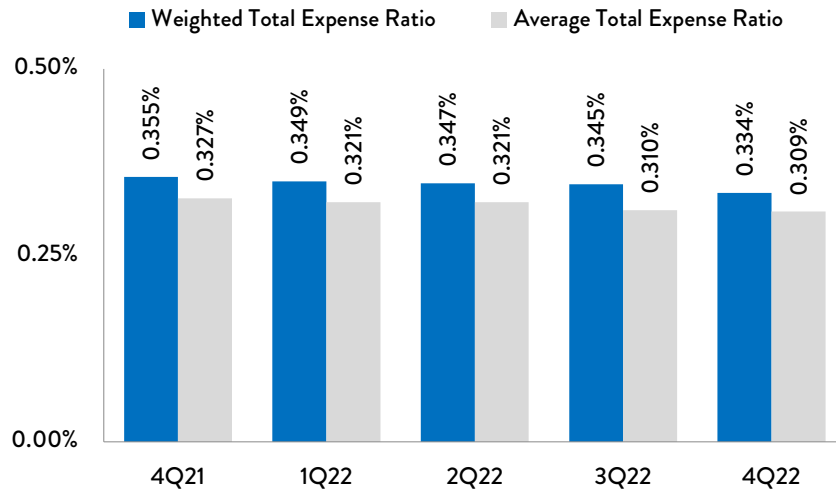
PERFORMANCE REVIEW

Fourth Quarter 2022

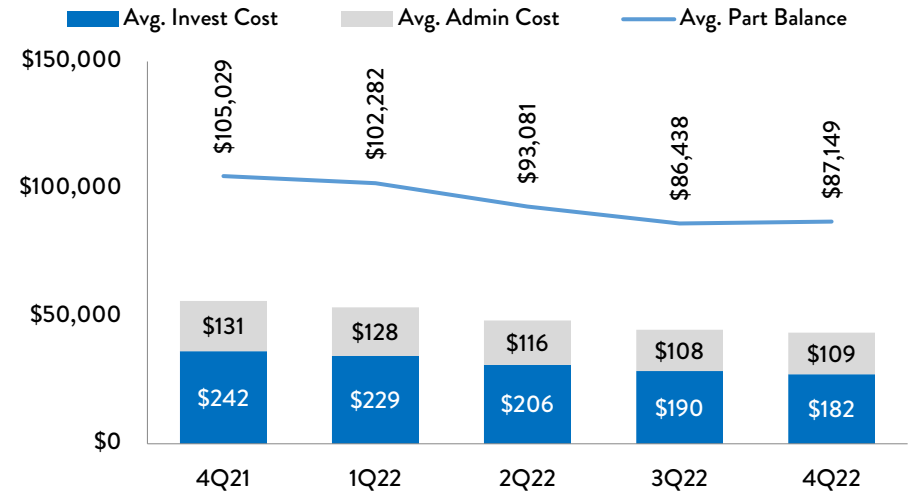
							Annualized						
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016	
Vanguard Target Retirement 2045	8.89	-17.36	-17.36	3.74	5.14	8.34	16.16	16.30	24.94	-7.90	21.42	8.87	
Vanguard Retirement 2045 Index	8.99	-16.84	-16.84	4.26	5.55	8.71	16.45	17.03	25.36	-7.77	21.54	9.13	
+/- Index	(0.10)	(0.52)	(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	
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016	
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	
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016	
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	
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016	
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	
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016	
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 4

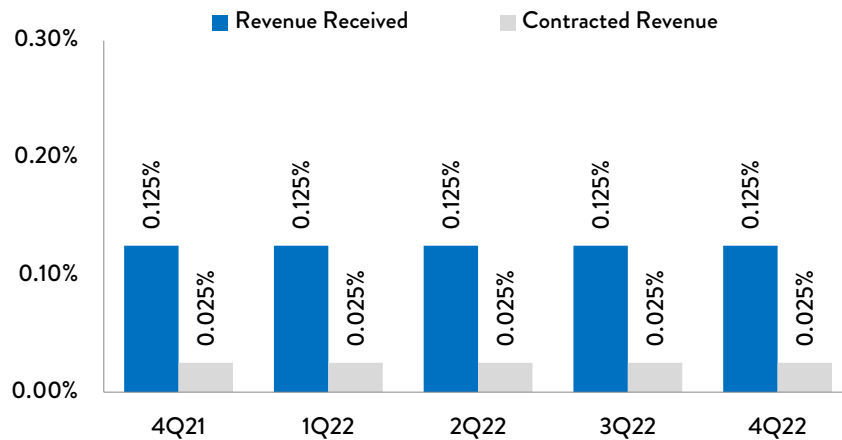
Annualized Plan Cost (%)



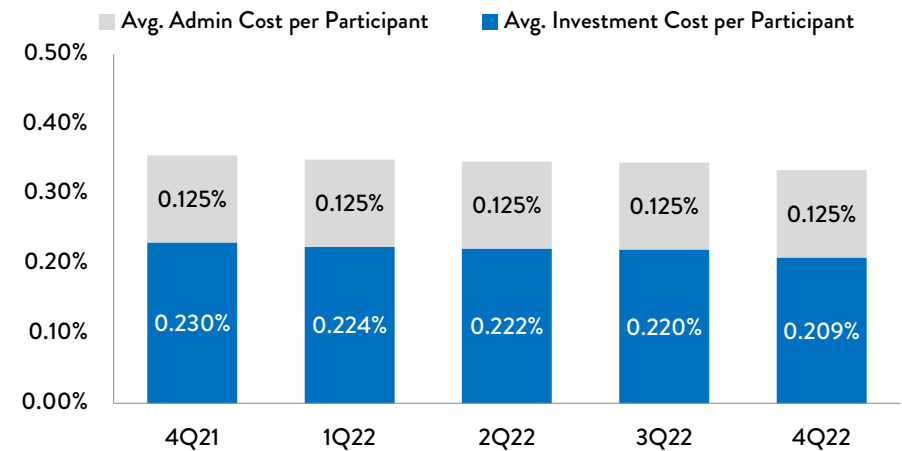
Average Participant Balance and Cost (\$)



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



**Annualized Total Cost Summary
(as a % of total assets)**



CITY OF VALLEJO, CA
457(b) Deferred Compensation Plan

PLAN FEE ANALYSIS
Fourth Quarter 2022

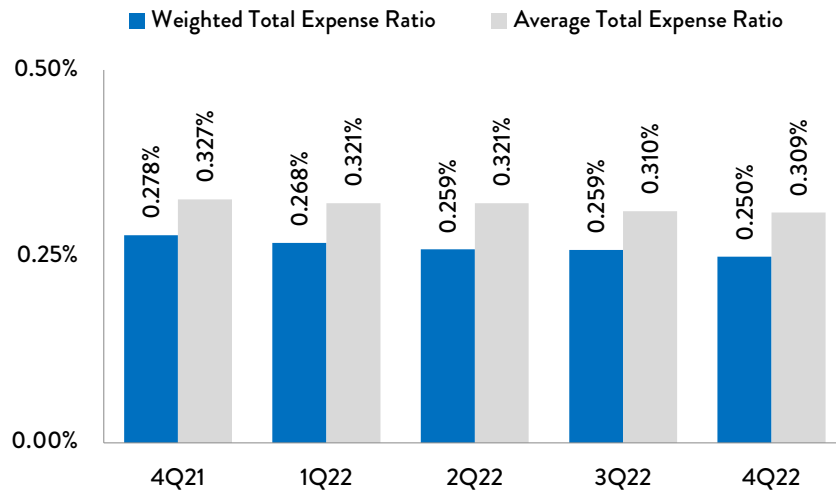
Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
MissionSquare PLUS Fund R10*	-	\$13,168,081	0.31%	0.125%	\$40,821	\$16,460
Fidelity US Bond Index	FXNAX	\$1,821,768	0.03%	0.125%	\$455	\$2,277
Sterling Capital Total Return Bond R6	STRDX	\$2,187,489	0.35%	0.125%	\$7,656	\$2,734
MFS Value R6	MEIKX	\$1,880,809	0.43%	0.125%	\$8,087	\$2,351
Fidelity 500 Index	FXAIX	\$5,029,459	0.02%	0.125%	\$754	\$6,287
Vanguard US Growth Adm	VWUAX	\$4,509,134	0.23%	0.125%	\$10,371	\$5,636
Allspring Special Mid Cap Value Fund	WFPRX	\$580,723	0.70%	0.125%	\$4,065	\$726
Fidelity Mid Cap Index	FSMDX	\$1,240,475	0.03%	0.125%	\$310	\$1,551
MFS Mid Cap Growth R6	OTCKX	\$1,030,796	0.66%	0.125%	\$6,803	\$1,288
Fidelity Small Cap Index	FSSNX	\$1,591,486	0.03%	0.125%	\$398	\$1,989
Vanguard International Value Inv	VTRIX	\$649,521	0.36%	0.125%	\$2,338	\$812
Fidelity Total International Index	FTIHX	\$2,347,880	0.06%	0.125%	\$1,409	\$2,935
Vanguard International Growth Adm	VWILX	\$755,290	0.34%	0.125%	\$2,568	\$944
Vanguard Target Retirement Income	VTINX	\$224,080	0.08%	0.125%	\$179	\$280
Vanguard Target Retirement 2020	VTWNX	\$123,839	0.08%	0.125%	\$99	\$155
Vanguard Target Retirement 2025	VTTVX	\$948,619	0.08%	0.125%	\$759	\$1,186
Vanguard Target Retirement 2030	VTHRX	\$1,072,150	0.08%	0.125%	\$858	\$1,340
Vanguard Target Retirement 2035	VTHHX	\$1,831,385	0.08%	0.125%	\$1,465	\$2,289
Vanguard Target Retirement 2040	VFORX	\$741,092	0.08%	0.125%	\$593	\$926
Vanguard Target Retirement 2045	VTIVX	\$661,216	0.08%	0.125%	\$529	\$827
Vanguard Target Retirement 2050	VFIFX	\$970,217	0.08%	0.125%	\$776	\$1,213
Vanguard Target Retirement 2055	VFFVX	\$402,273	0.08%	0.125%	\$322	\$503
Vanguard Target Retirement 2060	VTTSX	\$145,937	0.08%	0.125%	\$117	\$182
Vanguard Target Retirement 2065	VLXVX	\$9,366	0.08%	0.125%	\$7	\$12
TOTAL		\$43,923,087			\$91,741	\$54,904

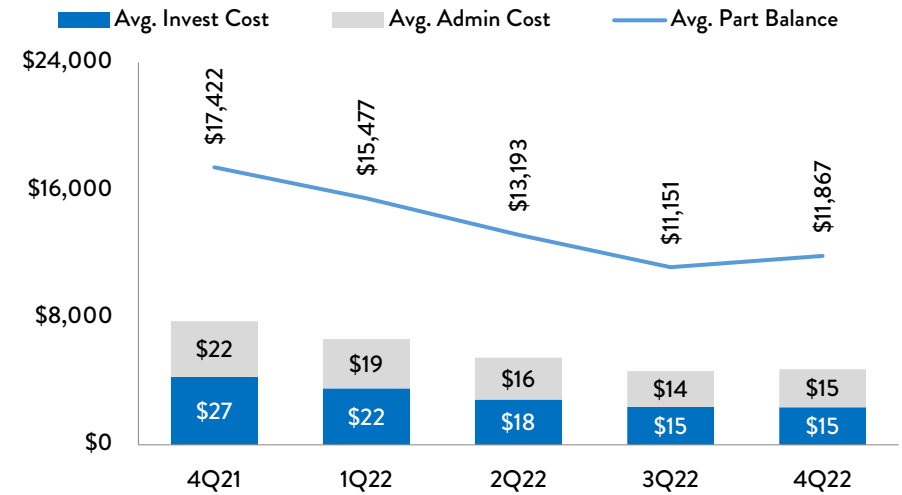
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$13,839	\$54,904
Contracted Revenue (est):	\$2,768	\$10,981
Net Excess/(Deficit) (est):	\$11,071	\$43,923

*For reporting purposes, fund level fees have been excluded from the fund expense ratio calculations.

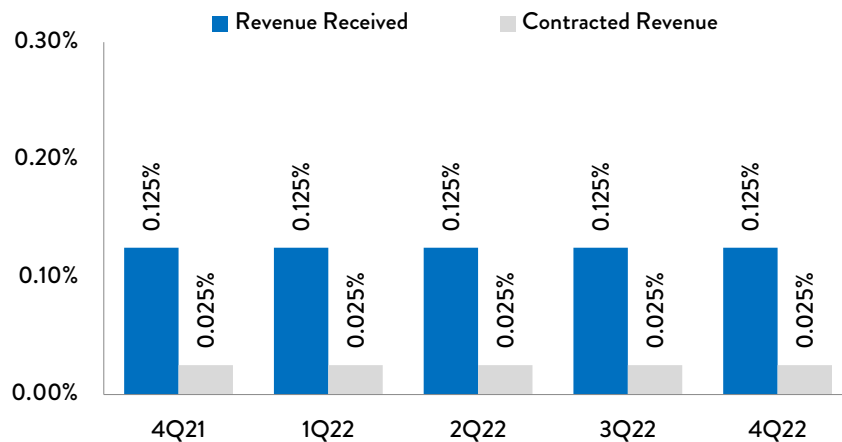
Annualized Plan Cost (%)



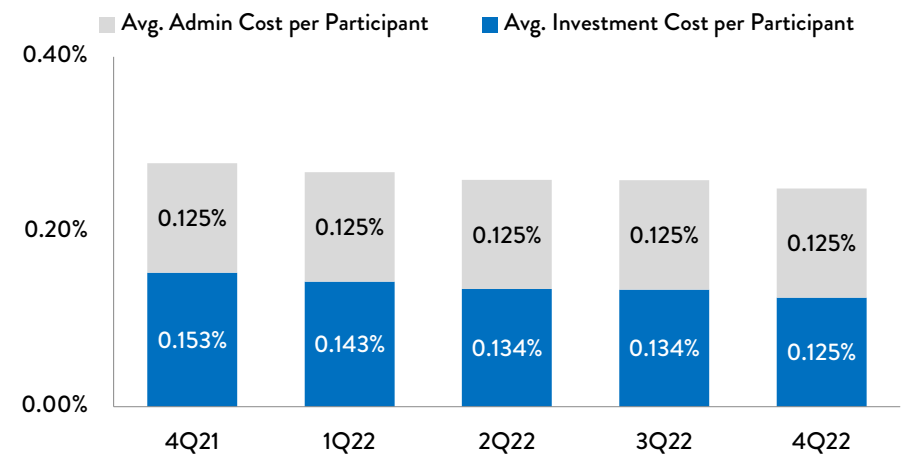
Average Participant Balance and Cost (\$)



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



**Annualized Total Cost Summary
(as a % of total assets)**



CITY OF VALLEJO, CA
401(a) Defined Contribution Plans

PLAN FEE ANALYSIS
Fourth Quarter 2022

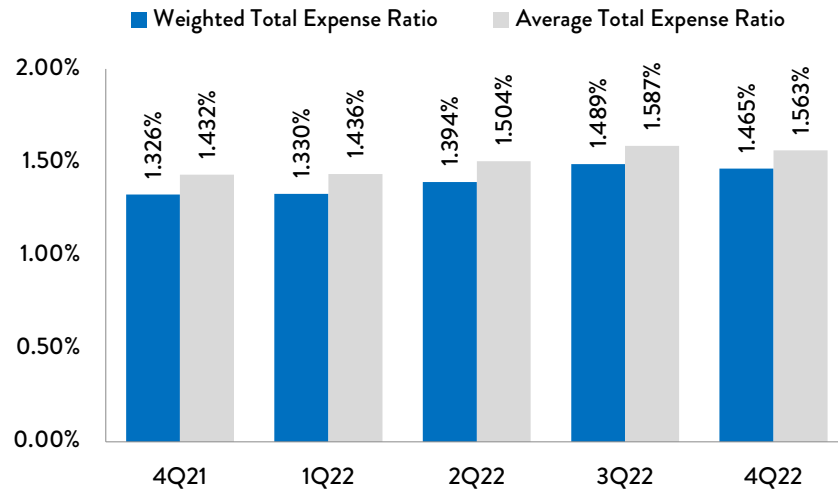
Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
MissionSquare PLUS Fund R10*	-	\$53,894	0.31%	0.125%	\$167	\$67
Fidelity US Bond Index	FXNAX	\$40,371	0.03%	0.125%	\$10	\$50
Sterling Capital Total Return Bond R6	STRDX	\$13,919	0.35%	0.125%	\$49	\$17
MFS Value R6	MEIKX	\$147	0.43%	0.125%	\$1	\$0
Fidelity 500 Index	FXAIX	\$53,898	0.02%	0.125%	\$8	\$67
Vanguard US Growth Adm	VWUAX	\$54,102	0.23%	0.125%	\$124	\$68
Allspring Special Mid Cap Value Fund	WFPRX	\$73	0.70%	0.125%	\$1	\$0
Fidelity Mid Cap Index	FSMDX	\$23,687	0.03%	0.125%	\$6	\$30
MFS Mid Cap Growth R6	OTCKX	\$2,221	0.66%	0.125%	\$15	\$3
Fidelity Small Cap Index	FSSNX	\$220	0.03%	0.125%	\$0	\$0
Vanguard International Value Inv	VTRIX	\$169	0.36%	0.125%	\$1	\$0
Fidelity Total International Index	FTIHX	\$16,419	0.06%	0.125%	\$10	\$21
Vanguard International Growth Adm	VWILX	\$710	0.34%	0.125%	\$2	\$1
Vanguard Target Retirement Income	VTINX	\$0	0.08%	0.125%	\$0	\$0
Vanguard Target Retirement 2020	VTWNX	\$8,110	0.08%	0.125%	\$6	\$10
Vanguard Target Retirement 2025	VTTVX	\$4,305	0.08%	0.125%	\$3	\$5
Vanguard Target Retirement 2030	VTHRX	\$102,107	0.08%	0.125%	\$82	\$128
Vanguard Target Retirement 2035	VTHHX	\$12,119	0.08%	0.125%	\$10	\$15
Vanguard Target Retirement 2040	VFORX	\$13,307	0.08%	0.125%	\$11	\$17
Vanguard Target Retirement 2045	VTIVX	\$8,505	0.08%	0.125%	\$7	\$11
Vanguard Target Retirement 2050	VFIFX	\$4,882	0.08%	0.125%	\$4	\$6
Vanguard Target Retirement 2055	VFFVX	\$2,170	0.08%	0.125%	\$2	\$3
Vanguard Target Retirement 2060	VTTSX	\$0	0.08%	0.125%	\$0	\$0
Vanguard Target Retirement 2065	VLXVX	\$0	0.08%	0.125%	\$0	\$0
TOTAL		\$415,334			\$517	\$519

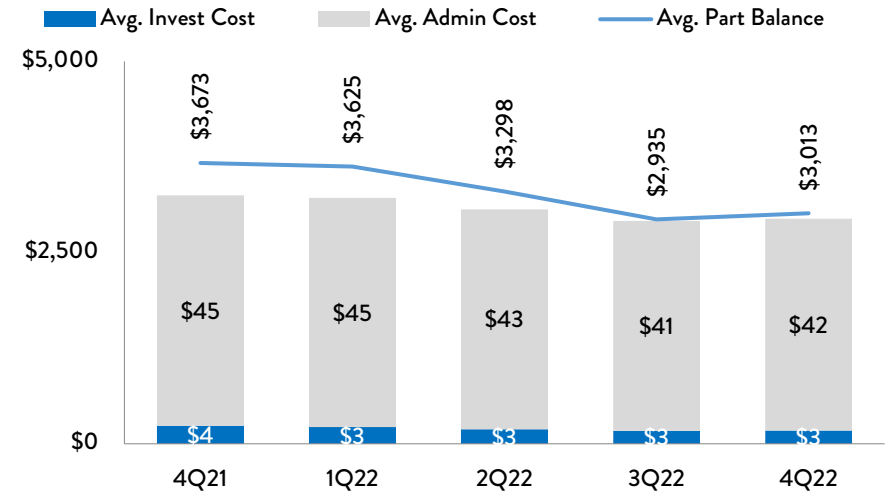
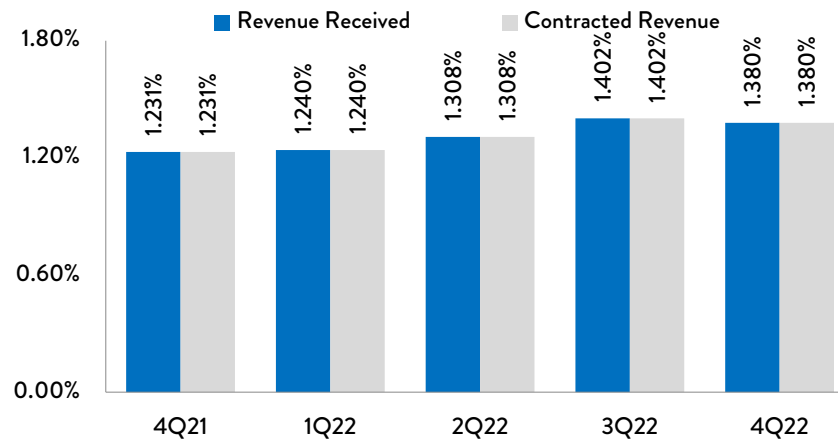
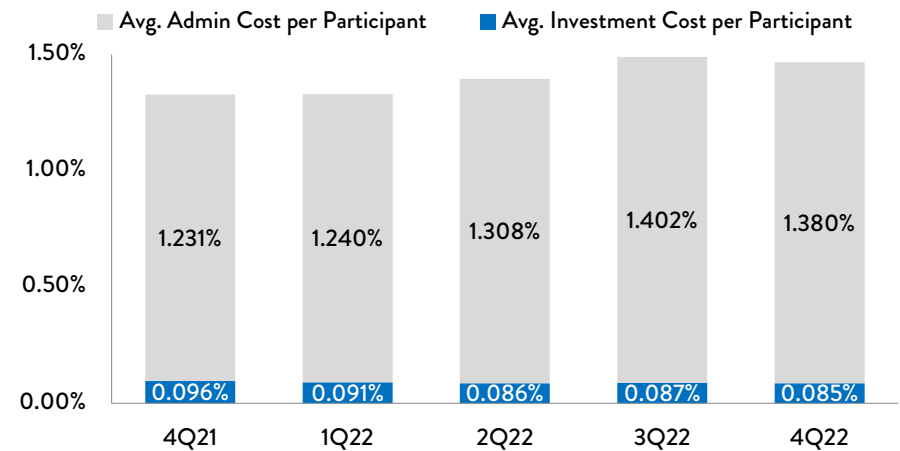
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$131	\$519
Contracted Revenue (est):	\$26	\$104
Net Excess/(Deficit) (est):	\$105	\$415

*For reporting purposes, fund level fees have been excluded from the fund expense ratio calculations.

Annualized Plan Cost (%)



Average Participant Balance and Cost (\$)

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

CITY OF VALLEJO, CA
Retirement Health Savings Plan

PLAN FEE ANALYSIS
Fourth Quarter 2022

Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Total Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
MissionSquare PLUS Fund S11*	-	\$20,511	0.31%	1.380%	\$64	\$283
Fidelity US Bond Index	FXNAX	\$287	0.03%	1.380%	\$0	\$4
Sterling Capital Total Return Bond R6	STRDX	\$0	0.35%	1.380%	\$0	\$0
MFS Value R6	MEIKX	\$44	0.43%	1.380%	\$0	\$1
Fidelity 500 Index	FXAIX	\$38,152	0.02%	1.380%	\$6	\$526
Vanguard US Growth Adm	VWUAX	\$51,147	0.23%	1.380%	\$118	\$706
Allspring Special Mid Cap Value Fund	WFPRX	\$30	0.70%	1.380%	\$0	\$0
Fidelity Mid Cap Index	FSMDX	\$18,697	0.03%	1.380%	\$5	\$258
MFS Mid Cap Growth R6	OTCKX	\$651	0.66%	1.380%	\$4	\$9
Fidelity Small Cap Index	FSSNX	\$2,703	0.03%	1.380%	\$1	\$37
Vanguard International Value Inv	VTRIX	\$0	0.36%	1.380%	\$0	\$0
Fidelity Total International Index	FTIHX	\$13,488	0.06%	1.380%	\$8	\$186
Vanguard International Growth Adm	VWILX	\$0	0.34%	1.380%	\$0	\$0
Vanguard Target Retirement Income	VTINX	\$5,039	0.08%	1.380%	\$4	\$70
Vanguard Target Retirement 2020	VTWNX	\$52,784	0.08%	1.380%	\$42	\$728
Vanguard Target Retirement 2025	VTTVX	\$136,785	0.08%	1.380%	\$109	\$1,887
Vanguard Target Retirement 2030	VTHRX	\$145,942	0.08%	1.380%	\$117	\$2,014
Vanguard Target Retirement 2035	VTHHX	\$156,565	0.08%	1.380%	\$125	\$2,160
Vanguard Target Retirement 2040	VFORX	\$259,141	0.08%	1.380%	\$207	\$3,575
Vanguard Target Retirement 2045	VTIVX	\$256,344	0.08%	1.380%	\$205	\$3,537
Vanguard Target Retirement 2050	VFIFX	\$294,259	0.08%	1.380%	\$235	\$4,060
Vanguard Target Retirement 2055	VFFVX	\$140,795	0.08%	1.380%	\$113	\$1,943
Vanguard Target Retirement 2060	VTTSX	\$18,028	0.08%	1.380%	\$14	\$249
Vanguard Target Retirement 2065	VLXVX	\$635	0.08%	1.380%	\$1	\$9
TOTAL		\$1,612,027			\$1,378	\$22,241

Plan Administration Cost	Quarter	Annualized
MissionSquare Administration Fee (0.55%) (est):	\$2,235	\$8,866
MissionSquare Per Participant Fee (\$25/year) (est):	\$3,371	\$13,375
Total Plan Administration Fees (est):	\$5,606	\$22,241

*For reporting purposes, fund level fees have been excluded from the fund expense ratio calculations.

Section 5

Allspring Special Mid Cap Value R6 (USD)

Morningstar Quantitative Rating™
Bronze
 11-30-2022

Overall Morningstar Rating™
 ★★★★★
 393 US Fund Mid-Cap Value

Standard Index
 S&P 500 TR USD

Category Index
 Russell Mid Cap Value TR USD

Morningstar Cat
 US Fund Mid-Cap Value

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-31.71	19.56	5.57	19.92	3.36
2021	11.20	6.08	-0.72	9.98	28.80
2022	-2.27	-10.19	-4.62	14.08	-4.50
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-4.50	8.33	8.45	—	10.72
Std 12-31-2022	-4.50	—	8.45	—	10.72
Total Return	-4.50	8.33	8.45	11.93	10.72
+/- Std Index	13.61	0.67	-0.97	-0.64	—
+/- Cat Index	7.53	2.51	2.73	1.82	—
% Rank Cat	20	24	8	5	—
No. in Cat	405	393	372	272	—

	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 800-222-8222 or visit www.allspringglobal.com.

Fees and Expenses

Sales Charges

Front-End Load %

NA

Deferred Load %

NA

Fund Expenses

Management Fees %

0.66

12b1 Expense %

0.00

Net Expense Ratio %

0.70

Gross Expense Ratio %

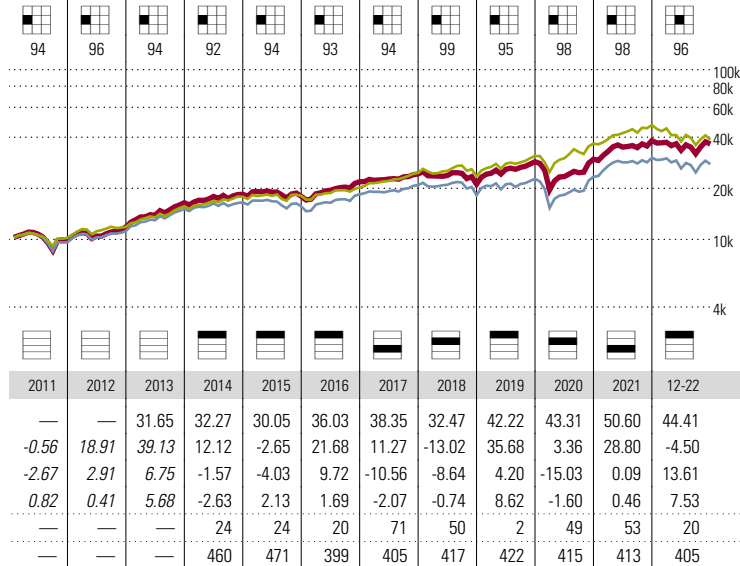
0.70

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	393 funds	372 funds	272 funds
Morningstar Rating™	4★	4★	5★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	+Avg	High	High
	3 Yr	5 Yr	10 Yr
Standard Deviation	23.90	20.65	16.21
Mean	8.33	8.45	11.93
Sharpe Ratio	0.42	0.44	0.73
MPT Statistics	Standard Index	Best Fit Index	Russell Mid Cap Value TR USD
Alpha	1.21	2.53	—
Beta	1.02	0.95	—
R-Squared	81.32	97.69	—
12-Month Yield	—	—	—
Potential Cap Gains Exp	—	—	6.57%

Operations

Family:	Allspring Global Investments
Manager:	Multiple
Tenure:	14.0 Years
Objective:	Growth



Investment Style
 Equity
 Stocks %

Growth of \$10,000

— Allspring Special Mid Cap Value R6
 36,481
 — Category Average
 27,754
 — Standard Index
 38,680

Performance Quartile
 (within category)

History

NAV/Price	44.41
Total Return %	-4.50
+/- Standard Index	13.61
+/- Category Index	7.53
% Rank Cat	20
No. of Funds in Cat	405

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 9 Total Stocks , 107 Total Fixed-Income, 24% Turnover Ratio	Net Assets %
Cash	3.77	3.77	0.00	—	—	Allspring Government MMkt Select	3.77
US Stocks	92.42	92.42	0.00	—	429 mil	AerCap Holdings NV	3.36
Non-US Stocks	3.81	3.81	0.00	—	7 mil	Arch Capital Group Ltd	3.34
Bonds	0.00	0.00	0.00	—	7 mil	LKQ Corp	3.26
Other/Not Clsfd	0.00	0.00	0.00	—	4 mil	Amdocs Ltd	3.16
Total	100.00	100.00	0.00	—	3 mil	Republic Services Inc	3.16
				—	3 mil	Jacobs Solutions Inc	2.91
				—	4 mil	D.R. Horton Inc	2.86
				—	2 mil	Vulcan Materials Co	2.80
				—	10 mil	Reynolds Consumer Products Inc Ord	2.76

Equity Style

Value	Blend	Growth
Large	Mid	Small
High	Mid	Low

Portfolio Statistics

Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	14.6	0.77
P/C Ratio TTM	9.4	0.66
P/B Ratio TTM	2.3	0.64
Geo Avg Mkt Cap \$mil	17616	0.11

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	96.0
Greater Europe	2.4
Greater Asia	1.5

Sector Weightings

Stocks %	Rel Std Index
Cyclical	42.8
Basic Materials	4.9
Consumer Cyclical	13.5
Financial Services	16.1
Real Estate	8.3
Sensitive	35.0
Communication Services	0.7
Energy	6.8
Industrials	19.0
Technology	8.6
Defensive	22.2
Consumer Defensive	5.5
Healthcare	9.2
Utilities	7.5

Fidelity® 500 Index (USD)**Morningstar Analyst Rating™**

02-16-2022

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	-19.59	20.53	8.94	12.14	18.40
2021	6.18	8.55	0.58	11.02	28.69
2022	-4.60	-16.10	-4.89	7.56	-18.13

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.13	7.65	9.41	12.55	11.57
Std 12-31-2022	-18.13	—	9.41	12.55	11.57
Total Return	-18.13	7.65	9.41	12.55	11.57
+/- Std Index	-0.02	-0.01	-0.01	-0.01	—
+/- Cat Index	1.00	0.30	0.28	0.18	—
% Rank Cat	51	32	23	12	—
No. in Cat	1358	1223	1116	818	—

	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 202-551-8090 or visit www.institutional.fidelity.com.

Fees and Expenses**Sales Charges**

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.02
12b1 Expense %	NA
Net Expense Ratio %	0.02
Gross Expense Ratio %	0.02

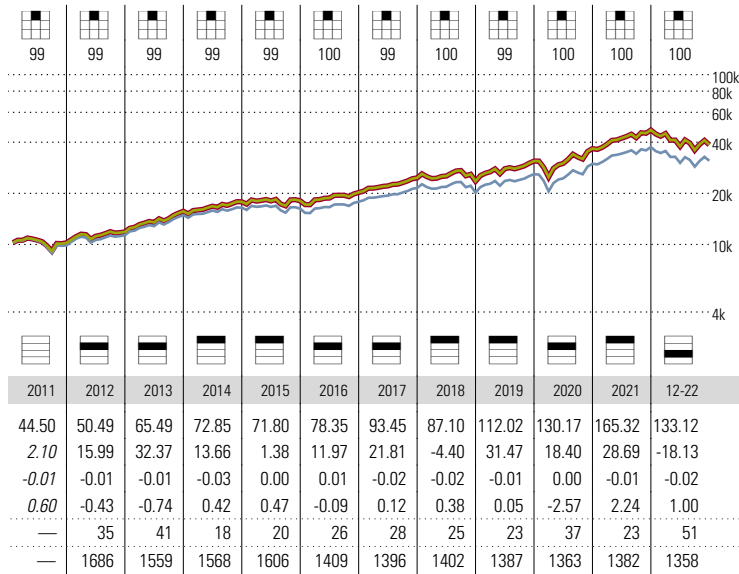
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	1,223 funds	1,116 funds	818 funds
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	21.16	18.69	14.77
Mean	7.65	9.41	12.55
Sharpe Ratio	0.41	0.50	0.82

MPT Statistics	Standard Index	Best Fit Index
	S&P 500 TR USD	S&P 500 TR USD

Alpha	-0.01	-0.01
Beta	1.00	1.00
R-Squared	100.00	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	48.33%

**Investment Style**Equity
Stocks %**Growth of \$10,000**

Fidelity® 500 Index
38,629
Category Average
31,104
Standard Index
38,680

Performance Quartile
(within category)**History**

NAV/Price
Total Return %
+/- Standard Index
+/- Category Index
% Rank Cat
No. of Funds in Cat

Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 10-2022	Share Amount	Holdings : 503 Total Stocks, 0 Total Fixed-Income, 2% Turnover Ratio	Net Assets %
Cash	0.02	0.08	0.06				
US Stocks	98.88	98.88	0.00				
Non-US Stocks	1.10	1.10	0.00	⊖	164 mil	Apple Inc	6.51
Bonds	0.00	0.00	0.00	⊖	81 mil	Microsoft Corp	5.54
Other/Not Clsfd	0.00	0.00	0.00	⊖	96 mil	Amazon.com Inc	2.49
Total	100.00	100.06	0.06	⊖	65 mil	Alphabet Inc Class A	1.76
				⊖	20 mil	Berkshire Hathaway Inc Class B	1.67
				⊖	58 mil	Alphabet Inc Class C	1.58
				⊖	29 mil	Tesla Inc	1.51
				⊖	10 mil	UnitedHealth Group Inc	1.49
				⊖	29 mil	Johnson & Johnson	1.36
				⊖	45 mil	Exxon Mobil Corp	1.35
				⊖	27 mil	NVIDIA Corp	1.23
				⊖	32 mil	JPMorgan Chase & Co	1.18
				⊖	26 mil	Procter & Gamble Co	1.04
				⊖	18 mil	Visa Inc Class A	1.03
				⊖	11 mil	The Home Depot Inc	0.97

Equity Style

Value	Blend	Growth
Large	Med	Small

Portfolio Statistics

	Port Avg	Rel Index	Rel Cat
P/E Ratio TTM	20.2	1.06	1.10
P/C Ratio TTM	15.0	1.06	1.01
P/B Ratio TTM	3.8	1.06	0.92
Geo Avg Mkt Cap \$mil	175549	1.09	0.83

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low

Credit Quality Breakdown —

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

Regional Exposure

	Stocks %	Rel Std Index
Americas	98.9	1.00
Greater Europe	1.1	0.97
Greater Asia	0.0	0.97

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	29.1	1.01
Basic Materials	2.4	0.98
Consumer Cyclical	10.2	1.06
Financial Services	13.8	0.99
Real Estate	2.8	0.99
Sensitive	45.2	1.01
Communication Services	7.5	1.02
Energy	5.1	0.98
Industrials	8.9	0.98
Technology	23.7	1.03
Defensive	25.7	0.96
Consumer Defensive	7.4	0.97
Healthcare	15.3	0.96
Utilities	3.0	0.94

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	14.0 Years
Objective:	Growth and Income

Base Currency:	USD
Ticker:	FXAIX
ISIN:	US3159117502
Minimum Initial Purchase:	\$0

Purchase Constraints:	A
Incept:	05-04-2011
Type:	MF
Total Assets:	\$352,765.08 mil

Total Assets: \$24,593.65 mil

Fidelity® Small Cap Index (USD)

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-30.62	25.49	4.98	31.28	19.99
2021	12.73	4.26	-4.40	2.10	14.71
2022	-7.47	-17.18	-2.08	6.25	-20.27
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-20.27	3.15	4.22	9.17	10.19
Std 12-31-2022	-20.27	—	4.22	9.17	10.19
Total Return	-20.27	3.15	4.22	9.17	10.19
+/- Std Index	-2.16	-4.51	-5.21	-3.39	—
+/- Cat Index	0.16	0.05	0.09	0.16	—
% Rank Cat	84	79	68	52	—
No. in Cat	611	585	543	363	—

	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.

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Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	585 funds	543 funds	363 funds
Morningstar Rating™	2★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	-Avg	-Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	26.38	23.49	19.25
Mean	3.15	4.22	9.17
Sharpe Ratio	0.22	0.24	0.51

MPT Statistics	Standard Index	Best Fit Index Russell 2000 TR USD
Alpha	-4.05	0.05
Beta	1.12	1.00
R-Squared	80.38	100.00

12-Month Yield	—
Potential Cap Gains Exp	5.18%

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	11.3 Years
Objective:	Small Company

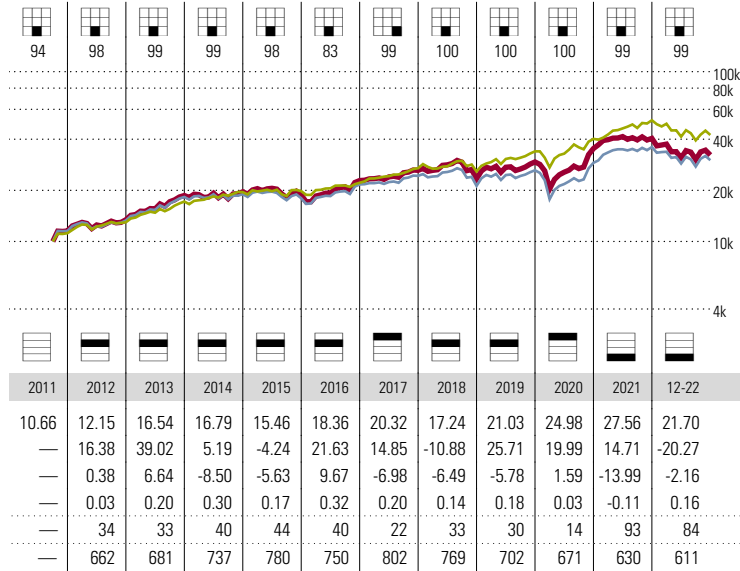
Morningstar Quantitative Rating™
Bronze
 11-30-2022

Overall Morningstar Rating™
 ★★★
 585 US Fund Small Blend

Standard Index
 S&P 500 TR USD

Category Index
 Russell 2000 TR
 USD

Morningstar Cat
 US Fund Small Blend



Investment Style
 Equity
 Stocks %

Growth of \$10,000

Fidelity® Small Cap Index	32,251
Category Average	30,094
Standard Index	42,356

Performance Quartile
 (within category)

History

NAV/Price	21.70
Total Return %	-20.27
+/- Standard Index	-2.16
+/- Category Index	-2.16
% Rank Cat	84
No. of Funds in Cat	611

Portfolio Analysis 10-31-2022

Asset Allocation %			Net %	Long %	Short %	Share Chg since 09-2022	Share Amount	Holdings :	Net Assets %
Cash			0.05	0.81	0.77			1,950 Total Stocks , 1 Total Fixed-Income, 24% Turnover Ratio	
US Stocks			98.24	98.24	0.00				
Non-US Stocks			1.71	1.71	0.00	⊖	1,675	E-mini Russell 2000 Index Future D	0.81
Bonds			0.01	0.01	0.00	⊖	134 mil	Fidelity Revere Str Tr	0.70
Other/Not Clsfd			0.00	0.00	0.00	⊕	281,165	ShockWave Medical Inc	0.43
Total			100.00	100.77	0.77	⊕	290,129	Chart Industries Inc	0.34
						⊕	889,228	Matador Resources Co	0.31
Equity Style			Portfolio Statistics						
Value	Blend	Growth	Port Avg	Rel Index	Rel Cat	⊕	224,912	RBC Bearings Inc	0.30
			P/E Ratio TTM	11.6	0.61	⊕	1 mil	Murphy Oil Corp	0.30
			P/C Ratio TTM	9.7	0.68	⊕	384,416	EMCOR Group Inc	0.28
			P/B Ratio TTM	1.9	0.53	⊕	171,027	Kinsale Capital Group Inc	0.28
			Geo Avg Mkt Cap \$mil	2200	0.01	⊕	592,489	SouthState Corp	0.28
						⊕	169,856	Murphy USA Inc	0.28
						⊕	528,542	Texas Roadhouse Inc	0.27
Fixed-Income Style									
Ltd	Mod	Ext	Avg Eff Maturity	—		⊕	1 mil	Iridium Communications Inc	0.27
			Avg Eff Duration	—		⊕	235,260	Karuna Therapeutics Inc	0.27
			Avg Wtd Coupon	—		⊕	1 mil	Halozyyme Therapeutics Inc	0.27
			Avg Wtrd Price	—		⊕			

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	38.1	1.33
Basic Materials	4.1	1.66
Consumer Cyclical	10.1	1.05
Financial Services	16.4	1.18
Real Estate	7.5	2.69
Sensitive	37.6	0.84
Communication Services	2.6	0.36
Energy	6.8	1.30
Industrials	14.7	1.62
Technology	13.5	0.59
Defensive	24.3	0.91
Consumer Defensive	4.0	0.53
Healthcare	16.8	1.06
Utilities	3.4	1.07

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

Morningstar Cat
US Fund Foreign Large
Blend

33

Fidelity® US Bond Index (USD)

Morningstar Analyst Rating™



03-30-2022

Overall Morningstar Rating™



405 US Fund Intermediate Core Bond

Standard Index

Bloomberg US Agg Bond TR USD

Category Index

Bloomberg US Agg Bond TR USD

Morningstar Cat

US Fund Intermediate Core Bond

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	3.66	2.77	0.43	0.75	7.80
2021	-3.48	1.85	0.02	-0.12	-1.79
2022	-5.88	-4.66	-4.69	1.68	-13.03
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-13.03	-2.72	-0.02	1.01	1.71
Std 12-31-2022	-13.03	—	-0.02	1.01	1.71
Total Return	-13.03	-2.72	-0.02	1.01	1.71
+/- Std Index	-0.02	0.00	-0.04	-0.05	—
+/- Cat Index	-0.02	0.00	-0.04	-0.05	—
% Rank Cat	33	40	36	38	—
No. in Cat	453	405	372	275	—

7-day Yield	Subsidized	Unsubsidized
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.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8544 or visit www.institutional.fidelity.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 %	0.03
Gross Expense Ratio %	0.03

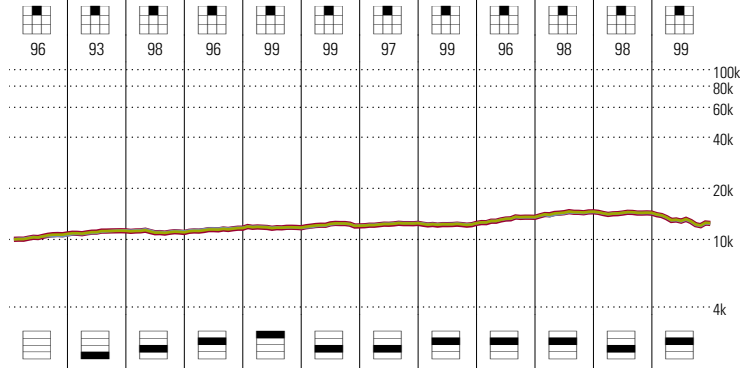
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	405 funds	372 funds	275 funds
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	5.86	5.10	4.18
Mean	-2.72	-0.02	1.01
Sharpe Ratio	-0.58	-0.24	0.07

MPT Statistics	Standard Index	Best Fit Index
		Bloomberg US Agg Bond TR USD
Alpha	0.00	0.00
Beta	1.00	1.00
R-Squared	99.68	99.68
12-Month Yield	—	—
Potential Cap Gains Exp	—	-0.01%

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	8.7 Years
Objective:	Multisector Bond



Investment Style

Fixed-Income Bond %

Growth of \$10,000

Fidelity® US Bond Index 12,422
Category Average 12,374
Standard Index 12,484

Performance Quartile (within category)

History

NAV/Price	10.18
Total Return %	-13.03
+/- Standard Index	-0.02
+/- Category Index	-0.02
% Rank Cat	33
No. of Funds in Cat	453

Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 10-2022	Share Amount	Holdings :	Net Assets %
Cash	0.93	0.93	0.00			0 Total Stocks, 8,720 Total Fixed-Income, 50% Turnover Ratio	
US Stocks	0.00	0.00	0.00				
Non-US Stocks	0.00	0.00	0.00	⊕	901 mil	United States Treasury Notes 2.75%	1.51
Bonds	99.07	99.07	0.00		724 mil	United States Treasury Notes 1.5%	1.13
Other/Not Clsfd	0.00	0.00	0.00		642 mil	United States Treasury Notes 2.625%	1.08
Total	100.00	100.00	0.00		584 mil	United States Treasury Notes 2.25%	1.02
				⊖	681 mil	Federal Home Loan Mortgage Corpora	1.02
					507 mil	United States Treasury Notes 1.5%	0.83
					461 mil	United States Treasury Notes 3%	0.81
					430 mil	United States Treasury Notes 0.5%	0.72
					420 mil	United States Treasury Notes 2.25%	0.71
					411 mil	United States Treasury Notes 1%	0.69
					362 mil	United States Treasury Notes 2.75%	0.62
				⊖	409 mil	Federal National Mortgage Associat	0.61
					349 mil	United States Treasury Notes 1.5%	0.61
					372 mil	United States Treasury Notes 1.25%	0.59
					337 mil	United States Treasury Notes 1.75%	0.58

Equity Style

Value	Blend	Growth

Portfolio Statistics

P/E Ratio TTM	Port Avg	Rel Index	Rel Cat
P/C Ratio TTM	—	—	—
P/B Ratio TTM	—	—	—
Geo Avg Mkt Cap \$mil	—	—	—

Fixed-Income Style

Ltd	Mod	Ext

Avg Eff Maturity	Port Avg	Rel Index	Rel Cat
Avg Eff Duration	—	6.16	—
Avg Wtd Coupon	—	—	—
Avg Wtd Price	—	90.04	—

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	74.14
AA	4.51
A	10.86
BBB	10.47
BB	0.00
B	0.00
Below B	0.00
NR	0.02

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	—	—

MFS Mid Cap Growth R6 (USD)

Morningstar Analyst Rating™

Silver
02-23-2022

Overall Morningstar Rating™

★★★★

534 US Fund Mid-Cap Growth

Standard Index

S&P 500 TR USD

Category Index

Russell Mid Cap

Growth TR USD

Morningstar Cat

US Fund Mid-Cap

Growth

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-16.05	26.14	11.39	15.13	35.80
2021	-2.40	7.99	2.28	5.91	14.17
2022	-15.56	-17.34	-4.10	7.13	-28.29
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-28.29	3.59	9.19	—	12.10
Std 12-31-2022	-28.29	—	9.19	—	12.10
Total Return	-28.29	3.59	9.19	12.39	12.10
+/- Std Index	-10.18	-4.07	-0.24	-0.18	—
+/- Cat Index	-1.57	-0.26	1.55	0.98	—
% Rank Cat	60	59	20	16	—
No. in Cat	586	534	499	389	—

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

Performance Disclosure

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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 800-225-2606 or visit <http://www.mfs.com>.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.64
12b1 Expense %	NA
Net Expense Ratio %	0.66
Gross Expense Ratio %	0.67

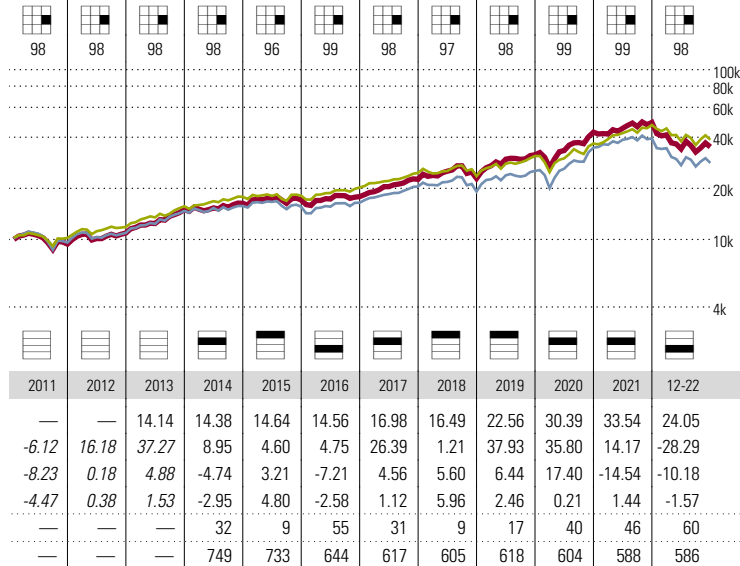
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	534 funds	499 funds	389 funds
Morningstar Rating™	3★	4★	4☆
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	+Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	23.07	20.38	16.08
Mean	3.59	9.19	12.39
Sharpe Ratio	0.23	0.47	0.76

MPT Statistics	Standard Index	Best Fit Index
		Morningstar US Mid Brd Grt TR USD
Alpha	-3.41	-1.99
Beta	1.00	0.94
R-Squared	83.82	96.19
12-Month Yield	—	—
Potential Cap Gains Exp	—	18.22%

Operations

Family:	MFS
Manager:	Multiple
Tenure:	14.2 Years
Objective:	Growth



Investment Style

Equity

Stocks %

Growth of \$10,000

MFS Mid Cap Growth R6	35,060
Category Average	28,223
Standard Index	38,680

Performance Quartile (within category)

History

NAV/Price	24.05
Total Return %	-28.29
+/- Standard Index	-10.18
+/- Category Index	-1.57
% Rank Cat	60
No. of Funds in Cat	586

Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.08	2.08	0.00
US Stocks	86.80	86.80	0.00
Non-US Stocks	11.12	11.12	0.00
Bonds	0.00	0.00	0.00
Other/Not Clsfd	0.00	0.00	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	32.7	1.72	1.28
P/C Ratio TTM	24.1	1.70	1.25
P/B Ratio TTM	5.0	1.39	1.24
Geo Avg Mkt Cap \$mil	21430	0.13	1.34

Fixed-Income Style

Ltd	Mod	Ext
High	—	—
Mid	—	—
Low	—	—

Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Credit Quality Breakdown —

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

Regional Exposure

	Stocks %	Rel Std Index
Americas	92.2	0.93
Greater Europe	6.8	6.19
Greater Asia	1.0	33.23

Share Chg since 10-2022	Share Amount	Holdings : 87 Total Stocks , 0 Total Fixed-Income, 21% Turnover Ratio	Net Assets %
+	350,661	O'Reilly Automotive Inc	2.28
+	2 mil	Verisk Analytics Inc	2.27
+	4 mil	Nasdaq Inc	2.17
+	2 mil	Steris PLC	2.14
+	2 mil	Vulcan Materials Co	2.09
-	2 mil	PerkinElmer Inc	2.01
-	2 mil	Agilent Technologies Inc	1.99
-	2 mil	Wolters Kluwer NV	1.86
-	1 mil	Icon PLC	1.85
-	1 mil	IDEX Corp	1.79

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	34.8	1.21
Basic Materials	2.1	0.87
Consumer Cyclical	16.9	1.76
Financial Services	11.0	0.79
Real Estate	4.8	1.72
Sensitive	45.1	1.01
Communication Services	3.1	0.42
Energy	2.7	0.52
Industrials	16.5	1.82
Technology	22.9	0.99
Defensive	20.1	0.75
Consumer Defensive	1.0	0.13
Healthcare	19.1	1.20
Utilities	0.0	0.00

MFS Value R6 (USD)

Morningstar Analyst Rating™



08-04-2022

Overall Morningstar Rating™



1,155 US Fund Large Value

Standard Index

S&P 500 TR USD

Category Index

Russell 1000 Value

Morningstar Cat

US Fund Large Value

TR USD

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-23.74	14.33	5.96	12.60	4.03
2021	8.69	5.66	0.67	8.60	25.55
2022	-3.61	-9.88	-4.55	13.60	-5.80
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-5.80	7.15	7.64	11.29	8.19
Std 12-31-2022	-5.80	—	7.64	11.29	8.19
Total Return	-5.80	7.15	7.64	11.29	8.19
+/- Std Index	12.31	-0.51	-1.78	-1.27	—
+/- Cat Index	1.74	1.20	0.97	1.00	—
% Rank Cat	51	49	40	19	—
No. in Cat	1229	1155	1099	819	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 12-31-22	1.83 ¹	1.82
1. Contractual waiver; Expires 12-31-2023		

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 800-225-2606 or visit <http://www.mfs.com>.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.43
12b1 Expense %	NA
Net Expense Ratio %	0.43
Gross Expense Ratio %	0.44

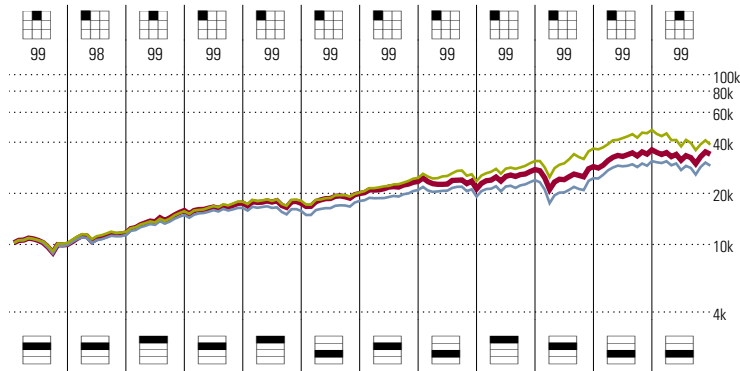
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	1,155 funds	1,099 funds	819 funds
Morningstar Rating™	3★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
Standard Deviation	20.07	17.91	14.44
Mean	7.15	7.64	11.29
Sharpe Ratio	0.40	0.43	0.76

MPT Statistics	Standard Index	Best Fit Index
		Morningstar US LM
		Brd Val TR USD
Alpha	0.18	-0.04
Beta	0.90	0.95
R-Squared	90.66	98.46
12-Month Yield		1.98%
Potential Cap Gains Exp		45.93%

Operations

Family:	MFS
Manager:	Multiple
Tenure:	16.7 Years
Objective:	Growth



Investment Style

Equity
Stocks %

Growth of \$10,000

MFS Value R6	33,971
Category Average	29,099
Standard Index	38,680

Performance Quartile

(within category)

History

NAV/Price	47.45
Total Return %	-5.80
+/- Standard Index	12.31
+/- Category Index	1.74
% Rank Cat	51
No. of Funds in Cat	1229

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	12-22
22.35	25.35	33.20	34.94	32.79	36.05	40.56	35.30	44.41	44.82	54.33	47.45	
-0.05	16.57	35.95	10.68	-0.42	14.25	17.86	-9.78	30.18	4.03	25.55	-5.80	
-2.16	0.57	3.57	-3.01	-1.81	2.29	-3.97	-5.39	-1.30	-14.37	-3.15	12.31	
-0.44	-0.94	3.43	-2.77	3.40	-3.09	4.20	-1.51	3.64	1.23	0.39	1.74	
42	27	12	49	11	51	29	67	9	38	57	51	
1258	1208	1213	1290	1378	1268	1260	1244	1209	1200	1207	1229	

Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 10-2022	Share Amount	Holdings : 72 Total Stocks, 0 Total Fixed-Income, 12% Turnover Ratio	Net Assets %
Cash	0.83	0.83	0.00				
US Stocks	91.60	91.60	0.00				
Non-US Stocks	7.57	7.57	0.00	⊖	17 mil	JPMorgan Chase & Co	3.79
Bonds	0.00	0.00	0.00	⊖	10 mil	Johnson & Johnson	3.02
Other/Not Clsfd	0.00	0.00	0.00	⊖	5 mil	Cigna Corp	2.90
Total	100.00	100.00	0.00	⊖	3 mil	Northrop Grumman Corp	2.50
				⊖	8 mil	Texas Instruments Inc	2.48
				⊖	7 mil	Honeywell International Inc	2.46
				⊖	30 mil	Pfizer Inc	2.44
				⊖	5 mil	Aon PLC Class A	2.36
				⊖	8 mil	Marsh & McLennan Companies Inc	2.32
				⊖	11 mil	Progressive Corp	2.29
				⊖	6 mil	Chubb Ltd	2.28
				⊖	37 mil	Comcast Corp Class A	2.19
				⊖	11 mil	ConocoPhillips	2.17
				⊖	6 mil	Lowe's Companies Inc	1.97
				⊖	2 mil	Thermo Fisher Scientific Inc	1.93

Credit Quality Breakdown —

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

Regional Exposure

	Stocks %	Rel Std Index
Americas	93.0	0.94
Greater Europe	7.0	6.39
Greater Asia	0.0	0.00

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	34.7	1.21
Basic Materials	4.4	1.78
Consumer Cyclical	3.1	0.32
Financial Services	26.0	1.88
Real Estate	1.2	0.42
Sensitive	33.6	0.75
Communication Services	3.3	0.45
Energy	4.7	0.90
Industrials	18.2	2.01
Technology	7.4	0.32
Defensive	31.7	1.19
Consumer Defensive	7.0	0.91
Healthcare	18.6	1.17
Utilities	6.2	1.94

MissionSquare PLUS Fund

Fund profile & characteristics

Fund Net Assets	\$11.7 Billion
Inception Date	January 2, 1991
Credit Quality ¹	Aa3/AA-/AA
Effective Duration ²	3.03
Market/Book Value Ratio	92.36%
# of Holdings	over 4,000
# of Investment Managers	12
# of Synthetic & Separate Account GIC Issuers	8
# of Traditional GIC providers	8

Sector allocation

Agencies	0.68%
Asset-Backed	6.09%
Cash & Cash Equivalents	4.73%
Credits	25.84%
Maturing GICs	22.65%
Mortgage-Backed	20.32%
Municipals	0.57%
Other	0.09%
Treasuries	11.40%
Wrap Providers	7.64%

Structure

Tier 1 - Cash Buffer	6.3%
Tier 2 - Shorter Duration Focus	8.6%
Tier 3 - Laddered Maturity Focus	22.7%
Tier 4 - Total Return Focus	62.4%

Maturity allocation

0-1 Yrs	16.0%
1-2 Yrs	10.9%
2-3 Yrs	12.4%
3-4 Yrs	7.9%
4-5 Yrs	13.3%
5+ Yrs	39.5%

Portfolio management

Investment Adviser:

MissionSquare Investments

Portfolio Managers:

Karen Chong-Wulff, CFA, CAIA, Managing Vice President, Managed Fund Since 2007

Oliver Meng, CFA, CAIA, FRM, Director, Senior Fund Manager, Managed Fund Since 2021

Wayne Wicker, CFA, Senior Vice President and Chief Investment Officer, Managed Fund Since 2004

Investment objective

The PLUS Fund's investment objective is to seek to offer a competitive level of income consistent with providing capital preservation and meeting liquidity needs.

Fund goals

Key goals are to seek to preserve capital, by limiting risk of loss of principal and delivering stable returns, and to meet liquidity needs of those who invest in the PLUS Fund.

Investment strategy

MissionSquare Investments employs a structured, multi-product, multi-manager approach in managing the Fund. The Fund invests primarily in a diversified and tiered portfolio of stable value investment contracts and in fixed income securities, fixed income mutual funds, and fixed income commingled trust funds ("fixed income assets") that back certain stable value investment contracts. In addition, the Fund invests in money market mutual funds, as well as cash and cash equivalents. The Fund's portfolio may include different types of investments with a variety of negotiated terms and maturities and is diversified across sectors and issuers. The composition of the Fund's portfolio and its allocations to various stable value investments and fixed income investment sectors, across the fund's multiple tiers, is determined based on prevailing economic and capital market conditions, relative value analysis, liquidity needs, and other factors. The Fund invests in stable value investment contracts to seek to achieve, over the long run, returns higher than those of money market funds and short-term bank rates and relatively stable returns compared to short-to-intermediate term fixed income funds. The Fund generally will not track shorter-term interest rates as closely as money market mutual funds, because of its longer maturity, potential adverse market changes, and provisions in stable value contracts held by the Fund. In addition, while the Fund's returns are generally expected to follow interest rate trends over time, they typically will do so on a lagged basis.

Performance as of 09/30/2022

Share Class/CUSIP	Crediting Rate ³	Performance					Total estimated expenses
		YTD	1 Year	3 Year	5 Year	10 Year	
PLUS Fund (Gross) / -	2.47%	1.64%	2.19%	2.36%	2.47%	2.45%	0.21%
Morningstar US CIT Stable Value Peer Percentile ⁴	-	-	7%	7%	7%	1%	-
Morningstar US CIT Stable Value Number of Funds ⁴	-	-	16	16	16	16	-
R10 ⁵ / 92208J709	2.15%	1.42%	1.88%	2.05%	2.16%	2.14%	0.52%
R9 ⁵ / 92208J600	2.10%	1.38%	1.83%	2.00%	2.11%	2.09%	0.57%
R8 ⁵ / 92208J501	2.06%	1.34%	1.78%	1.95%	2.06%	2.04%	0.62%
R7 ⁵ / 92208J402	2.00%	1.30%	1.73%	1.90%	2.01%	1.99%	0.67%
R5/ 92208J303	1.91%	1.23%	1.62%	1.79%	1.91%	1.88%	0.77%
R3/ 92208J204	1.61%	1.01%	1.33%	1.50%	1.61%	1.59%	1.06%
R1/ 92208J105	1.35%	0.81%	1.07%	1.24%	1.35%	1.33%	1.32%
ICE BofA US 3 Month Treasury Bill Index	-	0.61%	0.62%	0.59%	1.15%	0.68%	-
Morningstar US CIT Stable Value Index ^{6,7}	-	1.31%	1.74%	1.98%	2.11%	1.96%	-
Standard Deviation (Gross)	-	-	0.03	0.06	0.07	0.06	-

Issuers

Traditional GIC (20.5%)

Minnesota Life	4.9%
Principal Life	4.4%
Metropolitan Life	3.9%
Metropolitan Tower Life	3.2%
Prudential	1.4%
United of Omaha	1.1%
New York Life	0.9%
Jackson National Life	0.7%

Synthetic GIC (53.0%)

Transamerica Life	13.4%
Pacific Life	13.3%
Prudential	12.7%
Metropolitan Tower Life	7.8%
Principal Life	5.8%

Separate Account GIC (20.2%)

New York Life	9.2%
Massachusetts Mutual Life	8.9%
Lincoln National Life	2.2%

PLUS Fund Gross total fee is 0.21% of assets. The fees included in the gross return consist of: (i) third-party manager fees of 0.08% of assets; (ii) third-party wrap provider fees of 0.11% of assets; (iii) third-party custody fees of 0.01% of assets; and (iv) third-party acquired fund fees of 0.01% of assets. The gross return is reported in a manner consistent with stable value industry reporting practices. Fees are subject to change due to fixed income manager, wrap, allocation, or other changes. Periods greater than one year represent annualized performance and past performance, as shown, is no guarantee of future results. Current performance may be lower or higher than the performance shown. For current performance, contact MissionSquare Retirement by calling 800-669-7400 or by visiting www.missionssq.org if you are a plan administration client, or www.investments.missionssq.org for institutions.

* The PLUS Fund includes additional share classes that are made available to clients based on asset size. For additional information, please contact the MissionSquare Investment Only team by calling us at 833-747-5601 or emailing us at io@missionssq.org.

When Funds are marketed to institutional clients, the Funds are offered by MissionSquare Investment Services, an SEC registered broker-dealer and FINRA member firm. MissionSquare Investment Services is a wholly-owned subsidiary of MissionSquare Retirement and is an affiliate of VantageTrust Company, LLC and MissionSquare Investments.

Fund information

The Fund is an investment option of VantageTrust, a group trust established and maintained by VantageTrust Company, LLC, a wholly owned subsidiary of MissionSquare Retirement. VantageTrust provides for the commingling of assets of certain trusts and plans as described in its Declaration of Trust, and is only available for investment by such eligible trusts and plans. The Fund is not a mutual fund. Its units are not deposits of VantageTrust Company and are not insured by the Federal Deposit Insurance Corporation or any other agency. The Fund is a security that has not been registered under the Securities Act of 1933 and is exempt from investment company registration under the Investment Company Act of 1940. For additional information regarding the Fund, including a description of the principal risks, please consult the Funds Disclosure Memorandum, which is available when plan administration clients log in at www.missionsq.org, at www.investments.missionsq.org for institutions, or upon request by calling 800-669-7400.

Before investing in the Fund you should carefully consider your investment goals, tolerance for risk, investment time horizon, and personal circumstances. There is no guarantee that the Fund will meet its investment objective and you can lose money.

Investment risks

Stable Value Risk, Interest Rate Risk, Credit Risk, Stable Value Issuer Risk, Liquidity Risk, Reinvestment Risk, Call Risk, Mortgage-Backed Securities Risk, Asset-Backed Securities Risk, Securities Lending Risk, Derivative Instruments Risk, Large Investor Risk.

Restrictions related to employer withdrawals

In the event an Employer initiates withdrawal of all or part of its Plan's assets from the PLUS Fund, the payout of such assets may be deferred for a period of up to twelve months. In the case of a total withdrawal, participant transfers of PLUS Fund assets to other investment options will be restricted and participants will not be able to make additional investments in the PLUS Fund during this twelve-month period.

Transfer restrictions

Direct transfers from the PLUS Fund to competing funds are restricted. Competing funds include, but are not limited to, the following types of investment options: (1) cash management funds, money market mutual funds, bank collective short-term investment funds, bank accounts or certificates of deposit, stable value funds or substantially similar investment options that offer guarantees of principal or income, such as guaranteed annuity contracts or similar arrangements with financial institutions; (2) short-term bond funds that invest in fixed income securities and seek to maintain or have an average portfolio duration of less than two years; and (3) any investment option that invests 80% or more of its assets in (i) fixed income securities or funds with a duration of less than two years, or (ii) instruments that seek to provide capital preservation such as stable value funds, bank certificates of deposit or bank accounts, and cash or cash equivalents. To transfer money from the PLUS Fund to a competing fund, you must first transfer the amount to a non-competing fund for a period of at least 90 days. For example, if you want to transfer money from the PLUS Fund to a money market fund, you will first need to transfer the money to a non-competing fund and then, 90 days later or any time thereafter, transfer that amount of money to the money market fund.

Contact information

Investment Only

Andrew Whiting
202-731-2143
AWWhiting@missionsq.org

Investment Consultant Relations

Rick Donley
800-708-2416
RDonley@missionsq.org

1. Credit Quality is calculated by MissionSquare Investments (MSQI) and is only one factor that may be considered in assessing the risks of a fixed income portfolio, and it does not provide a complete picture of the credit risks or the dispersion of those risks within a portfolio. MSQI calculates the average based on the Moody's, S&P, Fitch (M/S&P/F) or a combination of the three credit ratings of the underlying securities or wrap providers. Moody's, S&P, and Fitch are Nationally Recognized Statistical Rating Organizations and are not affiliated with MSQI.
2. Effective duration measures the interest rate sensitivity of the underlying portfolio. For the portion of the Fund invested in Maturing GICs, effective duration is not applicable and a duration of zero is assigned since their current values are not impacted by interest rate changes. If a duration based on weighted average maturity or cash flows is assigned to the Maturing GICs, the Fund's overall September 30, 2022 duration would be 3.70.
3. Annualized crediting rate for the last day of the month.
4. The Morningstar US CIT Stable Value universe represents the majority of the U.S. collective investment trust stable-value fund pooled universe and was named the Hueler Analytics Stable Value Pooled Fund Comparative Universe prior to January 31, 2021. The percentile ranks shown are derived by MissionSquare Investments (MSQI) using gross returns from Morningstar. MSQI does not independently verify Morningstar data. Gross returns do not include plan administration fees, advisor expenses, or other stable value fund costs. Actual performance experienced by participants would be commensurately lower. The highest (or most favorable) percentile rank is 1 and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a universe will always receive a rank of 1. Past performance is no guarantee of future results.
5. Performance information for this class prior to its inception date is the performance of the Fund adjusted to reflect the estimated fees and expenses of this class.
6. The Morningstar US CIT Stable Value Index measures the performance of approximately 75% of the U.S. collective investment trust stable-value fund pooled universe and is the stable value industry benchmark used by many institutional investors, consultants, advisers, and plan sponsors for monitoring stable value pooled funds.
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Sterling Capital Total Return Bond R6 (USD)

Morningstar Quantitative Rating™
Neutral
11-30-2022

Overall Morningstar Rating™
★★★★
405 US Fund Intermediate Core Bond

Standard Index
Bloomberg US
Agg Bond TR USD

Category Index
Bloomberg US Agg
Bond TR USD

Morningstar Cat
US Fund Intermediate
Core Bond

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	0.73	5.10	1.59	1.67	9.35
2021	-3.00	2.16	0.04	-0.26	-1.12
2022	-6.15	-4.69	-4.42	1.57	-13.15

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-13.15	-2.08	—	—	0.71
Std 12-31-2022	-13.15	—	—	—	0.71
Total Return	-13.15	-2.08	0.48	1.58	0.71
+/- Std Index	-0.14	0.64	0.46	0.53	—
+/- Cat Index	-0.14	0.64	0.46	0.53	—
% Rank Cat	40	15	10	5	—
No. in Cat	453	405	372	275	—

7-day Yield 01-19-23	Subsidized	Unsubsidized
	3.12 ¹	—
30-day SEC Yield 12-31-22	3.81 ¹	3.78
1. Contractual waiver; Expires 01-31-2023		

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 800-228-1872 or visit www.sterlingcapitalfunds.com.

Fees and Expenses

Sales Charges

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.25
12b1 Expense %	0.00
Net Expense Ratio %	0.35
Gross Expense Ratio %	0.46

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	405 funds	372 funds	275 funds

Morningstar Rating™	4★	4★	5★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	High	High

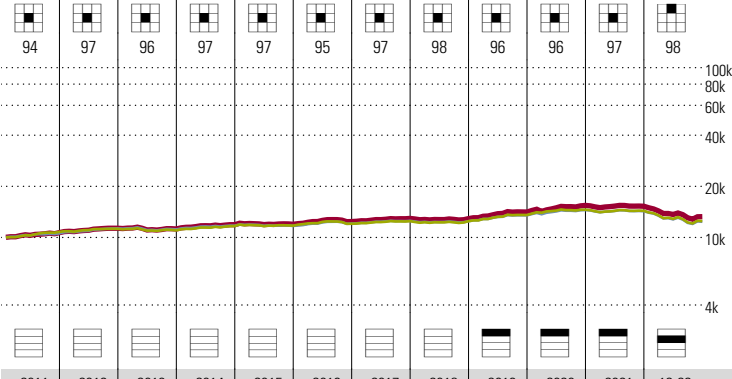
	3 Yr	5 Yr	10 Yr
Standard Deviation	6.00	5.13	4.11
Mean	-2.08	0.48	1.58
Sharpe Ratio	-0.46	-0.14	0.21

MPT Statistics	Standard Index	Best Fit Index
		Bloomberg US
		Universal TR USD
Alpha	0.57	0.42
Beta	0.97	0.98
R-Squared	90.07	95.84

12-Month Yield	2.93%
Potential Cap Gains Exp	-19.17%

Operations

Family:	Sterling Capital Funds
Manager:	Multiple
Tenure:	15.0 Years
Objective:	Growth and Income
Base Currency:	USD



Investment Style
Fixed-Income
Bond %

Growth of \$10,000

Sterling Capital Total Return Bond R6	13,253
Category Average	12,374
Standard Index	12,484

Performance Quartile
(within category)

History

NAV/Price	9.18
Total Return %	-13.15
+/- Standard Index	-0.14
+/- Category Index	-0.14
% Rank Cat	40
No. of Funds in Cat	453

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 11-2022	Share Amount	Holdings : 0 Total Stocks, 301 Total Fixed-Income, 48% Turnover Ratio	Net Assets %
Cash	1.60	1.60	0.00				
US Stocks	0.00	0.00	0.00				
Non-US Stocks	0.00	0.00	0.00	⊕	106 mil	United States Treasury Bonds 1.375%	5.78
Bonds	98.13	98.13	0.00		51 mil	United States Treasury Bonds 2.5%	3.78
Other/Not Clsfd	0.27	0.27	0.00		35 mil	United States Treasury Notes 2.625%	3.14
Total	100.00	100.00	0.00		21 mil	United States Treasury Notes 1.5%	1.80
					21 mil	ONEMAIN FINANCIAL ISSUANCE TRUST 1	1.72

Equity Style

Value	Blend	Growth

Portfolio Statistics

P/E Ratio TTM	Port Avg	Rel Index	Rel Cat
P/C Ratio TTM	—	—	—
P/B Ratio TTM	—	—	—
Geo Avg Mkt Cap \$mil	—	—	—

Fixed-Income Style

Ltd	Mod	Ext

Avg Eff Maturity	8.75
Avg Eff Duration	6.05
Avg Wtd Coupon	3.17
Avg Wtd Price	88.41

Credit Quality Breakdown 12-31-2022

	Bond %
AAA	66.46
AA	8.48
A	12.58
BBB	12.40
BB	0.06
B	0.00
Below B	0.02
NR	0.00

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	—	—

Vanguard International Growth Adm (USD)

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-15.52	33.01	16.27	22.26	59.74
2021	-1.03	7.49	-4.05	-2.76	-0.74
2022	-16.45	-18.13	-10.16	12.62	-30.79
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-30.79	3.14	4.75	7.84	7.12
Std 12-31-2022	-30.79	—	4.75	7.84	7.12
Total Return	-30.79	3.14	4.75	7.84	7.12
+/- Std Index	-14.79	3.07	3.87	4.04	—
+/- Cat Index	-7.74	3.54	3.26	3.16	—
% Rank Cat	82	9	13	4	—
No. in Cat	443	399	346	226	—

	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 %

0.32

12b1 Expense %

NA

Net Expense Ratio %

0.34

Gross Expense Ratio %

0.34

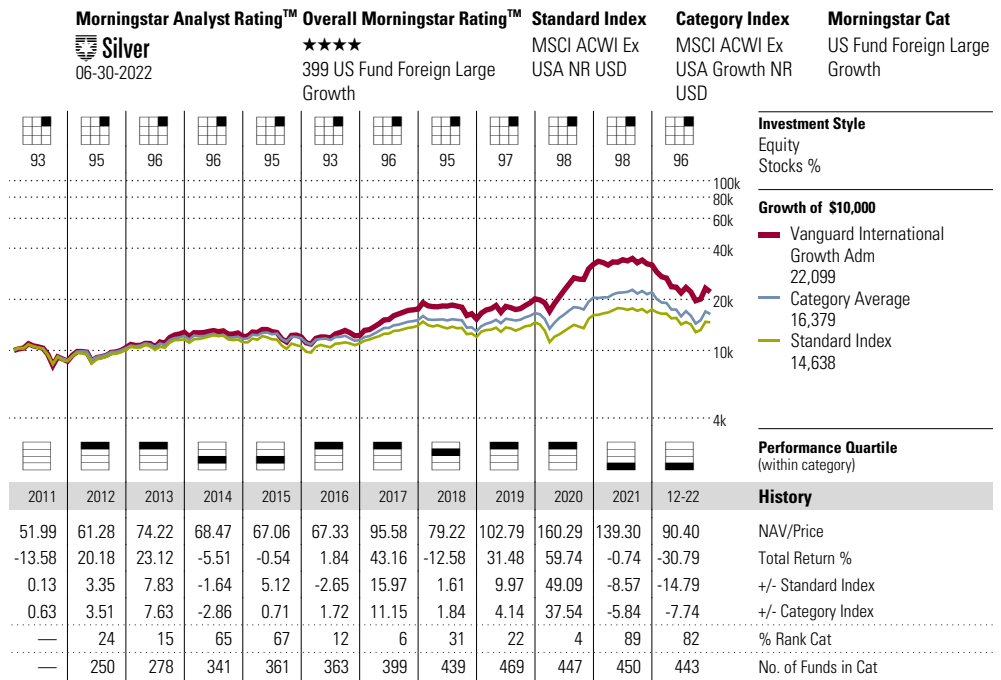
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
	399 funds	346 funds	226 funds
Morningstar Rating™	4★	4★	4★
Morningstar Risk	High	High	High
Morningstar Return	High	+Avg	High
	3 Yr	5 Yr	10 Yr
Standard Deviation	24.95	22.14	18.15
Mean	3.14	4.75	7.84
Sharpe Ratio	0.21	0.26	0.46

MPT Statistics	Standard Index	Best Fit Index
	MSCI ACWI Ex USA	Growth NR USD
Alpha	3.99	4.54
Beta	1.13	1.23
R-Squared	78.67	89.80
12-Month Yield	—	—
Potential Cap Gains Exp	21.25%	—

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	13.1 Years
Objective:	Foreign Stock



Portfolio Analysis 10-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 09-2022	Share Amount	Holdings : 118 Total Stocks, 0 Total Fixed-Income, 15% Turnover Ratio	Net Assets %
Cash	2.01	2.83	0.81				
US Stocks	14.61	14.61	0.00				
Non-US Stocks	82.30	82.30	0.00	⊖	4 mil	ASML Holding NV	5.25
Bonds	0.00	0.00	0.00	⊖	2 mil	MercadoLibre Inc	4.63
Other/Not Clsfd	1.07	1.07	0.00		10 mil	Moderna Inc	3.88
Total	100.00	100.81	0.81	⊖	952,616	Adyen NV	3.54
					5 mil	Tesla Inc	2.86
					2 mil	Kering SA	2.75
				⊖	84 mil	Taiwan Semiconductor Manufacturing	2.63
				⊖	38 mil	Tencent Holdings Ltd	2.58
					3 mil	Genmab A/S	2.56
					2 mil	argenx SE	2.36
					4 mil	Illumina Inc	2.32
					49 mil	Meituan Class B	2.05
					9 mil	Spotify Technology SA	1.98
				⊖	4 mil	Ferrari NV	1.87
					23 mil	M3 Inc	1.79

Equity Style	Value	Blend	Growth	Large	Mid	Small
P/E Ratio TTM	15.7	1.32	0.82			
P/C Ratio TTM	13.1	1.55	0.96			
P/B Ratio TTM	3.0	1.90	1.00			
Geo Avg Mkt Cap \$mil	48088	1.21	0.99			

Fixed-Income Style	Ltd	Mod	Ext	High	Mid	Low
Avg Eff Maturity						
Avg Eff Duration						
Avg Wtd Coupon						
Avg Wtd Price						

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

Regional Exposure	Stocks %	Rel Std Index
Americas	23.0	2.13
Greater Europe	49.1	1.10
Greater Asia	27.9	0.63

Sector Weightings	Stocks %	Rel Std Index
Cyclical	36.3	0.85
Basic Materials	0.5	0.06
Consumer Cyclical	25.6	2.37
Financial Services	10.2	0.49
Real Estate	0.0	0.00
Sensitive	38.0	1.07
Communication Services	6.0	0.95
Energy	2.0	0.33
Industrials	10.7	0.88
Technology	19.2	1.76
Defensive	25.7	1.17
Consumer Defensive	5.3	0.61
Healthcare	19.3	1.93
Utilities	1.1	0.33

Vanguard International Value Inv (USD)

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-26.30	15.08	3.99	23.57	8.99
2021	5.74	3.97	-3.66	1.95	7.97
2022	-5.10	-11.38	-9.27	15.76	-11.66

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-11.66	1.30	1.36	4.31	8.07
Std 12-31-2022	-11.66	—	1.36	4.31	8.07
Total Return	-11.66	1.30	1.36	4.31	8.07
+/- Std Index	4.34	1.23	0.48	0.51	—
+/- Cat Index	-3.07	1.24	1.41	1.58	—
% Rank Cat	75	40	27	25	—
No. in Cat	354	321	298	177	—

	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 %	0.35
12b1 Expense %	NA
Net Expense Ratio %	0.36
Gross Expense Ratio %	0.36

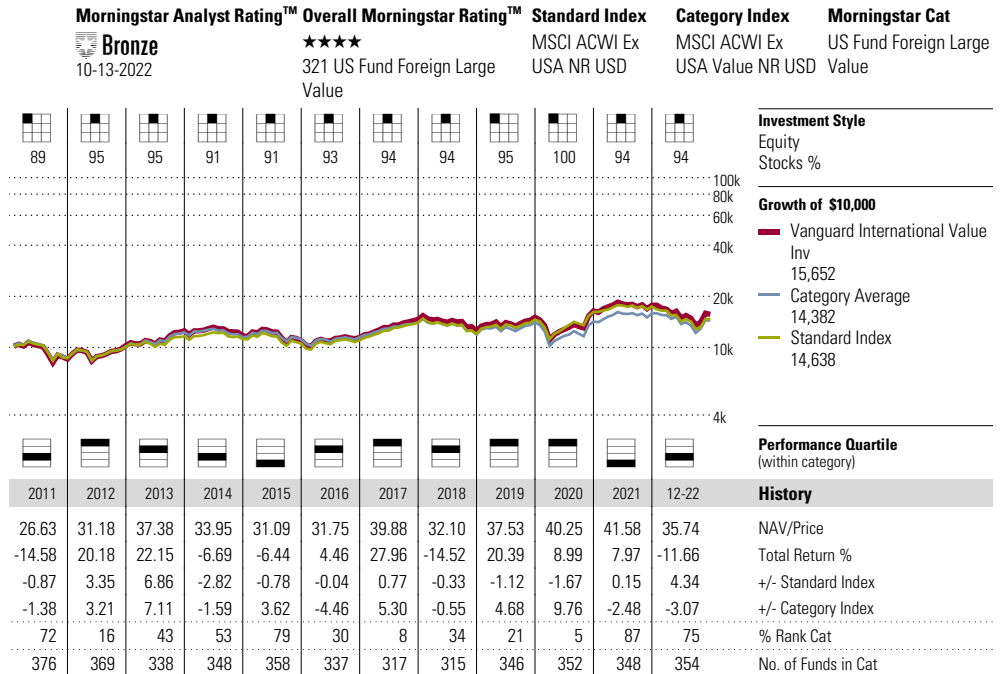
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg
Standard Deviation	21.95	18.83	15.66
Mean	1.30	1.36	4.31
Sharpe Ratio	0.13	0.09	0.30

MPT Statistics	Standard Index	Best Fit Index
		Morningstar Gbl
		xUS Val TME NR
		USD
Alpha	1.60	0.57
Beta	1.09	1.01
R-Squared	94.52	97.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	-11.12%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	12.7 Years
Objective:	Foreign Stock



Portfolio Analysis 10-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 09-2022	Share Amount	Holdings : 196 Total Stocks, 0 Total Fixed-Income, 37% Turnover Ratio	Net Assets %
Cash	6.02	6.26	0.24				
US Stocks	4.52	4.52	0.00				
Non-US Stocks	89.46	89.46	0.00		32 mil	BP PLC	1.51
Bonds	0.00	0.00	0.00	⊕	2 mil	Airbus SE	1.50
Other/Not Clsfd	0.00	0.00	0.00		4 mil	Holcim Ltd	1.48
Total	100.00	100.24	0.24		3 mil	TotalEnergies SE	1.40
				⊕	21 mil	Alibaba Group Holding Ltd Ordinary	1.39
					43 mil	Bank Bradesco SA ADR	1.37
					29 mil	HSBC Holdings PLC	1.27
					19 mil	AIA Group Ltd	1.21
					5 mil	RELX PLC	1.20
					6 mil	ICICI Bank Ltd ADR	1.14
					5 mil	Shell PLC	1.10
				⊕	2 mil	Novartis AG	1.04
					902,385	Air Liquide SA	1.00
					416,187	Aon PLC Class A	0.99
					628,158	MTU Aero Engines AG	0.95

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value	P/E Ratio TTM	11.3	0.95	1.22
Blend	P/C Ratio TTM	7.7	0.90	1.25
Growth	P/B Ratio TTM	1.4	0.88	1.21
Large	Geo Avg Mkt Cap \$mil	25315	0.64	0.77
Mid				
Small				

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

Base Currency:	USD
Ticker:	VTRIX
ISIN:	US9219392035
Minimum Initial Purchase:	\$3,000

Sector Weightings	Stocks %	Rel Std Index
Cyclical	43.1	1.01
Basic Materials	10.6	1.27
Consumer Cyclical	14.8	1.37
Financial Services	16.4	0.79
Real Estate	1.3	0.51
Sensitive	40.3	1.13
Communication Services	6.0	0.96
Energy	8.4	1.38
Industrials	18.4	1.52
Technology	7.5	0.68
Defensive	16.6	0.76
Consumer Defensive	6.2	0.72
Healthcare	7.9	0.79
Utilities	2.4	0.75

Vanguard Target Retirement 2020 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
140 US Fund Target-Date
2020

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2020
TR USD

Morningstar Cat
US Fund Target-Date
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	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 01-19-23	2.73	2.73

Performance Disclosure

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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

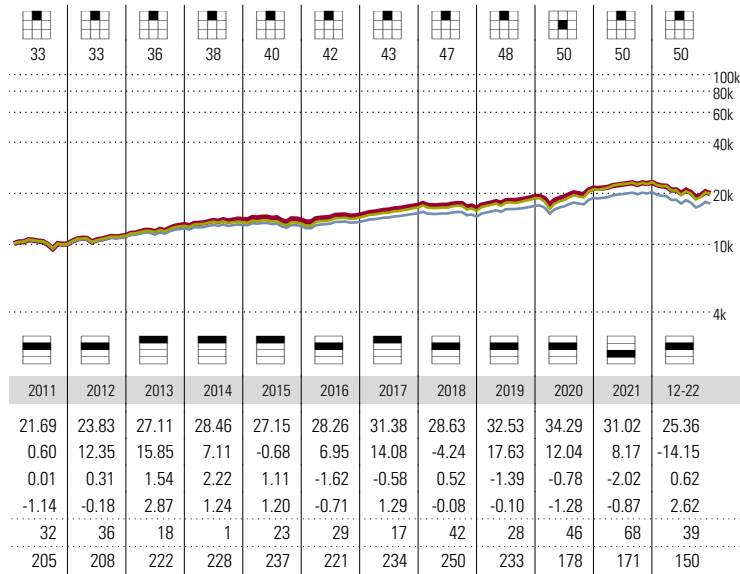
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg
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 2020
		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%

Operations

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	3.27	12.14	8.87
US Stocks	24.85	24.85	0.00
Non-US Stocks	16.97	16.97	0.00
Bonds	54.88	54.90	0.02
Other/Not Clsfd	0.03	0.03	0.00
Total	100.00	108.89	8.89

Equity Style

Value	Blend	Growth			Avg	Index	Cap
			Large	P/E Ratio TTM	14.7	1.03	0.94
				P/C Ratio TTM	10.9	1.01	0.94
			Mid	P/B Ratio TTM	2.2	1.07	0.92
			Small	Geo Avg Mkt Cap \$mil	57226	1.39	0.89

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Avg Eff Maturity		7.75
Avg Eff Duration		6.02
Avg Wtd Coupon		2.08
Avg Wtd Price		90.82

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	64.92
AA	7.95
A	13.98
BBB	12.50
BB	0.00
B	0.00
Below B	0.32
NR	0.33

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.6	1.03
Greater Europe	17.8	0.98
Greater Asia	18.6	0.93

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings	10,639 Total Stocks, 17,617 Total Fixed-Income, 14% Turnover Ratio	Net Assets %
+	1,365 mil	Vanguard Total Bond Market II Idx		30.97
-	58 mil	Vanguard Total Stock Mkt Idx Instl		25.93
-	434 mil	Vanguard Total Intl Stock Index Inv		17.94
+	218 mil	Vanguard Total Intl Bd II Idx Instl		13.75
-	178 mil	Vanguard Shrt-Term Infl-Prot Sec I		10.30

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.3	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.00
Industrials	11.3	0.98
Technology	18.5	1.34
Defensive	23.1	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2025 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
195 US Fund Target-Date
2025

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2025
TR USD

Morningstar Cat
US Fund Target-Date
2025

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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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.

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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

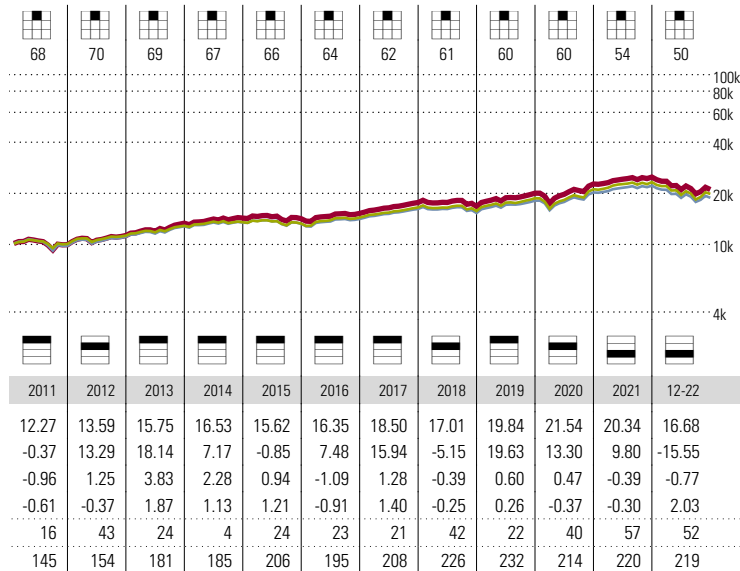
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg
Standard Deviation	13.38	11.61	9.43
Mean	1.66	3.58	6.43
Sharpe Ratio	0.13	0.25	0.62

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%

Operations

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.99	10.81	7.82
US Stocks	31.84	31.84	0.00
Non-US Stocks	22.19	22.19	0.00
Bonds	42.94	42.96	0.02
Other/Not Clsfd	0.03	0.03	0.00
Total	100.00	107.84	7.84

Equity Style

Value	Blend	Growth
Large	Med	Small
P/E Ratio TTM	14.7	1.03
P/C Ratio TTM	10.9	1.01
P/B Ratio TTM	2.2	1.07
Geo Avg Mkt Cap \$mil	56843	1.38

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Avg Eff Maturity		8.44
Avg Eff Duration		6.50
Avg Wtd Coupon		2.29
Avg Wtd Price		90.08

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	60.35
AA	8.97
A	15.80
BBB	14.15
BB	0.00
B	0.00
Below B	0.36
NR	0.37

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.2	1.02
Greater Europe	18.0	0.99
Greater Asia	18.9	0.95

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings	Net Assets %
		10,864 Total Stocks, 17,474 Total Fixed-Income, 14% Turnover Ratio	
⊖	133 mil	Vanguard Total Stock Mkt Idx Instl	33.23
⊕	2,153 mil	Vanguard Total Bond Market II Idx	27.35
⊖	987 mil	Vanguard Total Intl Stock Index Inv	22.85
⊕	343 mil	Vanguard Total Intl Bd II Idx Instl	12.12
⊕	101 mil	Vanguard Shrt-Term Infl-Prot Sec I	3.27

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2030 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
195 US Fund Target-Date
2030

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2030
TR USD

Morningstar Cat
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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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

Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

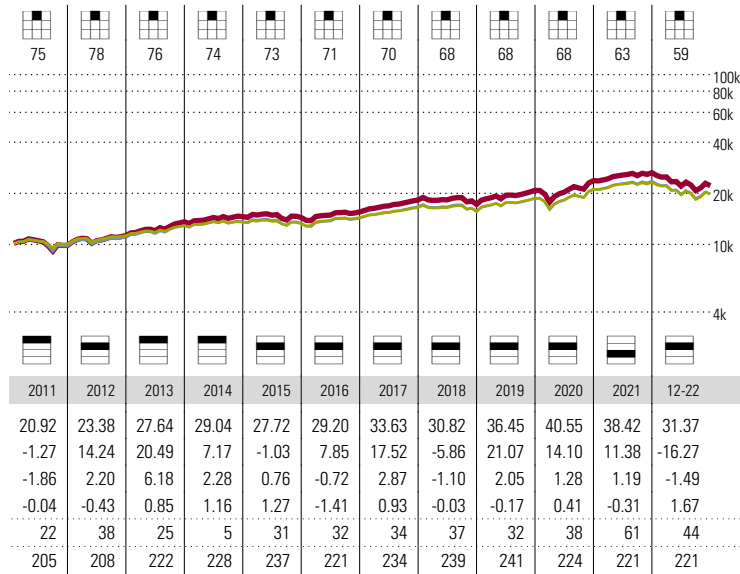
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

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	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	Morningstar
		Lifetime Mod 2035	TR USD
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
Manager:	Multiple
Tenure:	9.9 Years
Objective:	Asset Allocation



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.80	9.52	6.72
US Stocks	36.80	36.80	0.00
Non-US Stocks	25.81	25.81	0.00
Bonds	34.56	34.57	0.02
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	106.73	6.73

Equity Style

Value	Blend	Growth				Avg	Index	Cap
			Large	P/E Ratio TTM	14.7	1.03	0.92	
				P/C Ratio TTM	10.9	1.01	0.92	
			Mid	P/B Ratio TTM	2.2	1.07	0.88	
				Geo Avg Mkt Cap \$mil	56718	1.37	0.82	
			Small					

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Avg Eff Maturity		8.93
Avg Eff Duration		6.83
Avg Wtd Coupon		2.44
Avg Wtd Price		89.56

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	57.30
AA	9.61
A	17.03
BBB	15.29
BB	0.00
B	0.00
Below B	0.39
NR	0.39

Regional Exposure

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

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 10,956 Total Stocks , 17,264 Total Fixed-Income, 11% Turnover Ratio	Net Assets %
⊖	163 mil	Vanguard Total Stock Mkt Idx Instl	38.42
⊖	1,204 mil	Vanguard Total Intl Stock Index Inv	26.28
⊕	1,976 mil	Vanguard Total Bond Market II Idx	23.65
⊕	313 mil	Vanguard Total Intl Bd II Idx Instl	10.40

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2035 Fund (USD)

Morningstar Analyst Rating™



02-24-2022

Overall Morningstar Rating™



188 US Fund Target-Date 2035

Standard Index

Morningstar Mod

Tgt Risk TR USD

Category Index

Morningstar

Lifetime Mod 2035

TR USD

Morningstar Cat

US Fund Target-Date

2035

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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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 %

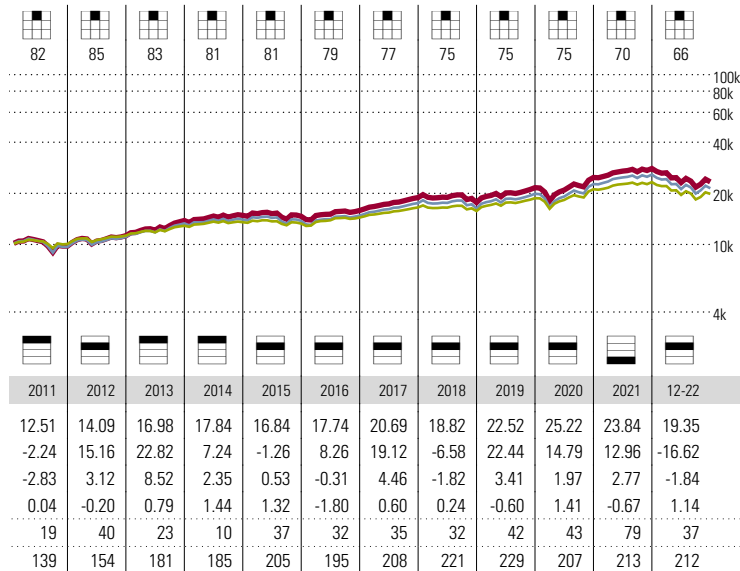
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Risk and Return Profile

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.92	8.21	5.28
US Stocks	40.88	40.88	0.00
Non-US Stocks	28.75	28.75	0.00
Bonds	27.41	27.42	0.01
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	105.29	5.29

Equity Style

Value	Blend	Growth			Avg	Index	Cap
			Large	P/E Ratio TTM	14.7	1.03	0.94
				P/C Ratio TTM	10.9	1.01	0.94
			Mid	P/B Ratio TTM	2.2	1.07	0.91
			Small	Geo Avg Mkt Cap \$mil	56668	1.37	0.87

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Avg Eff Maturity		8.93
Avg Eff Duration		6.83
Avg Wtd Coupon		2.45
Avg Wtd Price		89.56

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	57.43
AA	9.54
A	16.98
BBB	15.28
BB	0.00
B	0.00
Below B	0.38
NR	0.39

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.0	1.02
Greater Europe	18.1	0.99
Greater Asia	19.0	0.95

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,031 Total Stocks , 16,969 Total Fixed-Income, 9% Turnover Ratio	Net Assets %
⊖	178 mil	Vanguard Total Stock Mkt Idx Instl	42.54
⊖	1,322 mil	Vanguard Total Intl Stock Index Inv	29.24
⊕	1,547 mil	Vanguard Total Bond Market II Idx	18.77
⊕	242 mil	Vanguard Total Intl Bd II Idx Instl	8.17

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2040 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
189 US Fund Target-Date
2040

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2040
TR USD

Morningstar Cat
US Fund Target-Date
2040

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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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

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

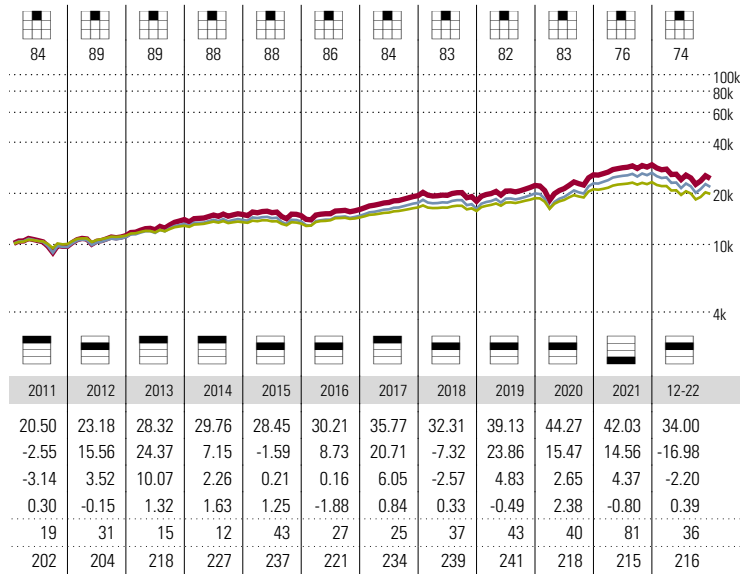
Risk and Return Profile

	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 MSCI ACWI NR USD
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%

Operations

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.84	6.70	3.86
US Stocks	45.29	45.29	0.00
Non-US Stocks	31.70	31.70	0.00
Bonds	20.13	20.14	0.01
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	103.87	3.87

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	10.9	1.01	0.94
P/B Ratio TTM	2.2	1.07	0.92
Geo Avg Mkt Cap \$mil	56761	1.38	0.90

Fixed-Income Style

	Ltd	Mod	Ext
High			
Mid			
Low			

Credit Quality Breakdown 11-30-2022	Bond %
AAA	57.51
AA	9.50
A	16.95
BBB	15.27
BB	0.00
B	0.00
Below B	0.38
NR	0.39

Regional Exposure	Stocks %	Rel Std Index
Americas	63.1	1.02
Greater Europe	18.0	0.99
Greater Asia	18.9	0.95

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,088 Total Stocks , 16,399 Total Fixed-Income, 7% Turnover Ratio	Net Assets %
⊖	169 mil	Vanguard Total Stock Mkt Idx Instl	46.78
⊖	1,263 mil	Vanguard Total Intl Stock Index Inv	32.25
⊕	983 mil	Vanguard Total Bond Market II Idx	13.77
⊕	153 mil	Vanguard Total Intl Bd II Idx Instl	5.95

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2045 Fund (USD)

Morningstar Analyst Rating™

Silver

02-24-2022

Overall Morningstar Rating™

★★★★

188 US Fund Target-Date
2045

Standard Index

Morningstar Mod

Tgt Risk TR USD

Category Index

Morningstar

Lifetime Mod 2045

TR USD

Morningstar Cat

US Fund Target-Date

2045

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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-18-23	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

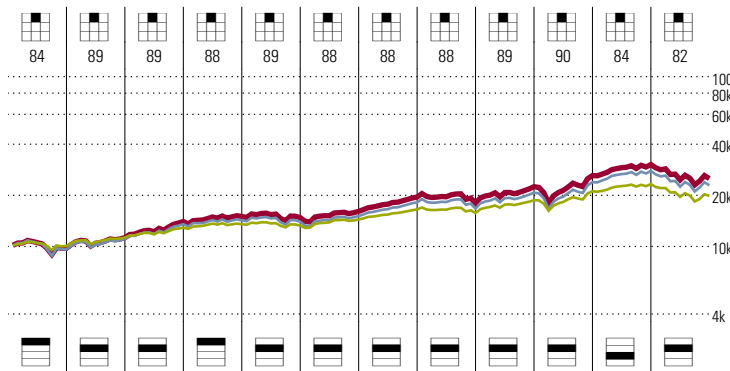
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	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
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%

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
12.87	14.55	17.76	18.65	17.78	18.89	22.50	20.21	24.70	28.19	28.38	22.82
-2.51	15.58	24.37	7.16	-1.57	8.87	21.42	-7.90	24.94	16.30	16.16	-17.36
-3.11	3.54	10.06	2.27	0.22	0.30	6.77	-3.14	5.91	3.48	5.97	-2.58
0.67	-0.26	1.30	1.91	1.45	-1.97	0.89	0.27	-0.03	3.35	-0.20	-0.29
14	43	26	12	42	28	26	43	43	36	68	31
139	145	180	185	206	195	208	221	229	207	213	212

Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.69	5.17	2.48
US Stocks	49.69	49.69	0.00
Non-US Stocks	34.62	34.62	0.00
Bonds	12.96	12.97	0.01
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	102.49	2.49

Equity Style

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

Fixed-Income Style

Ltd	Mod	Ext
High	High	Low
Mid	High	Low
Low	High	Low

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	57.61
AA	9.46
A	16.91
BBB	15.26
BB	0.00
B	0.00
Below B	0.38
NR	0.38

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.2	1.02
Greater Europe	18.0	0.99
Greater Asia	18.9	0.95

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,135 Total Stocks , 15,315 Total Fixed-Income, 5% Turnover Ratio	Net Assets %
⊖	172 mil	Vanguard Total Stock Mkt Idx Instl	50.84
⊖	1,291 mil	Vanguard Total Intl Stock Index Inv	35.22
⊕	594 mil	Vanguard Total Bond Market II Idx	8.89
⊕	91 mil	Vanguard Total Intl Bd II Idx Instl	3.80

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2050 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
189 US Fund Target-Date
2050

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2050
TR USD

Morningstar Cat
US Fund Target-Date
2050

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 01-19-23	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

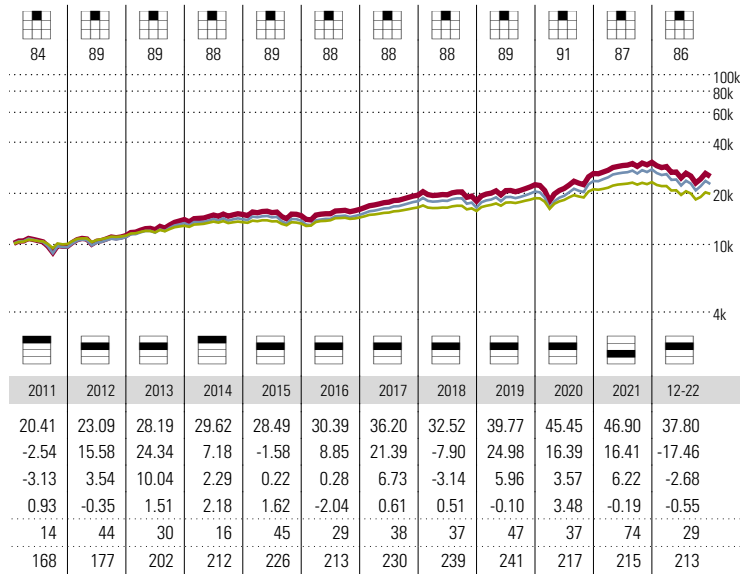
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
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 MSCI ACWI NR USD
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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.64	4.46	1.82
US Stocks	51.89	51.89	0.00
Non-US Stocks	36.11	36.11	0.00
Bonds	9.33	9.33	0.00
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	101.82	1.82

Equity Style

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

Fixed-Income Style

Ltd	Mod	Ext
High	High	Low
Mid	High	Low
Low	High	Low

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	57.39
AA	9.56
A	16.99
BBB	15.28
BB	0.00
B	0.00
Below B	0.39
NR	0.39

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.2	1.02
Greater Europe	18.0	0.99
Greater Asia	18.8	0.94

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,141 Total Stocks , 14,309 Total Fixed-Income, 4% Turnover Ratio	Net Assets %
+	144 mil	Vanguard Total Stock Mkt Idx Instl	52.72
-	1,087 mil	Vanguard Total Intl Stock Index Inv	36.88
+	348 mil	Vanguard Total Bond Market II Idx	6.48
-	54 mil	Vanguard Total Intl Bd II Idx Instl	2.79

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2055 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
188 US Fund Target-Date
2055

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2055
TR USD

Morningstar Cat
US Fund Target-Date
2055

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 01-19-23	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

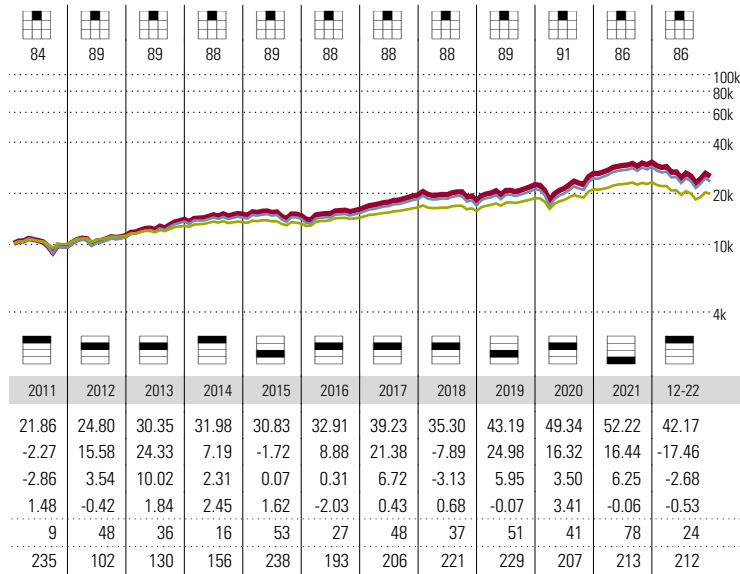
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
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 MSCI ACWI NR USD
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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.73	4.52	1.79
US Stocks	51.89	51.89	0.00
Non-US Stocks	36.04	36.04	0.00
Bonds	9.30	9.30	0.00
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	101.80	1.80

Equity Style

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

Fixed-Income Style

Ltd	Mod	Ext
High	High	Low
Mid	High	Low
Low	High	Low

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	57.57
AA	9.48
A	16.93
BBB	15.26
BB	0.00
B	0.00
Below B	0.38
NR	0.38

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.2	1.02
Greater Europe	18.0	0.99
Greater Asia	18.8	0.94

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,141 Total Stocks , 14,287 Total Fixed-Income, 4% Turnover Ratio	Net Assets %
+	89 mil	Vanguard Total Stock Mkt Idx Instl	52.67
-	673 mil	Vanguard Total Intl Stock Index Inv	36.78
+	216 mil	Vanguard Total Bond Market II Idx	6.46
+	33 mil	Vanguard Total Intl Bd II Idx Instl	2.76

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.00
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement 2060 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
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	-2.68	1.84	1.44	2.52	—
+/- Cat Index	-0.48	0.86	0.71	0.85	—
% Rank Cat	25	43	46	1	—
No. in Cat	212	183	157	1	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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

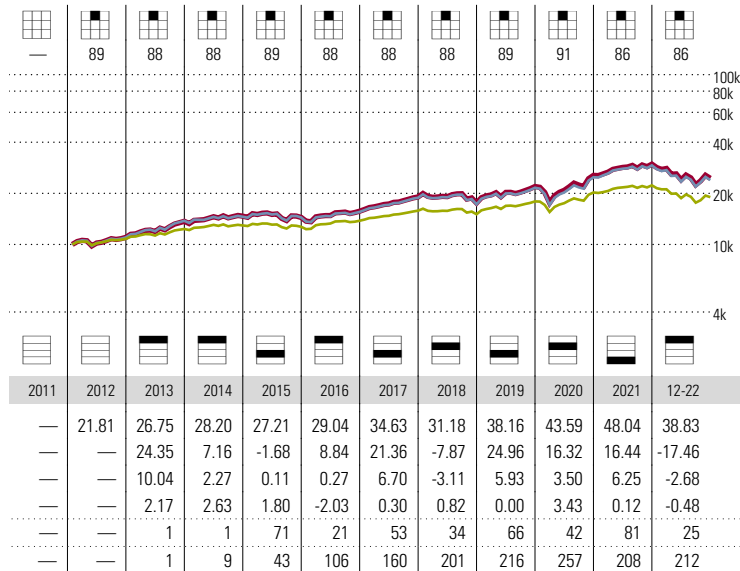
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	—
Morningstar Risk	-Avg	-Avg	—
Morningstar Return	Avg	Avg	—
Standard Deviation	18.81	16.45	13.11
Mean	3.79	5.18	8.34
Sharpe Ratio	0.25	0.31	0.62

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.86	4.67	1.81
US Stocks	51.88	51.88	0.00
Non-US Stocks	35.94	35.94	0.00
Bonds	9.27	9.28	0.00
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	101.81	1.81

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	14.7	1.03	0.94
	P/C Ratio TTM	10.9	1.01	0.94
	P/B Ratio TTM	2.2	1.07	0.92
	Geo Avg Mkt Cap \$mil	56952	1.38	0.92

Fixed-Income Style	Avg Eff Maturity	8.93
	Avg Eff Duration	6.83
	Avg Wtd Coupon	2.45
	Avg Wtd Price	—

Credit Quality Breakdown 11-30-2022	Bond %
AAA	57.39
AA	9.56
A	16.99
BBB	15.28
BB	0.00
B	0.00
Below B	0.39
NR	0.39

Regional Exposure	Stocks %	Rel Std Index
Americas	63.3	1.02
Greater Europe	17.9	0.99
Greater Asia	18.8	0.94

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,141 Total Stocks , 14,319 Total Fixed-Income, 3% Turnover Ratio	Net Assets %
+	45 mil	Vanguard Total Stock Mkt Idx Instl	52.73
+	338 mil	Vanguard Total Intl Stock Index Inv	36.72
+	108 mil	Vanguard Total Bond Market II Idx	6.44
+	17 mil	Vanguard Total Intl Bd II Idx Instl	2.80

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.00
Industrials	11.3	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

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	—	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 12-31-22	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

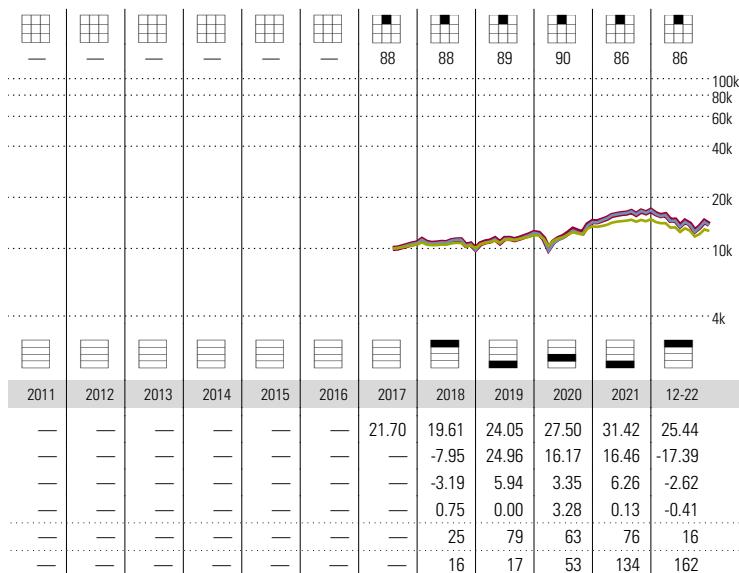
Risk and Return Profile

	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
Manager:	Multiple
Tenure:	5.5 Years
Objective:	Asset Allocation



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.99	4.90	1.91
US Stocks	52.34	52.34	0.00
Non-US Stocks	35.51	35.51	0.00
Bonds	9.11	9.12	0.00
Other/Not Clsfd	0.04	0.04	0.00
Total	100.00	101.91	1.91

Equity Style

Value	Blend	Growth																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</
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Fixed-Income Style

Ltd	Mod	Ext
High	—	—
Mid	—	—
Low	—	—
	Avg Eff Maturity	8.93
	Avg Eff Duration	6.85
	Avg Wtd Coupon	2.43
	Avg Wtd Price	—

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	56.39
AA	10.05
A	17.35
BBB	15.38
BB	0.00
B	0.00
Below B	0.41
NR	0.41

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.7	1.03
Greater Europe	17.7	0.97
Greater Asia	18.6	0.93

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 11,141 Total Stocks , 14,350 Total Fixed-Income, 2% Turnover Ratio	Net Assets %
—	11 mil	Vanguard Total Stock Mkt Idx Instl	52.87
—	79 mil	Vanguard Total Intl Stock Index Inv	36.51
—	25 mil	Vanguard Total Bond Market II Idx	6.27
—	4 mil	Vanguard Total Intl Bd II Idx Instl	2.97

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.3	0.88
Basic Materials	5.1	0.93
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.00
Industrials	11.3	0.98
Technology	18.5	1.34
Defensive	23.1	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard Target Retirement Income Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
145 US Fund Target-Date Retirement

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod Incm
TR USD

Morningstar Cat
US Fund Target-Date 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	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	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.

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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

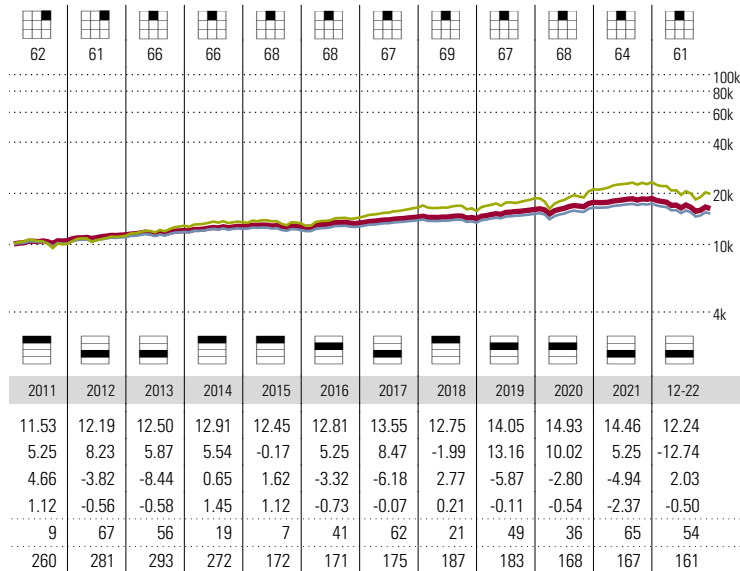
Risk and Return Profile

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

Operations

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



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	3.60	13.85	10.25
US Stocks	16.96	16.96	0.00
Non-US Stocks	11.83	11.83	0.00
Bonds	67.58	67.60	0.02
Other/Not Clsfd	0.02	0.02	0.00
Total	100.00	110.27	10.27

Equity Style

Value	Blend	Growth				Avg	Index	Cap
			Large	P/E Ratio TTM		14.7	1.03	0.97
				P/C Ratio TTM		10.9	1.01	0.99
			Mid	P/B Ratio TTM		2.2	1.07	0.98
			Small	Geo Avg Mkt Cap \$mil		56815	1.38	0.98

Fixed-Income Style

Ltd	Mod	Ext
High	Med	Low
Avg Eff Maturity		7.45
Avg Eff Duration		5.81
Avg Wtd Coupon		1.99
Avg Wtd Price		91.13

Credit Quality Breakdown 11-30-2022

	Bond %
AAA	66.95
AA	7.47
A	13.17
BBB	11.80
BB	0.00
B	0.00
Below B	0.30
NR	0.31

Regional Exposure

	Stocks %	Rel Std Index
Americas	63.1	1.02
Greater Europe	18.0	0.99
Greater Asia	18.9	0.95

Top Holdings 11-30-2022

Share Chg since 11-2022	Share Amount	Holdings : 10,090 Total Stocks , 17,799 Total Fixed-Income, 19% Turnover Ratio	Net Assets %
+	1,463 mil	Vanguard Total Bond Market II Idx	36.64
-	36 mil	Vanguard Total Stock Mkt Idx Instl	17.76
-	253 mil	Vanguard Shrt-Term Infl-Prot Sec I	16.12
-	229 mil	Vanguard Total Intl Bd II Idx Instl	15.97
-	271 mil	Vanguard Total Intl Stock Index Inv	12.37

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	35.4	0.88
Basic Materials	5.1	0.94
Consumer Cyclical	10.7	0.97
Financial Services	16.1	0.98
Real Estate	3.5	0.49
Sensitive	41.6	1.16
Communication Services	6.4	1.23
Energy	5.4	1.01
Industrials	11.4	0.99
Technology	18.4	1.33
Defensive	23.0	0.96
Consumer Defensive	7.2	0.97
Healthcare	12.8	1.00
Utilities	3.0	0.81

Vanguard US Growth Admiral™ (USD)

Performance 12-31-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-11.98	35.72	15.75	14.80	58.74
2021	-1.28	12.85	-1.40	2.37	12.45
2022	-15.08	-27.19	-1.64	-0.65	-39.58
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-39.58	2.55	7.72	12.23	6.39
Std 12-31-2022	-39.58	—	7.72	12.23	6.39
Total Return	-39.58	2.55	7.72	12.23	6.39
+/- Std Index	-21.47	-5.11	-1.70	-0.33	—
+/- Cat Index	-10.44	-5.23	-3.24	-1.87	—
% Rank Cat	92	77	64	41	—
No. in Cat	1235	1131	1054	804	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 01-19-23	0.56	0.56

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 %	0.23
12b1 Expense %	NA
Net Expense Ratio %	0.23
Gross Expense Ratio %	0.23

Risk and Return Profile

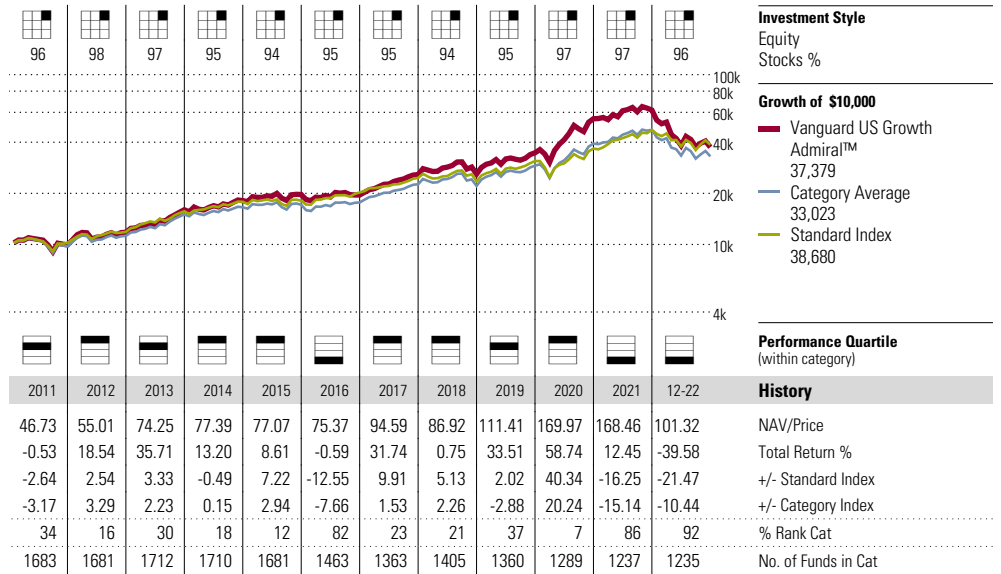
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	2★	2★	3★
Morningstar Risk	High	+Avg	+Avg
Morningstar Return	-Avg	Avg	Avg
Standard Deviation	27.34	23.53	18.22
Mean	2.55	7.72	12.23
Sharpe Ratio	0.19	0.38	0.68

MPT Statistics	Standard Index	Best Fit Index
Alpha	-4.84	-3.14
Beta	1.16	1.10
R-Squared	80.60	95.50
12-Month Yield		0.49%
Potential Cap Gains Exp		19.29%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	12.3 Years
Objective:	Growth

Morningstar Analyst Rating™	Overall Morningstar Rating™	Standard Index	Category Index	Morningstar Cat
Silver	★★★	S&P 500 TR USD	Russell 1000 Growth TR USD	US Fund Large Growth
05-15-2022	1,131 US Fund Large Growth			



Portfolio Analysis 10-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Chg since 09-2022	Share Amount	Holdings : 282 Total Stocks, 0 Total Fixed-Income, 23% Turnover Ratio	Net Assets %
Cash	3.39	3.39	0.00				
US Stocks	92.51	92.51	0.00				
Non-US Stocks	3.92	3.92	0.00	⊖	18 mil	Apple Inc	8.46
Bonds	0.00	0.00	0.00	⊕	10 mil	Microsoft Corp	6.78
Other/Not Clsfd	0.18	0.18	0.00		18 mil	Amazon.com Inc	5.73
Total	100.00	100.00	0.00	⊖	7 mil	Tesla Inc	4.93
				⊕	10 mil	Alphabet Inc Class C	2.98
				⊕	3 mil	Mastercard Inc Class A	2.53
				⊕	1 mil	UnitedHealth Group Inc	2.26
				⊖	5 mil	NVIDIA Corp	2.05
				⊖	3 mil	Visa Inc Class A	1.74
				⊖	11 mil	The Trade Desk Inc Class A	1.73
				⊕	3 mil	Salesforce Inc	1.40
				⊕	5 mil	Alphabet Inc Class A	1.38
				⊖	3 mil	Moderna Inc	1.32
				⊖	1 mil	Netflix Inc	1.23
				⊖	709,501	Costco Wholesale Corp	1.09

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	25.9	1.36	1.09
	P/C Ratio TTM	20.8	1.46	1.16
	P/B Ratio TTM	6.7	1.86	1.02
	Geo Avg Mkt Cap \$mil	158615	0.98	0.60

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

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

Regional Exposure	Stocks %	Rel Std Index
Americas	97.9	0.99
Greater Europe	2.1	1.89
Greater Asia	0.0	0.00

Sector Weightings	Stocks %	Rel Std Index
Cyclical	29.9	1.04
Basic Materials	0.3	0.11
Consumer Cyclical	19.4	2.03
Financial Services	8.1	0.58
Real Estate	2.2	0.77
Sensitive	50.9	1.14
Communication Services	8.3	1.14
Energy	1.4	0.26
Industrials	4.6	0.51
Technology	36.6	1.59
Defensive	19.2	0.72
Consumer Defensive	3.6	0.47
Healthcare	15.6	0.98
Utilities	0.0	0.00

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 %
Allspring Special Mid Cap Value R6	—	—	-4.50	8.45	—	10.72	06-28-2013	NA	NA	0.70	0.70	NA
Fidelity® 500 Index	—	—	-18.13	9.41	12.55	11.57	05-04-2011	NA	NA	0.02	0.02	NA
Fidelity® Mid Cap Index	—	—	-17.28	7.10	10.95	11.60	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity® Small Cap Index	—	—	-20.27	4.22	9.17	10.19	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity® Total International Index	—	—	-16.28	0.96	—	4.62	06-07-2016	NA	NA	0.06	0.06	NA
Fidelity® US Bond Index	—	—	-13.03	-0.02	1.01	1.71	05-04-2011	NA	NA	0.03	0.03	NA
MFS Mid Cap Growth R6	—	—	-28.29	9.19	—	12.10	01-02-2013	NA	NA	0.66 ¹	0.67	NA

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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 %
MFS Value R6	—	—	-5.80	7.64	11.29	8.19	05-01-2006	NA	NA	0.43 ²	0.44	NA
Sterling Capital Total Return Bond R6	—	—	-13.15	—	—	0.71	02-01-2018	NA	NA	0.35 ³	0.46	NA
Vanguard International Growth Adm	—	—	-30.79	4.75	7.84	7.12	08-13-2001	NA	NA	0.34	0.34	NA
Vanguard International Value Inv	—	—	-11.66	1.36	4.31	8.07	05-16-1983	NA	NA	0.36	0.36	NA
Vanguard Target Retirement 2020 Fund	—	—	-14.15	3.22	5.83	5.52	06-07-2006	NA	NA	0.08	0.08	NA
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 US Growth Admiral™	—	—	-39.58	7.72	12.23	6.39	08-13-2001	NA	NA	0.23	0.23	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 Gbl xUS Val TME NR USD			-9.04	—	—	—	11-24-2021					
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 LM Brd Growth TR USD			-31.71	—	—	—	12-21-2020					
Morningstar US LM Brd Val TR USD			-6.93	—	—	—	12-21-2020					
Morningstar US Mid Brd Grt TR USD			-25.83	—	—	—	12-21-2020					
Morningstar US Mod Con Tgt Alloc NR USD			-14.06	—	—	—	06-30-2020					
MSCI ACWI Ex USA Growth NR USD			-23.05	1.49	4.68	—	01-01-2001					
MSCI ACWI Ex USA NR USD			-16.00	0.88	3.80	—	01-01-2001					
MSCI ACWI Ex USA Value NR USD			-8.59	-0.05	2.72	—	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 Growth TR USD			-29.14	10.96	14.10	—	01-01-1987					
Russell 1000 TR USD			-19.13	9.13	12.37	—	12-31-1978					
Russell 1000 Value TR USD			-7.54	6.67	10.29	—	01-01-1987					
Russell 2000 TR USD			-20.44	4.13	9.01	—	12-31-1978					
Russell Mid Cap Growth TR USD			-26.72	7.64	11.41	—	02-01-1995					
Russell Mid Cap TR USD			-17.32	7.10	10.96	—	12-31-1978					
Russell Mid Cap Value TR USD			-12.03	5.72	10.11	—	12-31-1985					
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					

1. Contractual waiver; Expires 12-31-2023
2. Contractual waiver; Expires 12-31-2023
3. Contractual waiver; Expires 01-31-2023

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
Allspring Special Mid Cap Value R6	-6.63	6.90	—	8.93	06-28-2013	-1.61	6.33	—	8.15
Fidelity® 500 Index	-18.68	8.79	11.82	10.82	05-04-2011	-10.73	7.26	10.18	9.38
Fidelity® Mid Cap Index	-17.91	6.31	10.08	10.77	09-08-2011	-10.17	5.41	8.77	9.44
Fidelity® Small Cap Index	-20.68	3.42	8.20	9.25	09-08-2011	-12.00	3.14	7.19	8.15
Fidelity® Total International Index	-17.12	0.26	—	3.91	06-07-2016	-9.64	0.58	—	3.42
Fidelity® US Bond Index	-13.54	-0.74	0.10	0.76	05-04-2011	-7.38	-0.09	0.48	1.02
MFS Mid Cap Growth R6	-28.29	8.57	—	11.15	01-02-2013	-16.75	7.12	—	9.77
MFS Value R6	-7.78	6.21	9.79	6.93	05-01-2006	-2.61	5.53	8.74	6.31
Sterling Capital Total Return Bond R6	-14.14	—	—	-0.62	02-01-2018	-7.77	—	—	0.05
Vanguard International Growth Adm	-31.83	3.30	6.80	6.14	08-13-2001	-17.43	3.82	6.30	5.82
Vanguard International Value Inv	-12.26	0.38	3.44	6.14	05-16-1983	-6.54	0.87	3.17	6.04
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
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 US Growth Admiral™	-39.65	6.10	10.73	5.66	08-13-2001	-23.38	6.20	10.03	5.30

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 HOLDR 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, HOLDRs, 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 HOLDRs 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 Gbl xUS Val TME NR USD

The index measures the performance of large and mid-cap stocks representing global markets excluding US stocks with lower valuations. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

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 LM Brd Growth TR USD

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

Morningstar US LM Brd Val TR USD

The index provides a comprehensive depiction of the performance and fundamental characteristics of the Large-Mid Cap Value segment of U.S. equity markets. It targets stocks representing the cheaper half of the U.S. large- and mid-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar US Mid Brd Grt TR USD

The index measures the performance of US mid-cap growth stocks. It targets stocks representing the faster growing half of the mid-cap market. 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.

MSCI ACWI Ex USA Growth NR USD

The index measures the performance of the growth large and mid cap segments

of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

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 Ex USA Value NR USD

The index measures the performance of the value large and mid cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI 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 Growth TR USD

Tracks the companies within the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 1000 Growth ETF.

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 1000 Value TR USD

Tracks the companies within the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 1000 Value ETF.

Russell 2000 TR USD

Consists of the 2000 smallest companies in the Russell 3000 Index. The constituents displayed for this index are from the following proxy: iShares Russell 2000 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.

Russell Mid Cap TR USD

Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap ETF.

Russell Mid Cap Value TR USD

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

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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.

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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.

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HYAS GROUP

CITY OF VALLEJO RETIREMENT PLANS

Investment Policy Statement Basics

Vincent Galindo, Senior Consultant

January 30, 2023

For Institutional Use Only – Not for Public Distribution

FIDUCIARY BEST PRACTICES

- Forming a Committee
- Conduct meetings regularly
- Have a prudent process
- Document the process along the way
- Legal standard is process-based, not outcome based

GOVERNANCE DOCUMENTS

- Plan document
- Investment Policy Statement
- Fee Policy
- Education Policy

INVESTMENT POLICY STATEMENT (IPS)

- A plan-specific document detailing the structure and management of a plan's investments
- A roadmap for investment review
- Used by fiduciaries in the
 - selection and termination of investments
 - forming watch list criteria
- As a guide, the IPS is meant to be specific but not too specific
 - gives Committee discretion
- Should be reviewed – and possibly updated – annually

INVESTMENT POLICY STATEMENT (IPS)

Should Include:

- Delineation of responsibilities between the plan sponsor, investment consultant, record-keeper, and other associated parties
- Declaration of which investments and investment vehicles may be used within the Plan
- Performance and qualitative criteria for selecting, maintain, and removing investments
- Proxy-voting criteria
- It is to provide structure, method, and a written record thereof, to the fiduciary process of investment oversight

WATCH LIST

- ▶ The watch process is defined in the IPS
- ▶ Watch status is triggered when a plan's investment fails performance and/or qualitative criteria stated in the IPS

Examples of IPS Violations:

- failing performance criteria: an investment is underperforming its benchmark and peer group for the trailing five-year period
- failing qualitative criteria: a sudden departure of an investment's lead manager, an increase in fees, and/or a significant decrease in assets

- ▶ Watch indicates that an investment needs to cure an IPS violation to remain in the Plan
- ▶ A fund may remain on watch depending on the severity of the violation and the fund's progress is curing

REMOVAL FROM WATCH LIST

- Generally an investment must be IPS compliant for two consecutive quarters for it to be removed from watch status
 - At this point, the Committee may take the investment off watch status
 - If an investment is removed from watch, it is in good standing
- If an investment fails to cure its IPS violations within a reasonable timeframe, the Committee may elect to replace it
- In cases of replacement, the Hyas Group prepares a manager search report with alternative investment candidates
- The Committee may elect to replace the violating investment and the Hyas Group will help facilitate^s transition process

THANK YOU.

Vincent Galindo | Senior Consultant

vgalindo@hyasgroup.com

503.929.9402

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**457 DEFERRED COMPENSATION
PLAN, 401(a) DEFINED
CONTRIBUTION PLAN, AND
RETIREMENT HEALTH SAVINGS
PROGRAM**

**STATEMENT OF INVESTMENT POLICIES
AND GUIDELINES**

CITY OF VALLEJO, CA

Revised ~~July 2021~~ January 2023

INTRODUCTION AND PURPOSE

This statement is set forth to provide a clear understanding of the investment policies, guidelines and objectives related to the administration of the City of Vallejo 457 Deferred Compensation, 401(a) Defined Contribution, and Retirement Health Savings Program (hereinafter “Plans”). The Plans are salary deferral retirement plans available to eligible employees who are interested in saving for retirement and health care expenses on a tax-favored basis. The Plans’ purpose is to provide a vehicle for and to encourage additional savings to supplement the retirement benefits provided to City employees.

This Investment Policy Statement is further intended to assist the fiduciaries of the Plans in making investment-related decisions in a prudent manner. It outlines the underlying philosophies and processes for the selection, monitoring and evaluation of the investment options and investment providers utilized by the Plans. This Investment Policy Statement will be reviewed at least annually and it can be revised at any time to reflect changes in the capital markets, plan participant objectives, or other factors relevant to the Plans.

SUMMARY OF RESPONSIBILITIES

Plans’ Sponsor – The City of Vallejo is the Plans’ Sponsor, whose responsibilities include but are not limited to:

- Adopting and amending the Plan Documents;
- Approving Plan services contracts;
- Appointing the Committee members; and
- Designating other fiduciaries of the Plans.

Committee – The City of Vallejo 457 Deferred Compensation Plan, 401(a) Defined Contribution Plan, and Retirement Health Savings Program Committee (hereinafter “Committee”) serves as Administrator and has responsibility for the operation and administration of the Plans in accordance with the terms of the Plan Documents. It is the intent of the Committee to fulfill its fiduciary responsibilities with respect to the Plans solely in the interest of the participants and beneficiaries. The Committee members, as fiduciaries, are to perform their duties with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

The Committee’s responsibilities also include but are not limited to the following:

- Selecting the investment design features of the Plans, including establishing the investment policy and objectives and the number and types of investment alternatives available to Plan participants;
- Appointing, monitoring and evaluating all investment providers and managers in accordance with guidelines and benchmarks established within this document and consistent with applicable laws;
- Selecting and monitoring other Plan service providers, including, but not limited to, the Plans’ record-keeper, trustee, investment consultants, accountants, and/or any other providers; and
- Monitoring Plan costs which are charged to Plan assets and/or paid by Plan participants, including but not limited to investment management fees, custodial fees and fees paid to other service providers from Plan and/or participant assets (net of fees basis in evaluating the performance of investment managers);
- Establishing performance objectives and monitoring guidelines.

Investment Consultant - The Committee may engage an independent investment consultant (hereinafter “Consultant”) to assist in carrying out the duties and responsibilities of this Investment Policy Statement. Such Consultant must be registered with either State or Federal securities regulators pursuant to the Investment Advisors Act of 1940. The Consultant’s role is to provide information and advice to the Committee on various investment related issues. The Consultant has no discretionary control or authority

over Plan assets. In its role as an advisor to the Committee the Consultant acknowledges a fiduciary role with respect to the investment advice provided to the Committee. The services of the Consultant will be set forth in a separate agreement.

Investment Provider – An entity that offers investment option products and manages assets for the Plans. Examples of investment option products offered by an investment provider may include mutual funds, commingled trust funds, separate accounts and/or variable annuity contracts.

Investment Manager – The person(s) at the Investment Provider responsible for implementing an investment option's investing strategy and managing its portfolio trading activities.

Services Provider – An entity engaged to assist the Plans' Sponsor and the Committee in regard to the administration of the Plans. Service providers may include but are not limited to: the Plans' record-keepers, trustees, investment consultants, accountants, and/or any other providers. This assistance may include Plan enrollment, communication, education, including providing general investment information to Plan participants regarding the procedures for making investment choices under the Plans and general investment information regarding each of the investment options offered under the Plans, distribution processing, record keeping and other administrative functions as prescribed in an agreement entered into between the Plans' Sponsor and the Services Providers.

GENERAL COMPLIANCE

The Plans are designed to meet the applicable requirements of the Internal Revenue Code of 1986 (the Code), as amended. The Plans' investment policies and guidelines shall be reviewed on a regular basis for modifications, as needed, but may be modified at any time as deemed necessary by the Committee.

At minimum, it is intended that plan participants shall be provided with the following opportunities:

- A. Choose from a minimum of three diverse investment categories, each with materially different risk and return characteristics. At least one of the categories will provide for a high degree of safety and capital preservation.
- B. Make and/or modify investment decisions at least quarterly.
- C. Receive or have access to the following information, as updated:
 - A description of the investment alternatives available under the Plans including a general description of the investment objectives, risk and return characteristics, and type and diversification of assets comprising each alternative;
 - Identification of the designated Investment Providers, Managers and investment products;
 - A description of any transaction fees or expenses charged to the Plan participant's account, and information on costs and fees for an investment product that reduces the rate of return to Plan participants (expense ratios; and
 - Prospectuses, annual reports, and semi-annual reports on investment products, if available.

GENERAL INVESTMENT POLICY, OBJECTIVES AND STANDARDS

It is the policy of the Plans to foster an investment environment that encourages and facilitates participant efforts to supplement other sources of retirement income. The Plans will be structured in an attempt to provide Plan participants with an array of diversified investment options that offer competitive rates of return and reasonable overall cost. Participants in the Plans are solely responsible for their own investment decisions and bear the risks and assume responsibility for the results of the investment options that they select. The Plans' Sponsor and Committee make no representations, promises, or warranties regarding the suitability of Plan participation for any participant's individual investment or retirement needs. Additionally, the Plans' Sponsor and Committee make no representations, promises or warranties about the performance

of the Plans or the Plans' investments.

The Plans exist in a dynamic marketplace in which new investment alternatives may become available over time. At present, the market offers a broad array of investment products. Investment products available to the Plans are limited to those permissible under state law. These products may include:

- Fixed annuity options
- Variable annuity options
- Co-mingled trust funds
- Mutual funds
- Shares of any company, association or corporation

The primary investment objective of the Plans is to present participants with a range of investment options, which give participants an opportunity to increase the value of their investment assets in a manner consistent with varying levels of participant risk/reward tolerances and investment decision making skills. While the Plans cannot meet all plan participant investment preferences and attitudes, the Plans attempt to provide investment vehicles for participants at various levels of investment sophistication and with varying requirements for risk and return.

Information that may be used to select which investment products to offer includes, but is not limited to, the following:

- Age, income and other demographic data on Plan participants
- Liquidity and administrative constraints imposed on the Plans by service providers
- Development of new investment products in the marketplace
- Level of participant usage of investment products

To enable participants to establish different investment strategies, the Plans will offer investment categories that have varying return and volatility characteristics. It is the responsibility of each participant to evaluate the investment options and to select an appropriate mix.

A risk/reward structure is basic to investments. Generally, those vehicles offering the greatest return over time also carry the highest risk or volatility of return. The inherent conflict between volatility and long-range asset accumulation can be lessened through diversification among asset classes. To provide participants the opportunity to select risk/reward strategies and to diversify the Plans' assets, the Plans will offer a number of investment alternatives.

In addition to providing a range of investment options, the Plans seek to provide investment options that are competitive in terms of performance relative to appropriate investment performance and risk benchmarks. The performance and risk relationships of the Plans' investment options will be reviewed periodically. Investment options should generally be given a full market cycle to achieve stated objectives (market cycles normally occur over 3-5 year time periods). Investment options are expected to meet or exceed their pre-determined benchmark index(es) net of fees. Where peer groups are definable, investment options are also expected to perform within the upper half of a sample of same style peers net of fees. In addition to net investment performance, the options' risk characteristics will also be reviewed. The risk associated with an investment option generally should be similar to that of the same-style peer group.

INVESTMENT OPTIONS

Investment options offered by the Plans will be categorized or grouped by similarities in investment objectives, style and risk. The Plan Service Provider(s) and/or Consultant may be asked to assist in determining the categories of investment options. The Plan will be structured to assist participants in meeting their long-term investment objectives by providing investment options within the following permitted investment categories (these categories are further explained in the following pages of this document):

Tier 1: Target Retirement Date Pre-Mixed Portfolios

Tier 2: Asset Class Investment Options

- Fixed/Stable Value
- Total Return Bond
- U.S. Large-Size Company Equity
- U.S. Mid-Size Company Equity
- U.S. Small-Size Company Equity
- International Equity

Investment options and categories may be added or deleted as deemed necessary. At least one investment option shall be available within each investment category.

The following table outlines the objectives and performance benchmarks for each of the Plans' investment options. The risk associated with an investment option will be compared to appropriate risk benchmarks or measures for a same-style group of peer investment options, where definable.

TIER 1: TARGET RETIREMENT DATE PRE-MIXED PORTFOLIOS

Lifecycle Premixed Portfolio - Retirement Income	
Provide different levels of income and capital growth dependent upon an individual participant's specific risk tolerance and income needs. The portfolio will be well diversified including U.S. and international fixed income securities as well as U.S. and international equities. Stocks generally will comprise no more than 30% of the total portfolio. The percentage of international equities generally will not exceed 40% of the equity portion of the portfolio.	
Benchmark Index:	Custom Blended Index
Peer Group:	US Retirement Income

Lifecycle Premixed Portfolio –2020, 2025	
Provide different levels of income and capital growth dependent upon an individual participant's specific target retirement or withdrawal date. Portfolios provide different allocations to stocks and bonds dependent upon the target retirement or withdrawal date that is selected. The portfolio will be well diversified including U.S. and international fixed income securities and U.S. and international equities. Stocks generally will comprise 30%-60% of the total portfolio. The percentage of international equities generally will not exceed 40% of the equity portion of the portfolio.	
Benchmark Index:	Custom Blended Index
Peer Groups:	US Target Date 2020, US Target Date 2025

Lifecycle Premixed Portfolio – 2030, 2035, 2040, 2045, 2050, 2055, 2060, 2065	
Provide different levels of income and capital growth dependent upon an individual participant's specific target retirement or withdrawal date. Portfolios provide different allocations to stocks and bonds dependent upon the target retirement or withdrawal date that is selected. The portfolio will be well diversified including U.S. and international fixed income securities, and U.S. and international equities. Stocks generally will comprise 60%-90% of the total portfolio. The percentage of international equities generally will not exceed 40% of the equity portion of the portfolio.	
Benchmark Index:	Custom Blended Index
Peer Groups:	US Target Date 2030, US Target Date 2035, US Target Date 2040, US Target Date 2045, US Target Date 2050, US Target Date 2055, US Target Date 2060, US Target Date 2065+

TIER 2: ASSET CATEGORY INVESTMENT OPTIONS

Fixed / Stable Value	
Provide high current income relative to cash investments and a high degree of investment safety without fluctuation of principal. Investment returns are derived primarily from interest income. A Fixed or General Account option, which is a fixed rate contract that is backed by an insurance company's balance sheet, is to be of mid-investment-grade rating or higher, and backed by a diversified pool of underlying investments. A stable value option will be invested in guaranteed investment contracts (GICs), "synthetic" portfolios, money market instruments, and others, each mainly comprised of investments of short- to intermediate maturity, and which provide for an adequate degree of liquidity. The weighted-average maturity is expected to remain between two and five years at most times. The overall weighted credit-quality rating of the option shall be the equivalent of mid-investment-grade rating or higher. The rating must be obtained from at least one credit rating agency such as Moody, S&P or Duff & Phelps. If the option's weighted rating declines below this level, the option will be evaluated for corrective action.	
Benchmark Index:	1. 5 Year CMT Index 2. 90-Day Treasury Bills Index
Peer Group:	Stable Value

Total Return Bond	
Provide capital appreciation and income through a diversified, actively managed fixed income portfolio. The portfolio's duration is expected to be comparable to that of its Benchmark Index, with some bandwidth allowed for the manager to exercise strategic deviation from the Benchmark. Average credit quality is expected to be investment grade. The fixed income portfolio will normally be primarily comprised of investments including money market instruments, U.S. Government and Agency bonds, mortgage-backed securities, corporate bonds, and others. The manager will be given discretion to hold securities that are not contained within the Benchmark Index, which may include Foreign Bonds, High Yield Bonds, Convertibles, Treasury Inflation Protected Securities, derivatives, and others. The portfolio's aggregated composition and risk and return characteristics however are expected to be reflective of its asset class.	
Benchmark Index:	Barclays Capital US Aggregate Bond Index
Peer Group:	US Intermediate-Term Core Bond

U.S. Large Company Equity	
Provide long-term capital appreciation through a diversified common stock portfolio <u>whose average market capitalization may be categorized as Large Cap by an industry standard data provider</u> with an average market capitalization greater than \$10 billion . Stocks of foreign companies that are traded in the U.S. may also be included in the portfolio, but generally should not exceed more than 20% of the total portfolio.	
Benchmark Indexes:	Blend: S&P 500 Index Growth: Russell 1000 Growth Value: Russell 1000 Value Index
Peer Groups:	Blend: US Large Cap Blend Growth: US Large Cap Growth Value: US Large Cap Value

TIER 2: ASSET CATEGORY INVESTMENT OPTIONS (continued)

U.S. Mid-Size Company Equity	
Provide long-term capital appreciation through a diversified common stock portfolio <u>whose average market capitalization may be categorized as Mid Cap by an industry standard data provider</u> with an average market capitalization between \$2 billion and \$10 billion . Stocks of foreign companies that are traded in the U.S. may also be included in the portfolio, but generally should not exceed more than 20% of the total portfolio.	
Benchmark Indexes:	Blend: Russell Mid-Cap Index Growth: Russell Mid-Cap Growth Index Value: Russell Mid-Cap Value Index
Peer Groups:	Blend: US Mid-Cap Blend Growth: US Mid-Cap Growth Value: US Mid-Cap Value

U.S. Small Company Equity	
Provide long-term capital appreciation through a diversified common stock portfolio <u>whose average market capitalization may be categorized as Small Cap by an industry standard data provider</u> with the average market capitalization between \$500 million and \$2 billion . Stocks of foreign companies that are traded in the U.S. may also be included, but generally should not exceed more than 20% of the total portfolio.	
Benchmark Indexes:	Blend: Russell 2000 Index
Peer Groups:	Blend: US Small Cap Blend

International Equity	
Provide long-term capital appreciation through a diversified, actively managed portfolio of international equities. Stocks of emerging countries may be used at the discretion of the manager, but generally should not exceed more than 30% of the total portfolio.	
Benchmark Indexes:	Blend: MSCI All Country World Index ex-U.S. IMI (net) Growth: MSCI All Country World Index ex-U.S. Growth (net) Value: MSCI <u>All Country World Index ex-U.S. EAFE</u> EAFE -Value (net)
Peer Groups:	Blend: US Foreign Blend Growth: US Foreign Growth Value: US Foreign Value

INVESTMENT OPTION SELECTION GUIDELINES

Investment options offered to participants will be provided through investment provider(s) accessible on the Services Provider's platform. Before introducing a new investment option, the Committee, in consultation with the Consultant and Services Provider will define the niche to be filled and assess any prospective investment option's performance, quality, and risk characteristics. At a minimum, investment options under consideration should satisfy performance and risk considerations under actual, not modeled, conditions and over an appropriate time period. Investment option selection considerations may include, but are not limited to the following:

- The investment option should generally, but not necessarily, have a history that spans a full market cycle, normally three to five (3-5) years.
- The investment option should generally meet or exceed its predetermined benchmark index, net of fees.
- The investment option should generally perform at median or within the upper half of a recognized and defined sample of same-style peer options.

- The investment option should be able to demonstrate a consistent performance track record attributable to a specific investment manager or team of managers.
- In selecting Target Retirement Date funds, the Committee shall consider the current and prospective composition of the Target Date funds (based on their glide path), and the corresponding risk and return implications relative to the benchmark and peer group constituents.

INVESTMENT OPTION REVIEW GUIDELINES AND MONITORING

Investment providers and investment managers are required to comply with all applicable laws, rules, and regulations. However, the Committee takes no responsibility for the failure of such option and/or investment manager to comply with any and all applicable laws, rules or regulations.

With the possible exception of the Fixed Option, all options must have readily ascertainable market values and be easily marketable. It is recognized that certain stable value and Fixed options often have liquidity restrictions. Investment options with sales loads, redemption fees, or other non-investment management related expenses will be avoided to the extent possible. Options with deferred sales charges and/or market value adjustments will not be permitted.

Each investment option portfolio shall be diversified adequately to reduce risk and comply with current regulations and applicable state laws.

Investment option performance, risk and style consistency is intended to be evaluated on a quarterly basis. Performance and risk results will be evaluated using comparisons with this policy, pertinent market indices and against other same-style peers, where definable. When necessary, investment option performance and risk may be reviewed more frequently.

The Committee will periodically review the investment options' progress in meeting the Plans' investment objectives. Investment options will be expected to comply with all stated investment objectives, guidelines and applicable rules contained in the prospectus or fund fact sheet. The Committee will review the performance of investment options quarterly to determine if they are achieving the established objectives. Investment performance reviews may include, but are not limited to, a review of:

- Investment portfolios;
- Fees and expenses;
- Investment style, process and philosophy;
- Investment management personnel; and
- Index tracking error.

The performance review will also include measuring the options' investment performance relative to stated benchmarks or respective indexes and peer groups; as well as the monitoring risk measures. The following will be evaluated:

Quantitative Measures

Active Investment Strategies. Options employing active management are expected to outperform their stated asset class or style benchmark net of all management fees over a trailing five year time period; and to rank above the 50th percentile of the appropriate peer group for the same trailing five year time period. It is also expected that the risk of each option, as defined by standard deviation of returns, be commensurate with the prescribed strategy relative to the appropriate market index and/or peer group.

Passive Investment Strategies. Passive Options are expected to track the performance of the index strategy that the option is designed to replicate, less management fees, with marginal tracking error. It is also expected that the risk of each passive option, as defined by standard deviation of returns, be commensurate

with the appropriate market index.

Qualitative Measures

The options will also be monitored on an ongoing basis for other material changes which the Committee may determine are of importance to the decision of whether or not to retain an investment option, such as personnel departures; organizational changes; or alterations in investment style, philosophy, or strategy; and adherence to stated guidelines.

Time Periods. The Committee acknowledges that fluctuating rates of return characterize the securities markets, particularly during short-term time-periods. Recognizing that short-term fluctuations may cause variations in an option's performance, the Committee intends to employ investment options with long-term investment strategies and will evaluate option performance from a long-term perspective. Performance over market cycles of three to five years will be weighted more heavily than performance over shorter time periods, such as one year or less.

In addition to the qualitative and quantitative measures referenced above, the Committee will also review the investment options' risk characteristics in relation to that performance. Risk will be measured in various ways including, but not limited to:

- Standard deviation
- Downside risk or semi-variance
- Risk/return ratios such as Sharp or Treynor Ratios
- Other statistical measures such as Beta, Alpha and Variance

INVESTMENT OPTION TERMINATION AND WATCH GUIDELINES

Generally, all investment options are expected to remain true to their stated investment objectives and to perform as well as or better than their prescribed performance benchmarks, net of fees. The Committee recognizes the long-term nature of retirement plan investing and the variability of market returns. Periodic underperformance in any of the criteria outlined in this Investment Policy will not necessitate the termination of an option; however, any underperformance will result in consideration by the Committee of the factors causing underperformance and possible courses of action that the Committee may take.

The Committee may, at any time, place any investment option that it views as having a pattern of underperformance on a watch-status. Reasons the Committee might place an option on a watch status, include but are not limited to, the following:

Quantitative Measures

Actively Managed Options

- Performance below the prescribed benchmark index over a trailing five year period, combined with
- Performance below the median of its peer group over a trailing five year period

Passively Managed Options

- Net of fee performance tracking error relative to the respective index that is greater than 15 basis points over a trailing five-year period

Target Date funds will be evaluated based on the performance of the entire suite as held within the Plan. A Target Date suite will normally be viewed as being in violation of investment policy performance criteria if over one-half of the funds in a Target Date suite held within the Plan lag this Investment Policy Statement's prescribed performance measures. The Committee may elect to deviate from this approach if it appears reasonable to do so.

Certain passive investment options operate in a marketplace that includes foreign markets whose exchanges close prior to that of the United States. In these instances, some fund managers may engage in a method of “Fair Value Pricing,” whereby the managers adjust the pricing of securities in the Fund to reflect any information that has become available after the close of the applicable foreign market. Discrepancies in performance between the applicable investment option and its performance benchmark that are due to “Fair Value Pricing” and other common index fund tracking factors (such as the timing of market closures, management fees, benchmark nuances, and others) will be taken into consideration in evaluating performance of the affected investment options.

Qualitative Measures

- Management team or other significant personnel turnover;
- Changes in the product’s investment philosophy, process, style or risk profile;
- Excessive or rapid asset growth or decline;
- Pending regulatory investigations or material legal proceedings;
- Changes to firm ownership;
- Significant increase in management fees or expense ratio.
- In the case of monitoring Target Retirement Date funds, the Committee shall consider the current and prospective composition of the Target Date funds (based on their glide path) and the corresponding risk and return implications relative to the benchmark and peer group constituents.

An investment option may remain on watch status until the Committee decides to take further action. Committee actions include, but are not limited to, the following:

- Removing the investment option from watch status; and
- Terminating the investment option and reallocating the assets to an alternate or replacement investment option by Committee direction.

To be removed from quantitative, performance related watch status, generally, performance for the preceding five year trailing periods should be above the benchmark index or median for at least two consecutive quarters. However, barring any breakdown in process, the Committee may decide to leave an option on watch for as long as they believe it is prudent to do so.

The Committee reserves the right to terminate investment option relationships at any time, for any reason when it determines such termination is in the best interests of the Plans and its participants and beneficiaries. Upon termination, further contributions or transfers to an investment option may be frozen, or the option may be replaced with or without transferring existing assets from the replaced option. Once the decision to terminate an option and remove it from the Plans is made, asset transfer and liquidation should be handled to the best advantage of the Plans, with due consideration given to the anticipated effect on affected participants and beneficiaries.

INVESTMENT OVERSIGHT RESPONSIBILITY AND PROXY VOTING

The Committee shall have overall responsibility for the selection, monitoring and termination of all investment managers. Additionally, the Committee shall be responsible for reviewing and maintaining these investment policies and guidelines.

Proxy votes required by investment managers shall be cast by those parties designated by the Committee. Voting rights shall be exercised in the best interest of the participants and beneficiaries of the Plans. The Committee may insist that they exercise their voting rights themselves by communicating their intention to do so in a timely manner.

GLOSSARY

Annualized Return

Rate of return of the account smoothed as though the return occurred equally over twelve-month periods. When the specified time frame is for less than a year, the rate of return is projected as though the same performance continues to occur for a twelve-month period.

Benchmarks

A standard against which the performance of the portfolio can be measured, typically against a standard index, although a client manager may also set the benchmark.

Duration

The weighted maturity of a fixed-income investment's cash flows, used in the estimation of the price sensitivity of fixed-income securities for a given change in interest rates. Time periods are weighted by multiplying by the present value of its cash flow divided by the bond's price (a bond's cash flows consist of coupon payments and repayment of capital). A bond's duration will almost always be shorter than its maturity, with the exception of zero-coupon bonds, where maturity and duration are equal.

Growth Style Investing

Growth investors purchase companies that have above-average earnings growth and/or above-average sales growth rates.

Investment Objectives

The overall financial objectives of an investor. For example, whether the investor requires income or capital appreciation. The investor's objectives govern the investment strategy.

Large Cap

Large Capitalization – refers to those companies with a market capitalization categorized as Large Cap by an industry standard data provider of greater than \$10 billion.

Liquidity

The ability to buy or sell an asset quickly and in large volume without substantially affecting the asset's price.

Market Capitalization

The dollar value of a public company based on the total number of shares of stock available multiplied by the price per share.

Mid Cap

Mid Capitalization – refers to those companies with a market capitalization categorized as Mid Cap by an industry standard data provider between \$2 and \$10 billion.

Net of Fees

After subtraction of management fees.

GLOSSARY - CONTINUED

Peer Group

Contemporaries of the same asset class that can be compared against one another to achieve a larger sense of how the particular portfolio is performing.

Portfolio

Refers to the complete list of securities held in an investment vehicle.

Small Cap

Small Capitalization – refers to those companies with a market capitalization categorized as Small Cap by an industry standard data provider~~between \$500 million and \$1.99 billion.~~

Standard Deviation

Measures the range of returns and is based on a Normal Curve. Managers with lower standard deviations than the index have historically had returns that tended to fall closer to their mean return compared to the index. Managers with higher standard deviations than the index have historically had returns that tended to be further dispersed around the mean than the index. This is another measure of volatility, but it doesn't distinguish downside performance from upside performance.

Value Style Investing

Value investors rely on an examination of the underlying or unrealized value of a company as the primary criterion for deciding whether or not to buy a company's stock. Value stocks are often priced lower than growth stocks due to slower growth expectations, recent financial difficulty, or a host of other reasons.

**ADOPTED BY THE ADMINISTRATOR ON BEHALF OF THE CITY OF VALLEJO
EMPLOYEES PLANS:**

Signature: _____

Name:

Title: _____

Date: _____

DEFERRED COMPENSATION COMMITTEE

MEMBER LIST

City Manager or Designee: Mike Malone, main member, or Natalie Peterson, alternate

Director of Human Resources or Designee: Rachel Ferguson, main member, or **Pleshetta Dautart, alternate**

Director of Finance or Designee: Rekha Nayar, main member, or Allen French, alternate

Executive Secretary: Deborah Williams, main member, or Kimberly Gates, alternate

Representative for CAMP: Brisa Long, main member, or **Jason Lacey, alternate**

Representative for IAFF: Kevin Brown, main member, or Jonathan Alberti, alternate

Representative for IBEW: James Olson, main member, or Nick Rolley, alternate

Representative for VPOA: Michael Nichelini, main member, or Jared Jaksch, alternate