


March 31, 2024



## **The North Carolina Supplemental Retirement Plans Executive Summary**

**Investment Measurement Service  
Quarterly Review**

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The North Carolina Supplemental Retirement Plans

March 31, 2024

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## U.S. EQUITIES

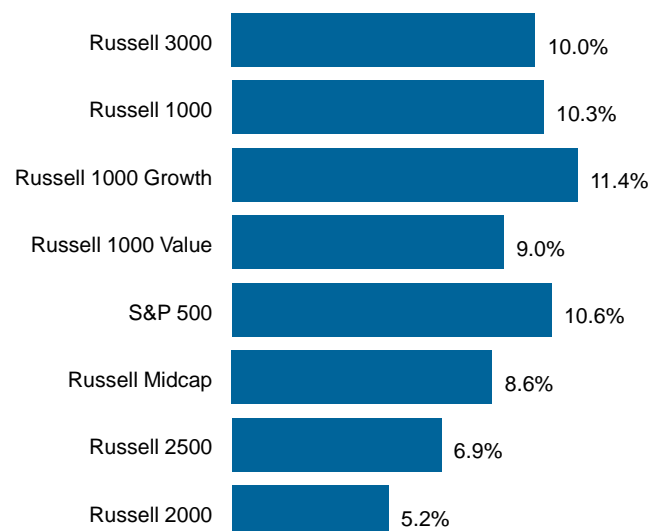
## Best first quarter in 5 years

- The U.S. equity markets were off to an exceptional start with the S&P 500 posting a YTD gain of 11%, its best first quarter since 2019. Performance was buoyed by continued optimism around a “soft landing” scenario, strong corporate earnings, and the Fed’s projected interest rate cuts in mid-2024.
- Almost all of the 11 S&P 500 sectors posted gains in 1Q24. Real estate was the only sector that posted losses, challenged by the interest rate environment and continued negative sentiment around office real estate.
- The best-performing sector was Communication Services, which generated a nearly 16% return during the quarter. Energy, Financials, Information Technology, and Industrials also posted double-digit returns.

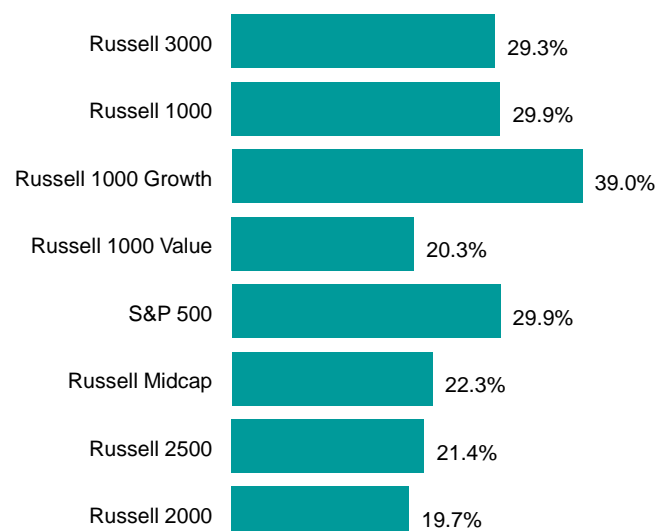
## Large cap stocks dominate again

- Growth outpaced value across the market cap spectrum once again, and large cap stocks continued to outperform small cap stocks.
- The “Magnificent Seven” in aggregate continues to outpace the other constituents of the S&P 500 in terms of earnings growth and total returns.
- However, signs point to the broadening of returns within the index including: 1) The narrowing of dispersion in the premium gap of returns/earnings growth; as of 3/31/24, the premium gap of returns/earnings growth between the “Magnificent Seven” and the other 493 stocks in the index was 10%. In recent periods, the gap has been >25%; 2) Only two stocks of the “Magnificent Seven” (Meta and NVIDIA) were among the top 10 performers within the index for the quarter.
- Returns within the “Magnificent Seven” cohort also show signs of disaggregation. Three stocks—Tesla, Apple, and Alphabet—exhibited negative to single-digit returns vs. other constituents, which generated low to high double-digit returns in 1Q24. In 2023, the entire cohort demonstrated positive double- and triple-digit returns.

## U.S. Equity: Quarterly Returns

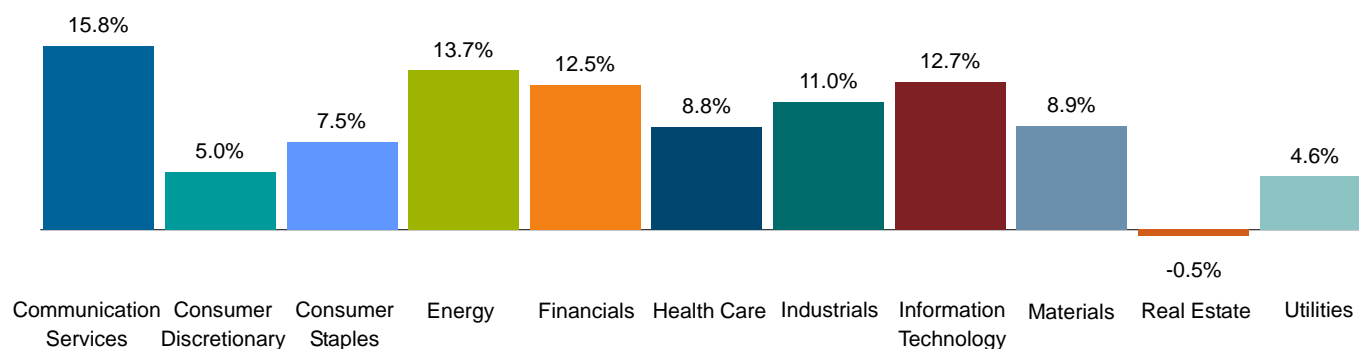


## U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&amp;P Dow Jones Indices

## S&amp;P Sector Returns, Quarter Ended 3/31/24



Source: S&amp;P Dow Jones Indices

## GLOBAL EQUITIES

## Another strong quarter for Japan

- Broad markets delivered strong returns on the decreasing expected probability of a recession in the U.S. and continued optimism around artificial intelligence.
- Small caps once again trailed large caps in a higher interest rate environment, which tends to more negatively impact smaller companies with more significant borrowing needs.
- Japan performed well yet again, beating the S&P 500 in 1Q24, driven by continued stock buybacks, economic resiliency, and a weakening yen, which helped exports.

## Emerging markets struggle but exporters thrive

- Emerging markets underperformed developed markets as China struggled with increased regulatory scrutiny and a continued economic slowdown.
- Exporting countries such as Peru and Colombia benefited from increasing commodity prices. Turkey also performed well with a return to orthodox monetary policies after experimenting with counterintuitive methodologies.

## Value benefits from rising commodity prices

- Energy's volatility continued; after struggling in 4Q23, energy rebounded and helped deliver stronger performance in the commodity-heavy value space.

## U.S. dollar gains as rate cut expectations fall

- The U.S. dollar rose in 1Q as investors recalibrated their interest rate expectations, with conventional wisdom now indicating that the U.S. may only enact one rate cut in 2024.

## Positive tailwinds

- End of deflation
- Most prolonged stint of consumption gains since mid-1990s
- Increase in exports (positive impact to GDP)
- Reforms support the Japanese equity market through increased M&A and improved corporate governance

## Slow growth in China

- Sluggish growth continues, with weak home sales and deflationary pressures.

## Market valuation in China

- With Chinese markets now down 60% from a high-water mark in early 2021, Chinese equities are at decade-low allocations in global portfolios.

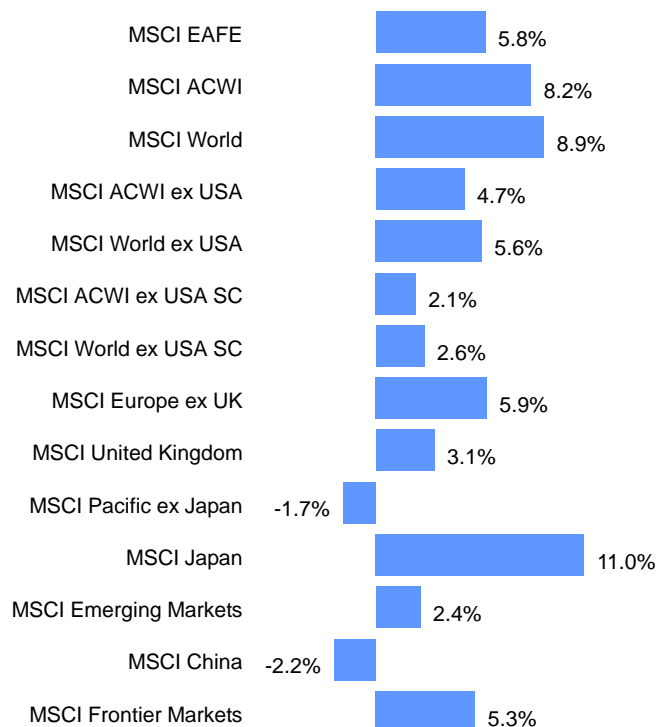
## Fast growth in India

- Highest real GDP growth and one of the only major countries with accelerating GDP growth.

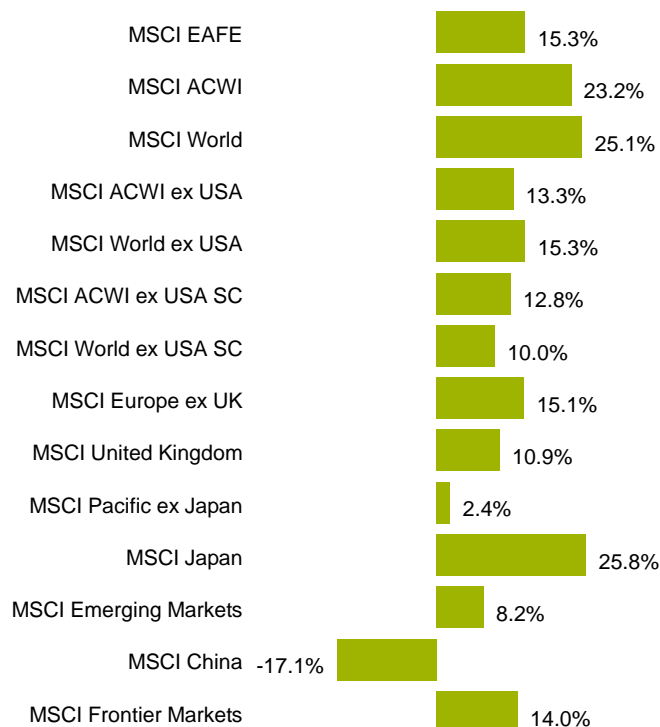
## Market valuation in India

- The MSCI India Index traded at 22.1 times forward earnings — above its 10-year average of 18.9 times.

## Global Equity: Quarterly Returns



## Global Equity: One-Year Returns



Source: MSCI

## U.S. FIXED INCOME

### Big increase in 10-year Treasury yield

- Markets' enthusiasm for multiple rate cuts starting in early 2024 was tempered by stronger-than-expected economic data.
- 10-year U.S. Treasury yield rose from 3.88% as of year-end to close the quarter at 4.21%.
- The yield curve remained inverted but less so than one year ago (2-year/10-year 42 bps vs. 57 one year ago).

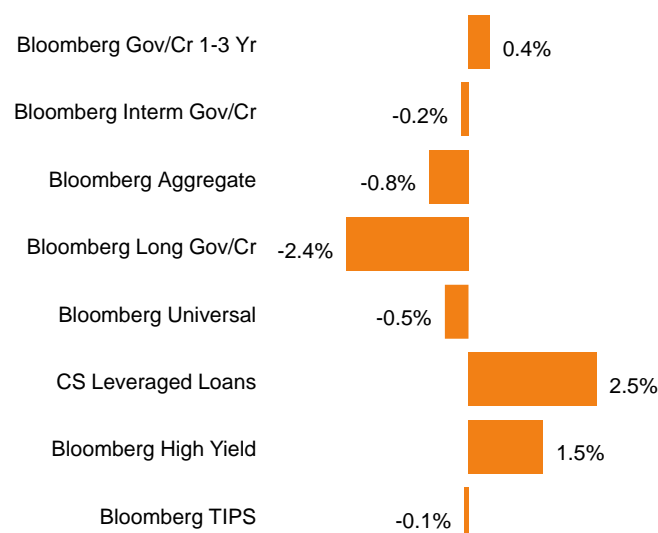
### Aggregate falls as rates climb

- The Bloomberg US Aggregate Bond Index fell 0.8% as rates rose.
- Investment grade corporates outperformed like-duration Treasuries, while mortgages underperformed.
- Lower quality also outperformed, with high yield corporates and leveraged loans posting the highest returns.
- Investment grade and high yield corporate spreads are now tighter than one standard deviation from the trailing 10-year average.

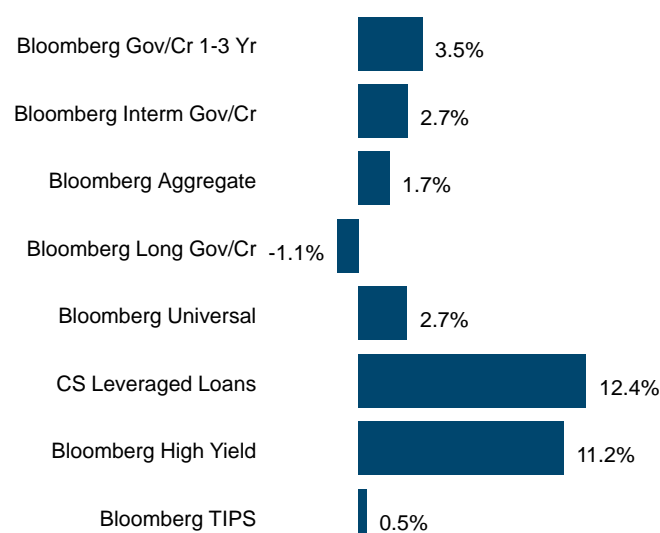
### Record corporate bond issuance

- Highest first quarter of new issuance on record, with \$529 billion in investment grade corporates, surpassing 2020's \$479 billion.
- High yield quarterly issuance was just as significant with a volume of \$85 billion, a level not seen since 2021.
- Both were met with strong investor demand.
- Corporate bond spreads continued to tighten across all qualities amid strong investor demand. Investment grade credit OAS declined 8 bps to 85 bps, while high yield corporates fell 24 bps, crossing the 300 bp level for the first time since January 2022.
- Investment grade credit spreads are now in the lowest 13<sup>th</sup> percentile over the last 20 years, while high yield bonds are in the 8<sup>th</sup> percentile. Bank loans are relatively more attractive, with spreads in the 42<sup>nd</sup> percentile since June 2008.
- However, all-in yields continue to provide high levels of income, with investment grade credit in the 77<sup>th</sup> percentile over the last 20 years, while high yield is in the 58<sup>th</sup> percentile. Bank loan yields, which are benefitting from the inverted yield curve, are in the 81<sup>st</sup> percentile since June 2008.

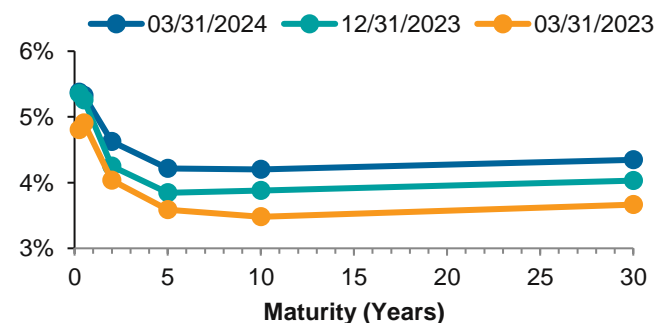
## U.S. Fixed Income: Quarterly Returns



## U.S. Fixed Income: One-Year Returns



## U.S. Treasury Yield Curves



Sources: Bloomberg, Credit Suisse

## MUNICIPAL BONDS

### Municipal bonds posted fairly flat returns in 1Q

- Yields rose, but less than for U.S. Treasuries.
- 10-year AAA municipal bond yield closed at 2.52%, up from 2.27% as of year-end.
- 10-year U.S. Treasury yield rose to 4.20% from 3.88%.
- Strong demand easily absorbed robust issuance.

### BBBs performed best for quarter and year

- AAA: -0.8%
- AA: -0.6%
- A: +0.1%
- BBB: +0.6%
- High Yield: +1.5%

### Valuations vs. U.S. Treasuries remained rich

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 60%
- Well below 10-year median of 86%

## GLOBAL FIXED INCOME

### Central banks close to rate cuts

- Central banks largely kept rates on hold but are getting closer to rate cuts as inflation moderates.
- Switzerland was the first to raise rates with a 25 bps increase.
- Japan was the last to exit negative interest rate policy, raising rates from -0.1% to a range of 0.0%-0.1%.

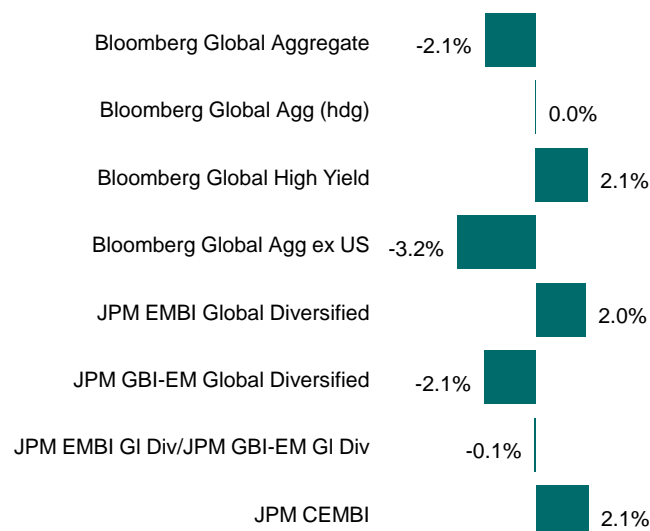
### U.S. dollar strengthened

- Major currencies weakened relative to the dollar, a reversal of fortune from 4Q23.
- Hedged investors saw better returns.

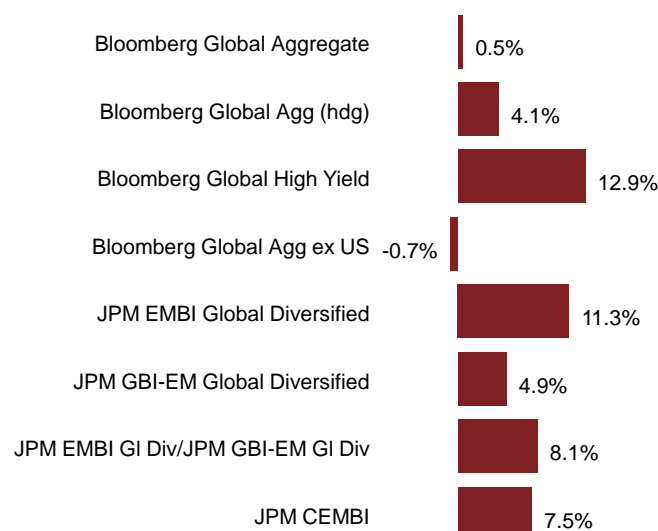
### Emerging markets were mixed

- Hard currency EM debt performed relatively well, especially high yield. The JPM EMBI Global Diversified Index rose 2.0%, with the high yield component up 4.9%.
- Local currencies generally lost ground to the U.S. dollar, hurting returns for the JPM GBI-EM Global Diversified Index.

## Global Fixed Income: Quarterly Returns

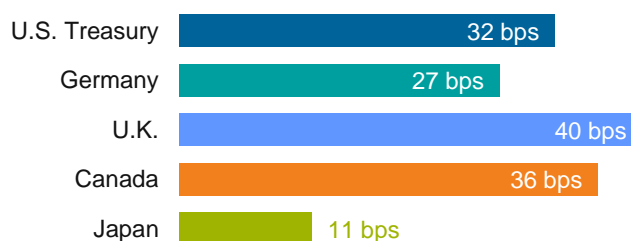


## Global Fixed Income: One-Year Returns



## Change in 10-Year Global Government Bond Yields

### 4Q23 to 1Q24



Sources: Bloomberg, JP Morgan

## Investment Fund Balances

The table below compares the fund's investment fund balances as of March 31, 2024 with that of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Funds

	March 31, 2024			December 31, 2023		
	Market Value	Weight	Net New Invest.	Invest. Return	Market Value	Weight
North Carolina SRP 401k & 457						
Tier II Passive	\$5,903,963,783	35.13%	\$(3,629,952)	\$446,592,984	\$5,461,000,751	34.05%
Fixed Income Passive	92,845,092	0.55%	1,931,914	(686,360)	91,599,538	0.57%
Treasury Inflation Protected	341,811,163	2.03%	(39,942,523)	670,858	381,082,829	2.38%
Large Cap Passive	4,327,913,625	25.75%	795,044	413,282,177	3,913,836,404	24.40%
International Passive	116,233,753	0.69%	(148,384)	4,902,343	111,479,794	0.69%
SMID Cap Passive	421,862,318	2.51%	(7,480,741)	27,266,167	402,076,893	2.51%
Inflation Responsive Fund	603,297,831	3.59%	41,214,739	1,157,799	560,925,294	3.50%
Tier II Active	\$10,902,918,582	64.87%	\$(75,302,494)	\$398,955,141	\$10,579,265,936	65.95%
Stable Value Fund	2,318,643,987	13.80%	(116,793,959)	17,401,423	2,418,036,522	15.07%
Fixed Income Fund	2,286,683,722	13.61%	(35,717,017)	(8,230,418)	2,330,631,157	14.53%
Large Cap Core Equity Fund	2,457,784,508	14.62%	(52,612,380)	251,581,681	2,258,815,207	14.08%
International Equity Fund	2,625,730,598	15.62%	100,532,572	78,688,264	2,446,509,762	15.25%
Small/Mid Cap Equity Fund	1,214,075,767	7.22%	29,288,290	59,514,190	1,125,273,287	7.02%
Total Fund	\$16,806,882,365	100.0%	\$(78,932,446)	\$845,548,125	\$16,040,266,686	100.0%

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Last 7 Years	
Tier 2: Passive (Net of Fee)										
Fixed Income Passive	(0.75%)	83	1.62%	76	(2.47%)	60	0.33%	91	1.02%	86
Blmbg Aggregate	(0.78%)	88	1.70%	75	(2.46%)	58	0.36%	89	1.06%	82
Callan Core Bond MFs	(0.48%)		2.25%		(2.42%)		0.70%		1.32%	
Treasury Inflation Protected Securities	0.24%	23	1.65%	23	0.78%	7	2.93%	10	-	
Blmbg US TIPS 1-10 Yr	0.26%	22	1.65%	23	0.80%	7	2.96%	10	2.56%	10
Callan TIPS MFs	0.02%		0.26%		(0.70%)		2.39%		2.19%	
Large Cap Passive	10.55%	67	29.86%	55	11.46%	54	15.04%	43	14.08%	28
S&P 500 Index	10.56%	67	29.88%	55	11.49%	54	15.05%	43	14.09%	28
Callan Large Cap Core MFs	11.60%		31.10%		11.77%		14.50%		13.32%	
International Passive	4.40%	70	12.90%	58	1.63%	70	5.87%	75	5.88%	61
International Benchmark (1)	4.33%	72	13.20%	56	1.53%	70	5.71%	77	5.69%	68
Callan Non US Equity MFs	5.29%		13.33%		3.34%		6.95%		6.50%	
SMID Cap Passive	6.88%	74	21.34%	43	2.90%	70	9.83%	62	9.37%	36
Russell 2500 Index	6.92%	74	21.43%	43	2.97%	70	9.90%	60	9.45%	34
Callan SMID Core MFs	7.91%		20.20%		5.32%		10.25%		8.58%	
Inflation Responsive Fund	0.05%	100	3.53%	87	1.73%	80	3.13%	96	3.55%	90
Inflation Responsive Benchmark	(0.07%)	100	3.27%	98	1.54%	81	2.92%	97	2.90%	94
Callan Real Assets MFs	2.30%		6.61%		4.99%		5.16%		5.11%	
Tier 2: Active (Net of Fee)										
Stable Value Fund	0.73%	11	2.85%	14	2.19%	9	2.29%	4	2.27%	1
3 Yr US Treas Rolling	1.05%	2	4.36%	1	2.96%	1	2.11%	14	2.14%	12
T-Bill + 1.5%	1.65%	1	6.74%	1	4.08%	1	3.52%	1	3.40%	1
Callan Stable Value CT	0.59%		2.38%		1.76%		1.79%		1.77%	
Fixed Income Fund	(0.34%)	63	3.30%	39	(2.04%)	50	1.11%	42	1.84%	26
Blmbg Aggregate	(0.78%)	90	1.70%	82	(2.46%)	69	0.36%	87	1.06%	83
Callan Core Plus MFs	(0.28%)		2.87%		(2.04%)		0.91%		1.56%	
Large Cap Core Equity Fund	11.28%	50	32.11%	47	8.65%	66	14.00%	51	-	
Russell 1000 Index	10.30%	62	29.87%	54	10.45%	42	14.76%	43	13.85%	49
Callan Lg Cap Broad MF	11.25%		31.41%		9.95%		14.09%		13.72%	
International Equity Fund	3.13%	86	12.32%	59	(0.91%)	85	5.40%	85	5.70%	68
International Benchmark (1)	4.33%	72	13.20%	56	1.53%	70	5.71%	77	5.69%	68
Callan Non US Equity MFs	5.29%		13.33%		3.34%		6.95%		6.50%	
Small/Mid Cap Equity Fund	5.17%	87	16.54%	69	3.54%	48	9.49%	56	-	
Russell 2500 Index	6.92%	67	21.43%	51	2.97%	54	9.90%	51	9.45%	51
Callan SMID Broad MFs	7.60%		21.45%		3.27%		10.02%		9.56%	

(1) As of 9/30/21, International Benchmark consists of MSCI ACWI ex-US IMI, previously consisted of MSCI ACWI ex-US.



## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last 10 Years		Last 15 Years		Since Inception
<b>Tier 2: Passive (Net of Fee)</b>					
Fixed Income Passive	1.50%	86	-		1.83% (10/10)
Blmbg Aggregate	1.54%	79	2.62%	92	1.91% (10/10)
Callan Core Bond MFs	1.73%		3.29%		-
Treasury Inflation Protected Securities	-		-		2.92% (7/18)
Blmbg US TIPS 1-10 Yr	2.23%	25	2.81%	71	2.94% (7/18)
Callan TIPS MFs	2.06%		2.97%		-
Large Cap Passive	12.92%	27	15.56%	23	15.56% (4/09)
S&P 500 Index	12.96%	26	15.63%	22	15.63% (4/09)
Callan Large Cap Core MFs	11.87%		14.49%		-
International Passive	4.29%	60	7.88%	73	7.88% (4/09)
International Benchmark (1)	4.13%	64	7.79%	76	7.79% (4/09)
Callan Non US Equity MFs	4.65%		8.47%		-
SMID Cap Passive	8.79%	39	14.02%	23	14.02% (4/09)
Russell 2500 Index	8.84%	38	14.08%	23	14.08% (4/09)
Callan SMID Core MFs	8.40%		13.37%		-
Inflation Responsive Fund	2.75%	63	-		2.20% (9/11)
Inflation Responsive Benchmark	1.62%	89	3.56%		1.02% (9/11)
Callan Real Assets MFs	3.11%		-		-
<b>Tier 2: Active (Net of Fee)</b>					
<b>Stable Value Fund</b>	<b>2.15%</b>	<b>7</b>	<b>-</b>		<b>2.45%</b> (7/09)
3 Yr US Treas Rolling	1.80%	25	1.46%	86	1.46% (7/09)
T-Bill + 1.5%	2.88%	1	2.46%	6	2.47% (7/09)
Callan Stable Value CT	1.65%		1.75%		-
<b>Fixed Income Fund</b>	<b>2.26%</b>	<b>27</b>	<b>3.44%</b>	<b>75</b>	<b>3.44%</b> (4/09)
Blmbg Aggregate	1.54%	91	2.62%	98	2.62% (4/09)
Callan Core Plus MFs	2.00%		3.88%		-
<b>Large Cap Core Equity Fund</b>	<b>-</b>		<b>-</b>		<b>13.47%</b> (10/17)
Russell 1000 Index	12.68%	45	15.62%	42	13.69% (10/17)
Callan Lg Cap Broad MF	12.12%		15.01%		-
<b>International Equity Fund</b>	<b>4.58%</b>	<b>51</b>	<b>8.27%</b>	<b>61</b>	<b>8.27%</b> (4/09)
International Benchmark (1)	4.13%	64	7.79%	76	7.79% (4/09)
Callan Non US Equity MFs	4.65%		8.47%		-
<b>Small/Mid Cap Equity Fund</b>	<b>-</b>		<b>-</b>		<b>8.58%</b> (10/17)
Russell 2500 Index	8.84%	45	14.08%	47	9.07% (10/17)
Callan SMID Broad MFs	8.64%		14.03%		-

(1) As of 9/30/21, International Benchmark consists of MSCI ACWI ex-US IMI, previously consisted of MSCI ACWI ex-US.

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Last 7 Years	
Tier 2: Active (Net of Fee)										
Stable Value Fund	0.73%	11	2.85%	14	2.19%	9	2.29%	4	2.27%	1
3 Yr US Treas Rolling	1.05%	2	4.36%	1	2.96%	1	2.11%	14	2.14%	12
T-Bill + 1.5%	1.65%	1	6.74%	1	4.08%	1	3.52%	1	3.40%	1
Callan Stable Value CT	0.59%		2.38%		1.76%		1.79%		1.77%	
Fixed Income Fund	(0.34%)	63	3.30%	39	(2.04%)	50	1.11%	42	1.84%	26
Blmbg Aggregate	(0.78%)	90	1.70%	82	(2.46%)	69	0.36%	87	1.06%	83
Callan Core Plus MFs	(0.28%)		2.87%		(2.04%)		0.91%		1.56%	
TCW Core Plus	(1.01%)	95	1.75%	82	(2.77%)	86	0.74%	64	1.40%	62
Blmbg Aggregate	(0.78%)	90	1.70%	82	(2.46%)	69	0.36%	87	1.06%	83
Callan Core Plus MFs	(0.28%)		2.87%		(2.04%)		0.91%		1.56%	
Prudential Core Plus	0.32%	11	4.89%	4	(1.30%)	12	1.52%	17	2.30%	12
Blmbg Aggregate	(0.78%)	90	1.70%	82	(2.46%)	69	0.36%	87	1.06%	83
Callan Core Plus MFs	(0.28%)		2.87%		(2.04%)		0.91%		1.56%	
Large Cap Core Equity Fund	11.28%	50	32.11%	47	8.65%	66	14.00%	51	-	
Russell 1000 Index	10.30%	62	29.87%	54	10.45%	42	14.76%	43	13.85%	49
Callan Lg Cap Broad MF	11.25%		31.41%		9.95%		14.09%		13.72%	
Hotchkis & Wiley Large Cap Value	9.95%	40	25.34%	31	10.32%	35	13.23%	18	11.20%	18
Russell 1000 Value Index	8.99%	55	20.27%	63	8.11%	74	10.32%	69	9.16%	72
Callan Lg Cap Value MF	9.55%		21.90%		9.42%		11.35%		10.04%	
Macquarie Large Cap Value	8.88%	57	17.13%	83	7.31%	88	8.46%	96	8.64%	83
Russell 1000 Value Index	8.99%	55	20.27%	63	8.11%	74	10.32%	69	9.16%	72
Callan Lg Cap Value MF	9.55%		21.90%		9.42%		11.35%		10.04%	
Sands Capital Large Cap Growth	15.00%	17	48.43%	6	(1.12%)	99	12.26%	97	15.64%	65
Russell 1000 Growth Index	11.41%	71	39.00%	59	12.50%	3	18.52%	8	18.06%	13
Callan Large Cap Grwth MF	12.81%		40.21%		9.64%		15.89%		16.20%	
Loomis SaylesLarge Cap Growth	12.47%	52	40.63%	48	12.86%	3	17.54%	14	17.73%	21
Russell 1000 Growth Index	11.41%	71	39.00%	59	12.50%	3	18.52%	8	18.06%	13
Callan Large Cap Grwth MF	12.81%		40.21%		9.64%		15.89%		16.20%	
BlackRock Russell 1000 Index	10.29%	72	29.88%	55	10.45%	66	14.77%	48	-	
Russell 1000 Index	10.30%	72	29.87%	55	10.45%	66	14.76%	48	13.85%	35
Callan Large Cap Core MFs	11.60%		31.10%		11.77%		14.50%		13.32%	

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last 10 Years		Last 15 Years		Since Inception
<b>Tier 2: Active (Net of Fee)</b>					
<b>Stable Value Fund</b>	<b>2.15%</b>	<b>7</b>	<b>-</b>		<b>2.45%</b> <sup>(7/09)</sup>
3 Yr US Treas Rolling	1.80%	25	1.46%	86	1.46% <sup>(7/09)</sup>
T-Bill + 1.5%	2.88%	1	2.46%	6	2.47% <sup>(7/09)</sup>
Callan Stable Value CT	1.65%		1.75%		-
<b>Fixed Income Fund</b>	<b>2.26%</b>	<b>27</b>	<b>3.44%</b>	<b>75</b>	<b>3.44%</b> <sup>(4/09)</sup>
Blmbg Aggregate	1.54%	91	2.62%	98	2.62% <sup>(4/09)</sup>
Callan Core Plus MFs	2.00%		3.88%		-
TCW Core Plus	-		-		1.46% <sup>(1/17)</sup>
Blmbg Aggregate	1.54%	91	2.62%	98	1.14% <sup>(1/17)</sup>
Callan Core Plus MFs	2.00%		3.88%		-
Prudential Core Plus	-		-		2.56% <sup>(1/15)</sup>
Blmbg Aggregate	1.54%	91	2.62%	98	1.24% <sup>(1/15)</sup>
Callan Core Plus MFs	2.00%		3.88%		-
<b>Large Cap Core Equity Fund</b>	<b>-</b>		<b>-</b>		<b>13.47%</b> <sup>(10/17)</sup>
Russell 1000 Index	12.68%	45	15.62%	42	13.69% <sup>(10/17)</sup>
Callan Lg Cap Broad MF	12.12%		15.01%		-
Hotchkis & Wiley Large Cap Value	10.28%	21	15.29%	7	15.29% <sup>(4/09)</sup>
Russell 1000 Value Index	9.01%	61	13.10%	45	13.10% <sup>(4/09)</sup>
Callan Lg Cap Value MF	9.19%		12.90%		-
Macquarie Large Cap Value	-		-		8.33% <sup>(6/15)</sup>
Russell 1000 Value Index	9.01%	61	13.10%	45	8.89% <sup>(6/15)</sup>
Callan Lg Cap Value MF	9.19%		12.90%		-
Sands Capital Large Cap Growth	12.56%	87	18.23%	5	18.23% <sup>(4/09)</sup>
Russell 1000 Growth Index	15.98%	7	17.85%	6	17.85% <sup>(4/09)</sup>
Callan Large Cap Grwth MF	14.38%		16.34%		-
Loomis Sayles Large Cap Growth	-		-		16.57% <sup>(8/14)</sup>
Russell 1000 Growth Index	15.98%	7	17.85%	6	16.16% <sup>(8/14)</sup>
Callan Large Cap Grwth MF	14.38%		16.34%		-
BlackRock Russell 1000 Index	-		-		13.46% <sup>(11/17)</sup>
Russell 1000 Index	12.68%	32	15.62%	22	13.48% <sup>(11/17)</sup>
Callan Large Cap Core MFs	11.87%		14.49%		-

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Last 7 Years	
Tier 2: Active (Net of Fee)										
International Equity Fund	3.13%	86	12.32%	59	(0.91%)	85	5.40%	85	5.70%	68
International Benchmark (1)	4.33%	72	13.20%	56	1.53%	70	5.71%	77	5.69%	68
Callan Non US Equity MFs	5.29%		13.33%		3.34%		6.95%		6.50%	
Mondrian ACWI ex-US Value	2.53%	88	13.49%	48	3.59%	47	5.52%	83	5.35%	73
MSCI ACWI ex US	4.69%	64	13.26%	55	1.94%	69	5.97%	73	5.88%	61
MSCI ACWI ex US Value	3.40%	85	15.34%	30	4.58%	37	5.36%	85	4.83%	80
Callan Non US Equity MFs	5.29%		13.33%		3.34%		6.95%		6.50%	
Baillie Gifford ACWI ex-US Growth	3.51%	85	9.79%	79	(4.21%)	94	5.77%	76	6.56%	46
MSCI ACWI ex US	4.69%	64	13.26%	55	1.94%	69	5.97%	73	5.88%	61
MSCI ACWI ex US Growth	5.91%	36	11.22%	68	(0.76%)	84	6.24%	69	6.69%	45
Callan Non US Equity MFs	5.29%		13.33%		3.34%		6.95%		6.50%	
Acadian	5.78%	18	19.68%	7	-		-		-	
MSCI ACWI ex US Small Cap	2.11%	66	12.80%	39	0.38%	43	6.24%	47	5.74%	46
Callan Intl Small Cap MFs	3.16%		11.34%		(0.39%)		6.07%		5.64%	
WCM	2.09%	66	15.07%	22	-		-		-	
MSCI ACWI ex US Small Cap	2.11%	66	12.80%	39	0.38%	43	6.24%	47	5.74%	46
Callan Intl Small Cap MFs	3.16%		11.34%		(0.39%)		6.07%		5.64%	
Small/Mid Cap Equity Fund	5.17%	87	16.54%	69	3.54%	48	9.49%	56	-	
Russell 2500 Index	6.92%	67	21.43%	51	2.97%	54	9.90%	51	9.45%	51
Callan SMID Broad MFs	7.60%		21.45%		3.27%		10.02%		9.56%	
Earnest Partners Small/Mid Cap	3.61%	95	13.22%	98	5.00%	51	-		-	
Russell 2500 Index	6.92%	74	21.43%	43	2.97%	70	9.90%	60	9.45%	34
Callan SMID Core MFs	7.91%		20.20%		5.32%		10.25%		8.58%	
Brown Advisory Small/Mid Cap Growth	5.43%	81	13.83%	82	0.42%	41	8.86%	52	10.62%	63
Russell 2500 Growth Index	8.51%	43	21.12%	61	(0.81%)	62	9.39%	49	10.57%	65
Callan SMID Growth MFs	7.80%		21.88%		(0.21%)		9.29%		10.93%	
BlackRock Russell 2500 Index	6.91%	74	21.63%	42	2.85%	71	10.07%	53	-	
Russell 2500 Index	6.92%	74	21.43%	43	2.97%	70	9.90%	60	9.45%	34
Callan SMID Core MFs	7.91%		20.20%		5.32%		10.25%		8.58%	

(1) As of 9/30/21, International Benchmark consists of MSCI ACWI ex-US IMI, previously consisted of MSCI ACWI ex-US.

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last 10 Years		Last 15 Years		Since Inception
<b>Tier 2: Active (Net of Fee)</b>					
<b>International Equity Fund</b>	<b>4.58%</b>	<b>51</b>	<b>8.27%</b>	<b>61</b>	<b>8.27%</b> <sup>(4/09)</sup>
International Benchmark	4.13%	64	7.79%	76	7.79% <sup>(4/09)</sup>
Callan Non US Equity MFs	4.65%		8.47%		-
Mondrian ACWI ex-US Value	4.02%	66	7.28%	88	7.28% <sup>(4/09)</sup>
MSCI ACWI ex US	4.25%	61	7.88%	73	7.88% <sup>(4/09)</sup>
MSCI ACWI ex US Value	3.20%	89	7.24%	88	7.24% <sup>(4/09)</sup>
Callan Non US Equity MFs	4.65%		8.47%		-
Baillie Gifford ACWI ex-US Growth	5.61%	25	9.81%	13	9.81% <sup>(4/09)</sup>
MSCI ACWI ex US	4.25%	61	7.88%	73	7.88% <sup>(4/09)</sup>
MSCI ACWI ex US Growth	5.12%	33	8.38%	56	8.38% <sup>(4/09)</sup>
Callan Non US Equity MFs	4.65%		8.47%		-
Acadian	-		-		3.01% <sup>(10/21)</sup>
MSCI ACWI ex US Small Cap	4.74%	49	9.96%	63	(1.99%) <sup>(10/21)</sup>
Callan Intl Small Cap MFs	4.72%		10.55%		-
WCM	-		-		(11.55%) <sup>(10/21)</sup>
MSCI ACWI ex US Small Cap	4.74%	49	9.96%	63	(1.99%) <sup>(10/21)</sup>
Callan Intl Small Cap MFs	4.72%		10.55%		-
<b>Small/Mid Cap Equity Fund</b>	<b>-</b>		<b>-</b>		<b>8.58%</b> <sup>(10/17)</sup>
Russell 2500 Index	8.84%	45	14.08%	47	9.07% <sup>(10/17)</sup>
Callan SMID Broad MFs	8.64%		14.03%		-
Earnest Partners Small/Mid Cap	-		-		5.00% <sup>(4/21)</sup>
Russell 2500 Index	8.84%	38	14.08%	23	2.97% <sup>(4/21)</sup>
Callan SMID Core MFs	8.40%		13.37%		-
Brown Advisory Small/Mid Cap Growth	10.02%	37	14.72%	39	14.72% <sup>(4/09)</sup>
Russell 2500 Growth Index	9.56%	53	14.73%	39	14.73% <sup>(4/09)</sup>
Callan SMID Growth MFs	9.60%		14.43%		-
BlackRock Russell 2500 Index	-		-		9.04% <sup>(11/17)</sup>
Russell 2500 Index	8.84%	38	14.08%	23	8.94% <sup>(11/17)</sup>
Callan SMID Core MFs	8.40%		13.37%		-

# The North Carolina Supplemental Retirement Plans

## Fee Matrix

Funds and Sub-Advisors	Assets*	Inv. Mgmt. Fee	Custodial Expenses <sup>1</sup>	NC Budget <sup>2</sup>	Total Estimated Expense (%)	Total Estimated Annual Expenses (\$) <sup>3</sup>	Callan Median Expense <sup>4</sup>	Difference
<b>North Carolina Stable Value Fund</b>	<b>\$2,318,643,987</b>	<b>0.2604%</b>	<b>0.0062%</b>	<b>0.0000%</b>	<b>0.27%</b>	<b>\$6,181,505</b>	<b>0.60%</b>	<b>-0.33%</b>
Galliard	\$0	0.2604%	0.0000%			\$0	0.27%	-0.01%
<b>North Carolina Fixed Income Passive Fund</b>	<b>\$92,845,092</b>	<b>0.0200%</b>	<b>0.0147%</b>	<b>0.0000%</b>	<b>0.03%</b>	<b>\$32,217</b>	<b>0.06%</b>	<b>-0.03%</b>
Blackrock	\$92,845,092	0.0200%	0.0100%			\$18,569	0.04%	-0.02%
<b>North Carolina Fixed Income Fund</b>	<b>\$2,286,683,722</b>	<b>0.1226%</b>	<b>0.0087%</b>	<b>0.0000%</b>	<b>0.13%</b>	<b>\$3,002,416</b>	<b>0.40%</b>	<b>-0.27%</b>
50% TCW	\$1,136,912,713	0.1352%	0.0000%			\$1,537,106	0.21%	-0.07%
50% Prudential	\$1,149,771,015	0.1100%	0.0100%			\$1,264,748	0.21%	-0.10%
<b>North Carolina Inflation Sensitive Fund</b>	<b>\$603,297,831</b>	<b>0.0900%</b>	<b>0.0112%</b>	<b>0.0000%</b>	<b>0.10%</b>	<b>\$610,537</b>	<b>0.40%</b>	<b>-0.30%</b>
Blackrock	\$603,297,831	0.0900%	0.0100%			\$542,968	0.11%	-0.02%
<b>North Carolina Large Cap Passive Fund</b>	<b>\$4,327,913,625</b>	<b>0.0050%</b>	<b>0.0008%</b>	<b>0.0000%</b>	<b>0.01%</b>	<b>\$251,019</b>	<b>0.16%</b>	<b>-0.15%</b>
Blackrock	\$4,327,913,625	0.0050%	0.0100%			\$216,396	0.02%	-0.02%
<b>North Carolina Large Cap Core Fund</b>	<b>\$2,457,784,508</b>	<b>0.2868%</b>	<b>0.0053%</b>	<b>0.0000%</b>	<b>0.29%</b>	<b>\$7,179,189</b>	<b>0.59%</b>	<b>-0.30%</b>
18.75% Hotchkis & Wiley	\$470,367,365	0.4000%	0.0000%			\$1,881,469	0.38%	0.02%
18.75% MacquarieLarge Cap Value	\$457,026,235	0.2602%	0.0000%			\$1,189,182	0.38%	-0.12%
18.75% Sands Capital Management	\$495,761,585	0.4500%	0.0000%			\$2,230,927	0.42%	0.03%
18.75% Loomis Sayles	\$476,559,260	0.3609%	0.0000%			\$1,719,902	0.42%	-0.06%
25% BlackRock Advisors Inc., Large Cap Index*	\$558,070,079	0.0050%	0.0100%			\$27,904	0.02%	-0.02%
<b>North Carolina SMID Cap Passive Fund</b>	<b>\$421,862,318</b>	<b>0.0050%</b>	<b>0.0151%</b>	<b>0.0000%</b>	<b>0.02%</b>	<b>\$84,794</b>	<b>0.16%</b>	<b>-0.14%</b>
Blackrock	\$421,862,318	0.0050%	0.0100%			\$21,093	0.03%	-0.03%
<b>North Carolina SMID Cap Core Fund</b>	<b>\$1,214,075,767</b>	<b>0.2928%</b>	<b>0.0132%</b>	<b>0.0000%</b>	<b>0.31%</b>	<b>\$3,715,072</b>	<b>0.83%</b>	<b>-0.52%</b>
30% Earnest Partners	\$347,681,301	0.4700%	0.0000%			\$1,634,102	0.67%	-0.20%
30% Alliance Bernstein	\$360,096,603	0.1667%	0.0000%			\$600,281	0.65%	-0.48%
30% Brown Advisory	\$353,280,617	0.3716%	0.0000%			\$1,312,791	0.70%	-0.33%
10% BlackRock Advisors Inc., SMID Index*	\$153,016,408	0.0050%	0.0100%			\$7,651	0.04%	-0.04%
<b>North Carolina International Passive Fund</b>	<b>\$116,233,753</b>	<b>0.0210%</b>	<b>0.0240%</b>	<b>0.0000%</b>	<b>0.05%</b>	<b>\$52,305</b>	<b>0.06%</b>	<b>-0.02%</b>
Blackrock	\$116,233,753	0.0210%	0.0200%			\$24,409	0.06%	-0.04%
<b>North Carolina International Equity</b>	<b>\$2,625,730,598</b>	<b>0.3730%</b>	<b>0.0309%</b>	<b>0.0000%</b>	<b>0.40%</b>	<b>\$10,605,326</b>	<b>0.80%</b>	<b>-0.40%</b>
43% Baillie Gifford Growth	\$1,139,908,765	0.2661%	0.0000%			\$3,033,297	0.51%	-0.24%
43% Mondrian Investment Partners Value	\$1,111,053,422	0.3845%	0.0000%			\$4,272,000	0.50%	-0.12%
7% Acadian	\$187,846,537	0.6299%	0.0000%			\$1,183,245	0.83%	-0.20%
7% WCM	\$186,647,386	0.7000%	0.0000%			\$1,306,532	0.84%	-0.14%
<b>North Carolina TIPS Fund</b>	<b>\$341,811,163</b>	<b>0.0250%</b>	<b>0.0038%</b>	<b>0.0000%</b>	<b>0.03%</b>	<b>\$98,442</b>	<b>0.40%</b>	<b>-0.37%</b>
Blackrock	\$341,811,163	0.0250%	0.0000%			\$85,453	0.15%	-0.13%
<b>Total</b>	<b>\$16,806,882,365</b>	<b>0.1286%</b>	<b>0.0122%</b>	<b>0.0000%</b>	<b>0.19%</b>	<b>\$31,812,822</b>	<b>0.22%</b>	

\*Individual Manager Assets do not sum to Fund asset class totals due to residual/closing accounts.

<sup>1</sup> Based on annualized monthly fee accruals as of 3/31/2024

<sup>2</sup>The cost of the budget associated with the management of the Supplemental Retirement Plans, borne by each investment option in proportion to the pro-rate share of the applicable assets in that fund.

<sup>3</sup> Manager fee estimates reflect investment management fee only, does not include \$31 per participant record-keeping fee.

<sup>4</sup>The median expenses for White Label composites are compared against their respective Callan Mutual Fund Institutional Universe, while the individual managers are compared to peers with the same vehicle and strategy assets. The total fund median represents asset-weighted investment management fees for plans greater than \$1 billion in the Callan DC index.

# The North Carolina Supplemental Retirement Plans

## Active Management Scorecard – Rolling 3-Years

North Carolina Supplemental Retirement Plans Active Management Scorecard - Rolling 3 Years									
	Large Cap Equity								
	3 Years to 3/31/2024		3 Years to 12/31/2023		3 Years to 09/30/2023		3 Years to 06/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Hotchkis & Wiley Large Cap Value									
Macquarie Large Cap Value									
Sands Capital Large Cap Growth									
Loomis Large Cap Growth									
	Small/Mid Cap								
	3 Years to 3/31/2024		3 Years to 12/31/2023		3 Years to 09/30/2023		3 Years to 06/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
EARNEST Partners SMID Cap Core*									
Alliance Bernstein SMID Value*									
Brown Advisory									
	International Equity								
	3 Years to 3/31/2024		3 Years to 12/31/2023		3 Years to 09/30/2023		3 Years to 06/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Baillie Gifford ACWI ex US Growth									
Mondrian ACWI ex US Value									
Acadian*									
WCM*									
	Fixed Income								
	3 Years to 3/31/2024		3 Years to 12/31/2023		3 Years to 09/30/2023		3 Years to 06/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
TCW Core Plus*									
Prudential Core Plus									
	Stable Value								
	3 Years to 3/31/2024		3 Years to 12/31/2023		3 Years to 09/30/2023		3 Years to 06/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Stable Value									
*Composite returns used to populate history; gross returns compared to index and separate account peer groups									

# The North Carolina Supplemental Retirement Plans

## Active Management Scorecard – Rolling 5-Years

North Carolina Supplemental Retirement Plans Active Management Scorecard - Rolling 5 Years									
	Large Cap Equity								
	5 Years to 3/31/2024		5 Years to 12/31/2023		5 Years to 9/30/2023		5 Years to 6/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Hotchkis & Wiley Large Cap Value									
Macquarie Large Cap Value*									
Sands Capital Large Cap Growth									
Loomis Large Cap Growth*									
	Small/Mid Cap								
	5 Years to 3/31/2024		5 Years to 12/31/2023		5 Years to 9/30/2023		5 Years to 6/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
EARNEST Partners SMID Cap Core*									
Alliance Bernstein SMID Value*									
Brown Advisory									
	International Equity								
	5 Years to 3/31/2024		5 Years to 12/31/2023		5 Years to 9/30/2023		5 Years to 6/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Baillie Gifford ACWI ex US Growth									
Mondrian ACWI ex US Value									
Acadian*									
WCM*									
	Fixed Income								
	5 Years to 3/31/2024		5 Years to 12/31/2023		5 Years to 9/30/2023		5 Years to 6/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
TCW Core Plus*									
Prudential Core Plus									
	Stable Value								
	5 Years to 3/31/2024		5 Years to 12/31/2023		5 Years to 9/30/2023		5 Years to 6/30/2023		5 Year Risk
	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	Above Benchmark	Above Peer Median	
Stable Value									
*Composite returns used to populate history; gross returns compared to index and separate account peer groups									



# The North Carolina Supplemental Retirement Plans Quarterly Manager Review

## Callan Manager Assessment

	Manager Overall	Product People	Philosophy/ Process	Short Term Performance	Long Term Performance	Product Dynamics	Product Overall	STATUS	NOTES
<b>LARGE CAP VALUE EQUITY</b>									
Hotchkis & Wiley Large Cap Value	●	●	●	●	●	●	●	Within Expectations	• Trailing five- and seven-year results rank near top quartile of peers.
Macquarie Large Cap Value	●	●	●	●	●	●	●	Cautionary (added to NCSRP watchlist 1Q24)	<ul style="list-style-type: none"> <li>• MIM appointed Marty Wolin as Chief Compliance Officer (CCO) in January, 2024. Brian Murray, prior CCO, remains on a leave of absence and continues to be an employee of the firm.</li> <li>• Bob Vogel, long time portfolio manager, retired from the firm in July 2023.</li> <li>• Former PM Ty Nutt retired in July 2019 and transitioned his lead role to Nik Lalvani. Macquarie promoted Associate PM Erin Ksenak to PM in December 2020 and analyst Vincent Celentano to Associate PM. Continue to monitor the team, process, and performance subsequent to transitions.</li> <li>• Very difficult five-year performance results. Recent calendar year 2023 underperformance impacting long-term results; client and asset stability has declined over the past three years.</li> <li>• Strategy lost two accounts for \$234 million during Q1 2024.</li> </ul>
<b>LARGE CAP CORE EQUITY</b>									
BlackRock Russell 1000 Index	●	●	●	●	●	●	●	Within Expectations	• Head of iShares and Index Investments Salim Ramji departed the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level.
<b>LARGE CAP GROWTH EQUITY</b>									
Loomis Sayles Large Cap Growth	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Loomis offered a voluntary separation program in 4Q22 to eligible personnel at the firm, excluding portfolio managers. A number of fixed income analysts within the central research team accepted the buyout.</li> <li>• Strategy had nearly \$5B in outflows during 2022 and over \$1B in outflows in 2023; however, most outflow activity has been attributed to rebalancing and is a small percentage of total strategy AUM. Strategy remains capacity constrained.</li> <li>• Trailing 5/7 year performance continue to slightly lag the benchmark, though the performance dispersion has continued to narrow given strong 2022, 2023 and YTD 2024 relative performance.</li> </ul>
Sands Capital Large Cap Growth	●	●	●	●	●	●	●	Cautionary	<ul style="list-style-type: none"> <li>• One of the four PMs on the strategy, Mike Sramek, elected to not to not return from a medical leave that was initiated in July 2022 and officially retired from the firm in December 2022. His tenure at the firm and impact on both Select and Focus Growth strategies necessitates continued due diligence around impact of his absence on the portfolio management approach going forward.</li> <li>• Calendar year 2023 performance outpaced that of the Russell 1000 Growth Index by 10%, buoyed by strong performance in three out of four quarters during the year. Outperformance continued in 1Q24 as the strategy generated over 300 basis points of excess return versus the benchmark. However, 3/5/7 year trailing performance, particularly the 3-year number, remain meaningfully behind the benchmark due to performance in 2021 and 2022.</li> <li>• Stability of asset base continues to be monitored as the strategy has continued to experience outflows. Outflows in 2023 totaled nearly \$1 billion, particularly within the strategy's endowment and foundation client base, and YTD 2024 outflows have already totaled over \$340 million.</li> </ul>

Product Dynamics: reflects noteworthy highlights of the portfolio and strategy including assets and portfolio characteristics.

Short-Term Performance: reflects periods of three years and under with a focus on whether or not the manager is performing within expectations.

Long-Term Performance: reflects periods of five years and longer with a focus on whether or not the manager is performing within expectations.

# The North Carolina Supplemental Retirement Plans Quarterly Manager Review

## Callan Manager Assessment

	Manager Overall	Product People	Philosophy / Process	Short Term Performance	Long Term Performance	Product Dynamics	Product Overall	STATUS	NOTES
<b>SMALL CAP GROWTH EQUITY</b>									
Brown Advisory Small/Mid Cap Growth	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Strategy AUM near high watermark (mitigated by slowing net flows and market volatility); total securities near all-time high (but within expected range).</li> <li>• Strategy one-year returns lagged index and ranked in bottom quartile of peers.</li> </ul>
<b>SMALL/MID CAP BROAD</b>									
BlackRock Russell 2500 Index	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Head of iShares and Index Investments Salim Ramji will be departing the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level.</li> </ul>
<b>SMALL/MID CAP VALUE</b>									
AB SMID Value	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• AB experienced some executive turnover in recent periods. In June 2022, CFO, Ali Dibadj, departed for the CEO role at Janus Henderson. In June 2023, COO/CFO, Kate Burke, accepted the role of President at Allspring. New appointments have been designated to each role (both permanent and interim). Callan will continue to monitor executive team stability in the interim.</li> <li>• Lead portfolio manager has been James McGregor since 2009. He is supported by co-PM Erik Turenchalk, four dedicated analysts, and a pooled analyst team at AB.</li> <li>• Strategy assets are nearly \$7 billion and may be capacity constrained.</li> </ul>
<b>SMALL/MID CAP CORE EQUITY</b>									
Earnest Partners Small/Mid Cap	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Firm founder Paul Viera owns majority of firm.</li> <li>• Strategy market capitalization consistently larger than benchmark and peers.</li> <li>• One year returns lag index and rank below peers.</li> </ul>
BlackRock SMID Cap Passive	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Head of iShares and Index Investments Salim Ramji will be departing the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level..</li> </ul>
<b>ACWI XUS CORE</b>									
BlackRock International Passive	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• Head of iShares and Index Investments Salim Ramji will be departing the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level..</li> </ul>
<b>ACWI XUS VALUE</b>									
Mondrian ACWI ex-US Value	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• In the last few years, there have been a number of investment professional shifts on the team, but all were well telegraphed, and resources remain robust.</li> <li>• Performance is consistent with the defensive value approach.</li> </ul>
<b>ACWI XUS GROWTH</b>									
Baillie Gifford ACWI ex-US Growth	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>• The retirement of Portfolio Manager Angus Franklin in Jun 2022, and the portfolio manager rotation of Toby Ross with Steve Vaughan in September 2022 is consistent with other Baillie Gifford PM rotations and was executed well.</li> <li>• Performance has been a bit challenged recently but not outside of expectations for the strategy's growth profile.</li> </ul>

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# The North Carolina Supplemental Retirement Plans Quarterly Manager Review

## Callan Manager Assessment

	Manager Overall	Product People	Philosophy/ Process	Short Term Performance	Long Term Performance	Product Dynamics	Product Overall	STATUS	NOTES
<b>ACWI XUS SMALL CORE</b>									
Acadian	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>Stable organization despite parent company BrightSphere who is expected sell its affiliate Acadian; however, the terms of the firm and economic structure are expected to be intact similar to BHMS transaction in July 2020 and TS&amp;W transaction in May 2021.</li> <li>The appointment of Fanesca Young as lead portfolio manager of Equities and departure of Portfolio Manager Kurt Livermore in 2Q23 is expected to have little overall impact given the systematic nature of the process and depth of the investment team.</li> <li>The CEO change was not anticipated but appears to be a positive for the firm's culture and future prospects beyond BrightSphere.</li> <li>The staffing reduction should not impact Acadian's equity strategies. The reduction was part of a refocusing of future organizational priorities.</li> </ul>
<b>ACWI XUS SMALL GROWTH</b>									
WCM	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>Co-CEO Kurt Winrich retired, effective 12/31/2021. Winrich continues to serve as chairman of the Board.</li> <li>In June 2023, WCM acquired Martin Capital, based in Eugene, Oregon, that manages dividend growth strategies and has \$300 million in assets under management. The team will continue to operate independently from other teams under the WCM umbrella. WCM continues to opportunistically bring in investment teams and acquire stakes in firms. Each team and firm brought under the WCM umbrella retains investment autonomy.</li> <li>The strategy has limited capacity.</li> </ul>
<b>CORE BOND</b>									
BlackRock Fixed Income Passive	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>Head of iShares and Index Investments Salim Ramji departed the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level.</li> </ul>
<b>CORE PLUS BOND</b>									
Prudential Core Plus	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>In January 2023 it was announced that Head of Fixed Income Michael Lillard will be retiring effective April 2024; PGIM provided ample notice regarding his retirement.</li> <li>PGIM announced a slew of retirements in April 2024, most of which will take effect in early 2025. These include the retirement of Head of Credit Richard Greenwood.</li> </ul>
TCW Core Plus	●	●	●	●	●	●	●	Within Expectations (added to NCSRP watchlist 1Q24)	<ul style="list-style-type: none"> <li>Monitoring the CEO leadership transition which occurred at year-end 2022.</li> <li>Monitoring potential impacts to investment strategy consistency due to changes in senior leadership (departures of Generalists Tad Rivelle '21, Laird Landmann '23, Steve Kane '24, and securitized PM Harrison Choi '23), but the team remains deep and experienced, and we support the recent announcements as a part of a transition to a new generation of leadership.</li> <li>Short-term underperformance in 2Q23 was attributed to a combination of longer duration and yield curve positioning relative to the benchmark, an underweight in IG credit, and an overweight in MBS.</li> <li>Long-term performance remains consistent, although, as previously discussed, it carries less significance during this transition to a new generation of leadership.</li> </ul>

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# The North Carolina Supplemental Retirement Plans Quarterly Manager Review

## Callan Manager Assessment

	Manager Overall	Product People	Philosophy/ Process	Short Term Performance	Long Term Performance	Product Dynamics	Product Overall	<u>STATUS</u>	<u>NOTES</u>
<b>US TIPS</b>									
BlackRock Treasury Inflation Protected	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>Head of iShares and Index Investments Salim Ramji will be departing the firm in Q1 2024. Callan will monitor BlackRock's decision on Ramji's successor, however the index team remains deep at the portfolio management level.</li> </ul>
<b>STABLE VALUE</b>									
Galliard Stable Value	●	●	●	●	●	●	●	Within Expectations	<ul style="list-style-type: none"> <li>Continuing to monitor parent company's (Allspring) ownership change that occurred in November 2021. Wells was rebranded to Allspring Global Investments and Joseph Sullivan replaced Nico Marais as CEO.</li> <li>Assets have stabilized since late 2020. The Galliard Stable Return Fund's put queue peaked in 2020 and has since decreased to 2017 levels.</li> </ul>

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*Short-Term Performance:* reflects periods of three years and under with a focus on whether or not the manager is performing within expectations.

*Long-Term Performance:* reflects periods of five years and longer with a focus on whether or not the manager is performing within expectations.

**The North Carolina Supplemental Retirement Plans**  
**Investment Manager Performance Monitoring Summary Report**  
**March 31, 2024**

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	3 Year Return Consistency	5 Year Sharpe Ratio	5 Year Excess Rtn Ratio	5 Year Tracking Error	5 Year Risk
<b>Tier 2: Passive vs. Net of Fee Groups</b>									
<b>Fixed Income Passive (i)</b>									
Callan Core Bond MFs	-0.8 83	1.6 76	-2.5 60	0.3 91		-0.3 92	-0.2 93	0.1 100	6.4 83
Blmbg Aggregate	-0.8 88	1.7 75	-2.5 58	0.4 89		-0.3 91			6.5 76
<b>Treasury Inflation Protected (i)</b>									
Callan TIPS MFs	0.2 23	1.7 23	0.8 7	2.9 10		0.2 4	-0.1 17	0.3 97	4.4 95
Blmbg US TIPS 1-10 Yr	0.3 22	1.6 23	0.8 7	3.0 10		0.2 3			4.3 95
<b>Large Cap Passive (i)</b>									
Callan Large Cap Core MFs	10.6 67	29.9 55	11.5 54	15.0 43		0.7 40	-0.7 89	0.0 99	19.5 55
S&P 500 Index	10.6 67	29.9 55	11.5 54	15.0 43		0.7 40			19.5 55
<b>International Passive (i)</b>									
Callan Non US Equity MFs	4.4 70	12.9 58	1.6 70	5.9 75		0.2 72	0.2 58	0.9 99	20.2 84
International Benchmark	4.3 72	13.2 56	1.5 70	5.7 77		0.2 73			20.1 87
<b>SMID Cap Passive (i)</b>									
Callan SMID Core MFs	6.9 74	21.3 43	2.9 70	9.8 62		0.3 62	-1.1 95	0.1 100	25.5 40
Russell 2500 Index	6.9 74	21.4 43	3.0 70	9.9 60		0.3 61			25.5 40
<b>Inflation Responsive Fund (i)</b>									
Callan Real Assets MFs	0.0 100	3.5 87	1.7 80	3.1 96		0.1 93	1.5 1	0.1 98	12.0 66
Inflation Responsive Benchmark	-0.1 100	3.3 98	1.5 81	2.9 97		0.1 96			12.0 66
<b>Tier 2: Active vs. Net of Fee Groups</b>									
<b>Stable Value Fund</b>									
Callan Stable Value CT	0.7 11	2.9 14	2.2 9	2.3 4		1.2 5	-1.4 5	0.9 51	0.2 35
T-Bill + 1.5%	1.7 1	6.7 1	4.1 1	3.5 1		1.5 4			1.0 1
<b>Fixed Income Fund</b>									
Callan Core Plus MFs	-0.3 63	3.3 39	-2.0 50	1.1 42		-0.1 39	0.3 32	2.3 62	7.3 36
Blmbg Aggregate	-0.8 90	1.7 82	-2.5 69	0.4 87		-0.3 96			6.5 90
<b>TCW Core Plus</b>									
Callan Core Plus MFs	-1.0 95	1.7 82	-2.8 86	0.7 64		-0.2 67	0.4 28	1.1 96	7.0 63
Blmbg Aggregate	-0.8 90	1.7 82	-2.5 69	0.4 87		-0.3 96			6.5 90

Returns:  
■ above median  
■ third quartile  
■ fourth quartile

Return Consistency:  
■ above median  
■ third quartile  
■ fourth quartile

Sharpe Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Excess Return Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Tracking Error:  
■ below median  
■ second quartile  
■ first quartile

Risk:  
■ below median  
■ second quartile  
■ first quartile

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**The North Carolina Supplemental Retirement Plans**  
**Investment Manager Performance Monitoring Summary Report**  
**March 31, 2024**

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	3 Year Return Consistency	5 Year Sharpe Ratio	5 Year Excess Rtn Ratio	5 Year Tracking Error	5 Year Risk
<b>Prudential Core Plus</b> Callan Core Plus MFs Blmbg Aggregate	0.3 11 -0.8 90	4.9 4 1.7 82	-1.3 12 -2.5 69	1.5 17 0.4 87	<div></div> <div></div> <div></div>	-0.1 15 -0.3 96	0.3 35	3.7 25	7.9 14 6.5 90
<b>Large Cap Core Equity Fund</b> Callan Lg Cap Broad MF Russell 1000 Index	11.3 50 10.3 62	32.1 47 29.9 54	8.6 66 10.5 42	14.0 51 14.8 43	<div></div> <div></div> <div></div>	0.5 54 0.6 31	-0.2 61	3.7 82	21.9 41 20.1 62
<b>Hotchkis &amp; Wiley Large Cap Value</b> Callan Lg Cap Value MF Russell 1000 Value Index	10.0 40 9.0 55	25.3 31 20.3 63	10.3 35 8.1 74	13.2 18 10.3 69	<div></div> <div></div> <div></div>	0.4 70 0.4 70	0.3 39	9.0 10	26.9 5 19.8 61
<b>Macquarie Large Cap Value</b> Callan Lg Cap Value MF Russell 1000 Value Index	8.9 57 9.0 55	17.1 83 20.3 63	7.3 88 8.1 74	8.5 96 10.3 69	<div></div> <div></div> <div></div>	0.3 95 0.4 70	-0.5 96	3.7 64	19.5 71 19.8 61
<b>Sands Capital Large Cap Growth</b> Callan Large Cap Grwth MF Russell 1000 Growth Index	15.0 17 11.4 71	48.4 6 39.0 59	-1.1 99 12.5 3	12.3 97 18.5 8	<div></div> <div></div> <div></div>	0.3 99 0.7 8	-0.4 36	14.8 1	32.7 1 22.7 64
<b>Loomis Sayles Large Cap Growth</b> Callan Large Cap Grwth MF Russell 1000 Growth Index	12.5 52 11.4 71	40.6 48 39.0 59	12.9 3 12.5 3	17.5 14 18.5 8	<div></div> <div></div> <div></div>	0.7 13 0.7 8	-0.2 13	5.7 33	22.5 66 22.7 64
<b>BlackRock Russell 1000 Index (i)</b> Callan Large Cap Core MFs Russell 1000 Index	10.3 72 10.3 72	29.9 55 29.9 55	10.4 66 10.5 66	14.8 48 14.8 48	<div></div> <div></div> <div></div>	0.6 47 0.6 47	0.1 44	0.1 99	20.1 33 20.1 33
<b>International Equity Fund</b> Callan Non US Equity MFs International Benchmark	3.1 86 4.3 72	12.3 59 13.2 56	-0.9 85 1.5 70	5.4 85 5.7 77	<div></div> <div></div> <div></div>	0.2 83 0.2 73	-0.1 87	3.3 92	21.8 57 20.1 87
<b>Mondrian ACWI ex-US Value</b> Callan Non US Equity MFs MSCI ACWI ex US	2.5 88 4.7 64	13.5 48 13.3 55	3.6 47 1.9 69	5.5 83 6.0 73	<div></div> <div></div> <div></div>	0.2 76 0.2 71	-0.1 83	5.0 58	20.4 81 20.0 87
<b>Baillie Gifford ACWI ex-US Growth</b> Callan Non US Equity MFs MSCI ACWI ex US	3.5 85 4.7 64	9.8 79 13.3 55	-4.2 94 1.9 69	5.8 76 6.0 73	<div></div> <div></div> <div></div>	0.2 85 0.2 71	-0.0 76	8.6 15	24.8 15 20.0 87

Returns:  
 above median  
 third quartile  
 fourth quartile

Return Consistency:  
 above median  
 third quartile  
 fourth quartile

Sharpe Ratio:  
 above median  
 third quartile  
 fourth quartile

Excess Return Ratio:  
 above median  
 third quartile  
 fourth quartile

Tracking Error:  
 below median  
 second quartile  
 first quartile

Risk:  
 below median  
 second quartile  
 first quartile

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**The North Carolina Supplemental Retirement Plans**  
**Investment Manager Performance Monitoring Summary Report**  
**March 31, 2024**

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	3 Year Return Consistency	5 Year Sharpe Ratio	5 Year Excess Rtn Ratio	5 Year Tracking Error	5 Year Risk
<b>Acadian</b> Callan Intl Small Cap MFs MSCI ACWI ex US Small Cap	5.8 18 2.1 66	19.7 7 12.8 39	5.5 9 0.4 43	11.1 3 6.2 47	<div><div></div><div></div><div></div></div>	0.4 3 0.2 46	1.0 1	4.6 83	22.9 90 23.6 76
<b>WCM</b> Callan Intl Small Cap MFs MSCI ACWI ex US Small Cap	2.1 66 2.1 66	15.1 22 12.8 39	-4.3 78 0.4 43	11.3 3 6.2 47	<div><div></div><div></div><div></div></div>	0.3 5 0.2 46	0.4 10	14.0 6	31.6 5 23.6 76
<b>Small/Mid Cap Equity Fund</b> Callan SMID Broad MFs Russell 2500 Index	5.2 87 6.9 67	16.5 69 21.4 51	3.5 48 3.0 54	9.5 56 9.9 51	<div><div></div><div></div><div></div></div>	0.3 53 0.3 52	-0.2 76	2.3 100	24.6 68 25.5 55
<b>Earnest Partners Small/Mid Cap</b> Callan SMID Core MFs Russell 2500 Index	3.6 95 6.9 74	13.2 98 21.4 43	5.0 51 3.0 70	11.5 24 9.9 60	<div><div></div><div></div><div></div></div>	0.4 15 0.3 61	0.2 28	6.7 17	21.2 89 25.5 40
<b>Brown Advisory Small/Mid Cap Growth</b> Callan SMID Growth MFs Russell 2500 Growth Index	5.4 81 8.5 43	13.8 82 21.1 61	0.4 41 -0.8 62	8.9 52 9.4 49	<div><div></div><div></div><div></div></div>	0.3 48 0.3 48	-0.1 53	4.7 86	24.3 81 26.4 52
<b>BlackRock Russell 2500 Index (i)</b> Callan SMID Core MFs Russell 2500 Index	6.9 74 6.9 74	21.6 42 21.4 43	2.9 71 3.0 70	10.1 53 9.9 60	<div><div></div><div></div><div></div></div>	0.3 60 0.3 61	0.3 25	0.5 100	25.9 36 25.5 40

Returns:  

above median

third quartile

fourth quartile

Return Consistency:  

above median

third quartile

fourth quartile

Sharpe Ratio:  

above median

third quartile

fourth quartile

Excess Return Ratio:  

above median

third quartile

fourth quartile

Tracking Error:  

below median

second quartile

first quartile

Risk:  

below median

second quartile

first quartile

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**Investment Manager Performance Monitoring Summary Report**  
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Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	3 Year Return Consistency	5 Year Sharpe Ratio	5 Year Excess Rtn Ratio	5 Year Tracking Error	5 Year Risk
<b>Tier 2: Active vs. Gross of Fee Groups</b>									
<b>Stable Value Fund</b>									
<b>Galliard Stable Value</b>	0.7 39	2.9 32	2.3 38	2.4 32		1.8 32	-1.3 31	0.9 25	0.2 63
Callan Stable Value SA									
T-Bill + 1.5%	1.7 1	6.7 1	4.1 2	3.5 2		1.5 43			1.0 1
<b>Fixed Income Fund</b>									
<b>TCW Core Plus</b>	-1.0 98	1.9 80	-2.6 97	0.9 60		-0.2 50	0.5 54	1.1 54	7.0 11
Callan Core Bond FI									
Bimbg Aggregate	-0.8 94	1.7 86	-2.5 89	0.4 96		-0.3 96			6.5 79
<b>Prudential Core Plus</b>	0.3 1	4.9 1	-1.3 3	1.5 3		-0.1 3	0.3 78	3.7 1	7.9 2
Callan Core Bond FI									
Bimbg Aggregate	-0.8 94	1.7 86	-2.5 89	0.4 96		-0.3 96			6.5 79
<b>Large Cap Core Equity Fund</b>									
<b>Hotchkis &amp; Wiley Large Cap Value</b>	10.1 46	25.8 32	10.8 36	13.7 21		0.4 71	0.4 58	9.0 8	26.9 6
Callan Large Cap Value									
Russell 1000 Value Index	9.0 63	20.3 76	8.1 86	10.3 87		0.4 78			19.8 70
<b>Macquarie Large Cap Value</b>	8.9 63	17.4 91	7.6 93	8.8 96		0.3 94	-0.4 98	3.7 61	19.5 75
Callan Large Cap Value									
Russell 1000 Value Index	9.0 63	20.3 76	8.1 86	10.3 87		0.4 78			19.8 70
<b>Sands Capital Large Cap Growth</b>	15.1 17	49.1 4	-0.7 97	12.8 94		0.3 97	-0.4 42	14.8 4	32.7 3
Callan Large Cap Growth									
Russell 1000 Growth Index	11.4 68	39.0 54	12.5 18	18.5 10		0.7 18			22.7 57
<b>Loomis Sayles Large Cap Growth</b>	12.6 47	41.1 41	13.3 9	18.0 18		0.7 28	-0.1 15	5.7 35	22.5 59
Callan Large Cap Growth									
Russell 1000 Growth Index	11.4 68	39.0 54	12.5 18	18.5 10		0.7 18			22.7 57
<b>BlackRock Russell 1000 Index (i)</b>	10.3 74	29.9 72	10.5 75	14.8 60		0.6 59	0.1 54	0.1 100	20.1 28
Callan Large Cap Core									
Russell 1000 Index	10.3 74	29.9 72	10.5 75	14.8 60		0.6 59			20.1 29

Returns:  
■ above median  
■ third quartile  
■ fourth quartile

Return Consistency:  
■ above median  
■ third quartile  
■ fourth quartile

Sharpe Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Excess Return Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Tracking Error:  
■ below median  
■ second quartile  
■ first quartile

Risk:  
■ below median  
■ second quartile  
■ first quartile

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**Investment Manager Performance Monitoring Summary Report**  
**March 31, 2024**

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	3 Year Return Consistency	5 Year Sharpe Ratio	5 Year Excess Rtn Ratio	5 Year Tracking Error	5 Year Risk
<b>International Fund</b>									
<b>Mondrian ACWI ex-US Value</b> Callan NonUS Eq	2.6 88	13.9 58	4.0 48	5.9 88		0.2 82	-0.0 88	5.0 48	20.4 71
MSCI ACWI ex US	4.7 67	13.3 62	1.9 76	6.0 87		0.2 81			20.0 78
<b>Baillie Gifford ACWI ex-US Growth</b> Callan NonUS Eq	3.6 82	10.1 86	-4.0 96	6.0 86		0.2 89	0.0 85	8.6 11	24.8 9
MSCI ACWI ex US	4.7 67	13.3 62	1.9 76	6.0 87		0.2 81			20.0 78
<b>Acadian</b> Callan Intl Small Cap	5.8 34	19.7 8	5.5 9	11.1 6		0.4 6	1.0 3	4.6 74	22.9 85
MSCI ACWI ex US Small Cap	2.1 71	12.8 45	0.4 52	6.2 52		0.2 48			23.6 69
<b>WCM</b> Callan Intl Small Cap	2.1 71	15.1 33	-4.3 83	11.3 6		0.3 16	0.4 26	14.0 4	31.6 5
MSCI ACWI ex US Small Cap	2.1 71	12.8 45	0.4 52	6.2 52		0.2 48			23.6 69
<b>Small/Mid Cap Equity Fund</b>									
<b>Earnest Partners Small/Mid Cap</b> Callan Small/MidCap Core	3.7 91	13.7 83	5.5 58	12.6 24		0.5 15	0.4 32	6.6 32	21.3 88
Russell 2500 Index	6.9 66	21.4 53	3.0 83	9.9 80		0.3 75			25.5 43
<b>Brown Advisory Small/Mid Cap Growth</b> Callan Sm/MidCap Growth	5.5 74	14.3 69	0.8 38	9.3 57		0.3 54	-0.0 61	4.7 92	24.3 79
Russell 2500 Growth Index	8.5 41	21.1 34	-0.8 63	9.4 55		0.3 63			26.4 54
<b>BlackRock Russell 2500 Index (i)</b> Callan Small/MidCap Core	6.9 66	21.6 51	2.9 84	10.1 77		0.3 75	0.3 44	0.5 100	25.9 33
Russell 2500 Index	6.9 66	21.4 53	3.0 83	9.9 80		0.3 75			25.5 43

Returns:  
■ above median  
■ third quartile  
■ fourth quartile

Return Consistency:  
■ above median  
■ third quartile  
■ fourth quartile

Sharpe Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Excess Return Ratio:  
■ above median  
■ third quartile  
■ fourth quartile

Tracking Error:  
■ below median  
■ second quartile  
■ first quartile

Risk:  
■ below median  
■ second quartile  
■ first quartile

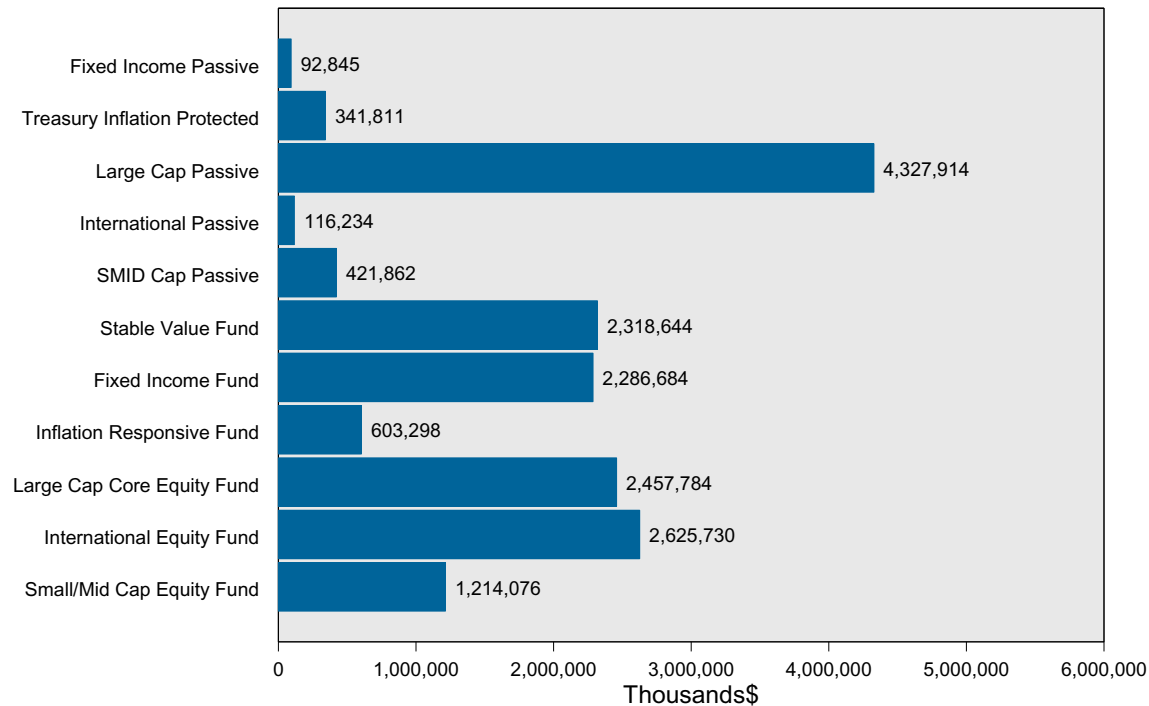
(i) - Indexed scoring method used. Green: manager & index ranking differ by <= +/- 10%tile. Gold: manager & index ranking differ by <= +/- 20%tile. Blue: manager & index ranking differ by > +/- 20%tile.



## Changes in Investment Fund Balances Period Ended March 31, 2024

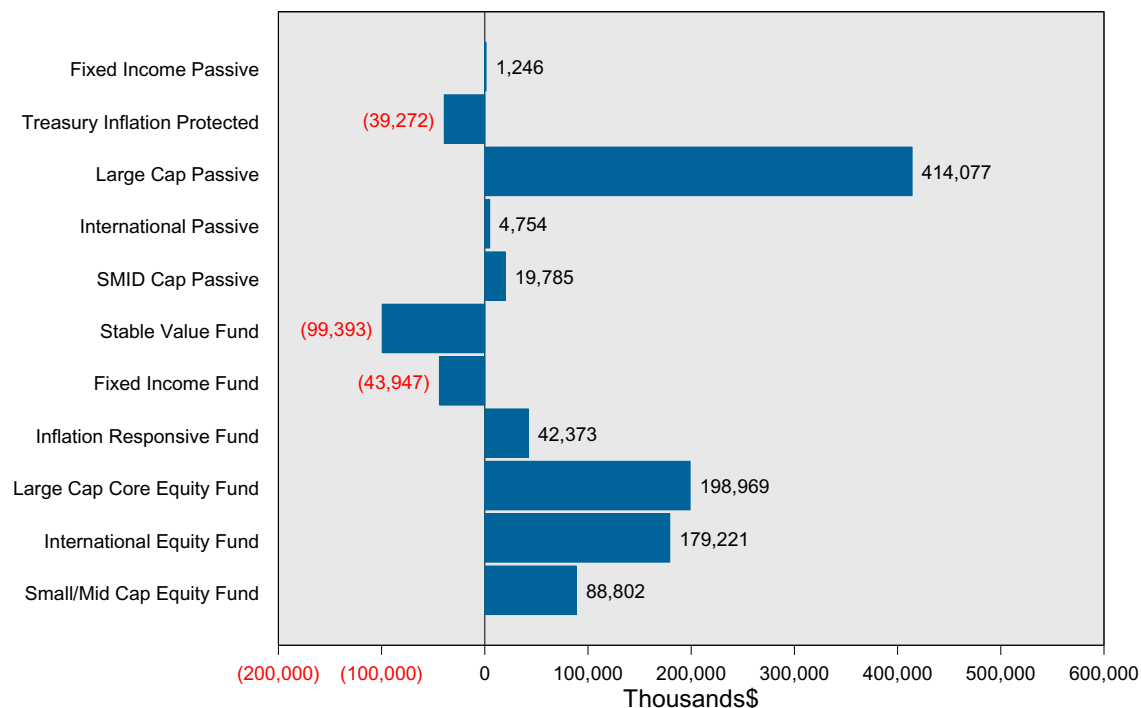
### Allocation Across Investment Options

The chart below illustrates the allocation of the aggregate fund assets across the various investment options for the quarter ended March 31, 2024.



### Changes in Fund Values

The chart below shows the net change in fund values across the various investment options for the quarter ended March 31, 2024. The change in value for each fund is the result of a combination of 3 factors: 1) market movements; 2) contributions or disbursements into or out of the funds by the participants (and any matching done by the company); and 3) transfers between funds by the participants.



## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	3 Years Ended 3/2024		3 Years Ended 12/2023		3 Years Ended 9/2023		3 Years Ended 6/2023	
Tier 2: Passive (Net of Fee)								
Fixed Income Passive	(2.47%)	60	(3.35%)	60	(5.21%)	70	(3.98%)	87
Blmbg Aggregate	(2.46%)	58	(3.31%)	60	(5.21%)	69	(3.96%)	85
Callan Core Bond MFs	(2.42%)		(3.16%)		(4.97%)		(3.61%)	
Large Cap Passive	11.46%	54	9.97%	56	10.12%	58	14.57%	45
S&P 500 Index	11.49%	54	10.00%	56	10.15%	57	14.60%	45
Callan Large Cap Core MFs	11.77%		10.16%		10.34%		14.16%	
International Passive	1.63%	70	1.36%	64	3.50%	55	7.08%	63
International Benchmark (1)	1.53%	70	1.26%	65	3.42%	56	6.79%	65
Callan Non US Equity MFs	3.34%		2.99%		5.25%		8.42%	
SMID Cap Passive	2.90%	70	4.21%	69	8.35%	76	12.24%	71
Russell 2500 Index	2.97%	70	4.24%	69	8.39%	76	12.29%	70
Callan SMID Core MFs	5.32%		6.15%		10.20%		13.81%	
Inflation Responsive Fund	1.73%	80	2.77%	77	2.91%	79	5.16%	79
Inflation Responsive Benchmark	1.54%	81	2.59%	77	2.75%	80	4.97%	79
Callan Real Assets MFs	4.99%		5.26%		5.64%		8.04%	

(1) As of 9/30/21, International Benchmark consists of MSCI ACWI ex-US IMI, previously consisted of MSCI ACWI ex-US.

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	3 Years Ended 3/2024		3 Years Ended 12/2023		3 Years Ended 9/2023		3 Years Ended 6/2023	
Tier 2: Active (Net of Fee)								
Stable Value Fund	2.19%	9	2.11%	10	2.06%	11	2.02%	9
3 Yr US Treas Rolling	2.96%	1	2.62%	1	2.27%	3	1.89%	19
T-Bill + 1.5%	4.08%	1	3.65%	1	3.20%	1	2.77%	1
Callan Stable Value CT	1.76%		1.68%		1.63%		1.58%	
Fixed Income Fund	(2.04%)	50	(3.12%)	51	(4.80%)	64	(3.31%)	66
Blmbg Aggregate	(2.46%)	69	(3.31%)	71	(5.21%)	88	(3.96%)	92
Callan Core Plus MFs	(2.04%)		(3.10%)		(4.63%)		(3.03%)	
TCW Core Plus	(2.77%)	88	(3.37%)	61	(5.28%)	78	(3.79%)	69
Blmbg Aggregate	(2.46%)	58	(3.31%)	60	(5.21%)	69	(3.96%)	85
Callan Core Bond MFs	(2.42%)		(3.16%)		(4.97%)		(3.61%)	
Prudential Core Plus	(1.30%)	12	(2.85%)	37	(4.28%)	26	(2.81%)	37
Blmbg Aggregate	(2.46%)	69	(3.31%)	71	(5.21%)	88	(3.96%)	92
Callan Core Plus MFs	(2.04%)		(3.10%)		(4.63%)		(3.03%)	
Large Cap Core Equity Fund	8.65%	66	7.13%	68	8.06%	58	12.48%	59
Russell 1000 Index	10.45%	42	8.97%	46	9.53%	44	14.09%	39
Callan Lg Cap Broad MF	9.95%		8.52%		8.76%		13.07%	
Hotchkis & Wiley Large Cap Value	10.32%	35	12.93%	6	18.89%	4	19.72%	5
Russell 1000 Value Index	8.11%	74	8.86%	70	11.05%	63	14.30%	64
Callan Lg Cap Value MF	9.42%		9.83%		12.00%		14.91%	
Macquarie Large Cap Value	7.31%	88	7.49%	89	9.15%	77	12.22%	86
Russell 1000 Value Index	8.11%	74	8.86%	70	11.05%	63	14.30%	64
Callan Lg Cap Value MF	9.42%		9.83%		12.00%		14.91%	
Sands Capital Large Cap Growth	(1.12%)	99	(6.39%)	99	(7.60%)	99	(0.42%)	99
Russell 1000 Growth Index	12.50%	3	8.86%	12	7.97%	11	13.73%	7
Callan Large Cap Grwth MF	9.64%		5.53%		4.68%		9.87%	
Loomis SaylesLarge Cap Growth	12.86%	3	9.57%	5	7.79%	15	12.91%	13
Russell 1000 Growth Index	12.50%	3	8.86%	12	7.97%	11	13.73%	7
Callan Large Cap Grwth MF	9.64%		5.53%		4.68%		9.87%	
International Equity Fund	(0.91%)	85	(0.75%)	79	0.96%	74	5.30%	82
International Benchmark (1)	1.53%	70	1.26%	65	3.42%	56	6.79%	65
Callan Non US Equity MFs	3.34%		2.99%		5.25%		8.42%	
Mondrian ACWI ex-US Value	3.59%	47	4.73%	27	8.26%	22	10.12%	33
MSCI ACWI ex US	1.94%	69	1.55%	63	3.74%	53	7.22%	62
MSCI ACWI ex US Value	4.58%	37	5.80%	17	9.57%	19	10.42%	29
Callan Non US Equity MFs	3.34%		2.99%		5.25%		8.42%	
Baillie Gifford ACWI ex-US Growth	(4.21%)	94	(4.89%)	95	(4.70%)	96	2.26%	96
MSCI ACWI ex US	1.94%	69	1.55%	63	3.74%	53	7.22%	62
MSCI ACWI ex US Growth	(0.76%)	84	(2.67%)	81	(1.86%)	85	3.96%	88
Callan Non US Equity MFs	3.34%		2.99%		5.25%		8.42%	
Small/Mid Cap Equity Fund	3.54%	48	5.03%	46	9.33%	46	13.41%	46
Russell 2500 Index	2.97%	54	4.24%	47	8.39%	47	12.29%	49
Callan SMID Broad MFs	3.27%		3.90%		7.41%		12.05%	
Brown Advisory Small/Mid Cap Growth	0.42%	41	(0.59%)	36	3.15%	35	8.33%	29
Russell 2500 Growth Index	(0.81%)	62	(2.68%)	61	1.01%	52	6.56%	47
Callan SMID Growth MFs	(0.21%)		(2.13%)		1.52%		5.84%	

(1) As of 9/30/21, International Benchmark consists of MSCI ACWI ex-US IMI, previously consisted of MSCI ACWI ex-US.

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods ended March 31, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended March 31, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
Tier 2: Active (Gross of Fee)										
Stable Value Fund										
Galliard Stable Value	0.73%	39	2.89%	32	2.29%	38	2.40%	32	2.46%	(1/11)
3 Yr US Treas Rolling	1.05%	4	4.36%	3	2.96%	8	2.11%	84	1.49%	(1/11)
T-Bill + 1.5%	1.65%	1	6.74%	1	4.08%	2	3.52%	2	2.56%	(1/11)
Callan Stable Value SA	0.72%		2.78%		2.24%		2.29%		-	
Fixed Income Fund										
TCW Core Plus	(0.97%)	98	1.90%	80	(2.63%)	97	0.88%	60	1.61%	(1/17)
Blmbg Aggregate	(0.78%)	94	1.70%	86	(2.46%)	89	0.36%	96	1.14%	(1/17)
Callan Core Bond FI	(0.46%)		2.49%		(2.03%)		0.94%		-	
Prudential Core Plus	0.32%	1	4.89%	1	(1.30%)	3	1.52%	3	2.67%	(1/15)
Blmbg Aggregate	(0.78%)	94	1.70%	86	(2.46%)	89	0.36%	96	1.24%	(1/15)
Callan Core Bond FI	(0.46%)		2.49%		(2.03%)		0.94%		-	
Large Cap Core Equity Fund										
Hotchkis & Wiley Large Cap Value	10.05%	46	25.82%	32	10.76%	36	13.68%	21	15.81%	(4/09)
Russell 1000 Value Index	8.99%	63	20.27%	76	8.11%	86	10.32%	87	13.10%	(4/09)
Callan Large Cap Value	9.78%		22.81%		10.14%		12.15%		-	
Macquarie Large Cap Value	8.94%	63	17.45%	91	7.60%	93	8.75%	96	8.63%	(6/15)
Russell 1000 Value Index	8.99%	63	20.27%	76	8.11%	86	10.32%	87	8.89%	(6/15)
Callan Large Cap Value	9.78%		22.81%		10.14%		12.15%		-	
Sands Capital Large Cap Growth	15.11%	17	49.06%	4	(0.68%)	97	12.75%	94	18.80%	(4/09)
Russell 1000 Growth Index	11.41%	68	39.00%	54	12.50%	18	18.52%	10	17.85%	(4/09)
Callan Large Cap Growth	12.52%		40.04%		10.44%		16.35%		-	
Loomis SaylesLarge Cap Growth	12.56%	47	41.13%	41	13.28%	9	17.97%	18	17.00%	(8/14)
Russell 1000 Growth Index	11.41%	68	39.00%	54	12.50%	18	18.52%	10	16.16%	(8/14)
Callan Large Cap Growth	12.52%		40.04%		10.44%		16.35%		-	
BlackRock Russell 1000 Index	10.29%	74	29.88%	72	10.45%	75	14.78%	60	13.47%	(11/17)
Russell 1000 Index	10.30%	74	29.87%	72	10.45%	75	14.76%	60	13.48%	(11/17)
Callan Large Cap Core	11.78%		31.68%		11.52%		15.23%		-	
International Equity Fund										
Mondrian ACWI ex-US Value	2.63%	88	13.92%	58	4.00%	48	5.93%	88	7.75%	(4/09)
MSCI ACWI ex US	4.69%	67	13.26%	62	1.94%	76	5.97%	87	7.88%	(4/09)
MSCI ACWI ex US Value	3.40%	84	15.34%	43	4.58%	37	5.36%	93	7.24%	(4/09)
Callan NonUS Eq	5.71%		14.52%		3.85%		7.90%		-	
Baillie Gifford ACWI ex-US Growth	3.58%	82	10.07%	86	(3.97%)	96	6.04%	86	10.23%	(4/09)
MSCI ACWI ex US	4.69%	67	13.26%	62	1.94%	76	5.97%	87	7.88%	(4/09)
MSCI ACWI ex US Growth	5.91%	42	11.22%	80	(0.76%)	92	6.24%	83	8.38%	(4/09)
Callan NonUS Eq	5.71%		14.52%		3.85%		7.90%		-	
Small/Mid Cap Equity Fund										
Earnest Partners Small/Mid Cap	3.73%	91	13.74%	83	5.51%	58	-		5.51%	(4/21)
Russell 2500 Index	6.92%	66	21.43%	53	2.97%	83	9.90%	80	2.97%	(4/21)
Callan Small/MidCap Core	8.32%		21.79%		6.23%		11.50%		-	
Brown Advisory Small/Mid Cap Growth	5.53%	74	14.28%	69	0.81%	38	9.31%	57	15.29%	(4/09)
Russell 2500 Growth Index	8.51%	41	21.12%	34	(0.81%)	63	9.39%	55	14.73%	(4/09)
Callan Sm/MidCap Growth	7.90%		17.45%		(0.01%)		9.93%		-	
BlackRock Russell 2500 Index	6.91%	66	21.64%	51	2.86%	84	10.08%	77	9.04%	(11/17)
Russell 2500 Index	6.92%	66	21.43%	53	2.97%	83	9.90%	80	8.94%	(11/17)
Callan Small/MidCap Core	8.32%		21.79%		6.23%		11.50%		-	

## Investment Fund Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment funds over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	3 Years Ended 3/2024		3 Years Ended 12/2023		3 Years Ended 9/2023		3 Years Ended 6/2023	
Tier 2: Active (Gross of Fee)								
Stable Value Fund								
Galliard Stable Value	2.29%	38	2.22%	37	2.17%	35	2.15%	33
3 Yr US Treas Rolling	2.96%	8	2.62%	11	2.27%	28	1.89%	78
T-Bill + 1.5%	4.08%	2	3.65%	2	3.20%	3	2.77%	5
Callan Stable Value SA	2.24%		2.19%		2.13%		2.08%	
Fixed Income Fund								
TCW Core Plus	(2.63%)	97	(3.24%)	86	(5.15%)	92	(3.66%)	82
Blmbg Aggregate	(2.46%)	89	(3.31%)	91	(5.21%)	93	(3.96%)	95
Callan Core Bond FI	(2.03%)		(2.92%)		(4.75%)		(3.39%)	
Prudential Core Plus	(1.30%)	3	(2.85%)	37	(4.28%)	9	(2.81%)	9
Blmbg Aggregate	(2.46%)	89	(3.31%)	91	(5.21%)	93	(3.96%)	95
Callan Core Bond FI	(2.03%)		(2.92%)		(4.75%)		(3.39%)	
Large Cap Core Equity Fund								
Hotchkis & Wiley Large Cap Value	10.76%	36	13.38%	14	19.37%	8	20.19%	11
Russell 1000 Value Index	8.11%	86	8.86%	88	11.05%	83	14.30%	82
Callan Large Cap Value	10.14%		11.10%		13.95%		16.37%	
Macquarie Large Cap Value	7.60%	93	7.78%	96	9.44%	93	12.52%	94
Russell 1000 Value Index	8.11%	86	8.86%	88	11.05%	83	14.30%	82
Callan Large Cap Value	10.14%		11.10%		13.95%		16.37%	
Sands Capital Large Cap Growth	(0.68%)	97	(5.97%)	97	(7.19%)	97	0.02%	96
Russell 1000 Growth Index	12.50%	18	8.86%	26	7.97%	27	13.73%	14
Callan Large Cap Growth	10.44%		6.74%		6.02%		11.21%	
Loomis SaylesLarge Cap Growth	13.28%	9	9.98%	14	8.19%	25	13.33%	24
Russell 1000 Growth Index	12.50%	18	8.86%	26	7.97%	27	13.73%	14
Callan Large Cap Growth	10.44%		6.74%		6.02%		11.21%	
International Equity Fund								
Mondrian ACWI ex-US Value	4.00%	48	5.14%	28	8.68%	20	10.54%	28
MSCI ACWI ex US	1.94%	76	1.55%	71	3.74%	62	7.22%	77
MSCI ACWI ex US Value	4.58%	37	5.80%	22	9.57%	14	10.42%	30
Callan NonUS Eq	3.85%		3.32%		4.97%		9.01%	
Baillie Gifford ACWI ex-US Growth	(3.97%)	96	(4.64%)	95	(4.46%)	96	2.52%	95
MSCI ACWI ex US	1.94%	76	1.55%	71	3.74%	62	7.22%	77
MSCI ACWI ex US Growth	(0.76%)	92	(2.67%)	92	(1.86%)	94	3.96%	95
Callan NonUS Eq	3.85%		3.32%		4.97%		9.01%	
Small/Mid Cap Equity Fund								
Brown Advisory Small/Mid Cap Growth	0.81%	38	(0.21%)	31	3.54%	33	8.73%	35
Russell 2500 Growth Index	(0.81%)	63	(2.68%)	61	1.01%	65	6.56%	58
Callan Sm/MidCap Growth	(0.01%)		(1.86%)		2.08%		7.63%	

## Galliard Stable Value Period Ended March 31, 2024

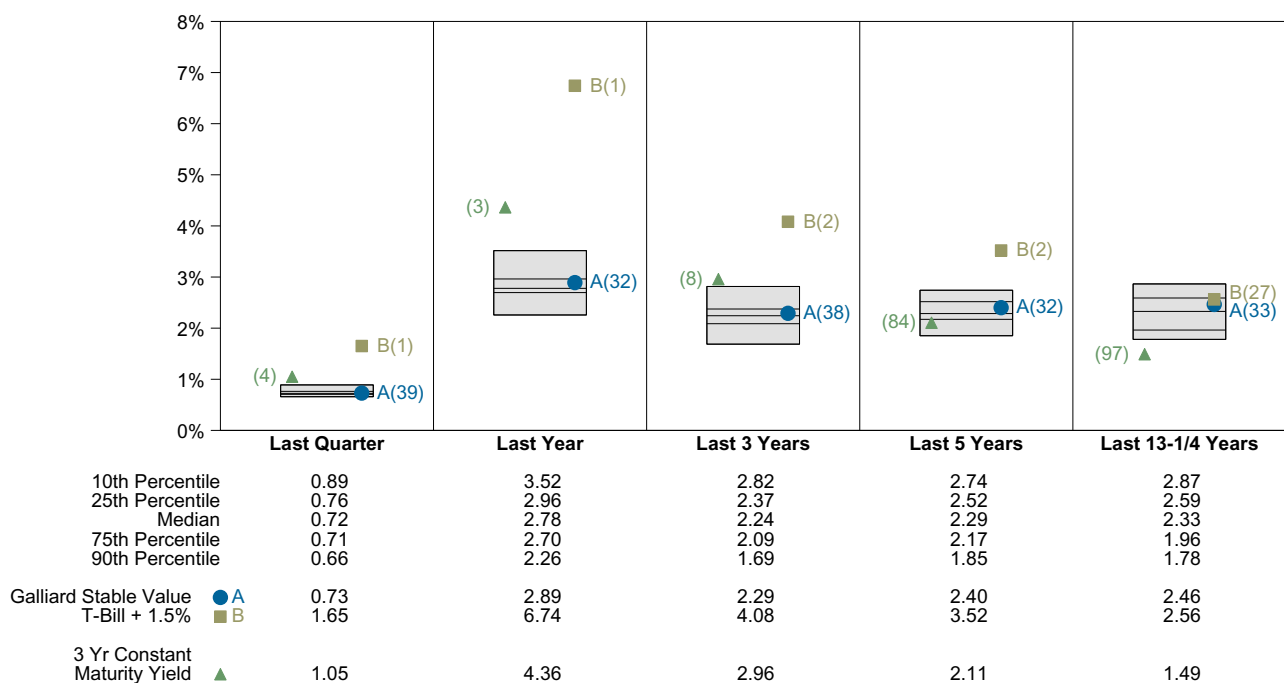
### Investment Philosophy

Galliard manages stable value portfolios with a focus on principal preservation, liquidity, and income generation. These goals are balanced with a conservative approach to underlying fixed income portfolios and active wrap contract management. Galliard's fixed income team seeks to generate diversified sources of income over treasuries by emphasizing higher quality sectors, while external managers are systematically reviewed and approved as subadvisers to complement the overall structure.

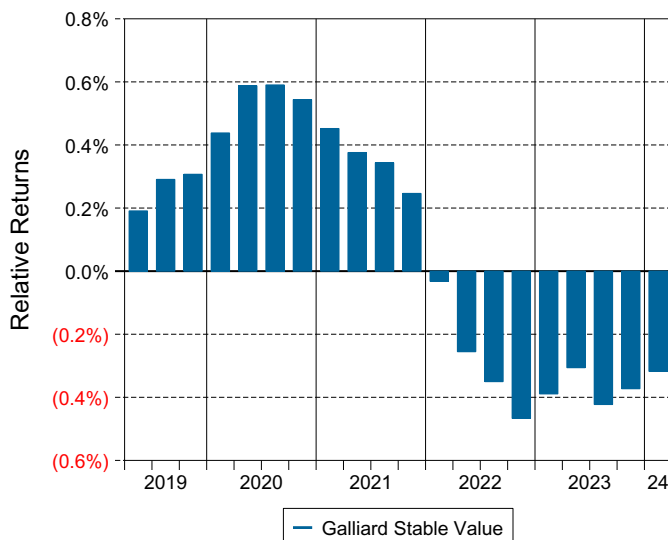
### Quarterly Summary and Highlights

- Galliard Stable Value's portfolio posted a 0.73% return for the quarter placing it in the 39 percentile of the Callan Stable Value SA group for the quarter and in the 32 percentile for the last year.
- Galliard Stable Value's portfolio underperformed the 3 Yr Constant Maturity Yield by 0.32% for the quarter and underperformed the 3 Yr Constant Maturity Yield for the year by 1.47%.

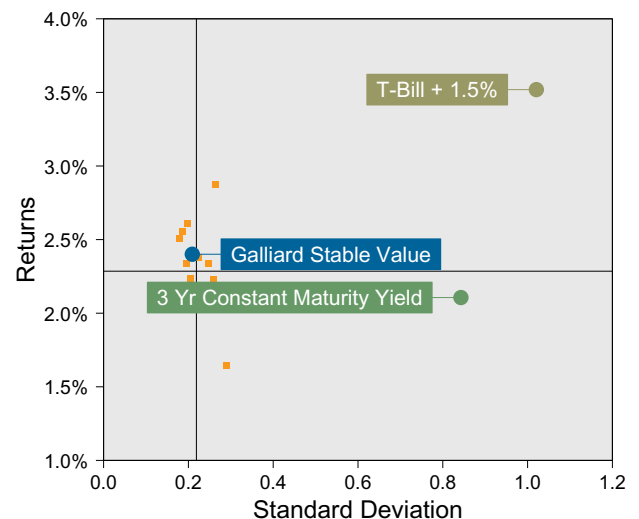
### Performance vs Callan Stable Value SA (Gross)



### Relative Returns vs 3 Yr Constant Maturity Yield



### Callan Stable Value SA (Gross) Annualized Five Year Risk vs Return



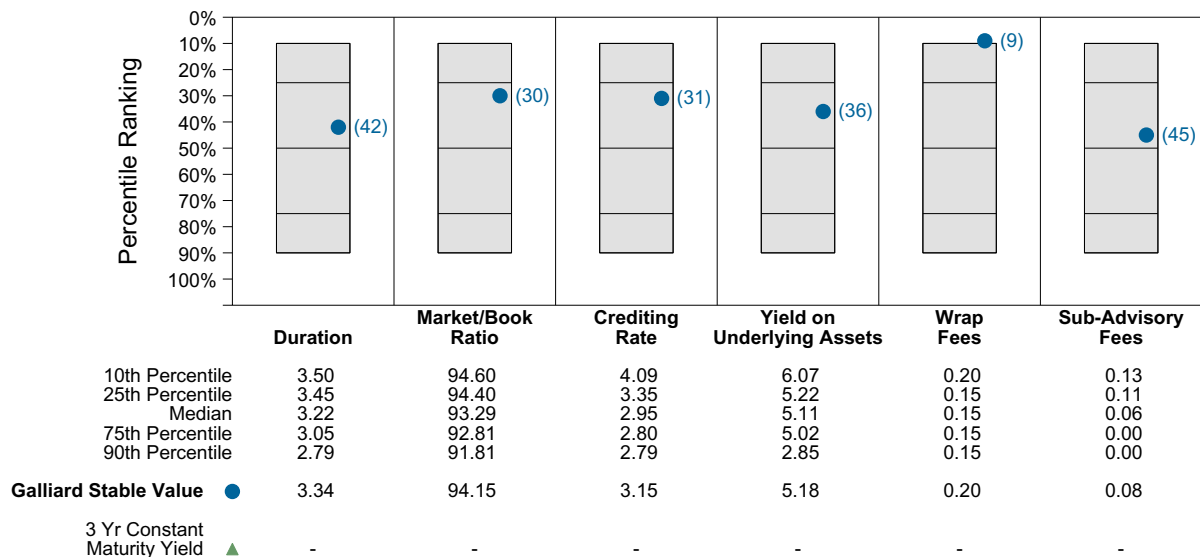


## Galliard Stable Value Stable Value Characteristics Analysis Summary

### Portfolio Characteristics

This graph compares the stable value fund's portfolio characteristics with the range of characteristics for the portfolios which make up the fund's style group. This analysis illustrates whether the fund's current structure is consistent with other funds employing the same style.

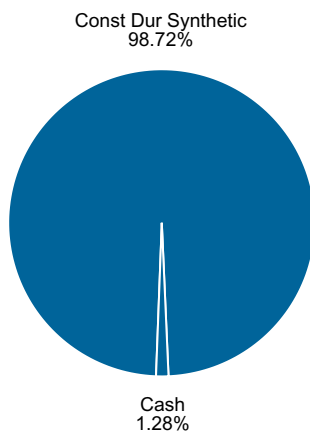
### Portfolio Characteristics Percentile Rankings Rankings Against Callan Stable Value SA as of March 31, 2024



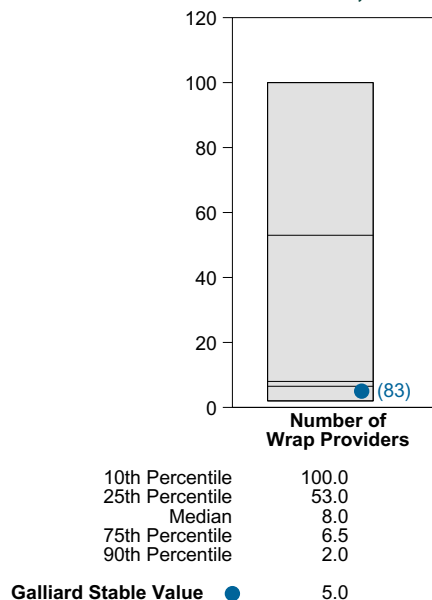
### Wrap Structure and Diversification

The graph below represents the stable value fund's wrap contract structure as of the most recent reporting period. The fund's overall wrap structure may include exposure to constant duration or maturing synthetic GIC contracts, traditional GIC contracts, cash, or other exposures. These contracts allow stable value portfolios to maintain book value accounting practices and a stable net asset value.

#### Portfolio Wrap Exposure March 31, 2024



#### Wrap Contract Diversification March 31, 2024



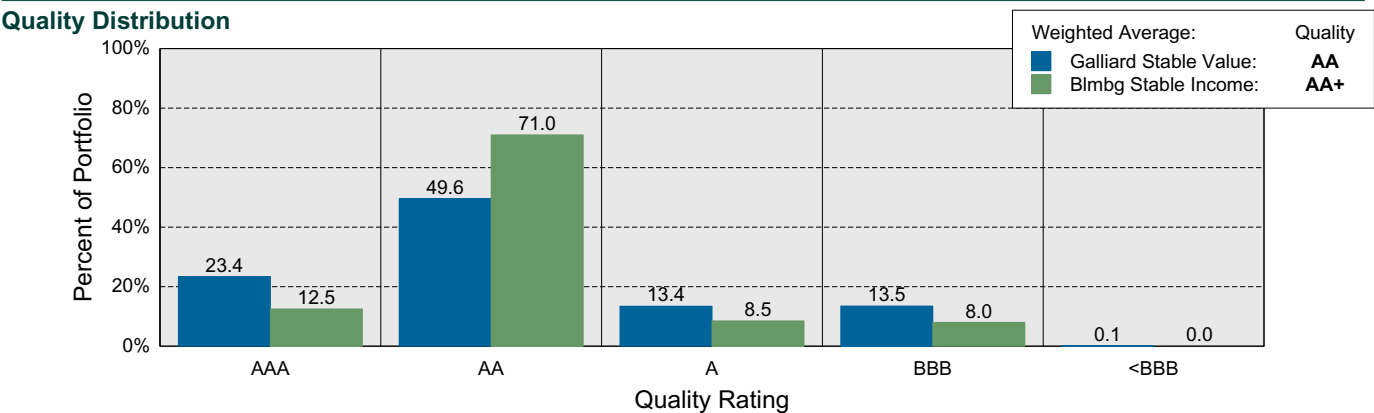
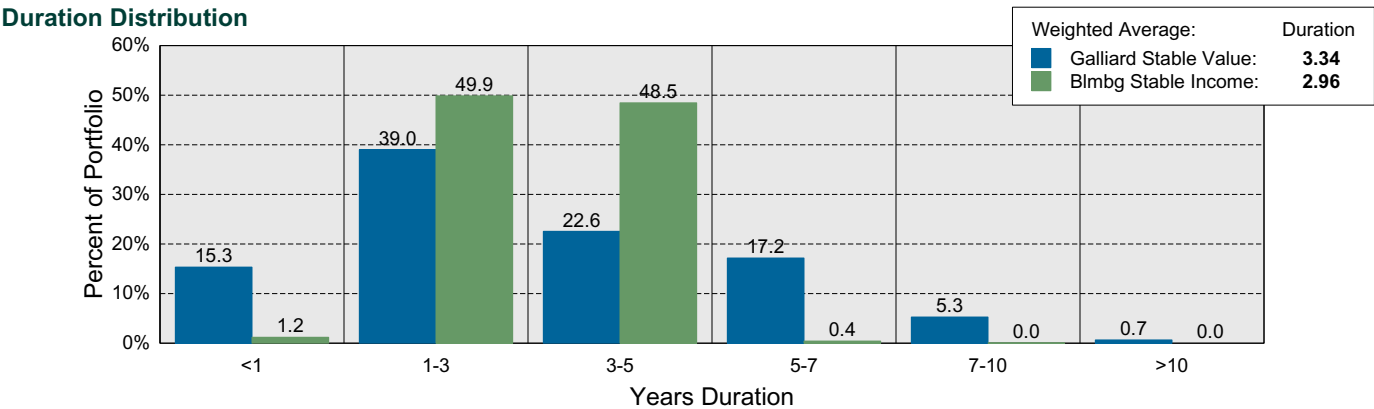
# Galliard Stable Value

## Stable Value Portfolio Characteristics Summary

### As of March 31, 2024

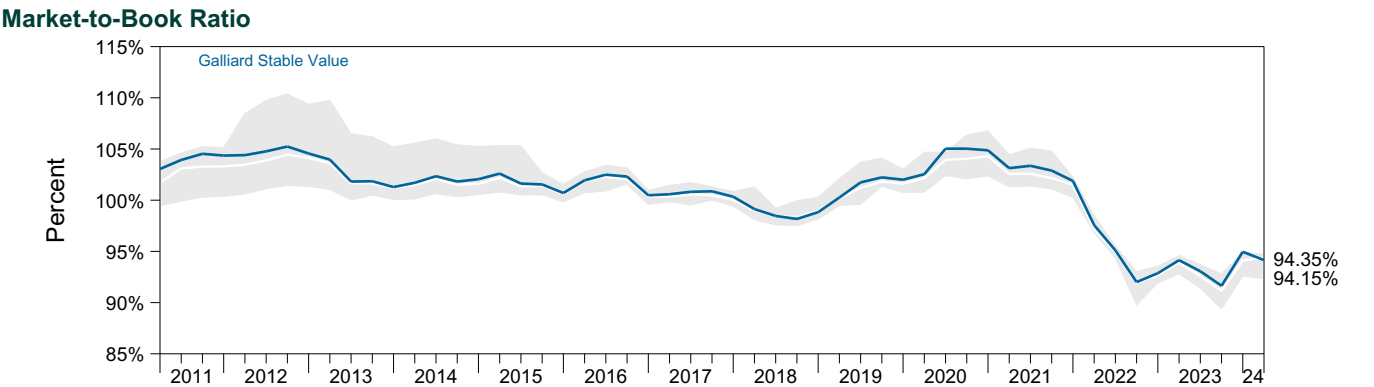
#### Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from two perspectives that have the greatest influence on return. The first chart compares the portfolio's duration distribution versus the benchmark, and the second chart compares the distributions across quality ratings.



#### Market-to-Book Ratio Over Time

The chart below depicts the historical movement of the stable value portfolio's market-to-book ratio over time. This statistic measures the overall "health" of the underlying portfolio. Portfolios with market-to-book ratios closer to 100% will be better positioned to absorb flows and should offer greater return stability over time. As a backdrop the range (from 10th to 90th percentile) is shown along with a white median line for the Callan Stable Value SA Universe.



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## First Quarter 2024 DC Trends

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This year's annual DC Trends Survey included responses from 132 plan sponsors, both Callan clients and other organizations. Respondents spanned a wide range of industries, with financial services and government being the most prevalent. Of all respondents, 64% were "mega plans" with more than \$1 billion in assets, and 58% had more than 10,000 participants. Responses were collected in the fall/winter of 2023. Highlights from this year's survey:

**AREAS OF FOCUS:** Plan governance and process have consistently ranked as one of the top priorities for plan sponsors and was so again in 2023. Investment management fees and administration fees rounded out the top three.

**FIDUCIARY INITIATIVES:** Plans cited the following as main areas of focus for 2024:

Review Plan Fees

Update or Review the IPS

Review the Investment Structure

**INVESTMENT MENU:** 91% of DC plans had a mix of active and passive investment funds. Purely passive and purely active lineups remained a rarity.

**INVESTMENT VEHICLES:** Collective investment trusts (82%) and mutual funds (80%) continued to be the most prevalent investment vehicles. Brokerage windows are offered by 53% of plan sponsors.

**TARGET DATE FUNDS:** Nearly all plans offered a target date fund (TDF), with 90% using it as the default. Among those that offer TDFs, 79% used an implementation that was at least partially indexed. In 2023, over 75% of plans took at least one action around their TDF. The most common were to evaluate the suitability of the underlying funds (76%) and the suitability of the glidepath (67%).

**MANAGED ACCOUNTS:** 58% of respondents offer managed account services. Larger plans (> \$1 billion) were more likely to offer managed account services. 84% monitor or benchmark their managed account service.

**FEES:** 59% of respondents reviewed their all-in administrative fees within the last year and 80% reviewed investment management fees over that same time period. More than half of plans evaluate sources of indirect revenues when conducting all-in administrative fee reviews.

**RETAINING ASSETS:** Of plans with a policy regarding retaining the assets of terminated or retired participants, 81% sought to retain retiree assets while 61% sought to retain terminated assets. This is a notable increase from 2015 when only 44% sought to retain the assets of these types of participants.

**RETIREMENT INCOME:** Over 80% of plans offered some sort of retirement income solution in 2023. Installment payments (78%) and partial distributions (76%) were the most common. Only 5% of plan sponsors offered qualified longevity annuity contracts (QLACs) or longevity insurance.

**ROLLOVERS IN:** Most plan sponsors reported they offer participants the opportunity to roll in qualified assets from their previous employer. Of these, only 22% actively promote this plan feature. Further, 56% of plan sponsors indicated that less than 10% of participants actually rolled in assets from their previous employers' qualified plan.



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## Equity Market Indicators

The market indicators included in this report are regarded as measures of equity or fixed income performance results. The returns shown reflect both income and capital appreciation.

**Russell 1000 Growth Index** Measures the performance of the large-cap growth segment of the US equity universe. It includes those Russell 1000 companies with relatively higher price-to-book ratios, higher I/B/E/S forecast medium term (2 year) growth and higher sales per share historical growth (5 years). The Russell 1000 Growth Index is constructed to provide a comprehensive and unbiased barometer for the large-cap growth segment. The index is completely reconstituted annually to ensure new and growing equities are included and that the represented companies continue to reflect growth characteristics.

**Russell 1000 Value Index** Measures the performance of the large-cap value segment of the US equity universe. It includes those Russell 1000 companies with relatively lower price-to-book ratios, lower I/B/E/S forecast medium term (2 year) growth and lower sales per share historical growth (5 years). The Russell 1000 Value Index is constructed to provide a comprehensive and unbiased barometer for the large-cap value segment. The index is completely reconstituted annually to ensure new and growing equities are included and that the represented companies continue to reflect value characteristics.

**Russell 2000 Value Index** Measures the performance of the small-cap value segment of the US equity universe. It includes those Russell 2000 companies with relatively lower price-to-book ratios, lower I/B/E/S forecast medium term (2 year) growth and lower sales per share historical growth (5 years). The Russell 2000 Value Index is constructed to provide a comprehensive and unbiased barometer for the small-cap value segment. The index is completely reconstituted annually to ensure new and growing equities are included and that the represented companies continue to reflect value characteristics.

**Russell 2500 Growth Index** Measures the performance of the small to mid-cap growth segment of the US equity universe. It includes those Russell 2500 companies with relatively higher price-to-book ratios, higher I/B/E/S forecast medium term (2 year) growth and higher sales per share historical growth (5 years). The Russell 2500 Growth Index is constructed to provide a comprehensive and unbiased barometer of the small to mid-cap growth market. The index is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small to mid-cap opportunity set and that the represented companies continue to reflect growth characteristics.

**Russell MidCap Growth Idx** Measures the performance of the mid-cap growth segment of the US equity universe. It includes those Russell Midcap Index companies with relatively higher price-to-book ratios, higher I/B/E/S forecast medium term (2 year) growth and higher sales per share historical growth (5 years). The Russell Midcap Growth Index is constructed to provide a comprehensive and unbiased barometer of the mid-cap growth market. The index is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true mid-cap growth market.

**S&P 500 Index** Measures performance of top 500 companies in leading industries of U.S. economy. The index covers approximately 80% of available market capitalization.

## Fixed Income Market Indicators

**3-month Treasury Bill** Provides a measure of riskless return. The rate of return is the average interest rate available on the beginning of each month for a Treasury Bill maturing in ninety days.

**Bloomberg Aggregate** Represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

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## International Equity Market Indicators

**MSCI EAFE (Net)** Is composed of approximately 1000 equity securities representing the stock exchanges of Europe, Australia, New Zealand and the Far East. The index is capitalization-weighted and is expressed in terms of U.S. dollars.

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## Callan Databases

In order to provide comparative investment results for use in evaluating a fund's performance, Callan gathers rate of return data from investment managers. These data are then grouped by type of assets managed and by the type of investment manager. Except for mutual funds, the results are for tax-exempt fund assets. The databases, excluding mutual funds, represent investment managers who handle over 80% of all tax-exempt fund assets.

### Equity Funds

Equity funds concentrate their investments in common stocks and convertible securities. The funds included maintain well-diversified portfolios.

**Core Equity** - Mutual funds whose portfolio holdings and characteristics are similar to that of the broader market as represented by the Standard & Poor's 500 Index, with the objective of adding value over and above the index, typically from sector or issue selection. The core portfolio exhibits similar risk characteristics to the broad market as measured by low residual risk with Beta and R-Squared close to 1.00.

**Large Cap Growth** - Mutual Funds that invest mainly in large companies that are expected to have above average prospects for long-term growth in earnings and profitability. Future growth prospects take precedence over valuation levels in the stock selection process. Invests in companies with P/E ratios, Price-to-Book values, Return-on-Assets values, Growth-in-Earnings values above the broader market. The companies typically have zero dividends or dividend yields below the broader market. Invests in securities which exhibit greater volatility than the broader market as measured by the securities' Beta and Standard Deviation.

**Large Cap Value** - Mutual funds that invest in predominantly large capitalization companies believed to be currently undervalued in the general market. The companies are expected to have a near-term earnings rebound and eventual realization of expected value. Valuation issues take precedence over near-term earnings prospects in the stock selection process. Invests in companies with P/E ratios and Price-to-Book values below the broader market. Usually exhibits lower risk than the broader market as measured by the Beta and Standard Deviation.

**Non-U.S. Equity Style Mutual Funds** - Mutual funds that invest their assets only in non-U.S. equity securities but exclude regional and index funds.

**Small Capitalization (Value)** - Mutual funds that invest in small capitalization companies that are believed to be currently undervalued in the general market. Valuation issues take precedence over near-term earnings prospects in the stock selection process. The companies are expected to have a near-term earnings rebound and eventual realization of expected value. Invests in companies with P/E ratios, Return-on-Equity values, and Price-to-Book values below the broader market as well as the small capitalization market segment. The companies typically have dividend yields in the high range for the small capitalization market. Invests in securities with risk/reward profiles in the lower risk range of the small capitalization market.

**Small/Middle Capitalization** - Managers who invest primarily in small to middle capitalization range companies with market capitalization below core equity companies. The market capitalization is about the upper quartile of the Small Cap group and the lower decile of the Mid Cap group. The Small/Mid Cap Broad style invests in securities with greater volatility than the broader market as measured by the risk statistics Beta and Standard Deviation. This style consists of the Small/Mid Cap Growth and the Small/Mid Cap Value Style Groups and other funds classified strictly as Small/Mid Cap Broad.

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## Callan Databases

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### Fixed Income Funds

Fixed Income funds concentrate their investments in bonds, preferred stocks, and money market securities. The funds included maintain well-diversified portfolios.

**Core Bond** - Mutual Funds that construct portfolios to approximate the investment results of the Bloomberg Barclays Capital Government/Credit Bond Index or the Bloomberg Barclays Capital Aggregate Bond Index with a modest amount of variability in duration around the index. The objective is to achieve value added from sector and/or issue selection.

**Stable Value** - The Stable Value database group is comprised of funds that invest primarily in Guaranteed Investment Contracts (GICs) and Synthetic Investment Contracts (SICs) to provide principal protection, stable book value and a guaranteed rate of return over a contractually specified time period. Common benchmarks for the universe include but not limited to, are the Ryan Labs GIC Master indices and the Hueler Stable Value Index.



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## Risk/Reward Statistics

The risk statistics used in this report examine performance characteristics of a manager or a portfolio relative to a benchmark (market indicator) which assumes to represent overall movements in the asset class being considered. The main unit of analysis is the excess return, which is the portfolio return minus the return on a risk free asset (3 month T-Bill).

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

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

**Downside Risk** stems from the desire to differentiate between "good risk" (upside volatility) and "bad risk" (downside volatility). Whereas standard deviation punishes both upside and downside volatility, downside risk measures only the standard deviation of returns below the target. Returns above the target are assigned a deviation of zero. Both the frequency and magnitude of underperformance affect the amount of downside risk.

**Excess Return Ratio** is a measure of risk adjusted relative return. This ratio captures the amount of active management performance (value added relative to an index) per unit of active management risk (tracking error against the index.) It is calculated by dividing the manager's annualized cumulative excess return relative to the index by the standard deviation of the individual quarterly excess returns. The Excess Return Ratio can be interpreted as the manager's active risk/reward tradeoff for diverging from the index when the index is mandated to be the "riskless" market position.

**Information Ratio** measures the manager's market risk-adjusted excess return per unit of residual risk relative to a benchmark. It is computed by dividing alpha by the residual risk over a given time period. Assuming all other factors being equal, managers with lower residual risk achieve higher values in the information ratio. Managers with higher information ratios will add value relative to the benchmark more reliably and consistently.

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

**Relative Standard Deviation** is a simple measure of a manager's risk (volatility) relative to a benchmark. It is calculated by dividing the manager's standard deviation of returns by the benchmark's standard deviation of returns. A relative standard deviation of 1.20, for example, means the manager has exhibited 20% more risk than the benchmark over that time period. A ratio of .80 would imply 20% less risk. This ratio is especially useful when analyzing the risk of investment grade fixed-income products where actual historical durations are not available. By using this relative risk measure over rolling time periods one can illustrate the "implied" historical duration patterns of the portfolio versus the benchmark.

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

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## Risk/Reward Statistics

**Rising Declining Periods** refer to the sub-asset class cycles vis-a-vis the broader asset class. This is determined by evaluating the cumulative relative sub-asset class index performance to that of the broader asset class index. For example, to determine the Growth Style cycle, the S&P 500 Growth Index (sub-asset class) performance is compared to that of the S&P 500 Index (broader asset class).

**Sharpe Ratio** is a commonly used measure of risk-adjusted return. It is calculated by subtracting the "risk-free" return (usually 3 Month Treasury Bill) from the portfolio return and dividing the resulting "excess return" by the portfolio's risk level (standard deviation). The result is a measure of return gained per unit of risk taken.

**Sortino Ratio** is a downside risk-adjusted measure of value-added. It measures excess return over a benchmark divided by downside risk. The natural appeal is that it identifies value-added per unit of truly bad risk. The danger of interpretation, however, lies in these two areas: (1) the statistical significance of the denominator, and (2) its reliance on the persistence of skewness in return distributions.

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

**Total Portfolio Risk** is a measure of the volatility of the quarterly excess returns of an asset. Total risk is composed of two measures of risk: market (non-diversifiable or systematic) risk and residual (diversifiable or unsystematic) risk. The purpose of portfolio diversification is to reduce the residual risk of the portfolio.

**Tracking Error** is a statistical measure of a portfolio's risk relative to an index. It reflects the standard deviation of a portfolio's individual quarterly or monthly returns from the index's returns. Typically, the lower the Tracking Error, the more "index-like" the portfolio.

**Treynor Ratio** represents the portfolio's average excess return over a specified period divided by the beta relative to its benchmark over that same period. This measure reflects the reward over the risk-free rate relative to the systematic risk assumed.

Note: Alpha, Total Risk, and Residual Risk are annualized.