

# Sacramento County 401(a): Plan Highlights & Key Observations

Date **December 2023**

## DEFERRED COMPENSATION PLAN ASSETS

At quarter-end, assets in the Sacramento County 401(a) Plan totaled \$41.634 million, increasing \$5,088,303 (13.92%) from \$36.546 million at the previous quarter-end.

Fidelity Contrafund held the highest percentage of non-target date assets (7.0%), followed by Vanguard Institutional Index (5.0%).

Assets in the Vanguard Target Retirement series totaled \$30.26 million (72.7%) at quarter end; this was an increase of \$3.75 million from \$26.51 million at the prior quarter-end.

## PERFORMANCE

The Plan's investments are generally meeting performance objectives; however, Parnassus Core Equity, JPMorgan Equity Income R6, JPMorgan Small Cap Equity R6, and Metropolitan West Total Return Bd Plan remained on watch from previous quarters. All funds are on watch due to underperformance.

JPMorgan Equity Income remains on the County's watchlist this quarter. This was due the fund performing below 50% of its peer group during for the three- and five-year time-period. For the quarter, the fund returned 8.54%, underperforming its benchmark at 9.50%. Overall, the healthcare sector weighed down performance due to political and regulatory pressures. Bristol-Myers Squibb, a healthcare stock, was the top detractor for the quarter, falling due to a delay in key drug revenue guidance. However, technology stock selection benefited. NWCM remains convicted in the fund.

Parnassus Core Equity continues to remain on watch due to underperforming the benchmark (S&P 500 Index) for both the three- and ten-year time periods. This quarter, it outperformed the benchmark by roughly 0.15% (11.84% versus 11.69%). In 2023, stock selection was strong in the fund, but was more than offset by poor sector allocation. The strongest selections occurred in the technology, financials, and consumer staples sectors. The fund remains in the top half of its peer group across all measured time periods above and NWCM remains convicted in the fund.

JPMorgan Small Cap Equity remained on the watchlist this quarter due to performing below 50% of its peer group for the same three- and five-year time period. For the quarter, the fund returned 12.47%, which underperformed the benchmark at -1.56% (Russell 2000). An

## NWCM PLAN CONSULTANTS

overweight position to Kinsale Capital Group was the top detractor, and management has continued to trim this position as they expect headwinds. BJ's Wholesale Club also detracted from overall performance posting earnings below expectations. Looking forward, management continues to focus on quality, cutting back on a larger-than-normal number of stocks and reallocating to their highest conviction ideas across sectors. Despite underperformance in 2023, the fund maintains a strong long-term record.

Metropolitan West Total Return Bd Plan remains on watch. Stephen Kane (1997), Laird Landmann (1997), Bryan Whalen (2004), Jerry Cudzil (2023), and Ruben Hovhannisyan (2023) are the managers of the strategy. Long time manager and former CIO Tad Rivelle (1997) retired at the end of 2021. In August 2023 it was announced that Landmann will retire at the end of 2023 and Kane will retire at the end of 2024. NWCM is closely monitoring this fund due to recent performance and upcoming changes to management.

The Galliard Stable Value fund is being closely monitored by NWCM's Investment Committee. In early April 2019, Wells Fargo & Company (WFC) announced that it had entered into an agreement to sell its Institutional Retirement & Trust (IRT) business to Principal Financial Group. Since then, the management team has remained stable. A recent notice provided by Galliard identified some upcoming changes to the trusts effective January 2nd, 2024. NWCM determined that these were administrative in nature. Importantly, the investment managers, wrap providers, fees, and the fund's Investment Guidelines, Objectives, and Strategies will remain the same. We do not recommend placing this fund on watch or activating the 12-month put at this time. A detailed memo has been provided for additional details to support our recommendation.

Sources: JPMorgan, Parnassus, TCW, as of 12/31/2023.

Investment Menu Review – December 2023

---

**Sacramento County 401(a) Plan**

# Table of Contents

---

1. Summary of Assets

2. Equity Performance

3. Fixed Income Performance & Fund Comments

4. Stable Value Performance

5. Stable Value Memo

6. Target Date Fund Review

# Summary of Assets

Asset Class	%	9/30/2023	Net Increases/Decreases	12/31/2023	%
<b>US Large Cap</b>	<b>13.8%</b>	<b>\$5,030,990</b>	<b>\$750,718</b>	<b>\$5,781,708</b>	<b>13.9%</b>
Parnassus Core Equity Institutional	1.1%	\$390,015	(\$60,666)	\$329,350	0.8%
Vanguard Institutional Index I	5.0%	\$1,844,442	\$224,243	\$2,068,684	5.0%
Fidelity Contrafund K6	6.5%	\$2,357,273	\$561,957	\$2,919,231	7.0%
JPMorgan Equity Income R6	1.2%	\$439,260	\$25,184	\$464,444	1.1%
<b>US Mid Cap</b>	<b>1.2%</b>	<b>\$434,185</b>	<b>\$206,689</b>	<b>\$640,874</b>	<b>1.5%</b>
Vanguard Extended Market Index Instl	1.2%	\$434,185	\$206,689	\$640,874	1.5%
<b>US Small Cap</b>	<b>0.8%</b>	<b>\$275,726</b>	<b>(\$37,927)</b>	<b>\$237,798</b>	<b>0.6%</b>
JPMorgan Small Cap Equity R6	0.8%	\$275,726	(\$37,927)	\$237,798	0.6%
<b>Foreign</b>	<b>1.9%</b>	<b>\$696,938</b>	<b>\$136,110</b>	<b>\$833,049</b>	<b>2.0%</b>
Vanguard Total Intl Stock Index Instl	1.1%	\$403,242	\$83,084	\$486,326	1.2%
Fidelity Overseas K	0.8%	\$293,696	\$53,026	\$346,722	0.8%
<b>Fixed Income</b>	<b>4.6%</b>	<b>\$1,665,436</b>	<b>\$49,385</b>	<b>\$1,714,821</b>	<b>4.1%</b>
Vanguard Total Bond Market Index I	1.5%	\$552,318	\$57,535	\$609,853	1.5%
Metropolitan West Total Return Bd Plan	0.7%	\$266,934	\$24,220	\$291,154	0.7%
Galliard Stable Value Fund E	2.3%	\$846,184	(\$32,370)	\$813,814	2.0%
<b>Specialty Options</b>	<b>5.3%</b>	<b>\$1,937,107</b>	<b>\$229,005</b>	<b>\$2,166,113</b>	<b>5.2%</b>
Fidelity Inv MM Fds Government Instl	2.1%	\$780,590	\$61,337	\$841,927	2.0%
Self Directed Account	3.2%	\$1,156,518	\$167,668	\$1,324,186	3.2%
<b>Target Date Funds</b>	<b>72.5%</b>	<b>\$26,505,792</b>	<b>\$3,754,323</b>	<b>\$30,260,115</b>	<b>72.7%</b>
Vanguard Target Retirement Income Trust Plus	1.9%	\$695,835	\$44,996	\$740,831	1.8%
Vanguard Target Retirement 2020 Trust Plus	5.1%	\$1,858,821	\$97,845	\$1,956,666	4.7%
Vanguard Target Retirement 2025 Trust Plus	9.1%	\$3,342,872	\$186,469	\$3,529,341	8.5%
Vanguard Target Retirement 2030 Trust Plus	14.2%	\$5,173,441	\$645,678	\$5,819,120	14.0%
Vanguard Target Retirement 2035 Trust Plus	16.5%	\$6,035,934	\$825,068	\$6,861,001	16.5%
Vanguard Target Retirement 2040 Trust Plus	12.3%	\$4,503,205	\$805,976	\$5,309,181	12.8%
Vanguard Target Retirement 2045 Trust Plus	7.2%	\$2,623,796	\$553,219	\$3,177,015	7.6%
Vanguard Target Retirement 2050 Trust Plus	3.5%	\$1,282,986	\$272,882	\$1,555,868	3.7%
Vanguard Target Retirement 2055 Trust Plus	1.9%	\$688,087	\$199,347	\$887,434	2.1%
Vanguard Target Retirement 2060 Trust Plus	0.6%	\$222,618	\$80,561	\$303,179	0.7%
Vanguard Target Retirement 2065 Trust Plus	0.2%	\$67,648	\$13,632	\$81,280	0.2%
Vanguard Target Retirement 2070 Trust Plus	0.0%	\$10,547	\$28,652	\$39,199	0.1%
<b>Total</b>	<b>100%</b>	<b>\$36,546,175</b>	<b>\$5,088,303</b>	<b>\$41,634,478</b>	<b>100%</b>

13.92%

# Equity Performance

## Watch List Criteria:

1. The fund performs below 50% of its peer group for a three-year period.
2. The fund performs below 50% of its peer group for a five-year period.
3. The fund performs below 50% of its peer group for a ten-year period.
4. Performance below the fund's prospectus benchmark for a three-year period.
5. Performance below the fund's prospectus benchmark for a five-year period.
6. Performance below the fund's prospectus benchmark for a ten-year period.
7. A Morningstar rating of 2 or below
8. A fund may also be placed on the watch List if there are extenuating circumstances.

To be placed on the watch List a fund must trip up at least two of the eight conditions.

To be taken off the watch List a fund must only reflect one watch List Criteria violation.

## Removal Criteria:

1. The fund performs below 50% of its peer group for a five-year period.
2. The fund performs below 50% of its peer group for a ten-year period.
3. Performance below the fund's prospectus benchmark for a five-year period.
4. Performance below the fund's prospectus benchmark for a ten-year period.
5. A Morningstar rating of 2 or below

To be considered for replacement a fund must violate all five Removal Criteria.

The benchmark which causes the fund to trip less Investment Policy Criteria is used.

	Prospectus Benchmark	MS Rating	Return					Action
			QTR	1 Year	3 Years	5 Years	10 Years	
<b>Equity</b>								
<b>Large Growth</b>								
Fidelity Contrafund K6*	S&P 500 TR USD	4	11.35	37.67	7.59	16.38	12.92	
+/- Benchmark			-0.34	11.38	-2.41	0.69	0.89	
Peer Group Percentile			89	51	27	41	33	
<b>Large Value</b>								
JPMorgan Equity Income R6	Russell 1000 Value TR USD	4	8.54	5.04	9.03	11.25	9.49	W
+/- Benchmark			-0.96	-6.42	0.17	0.35	1.09	
Peer Group Percentile			77	87	64	52	20	
<b>Large Blend</b>								
Parnassus Core Equity Institutional	S&P 500 TR USD	5	11.84	25.21	9.28	15.73	11.86	W
+/- Benchmark			0.15	-1.08	-0.72	0.05	-0.17	
Peer Group Percentile			39	41	44	18	15	
<b>Small Blend</b>								
JPMorgan Small Cap Equity R6	Russell 2000 TR USD	3	12.47	12.16	3.14	10.91	8.57	W
+/- Benchmark			-1.56	-4.77	0.92	0.94	1.42	
Peer Group Percentile			62	85	84	55	12	
<b>Foreign Large Blend</b>								
Fidelity Overseas K	MSCI EAFE NR USD	4	13.15	20.69	2.77	10.03	6.33	
+/- Benchmark			2.73	2.45	-1.24	1.87	2.05	
Peer Group Percentile			29	15	12	24	20	

# Fixed Income Performance & Fund Comments

	Prospectus Benchmark	MS Rating	Return					Action
			QTR	1 Year	3 Years	5 Years	10 Years	
<b>Fixed Income</b>								
<b>Intermediate-Term Bond</b>								
Metropolitan West Total Return Bd Plan	Bloomberg US Agg Bond TR USD	3	7.54	6.07	-3.63	1.31	1.91	W
+/- Benchmark			0.72	0.54	-0.32	0.20	0.10	
Peer Group Percentile			11	59	75	60	53	
<b>Stable Value</b>								
Galliard Stable Return Fund E	50% FTSE 3-Mo T-Bill + 50% ICE BofA 1-3Y Trsy	4	0.70	2.70	2.15	2.19	1.92	
+/- Benchmark			-1.25	-2.06	1.05	0.59	0.77	
Peer Group Percentile								

**JPMorgan Equity Income R6** - JPMorgan Equity Income remains on the County's watchlist this quarter. This was due the fund performing below 50% of its peer group during for the three- and five-year time-period. For the quarter, the fund returned 8.54%, underperforming its benchmark at 9.50%. Overall, the healthcare sector weighed down performance due to political and regulatory pressures. Bristol-Myers Squibb, a healthcare stock, was the top detractor for the quarter, falling due to a delay in key drug revenue guidance. However, technology stock selection benefited. NXP Semiconductor, in that sector, was the largest contributor. Looking ahead, management is taking a more positive stance on financial stocks, and they added exposure this quarter. Additionally, management is incrementally more cautious in the energy sector, though the tight supply-demand balance remains supportive of current prices. NWCM remains convicted in the fund.

**Parnassus Core Equity Institutional** - Parnassus Core Equity continues to remain on watch due to underperforming the benchmark (S&P 500 Index) for both the three- and ten-year time periods. This quarter, it outperformed the benchmark by roughly 0.15% (11.84% versus 11.69%). In 2023, stock selection was strong in the fund, but was more than offset by poor sector allocation. The strongest selections occurred in the technology, financials, and consumer staples sectors. Much of the 2023 market rally was heavily concentrated in large technology and consumer discretionary names. Some of these names, most notably, Amazon and Tesla were underweight in the fund which significantly detracted from performance. Parnassus is one of the most prominent investors using Environmental, Social, and Governance (ESG) guidelines. Looking ahead, management will continue to focus on long-term, high quality businesses that are available at attractive prices. They remain underweight to consumer discretionary, healthcare, and communication services sector. The fund remains in the top half of its peer group across all measured time periods above and NWCM remains convicted in the fund.

Sources: JPMorgan, Parnassus, TCW, as of 12/31/2023.

## Fund Comments Continued

---

**JPMorgan Small Cap Equity R6** – JPMorgan Small Cap Equity remained on the watchlist this quarter due to performing below 50% of its peer group for the same three- and five-year time period. For the quarter, the fund returned 12.47%, which underperformed the benchmark at -1.56% (Russell 2000). An overweight position to Kinsale Capital Group was the top detractor, and management has continued to trim this position as they expect headwinds ahead. BJ's Wholesale Club also detracted from overall performance posting earnings below expectations. Looking forward, management continues to focus on quality, cutting back on a larger-than-normal number of stocks and reallocating to their highest conviction ideas across sectors. Most of the trimming from outperformers occurred in industrials and financials. Management has been looking for opportunities in energy and during the fourth quarter they began adding to that sector. Despite underperformance in 2023, the fund maintains a strong long-term record.

**Metropolitan West Total Return Bd Plan** – Stephen Kane (1997), Laird Landmann (1997), Bryan Whalen (2004), Jerry Cudzil (2023), and Ruben Hovhannisyan (2023) are the managers of the strategy. Long time manager and former CIO Tad Rivelle (1997) retired at the end of 2021. In August 2023 it was announced that Landmann will retire at the end of 2023 and Kane will retire at the end of 2024. Rivelle, Landmann, and Kane are the co-founders of Metropolitan West Asset Management. Management looks to generate relative performance by rotating sector and risk factor exposures in the portfolio throughout the credit cycle. They rely on their experience and expertise with macro calls to generate the majority of alpha, although security selection and valuation analysis do play a part. Historically the strategy has been slightly overweight to MBS and duration relative to peers. The strategy ranks in the third quartile of peers over the trailing 3-, 5-, and 10-years. YTD in 2023 the strategy ranks in the third quartile of peers where the longer than average effective duration (7.1 years fund vs. 6.1 years peer average) was the largest headwind to relative performance through the first 3 quarters. NWCM is closely monitoring this fund due to recent performance and upcoming changes to management.

**Galliard Stable Return Fund** - In early April 2019, Wells Fargo & Company (WFC) announced that it had entered into an agreement to sell its Institutional Retirement & Trust (IRT) business to Principal Financial Group. Since then, the management team has remained stable. The portfolio itself is more conservative than peers, and is slightly lagging potential alternatives on a rate perspective, but has caught up over the trailing quarter. During 2022 and the first half of 2023, the fund saw above-average outflows, but in the second half of 2023, this has normalized allowing the team to reduce liquid assets and reinvest capital. In turn, this led to the market/book ratio increasing to 95.5% compared to a peer group average of 94.4%. A recent notice provided by Galliard identified some upcoming changes to the trusts effective January 2nd, 2024. NWCM determined that these were administrative in nature. Importantly, the investment managers, wrap providers, fees, and the fund's Investment Guidelines, Objectives, and Strategies will remain the same. We do not recommend placing this fund on watch or activating the 12-month put at this time. A detailed memo has been provided for additional details to support our recommendation.

Sources: JPMorgan, Pamassus, TCW, as of 12/31/2023.

# Galliard Stable Value Performance

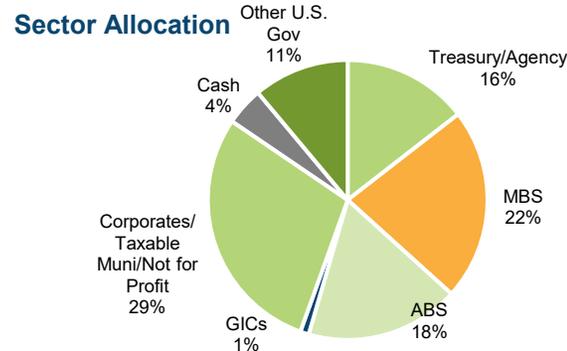
## Investment Strategy

The Fund's underlying fixed income strategy is managed in a conservative style that utilizes a disciplined value investing process to build a high-quality portfolio with broad diversification and an emphasis on risk control. Our core investment philosophy is to build a portfolio of realizable yield through bottom-up, fundamental research, utilizing a team-based approach to portfolio management. Galliard's fixed income portfolios emphasize high quality spread sectors, diversification across sectors and issuers to reduce risk, neutral duration positioning, and a laddered portfolio structure for ample natural liquidity. The majority of the Fund's assets will be invested in fixed income portfolios that are wrapped by stable value contracts which allow fund participants to transact at book value. The Fund will hold cash in order to maintain sufficient liquidity and may also invest in traditional GICs. The Fund utilizes high credit quality stable value contract issuers, with an emphasis on diversification.

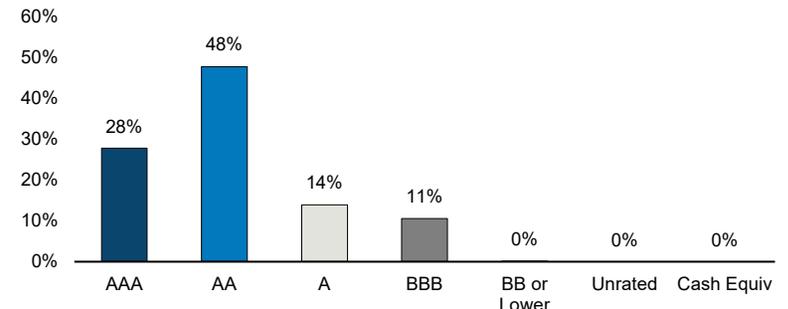
Fund Information	Fund
Fund Assets	\$20.2B
Avg Credit Quality (S&P)	AA-
# of Wrap Providers	11
Net Crediting Rate	2.76%
Effective Duration	2.80 Yrs
Market-to-Book	95.5%
<b>Expenses</b>	
Total Fund Expenses*	0.317%

\*fees as of 12/31/2023

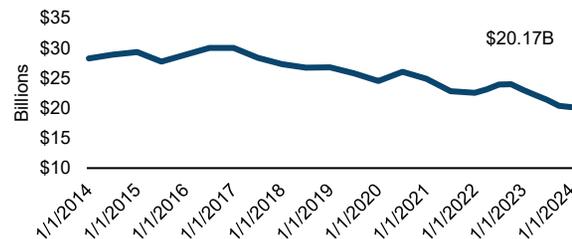
Annualized Performance		4Q23	YTD	1 Year	3 Year	5 Year	10 Year				
Galliard Stable Value Fund E (after fees)		0.70%	2.70%	2.70%	2.15%	2.19%	1.92%				
Benchmark**		1.95%	4.76%	4.76%	1.10%	1.61%	1.16%				
FTSE 3-Month T-Bill		1.41%	5.26%	5.26%	2.25%	1.91%	1.26%				
Calendar Year Performance		2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Galliard Stable Value Fund E (after fees)		2.70%	1.95%	1.80%	2.18%	2.34%	2.06%	1.74%	1.62%	1.50%	1.35%
Benchmark**		4.76%	-1.10%	-0.25%	1.84%	2.90%	1.72%	0.63%	0.58%	0.28%	0.33%
FTSE 3-Month T-Bill		5.26%	1.50%	0.05%	0.58%	2.25%	1.86%	0.84%	0.27%	0.03%	0.03%
Consumer Price Index		3.56%	6.45%	7.04%	1.36%	2.29%	1.67%	2.11%	2.07%	0.73%	1.76%



## Credit Quality



## Fund Assets



Issuer	% of Fund	S&P Rating
Transamerica Life Ins. Co.	14.0%	A+
American General Life Ins. Co.	13.9%	A+
Prudential Ins. Co. of America	13.8%	AA-
Royal Bank of Canada	13.4%	AA-
Metropolitan Life Ins. Co.	12.7%	AA-
Pacific Life Ins. Co.	8.6%	AA-
State Street Bank and Trust Co.	7.1%	AA-
Massachusetts Mutual Life Ins. Co.	6.5%	AA+
Nationwide Life Ins. Co.	5.9%	A+
Massachusetts Mutual Life Ins. Co.	0.5%	AA+
Principal Life Ins. Co.	0.3%	A+
Metropolitan Life Ins. Co.	0.1%	AA-

Source: NWCM, Galliard, as of 12/31/2023

\*\*Benchmark: 50% FTSE 3-Mo T-Bill + 50% ICE BofA 1-3 Yr Tsy Index

---

# Galliard Stable Value

---

<u>Title</u>	<u>Stable Value Update</u>
<u>Date</u>	<u>7 March 2024</u>

## Overview

**NWCM recommends that clients retain Galliard as its stable value manager.** Galliard continues to offer a diverse and competitively priced Stable Value strategy with strong performance over both the short and long term. Though the portfolio is positioned more conservatively than some peers, performance has been strongly consistent through changing market environments and interest rate cycles. The recent internal changes with the trusts and statements are not concerning as the strategy and team have remained stable throughout the acquisition of Galliard by GTCR LLC and Reverence LLP over the past three years.

## Portfolio

Stable value is the most conservative option in most defined contribution plans and Galliard leans slightly more conservatively than its stable value peer group. The strategy uses a disciplined investing process and strict risk controls to build a high-quality portfolio with broad diversification across the bond market. This approach has led the strategy to hold higher quality credit and shorter duration relative to peers to reduce the variance in yield across quarters. This has been management's long-term strategy and despite volatility in 2022 and 2023, management remains dedicated to this approach.

## Recent Administrative Changes

In 2021, GTCR and Reverence Capital acquired Wells Fargo Asset Management including Galliard Capital Management. Since then, very little change has occurred in the day-to-day management of the fund. Additionally, the management team has remained stable since the sale, with only one analyst leaving since 2019. The most recent change occurred in the second half of 2023, coinciding with the investment notices released on 11/1/23. The changes in the notice were regarding internal operations at Galliard and did not cause any concern and this stance has not changed. Specifically, those changes were related to underlying trust and custody across all of Wells Fargo's old trust businesses, which were taken over by SEI. There were 3 separate buckets within the trust under the old Wells Fargo platform, one of which was the Galliard Stable Value business (the other two being the now-named Allspring broad investment strategies, and Wells Fargo's proprietary recordkeeper specific funds now managed by Principal). The changes were to break the administration of those 3 buckets out into their own separate trusts. There were no changes in fees, put provision, management, or strategy at that time.

The strategy had seen above-average portfolio outflows from the end of 2022 to the middle of 2023, which caused the portfolio to take on shorter duration positions further affecting the crediting rate. By the end of 2023, interest rates and the put-queue normalized. Fewer outflows,

as we noted above, have allowed the team to reinvest capital that would have otherwise been used to fund liquidity at higher rates. This has also contributed to the crediting rate keeping better pace with peers, which was a slight concern throughout the first half of 2023.

### Performance

Galliard tends to be cautious in its approach to managing interest rate and credit risk and its investment performance remains solid. The strategy’s E share class performed in the 28th percentile of peers in 2023 and ranks in the 13th, 11th, and 18th percentiles over the past 3-, 5-, and 10- year time frames, respectively. With interest rates stabilizing at higher levels and fewer outflows affecting the portfolio, its crediting rate and consequently its trailing near-term performance has continued to improve, as more capital has been reinvested at higher rates. Additionally, the strategy’s Market/Book value ratio has improved over the last three months of 2023 and is now 95.47%, which is above that of the peer average of 94.42%. This highlights the relative strength in the underlying assets for Galliard relative to peers who may adopt a more risk-on approach in their portfolios.

### Fees

Fees continue to be competitive with the strategy’s E share class net expense ratio of 0.32%, which ranks in the least expensive quartile of the peer group.

### Summary

Galliard remains a solid stable value manager that manages assets conservatively relative to its peers. In the second half of 2023, NWCM had some qualitative concerns with the administrative changes and outflows, but these have eased over the past few months. Additionally, the crediting rate, market-to-book ratio, and fees remain competitive with peers. **NWCM believes that Galliard Stable Value remains a prudent option in the plan and does not recommend placing the fund on watch or activating the twelve-month put at this time.**

Investment Performance 12/31/2023	4th Qtr	1 Year	3 Year	5 Year	10 Year
Wells Fargo Stable Value Fund E	0.70	2.70	2.15	2.19	1.92
ICE BOFA 0-3M Treasury Bill	1.41	5.26	2.25	1.91	1.26

Fund Characteristics 12/31/2023	
Blended Yield	2.81%
Effective Duration	2.80 Yrs
Market to Book Ratio	95.5%
Total Fee	0.32%

# Target Date Performance

Portfolio/Benchmark	Q4 2023	YTD	1 year	3 years	5 years	10 years	Since inception	Inception date
<b>Vanguard Target Retirement Income Trust Plus</b>	<b>7.34%</b>	<b>10.74%</b>	<b>10.74%</b>	<b>0.56%</b>	<b>4.83%</b>	<b>4.09%</b>	<b>4.87%</b>	<b>6/22/2007</b>
Target Retirement Income Composite Index	7.33%	10.80%	10.80%	0.76%	5.13%	4.32%	--	--
<i>excess return</i>	0.01%	-0.06%	-0.06%	-0.20%	-0.30%	-0.23%		
<b>Vanguard Target Retirement 2020 Trust Plus</b>	<b>8.00%</b>	<b>12.51%</b>	<b>12.51%</b>	<b>1.47%</b>	<b>6.61%</b>	<b>5.52%</b>	<b>5.91%</b>	<b>6/22/2007</b>
Target Retirement 2020 Composite Index	7.97%	12.65%	12.65%	1.74%	6.98%	5.81%	--	--
<i>excess return</i>	0.03%	-0.14%	-0.14%	-0.27%	-0.37%	-0.29%		
<b>Vanguard Target Retirement 2025 Trust Plus</b>	<b>8.87%</b>	<b>14.55%</b>	<b>14.55%</b>	<b>2.03%</b>	<b>7.56%</b>	<b>6.1%</b>	<b>6.53%</b>	<b>6/28/2007</b>
Target Retirement 2025 Composite Index	8.85%	14.74%	14.74%	2.39%	8.01%	6.43%	--	--
<i>excess return</i>	0.02%	-0.19%	-0.19%	-0.36%	-0.45%	-0.33%		
<b>Vanguard Target Retirement 2030 Trust Plus</b>	<b>9.53%</b>	<b>16.03%</b>	<b>16.03%</b>	<b>2.66%</b>	<b>8.37%</b>	<b>6.58%</b>	<b>6.57%</b>	<b>6/28/2007</b>
Target Retirement 2030 Composite Index	9.51%	16.26%	16.26%	3.05%	8.83%	6.92%	--	--
<i>excess return</i>	0.02%	-0.23%	-0.23%	-0.39%	-0.46%	-0.34%		
<b>Vanguard Target Retirement 2035 Trust Plus</b>	<b>9.82%</b>	<b>17.14%</b>	<b>17.14%</b>	<b>3.33%</b>	<b>9.17%</b>	<b>7.06%</b>	<b>7.32%</b>	<b>6/28/2007</b>
Target Retirement 2035 Composite Index	9.86%	17.43%	17.43%	3.72%	9.64%	7.4%	--	--
<i>excess return</i>	-0.04%	-0.29%	-0.29%	-0.39%	-0.47%	-0.34%		
<b>Vanguard Target Retirement 2040 Trust Plus</b>	<b>10.23%</b>	<b>18.34%</b>	<b>18.34%</b>	<b>4.02%</b>	<b>9.99%</b>	<b>7.52%</b>	<b>7.22%</b>	<b>6/28/2007</b>
Target Retirement 2040 Composite Index	10.20%	18.60%	18.60%	4.38%	10.43%	7.87%	--	--
<i>excess return</i>	0.03%	-0.26%	-0.26%	-0.36%	-0.44%	-0.35%		
<b>Vanguard Target Retirement 2045 Trust Plus</b>	<b>10.57%</b>	<b>19.48%</b>	<b>19.48%</b>	<b>4.68%</b>	<b>10.76%</b>	<b>7.91%</b>	<b>7.97%</b>	<b>6/28/2007</b>
Target Retirement 2045 Composite Index	10.54%	19.77%	19.77%	5.03%	11.20%	8.25%	--	--
<i>excess return</i>	0.03%	-0.29%	-0.29%	-0.35%	-0.44%	-0.34%		
<b>Vanguard Target Retirement 2050 Trust Plus</b>	<b>10.79%</b>	<b>20.17%</b>	<b>20.17%</b>	<b>4.91%</b>	<b>10.93%</b>	<b>7.99%</b>	<b>7.51%</b>	<b>6/28/2007</b>
Target Retirement 2050 Composite Index	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%	--	--
<i>excess return</i>	0.01%	-0.31%	-0.31%	-0.36%	-0.44%	-0.35%		
<b>Vanguard Target Retirement 2055 Trust Plus</b>	<b>10.78%</b>	<b>20.16%</b>	<b>20.16%</b>	<b>4.92%</b>	<b>10.92%</b>	<b>7.97%</b>	<b>9.77%</b>	<b>10/5/2010</b>
Target Retirement 2055 Composite Index	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%	--	--
<i>excess return</i>	0.00%	-0.32%	-0.32%	-0.35%	-0.45%	-0.37%		
<b>Vanguard Target Retirement 2060 Trust Plus</b>	<b>10.79%</b>	<b>20.18%</b>	<b>20.18%</b>	<b>4.92%</b>	<b>10.92%</b>	<b>7.97%</b>	<b>9.52%</b>	<b>3/1/2012</b>
Target Retirement 2060 Composite Index	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%	--	--
<i>excess return</i>	0.01%	-0.30%	-0.30%	-0.35%	-0.45%	-0.37%		
<b>Vanguard Target Retirement 2065 Trust Plus</b>	<b>10.79%</b>	<b>20.15%</b>	<b>20.15%</b>	<b>4.95%</b>	<b>10.91%</b>	--	<b>8.44%</b>	<b>7/21/2017</b>
Target Retirement 2065 Composite	10.78%	20.48%	20.48%	5.27%	11.37%	--	--	--
<i>excess return</i>	0.01%	-0.33%	-0.33%	-0.32%	-0.46%			
<b>Vanguard Target Retirement 2070 Trust Plus</b>	<b>10.83%</b>	<b>20.24%</b>	<b>20.24%</b>	--	--	--	<b>13.75%</b>	
Target Retirement 2070 Composite Index	10.78%	20.48%	20.48%	5.27%	11.37%	8.22%	--	--
<i>excess return</i>	0.05%	-0.24%	-0.24%	--	--	--		

Sources: Vanguard and Morningstar, as of December 31, 2023.