

# Gwinnett County, Georgia Retirement Plans Management Committee Agenda Thursday, August 15, 2024, Regular Meeting - 8:00 AM 75 Langley Dr. Lawrenceville, GA 30046, Conference Room C Webex Virtual Meeting Call toll-free 408-418-9388 or visit www.webex.com Meeting number/access Code: 2345 826 6623; Password: pgRrJ9c3Tq2

1.	Call to Order		Chairman
2.	Approval of Agenda	*	Chairman
3.	Approval of Minutes: May 16, 2024	*	Chairman
4.	Performance Reports		
	<ul> <li>a. 2<sup>nd</sup> Quarter Reports <ol> <li>Q2 2024 Economic Overview</li> <li>Capital Market Assumptions &amp; Asset Allocation Study</li> <li>Q2 2024 DB Performance Report</li> <li>Downgraded Bond</li> <li>Q2 2024 Manager Status and Watch List</li> <li>Fee Analysis</li> <li>Q2 2024 DC Performance Report</li> </ol> </li> </ul>	***	UBS
	<ul> <li>b. 2<sup>nd</sup> Quarter Reports <ol> <li>Plan Review</li> <li>Voya Updates</li> <li>Legislative Updates</li> <li>Stable Value</li> <li>Ongoing Reporting</li> </ol> </li> </ul>	***	Voya
5.	Fiduciary Training Requirements a. Legislative Update b. Secure Act 2.0	*	Ed Emerson
6.	Investment Committee Reports a. Recommendation to Revise DB Investment Polic	* cy State	Mike Ludwiczak ment

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7. Vendor Renewals a. BNY Mellon Bank	*	Chairman
8. Next Meeting – November 14, 2024	*	Chairman
9. Public Comments	**	
10. Adjournment	*	Chairman

# \*Action Items

\*\*Speakers wishing to address the RPMC must report to the Clerk of the Committee prior to the meeting being called to order. Speakers are limited to 3 minutes or less.

\*\*\*Information items requiring no action.



# Gwinnett County, Georgia Retirement Plans Management Committee May 16, 2024 – 8:00 am Gwinnett Justice and Administrative Center 75 Langley Dr. Lawrenceville, GA 30046, Conference Room C Webex Virtual Meeting

Meeting number/access Code: 2346 627 0715; Password: 6rqUYEGaf84

Members Present (in-person): Jim Underwood, Glenn Stephens, Maria Woods, Ashley Stinson, Fred Cephas, Adrienne McAllister; Joe Heffron Staff Present (in-person): Mike Ludwiczak, Latosha Smiley-Peoples, Carol Vermilya, Michael Poole, Tori Burkholder, Staff Present (via WebEx): Buffy Alexzulian; Robert Queen; Chase Parker Others Present (in-person): UBS – Scott Olsen; Voya –Deirdre Jones, Michelle Ogden, Angel Mario, Wendy Moy; Morris Manning & Martin – Scott Wagner; Cavanaugh Macdonald Consulting, LLC –Todd Green, Nathaniel Hutchinson; Mauldin & Jenkins – Meredith Lipson Others Present (via WebEx): Voya – Dasha Basnakian, Tony Camp; Fin News – Lindsay Saienni; W.Intelligence – Kevin Balaod; Unknown Callers – 404-9\*\*-\*\*28, 770-8\*\*-\*\*49, Jon Cox

### 1. Call to Order

Jim Underwood called meeting to order at 8:00 am

### 2. Approval of Agenda

**Action:** Approved; Motion to approve Agenda: Adrienne McAllister; Second: Joe Heffron; Vote: 7-0

# Approval of Meeting Minutes: February 15, 2024 Action: Approved; Motion to approve the meeting minutes: Fred Cephas; Second: Joe Heffron; Vote: 7-0

# 4. Audit Committee Reports

# a. Financial Statements – DB Plan and OPEB

Meredith Lipson presented the DB Plan and OPEB Financial Reports **Action:** Approved; Motion to accept the DB and OPEB Financial Statements: Joe Heffron; Second: Ashley Stinson; Vote: 7-0

### b. DB Plan Valuation

Todd Green presented the DB Valuation **Action:** Approved; Motion to accept the DB Plan Valuation: Joe Heffron; Second: Adrienne McAllister; Vote: 7-0

# C. OPEB Valuation

Todd Green presented the OPEB Valuation **Action:** Approved; Motion to accept the OPEB Valuation: Adrienne McAllister; Second: Fred Cephas; Vote: 7-0

# 5. Performance Reports – Fund Reports

- a. UBS 1<sup>st</sup> Quarter Performance Reports
  - i. Q1 2024 Economic Overview
  - ii. Q1 2024 DB Performance Report
  - iii. Downgrade Bond
  - iv. Q1 2024 Manager Status and Watch List
  - v. Fee Analysis

vi. Q1 2024 DC Performance Report

Scott Olsen presented the above reports

The Chairman called for a brief recess from 10:15 am – 10:24 am

- b. Voya Financial 1st Quarter Reports
  - i. Plan Review
  - ii. Voya Updates
  - iii. Legislative Updates
  - iv. Stable Value
  - v. Ongoing Reporting

Deirdre Jones, Michelle Ogden, Angel Mario, Dasha Basnakian, and Tony Camp presented the above reports

# 6. Investment Committee Reports

# a. **REIT Manager Recommendation**

Action: Approved; Recommendation to terminate Invesco and reinvest in Cohen & Steers Mike Ludwiczak; Second: Fred Cephas; Vote: 7-0

# 7. Fiduciary Training Requirements

# a. Legislative Updates

Training & legislative updates were deferred to Q2

# 8. Vendor Renewals

# a. UBS – DB & DC Advisory

**Action:** Approved; Motion renew DB & DC Advisory: Ashley Stinson; Second: Joe Heffron; Vote: 7-0

# 9. Second Quarter Meeting – August 24, 2024

# 10. Public Comment

# 11. Adjournment

**Action:** Approved; Motion to adjourn: Glenn Stephens; Second: Adrienne McAllister; Vote: 7-0 The meeting adjourned at 12:11 am



# CIO Alert: Market scenarios from here

UBS House View - CIO Alert

Mark Haefele, Global Wealth Management Chief Investment Officer, UBS AG

#### What happened?

Global equities continued to sell off on Monday.

In the United States, the S&P 500 traded as much as 4.25% lower on Monday, before closing 3% weaker at 5,186. The sell-off was broad-based, affecting all sectors. The Russell 2000 index, representing small caps, fell by 3.3% to around 2,039, and the tech-heavy Nasdaq Composite also fell 3.4%, bringing it to 16,200.

The US moves followed weak trading sessions in Asia and Europe. Japanese markets endured their worst day in history (Nikkei 225 –12.4%), while both the Korean and Taiwanese markets dropped by more than 8%, as fears of a US economic slowdown reverberated across the globe.

The VIX implied volatility index hit a post-pandemic peak of more than 50, indicating heightened uncertainty about the future path for equity markets.

While market moves in recent days have been dramatic, it is important to keep them in the context of recent exceptional performance for global equities. While the S&P 500 is down 8.5% from its mid-July all-time high, it is still up 10% for the year. Performance for investors who are diversified across asset classes should also be somewhat cushioned by the recent strong performance by high-quality bonds.

#### What's the context?

The narrative driving global equity markets has pivoted dramatically in recent weeks. Optimism about artificial intelligence, robust growth, and a potential "roaring 20s" for economies and markets has given way to fears of a US recession, concerns about AI monetization, and rising risk of conflict in the Middle East.

While US economic data has been softer than expected for several months, Friday's employment data appears to have triggered a mood change in the market. The report contained significant downside surprises, with nonfarm payrolls increasing by only 114,000 and the unemployment rate rising to 4.3%, up from 4.1% in the prior month and from a low of 3.4% as recently as May 2023.

Notably, the speed of the rise in unemployment gained particular attention, as it triggered the Sahm rule, by which since 1960 a recession has begun every

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time the three-month average unemployment rate rose over 50bps from its low in the prior 12 months.

#### Our base case

In our view, despite the weaker payroll data, recession risks remain low. Our base case is for a soft landing for the US economy, with growth bottoming slightly below the 2% trend, and further moderation in inflation. We believe investor concerns about a recession are overdone for several reasons:

- It can be a mistake to read too much into a single data release. It is
  possible that the weakness of the July jobs report was accentuated by
  Hurricane Beryl. The number of people who reported being unable to
  work owing to the weather was 436,000, compared to an average of
  33,000 for July since 2000.
- The Sahm rule, which suggests that the rate of increase in unemployment is a harbinger of recession, looks questionable under current circumstances, in our view. With total nonfarm employment increasing by 2.5mn over the past year, we believe the higher unemployment rate is mainly due to a larger labor supply, rather than job shedding. Initial jobless claims—an indicator of labor demand—are still low by historical levels.
- While earnings commentary suggested some slowdown in advertising, auto, industrials, and software, profit margins remain solid, suggesting that companies have little reason to commence job cuts. S&P 500 companies are on pace to grow earnings per share 11% in 2024.
- Consumers and consumer spending are still in decent shape. June retail sales and personal consumption expenditure data suggest spending is normalizing from an elevated level, not deteriorating. Moreover, households are in good financial shape overall, with positive real income growth and average debt servicing costs that remain low relative to historical averages.
- Services sentiment is positive. The Institute for Supply Management (ISM) reported that its nonmanufacturing purchasing managers' index (PMI) rebounded in July to 51.4, with a jump in new orders and an increase in employment for the first time in six months.
- The Federal Reserve has plenty of scope to support the economy and markets. Recent data has improved confidence that inflation is headed sustainably back toward the 2% target, freeing the Fed to focus more attention on supporting growth and employment. At last week's policy meeting, Powell repeated that the Fed would be "watching very carefully" for signs of a sharp downturn in the labor market. We now believe the Fed will likely start the easing cycle with a 50-basis point cut at the September meeting, with a further 50 basis points of easing in the remainder of 2024, and more to follow in 2025.
- The promise of AI remains intact. Investors appear to have swung from rewarding companies for fast-rising capital spending, to becoming impatient with the pace of monetization. Yet the second quarter earnings season has continued to suggest top tech companies are confident that spending on AI infrastructure will deliver a high return. We have also been encouraged by anecdotal evidence that AI monetization is picking up.

- A further escalation of the Middle East conflict can still be avoided. Risks in the region have increased in recent weeks, and an attack on Israel from Iran and Hezbollah now looks imminent, according to US Secretary of State Antony Blinken. However, recent history suggests Israel will opt for a measured response, as it did following an Iranian drone and missile launch in April.
- The US election campaign could be a further source of volatility. Vice President Kamala Harris has continued to build momentum in her race for the White House. An average of national polls on Friday indicated that Harris has support of 45% of Americans versus 43.5% for Trump, according to 538, the opinion analysis website—within the 1.5-percentage-point band of uncertainty. This suggests that Harris has closed the lead that former President Trump had built up over President Biden, who dropped out of the race last month. A blue wave, in which the Democratic Party claims control of both the White House and Congress, is not our base case. But such an outcome might lead to an increase in capital gains and corporate taxes, which could lead some investors to harvest capital gains before such a move.

#### What would happen to markets in such a scenario?

- Equities: While markets are likely to remain volatile in the near term, we expect concerns about growth to ultimately prove unfounded. And investors should remember that Fed rate cuts in prior episodes that did not result in recession have typically been followed by strong equity market returns, with the S&P 500 rising by 17% on average after the first Fed rate cut. More than 75% of the S&P 500 market cap has now reported 2Q earnings. We have seen some softening in earnings data, but not so much as to change our profit growth outlook. Corporate profits are likely to grow by 11-12% in 2Q on a year-over-year basis, at the higher end of with our initial estimate. While the breadth of earnings beats is in line with historical averages, the magnitude of the beats are a bit below normal.Our base case year-end and June 2025 S&P 500 price targets remain 5,900 and 6,200, respectively. We expect 11% S&P 500 earnings growth in 2024 (USD 250) and 8% growth in 2025 (USD 270).
- Bonds: Fixed income markets are also likely to remain volatile, and a further rally in high-quality bonds (and declines in US 10-year yields) is possible in the near term should recession concerns persist, and the unwinding of carry trade positions continues. That said, if future data demonstrates the US remains on course for a soft landing, as we expect in our base case, then we would expect yields to settle in the 3.5-4.0% range by the end of the year. From a portfolio perspective, we continue to believe investors should deploy excess cash into high-quality fixed income, which can help cushion overall portfolios against heightened fears of recession.

#### What could trigger a downside scenario?

Of course, we do also need to consider the possibility that things could turn out worse than in our base case. This could happen by a variety of mechanisms:

• Future data demonstrates that jobs are being shed, adding to evidence that Fed policy has been too tight for too long. As more Americans

become fearful about losing their job, they could cut back spending to build up precautionary savings.

- Al investment slows. Al investment has been driving both the fortunes of chipmakers, notably Nvidia, and the cloud operations of the likes of Microsoft, Amazon, and Alphabet. If top tech companies start announcing that they are scaling back capital spending plans, we would be concerned about earnings sustainability. We would also be discouraged by a slowing in the growth of cloud revenues. Finally, disappointments on expected advances in chip technology could also trigger downside for tech stocks.
- A miscalculation by either Israel or Iran leads to a significant escalation in the Middle East, leading to higher global risk premia, as investors fear potential disruptions to oil supplies.

In such a scenario, we would expect global growth to fall sharply owing to weakness in consumer spending and labor markets, as well as a fall in Al-related investments. In response, we would expect central banks to cut rates swiftly, bringing monetary policy back into accommodative territory. The Fed would likely reduce rates well below the neutral policy rate, which we currently estimate to be around 3%.

#### What would happen to equity and bond markets in such a scenario?

- Equities: We see the S&P 500 falling to around 4,200 in our hard landing scenario driven by cuts to profit growth expectations and a reduction in valuation multiples.
- Bonds: A hard landing would prompt an aggressive Fed cutting cycle, in our view. In this scenario we would expect the 10-year US Treasury yield to finish 2024 at 2.5%. In addition to gains for high-quality bonds, we would expect appreciation in other relatively safe-haven assets such as gold, the Swiss franc, and the Japanese yen.

	Bull case: Roaring 20s	Base case: Soft landing	Bear case: Hard landing	
Probability	20%	60%	20%	Things to watch
Market path	Bonds down slightly, equities up Equity markets rally amid strong US growth, moderating inflation, and optimism about the impact of AI on earnings. Bond yields are volatile but rebound to slightly above current levels by year-end.	Bonds up, equities slightly up Bonds yields and equities may drop further in the near term on recession fears. But as these fears prove unfounded, equities rally and bond yields finish the year close to current levels	Bonds up, equities sharply down Global equities post double-rigit losses and credit spreads widen. Valuations in AI stocks drop autiantially. Safe-haven assets such as high-quality bonds, gold, the Swiss franc, and the Japanese yen, appreciate.	
Economic growth	The US grows above the trend rate of about 2% as labor markets, household balance sheets, and corporate earnings prove resilient. Improving European growth and fiscal stimulus in China contribute to strong global growth.	US economic growth remains around trend over the next 12 months. Other Western economies experience sub-trend growth, in Ine with market expectations. China announces targeted measures to support economic activity.	Global growth falls sharply over the next 12 months owing to further weakness in consumer spending and labor markets, as well as a fall in AI related investments. GOP contracts for at least two consecutive quarters in both the US and the Eurozone. Chinese economy disappoints.	US, China: PMI data US, Europe: Industrial prod. Global: Consumer spending US: Housing starts US: Savings rates, depletion US, Europe: Delinquency ratios Europe: gas prices
Inflation	Resumes decline in the US and continues to fall in Europe, reaching central bank targets earlier than expected.	Continues to fall gradually in the US and continues to fall in Europe, normalizing in 2H24.	Falls quickly as demand for goods and services collapses.	Global: Oil price US: CPI and PCE inflation US: ISM prices-paid subindex US: Average hourly earnings
Central banks	Continue cutting policy rates in mid- 2024 as inflation normalizes. The Fed cuts rates by 50bps in 2024, with cuts in September and December. Strong growth may limit expectations for cuts thereafter.	Continue cutting policy rates in 03-2024 as inflation normalizes. The Fed cuts rates by 100bps in 2024, with cuts in September and December. Markets expect deeper cuts in 2025 and 2026 amid slowing growth and inflation.	Major central banks out rates swiftly, bringing monetary policy back into accommodative territory. The fed lowers its policy rate by at least 250bps over the next 12 months.	US: Chg in nonfarm payrolls US: JOLTS openings and hires Eurozone: HCP inflation Global financial conditions Bank lending surveys
Geopolitics	A de-escalation in the Middle East crisis and in the Russia-Ukraine war, and/or an improvement in bilateral relations between the US and China.	The Middle East crisis remains geographically contained. The Russia- Ukraine war continues. The US election contributes to valatily, particularly at a sector level, but the net effect on broader markets is limited.	Tensions in the Middle East escalate to a regional war with potential for significant disruption to oil supply. The war in Ukraine escalates, and US- China tensions intensify.	Middle East crisis and oil supply Russia-Ukraine war signposts US sanctions on Chinese companie. US election season

Analysts: Dirk Effenberger, Danil Bargman

#### **Recommendations**

Throughout 2024 we have reiterated the theme of "guality," in both bonds and equities. With recession fears rising, quality remains a key theme.

In fixed income, we would expect quality bonds to deliver positive total returns in our base case, and they could rally even further if recessionary fears continue to mount. With cash interest rates likely to fall more quickly than we had previously expected, it remains important in our view for investors to deploy excess cash into medium-duration quality fixed income.

In equities, quality is an investment style that has historically outperformed as whole, but with the highest relative returns during recessions. Since 1992, quality stocks have delivered 9% annualized outperformance over global indices during recessions. (MSCI ACWI quality index versus MSCI ACWI). Companies with strong balance sheets and a track record of earnings growth, as well as those that are exposed to structural growth drivers, should be relatively well positioned if cyclical fears mount.

Elsewhere, we continue to like gold and the Swiss franc. The cost of direct hedging on equity markets has risen in recent days. As such, diversification with quality bonds, gold, and the Swiss franc is an important way for investors to insulate portfolios against further equity market volatility. Switzerland looks closer to the end of its policy easing cycle than most other central banks, and we would expect gold to benefit from central bank reserve diversification, investors seeking relative "safe havens'" and anticipation of faster interest rate cuts.

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Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

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In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers
  focus on all strategies at all times, and managed futures strategies may have material directional elements.
- Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They
  involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax,
  real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated
  with the ability to qualify for favorable treatment under the federal tax laws.
- Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- Foreign Exchange/Currency Risk: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

# Appendix

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# 2024 Capital Market Assumptions Update

5 February 2024

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**ERRATUM:** The version of this report published on 4 February 2024 contained incorrect equilibrium yield values in Figure 3. This version corrects these errors. Please disregard the previously published version.



# Content

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- 6 Why a CMA update was necessary
- 6 Changes to the major asset class CMAs
- 7 How we use CMAs
- 8 SAAs: Targeted changes to select institutional allocations

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Contact ubs-cio-wm@ubs.com At UBS, our Capital Market Assumptions (CMAs) and Strategic Asset Allocations (SAAs) are the fundamental underpinnings that inform our investment advice. The Chief Investment Office (CIO) and the Wealth Management USA (WM USA) Asset Allocation Committee (AAC) regularly review our CMAs and SAAs as asset class estimated returns and risks change over time. Our latest review determined that it is appropriate to update the CMAs, which last occurred in February 2023. The changes to our CMAs include changes to asset class compound returns, arithmetic returns, yields, and risks. We also made modest changes to a handful of institutional SAAs. We added an allocation to private infrastructure in the Conservative to Moderate risk profiles because we believe this asset class can provide another attractive way to capture income and capital appreciation in an efficient manner.

For the strategic CMAs, meant generally for one full business cycle, equity returns are slightly higher for the US and more notably for emerging markets than the prior CMAs, while fixed income returns have increased significantly in this update. Overall, these CMAs result in higher estimated returns over the cycle across all risk profiles. Our equilibrium CMA returns, which are applicable for a multi-business-cycle horizon, are slightly higher for fixed income and over 1% for most equities. The risk CMAs are the same for both the strategic and equilibrium returns, and the risk estimates increased for US equities and fixed income.

The following sections explain what the CMAs are, the differences between strategic and equilibrium CMAs, as well as compound and arithmetic returns, the yield estimates, the economic assumptions driving the CMA update, and explanations for the major asset class CMAs. Following that is an explanation of SAAs and their objectives, and a review of the SAAs' new estimated returns and risks resulting from the CMA changes.

# Capital Market Assumptions: The basics

Prudent asset allocation decision-making starts with reasonable assumptions about the risk and return prospects for a range of asset classes. In total, we estimate CMAs for over 100 distinct asset classes, including stocks, bonds, hedge fund strategies, and private markets. The return assumptions represent the annualized estimated return we expect from a particular asset class based on our methodology. The risk assumptions include the volatilities, which measure our estimated dispersion of returns, and correlations, which estimate how asset classes tend to move together over time. The risk assumptions do not incorporate other types of risks that may be commonly associated with actual products or investments, an example being liquidity risk. Our process of developing CMAs is based on fundamental building blocks for each asset class that we believe tend to drive returns. The building blocks consist of forecasts for economic growth and inflation; fiscal and monetary policy; corporate and workforce trends; and historical performance and valuations. Our methodology combines both objective and subjective elements to use what we view as the most

dependable aspects of a data-driven approach and enable us to overlay our best judgment in the process where necessary.

*Return* assumptions represent the annual estimated return we expect from a particular asset class. They do not represent the return of any particular security or investment and are purely hypothetical; nor do they take into consideration costs or fees associated with any security, investment, or strategy, including those that may be incurred when implementing an asset allocation. To derive our strategic returns, we explicitly model the asset class returns individually for the coming years. We also publish compound (or geometric) annualized growth rate (CAGR) returns over the forecast horizon. Arithmetic and compound returns are mathematically connected by the asset class's volatility, and reflect the exact same set of economic and market assumptions.

Our *volatility* (or risk) estimates seek to quantify the dispersion we expect in the asset class returns on a year-by-year basis. Of course, estimated volatility for any particular asset class comes with a range of caveats. For example, a particular investment or product might be more or less volatile than the asset class as a whole depending on factors like the investment objective, manager style, or constraints. Additionally, we're also making an assumption that asset classes themselves will be diversified; one particular position within an asset class can certainly exhibit different risk and return characteristics than the asset class as a whole.

Finally, *correlation* measures the interaction of two asset classes over time. Positively correlated asset classes tend to increase or decrease in value at the same time, whereas negatively correlated asset classes tend to move in opposite directions. Correlations fall on a range from -1 to 1, where -1 indicates a perfectly negative correlation, 0 indicates no correlation, and 1 indicates a perfectly positive correlation between the asset classes.

The difference between the strategic and equilibrium return assumptions is their investment time horizons. Specifically:

**Strategic returns** reflect our expectation for the average annual total return for various asset classes over one full business cycle. This includes the recovery, expansion, slowdown, and recession stages of the cycle. The length of business cycles isn't fixed, though in advanced economies they have been getting longer on average. The starting points for estimating returns are typically current values, such as bond yields or equity price-to-earnings ratios, and then we project a future path for this return driver to a long-term sustainable level.

**Equilibrium returns** are our estimates for average annual returns over multiple business cycles. We assume that asset class return drivers eventually converge to their long-run level, which is the economy's sustainable steady state. The equilibrium return is calculated assuming return drivers and returns themselves are in equilibrium. By definition, equilibrium returns are not influenced by cyclical developments or current

circumstances. Instead, they reflect structural assumptions about the economy, including the long-term potential growth rate and the neutral rate of interest.

The purpose of having two sets of CMA return assumptions is to distinguish the average annual return estimates for investors when their investment horizon changes from one to multiple business cycles. The strategic returns are applicable for shortto long-term investment horizons over a cycle, such as when constructing strategic asset allocations. By contrast, equilibrium returns are generally applicable for multi-cycle investment horizons and long-term planning.

#### Fig. 1

# 2024 strategic and equilibrium arithmetic return CMAs

	Strategic	Equilibrium	
Asset Class	Annual total return	Annual total return	Annual risk
US Cash	3.2%	2.9%	0.1%
US Gov't FI (short)	3.7%	3.2%	1.3%
US Gov't FI (intermediate)	4.8%	3.8%	5.6%
US Gov't FI (long)	5.7%	3.9%	9.7%
US Corp. Investment Grade FI	5.9%	5.0%	6.4%
US Corp. High Yield Fl	5.8%	6.6%	9.8%
Emerging Markets FI (Blend)	5.6%	5.3%	10.5%
US Large Cap Eqty	7.2%	9.8%	16.9%
US Large Cap Growth Eqty	6.8%	9.6%	17.4%
US Large Cap Value Eqty	7.8%	10.0%	17.1%
US Mid Cap Eqty	8.4%	10.5%	19.1%
US Small Cap Eqty	9.2%	11.5%	21.4%
International Dev. Mkts. Eqty	9.4%	9.9%	16.4%
Emerging Markets Eqty	9.9%	11.3%	19.6%
Multi-strategy Hedge Funds	5.8%	6.3%	6.6%
Global Macro Hedge Funds	4.6%	4.7%	4.9%
Event Driven Hedge Funds	6.2%	6.7%	10.1%
Relative Value Hedge Funds	5.8%	5.8%	5.0%
Equity Hedge Funds	6.5%	7.0%	12.0%
Private Equity Buyout	10.1%	11.4%	13.3%
Private Equity Growth	10.8%	12.3%	15.1%
Venture Capital	12.4%	14.4%	20.8%
Private Equity Secondaries	9.4%	10.4%	11.0%
Private Direct Lending	8.9%	9.0%	7.1%
Private Distressed Credit	9.2%	10.1%	13.0%
Private Real Estate	7.3%	10.1%	10.7%
Opportunistic Private Real Estate	7.3%	10.1%	10.7%
Private Infrastructure	7.0%	9.0%	8.2%

Note: These CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from these CMAs. See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information. Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024

We have only one set of volatility and correlation assumptions. Unlike returns that can vary quite a bit depending on starting economic conditions and valuations, risk properties tend to be stable and mean-reverting over time, and are unlikely to change from one economic cycle to the next.

For the select asset classes, Fig. 1 lists our updated strategic and equilibrium CMA arithmetic return assumptions and the updated risks, which represent the annualized standard deviation of returns. Fig. 2 lists the compound returns and risks for the same set of asset classes. The full set of CMAs can be found in Appendix 1. The updated strategic return CMAs are

Fig. 2

# 2024 strategic and equilibrium compound return CMAs

	Strategic	Equilibrium	
Asset Class	Annual total return	Annual total return	Annual risk
US Cash	3.2%	2.9%	0.1%
US Gov't FI (short)	3.7%	3.2%	1.3%
US Gov't FI (intermediate)	4.7%	3.7%	5.6%
US Gov't FI (long)	5.2%	3.4%	9.7%
US Corp. Investment Grade FI	5.7%	4.7%	6.4%
US Corp. High Yield Fl	5.3%	6.1%	9.8%
Emerging Markets FI (Blend)	5.0%	4.7%	10.5%
US Large Cap Eqty	5.7%	8.2%	16.9%
US Large Cap Growth Eqty	5.2%	7.9%	17.4%
US Large Cap Value Eqty	6.2%	8.4%	17.1%
US Mid Cap Eqty	6.4%	8.5%	19.1%
US Small Cap Eqty	6.7%	9.0%	21.4%
International Dev. Mkts. Eqty	7.9%	8.5%	16.4%
Emerging Markets Eqty	7.8%	9.2%	19.6%
Multi-strategy Hedge Funds	5.6%	6.1%	6.6%
Global Macro Hedge Funds	4.5%	4.6%	4.9%
Event Driven Hedge Funds	5.7%	6.2%	10.1%
Relative Value Hedge Funds	5.7%	5.7%	5.0%
Equity Hedge Funds	5.7%	6.2%	12.0%
Private Equity Buyout	9.1%	10.4%	13.3%
Private Equity Growth	9.5%	11.0%	15.1%
Venture Capital	10.0%	12.0%	20.8%
Private Equity Secondaries	8.7%	9.7%	11.0%
Private Direct Lending	8.6%	8.8%	7.1%
Private Distressed Credit	8.3%	9.2%	13.0%
Private Real Estate	6.7%	9.5%	10.7%
Opportunistic Private Real Estate	6.7%	9.5%	10.7%
Private Infrastructure	6.6%	8.6%	8.2%

Note: These CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from these CMAs. See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information. Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024

higher for nearly all major fixed income, equity, and private market segments. Since our last CMA update, US interest rates across the entire US Treasury yield curve have continued to rise and expectations for interest rates over longer horizons have also risen, thereby increasing our expectation for future fixed income returns. Within equities, valuations are higher than they were a year ago, but the macroeconomic environment and earnings outlook have also improved, which boosts our expectation for returns.

#### Fig. 3

# 2024 strategic and equilibrium arithmetic return and yield CMAs

	Strategic		m	
Asset Class	Annual total return	Yield	Annual total return	Yield
US Cash	3.2%	3.0%	2.9%	2.8%
US Gov't FI (short)	3.7%	3.3%	3.2%	3.0%
US Gov't FI (intermediate)	4.8%	3.6%	3.8%	3.4%
US Gov't FI (long)	5.7%	3.7%	3.9%	3.6%
US Corp. Investment Grade FI	5.9%	4.9%	5.0%	4.9%
US Corp. High Yield Fl	5.8%	7.8%	6.6%	8.2%
Emerging Markets FI (Blend)	5.6%	6.7%	5.3%	6.9%
US Large Cap Eqty	7.2%	1.9%	9.8%	1.9%
US Large Cap Growth Eqty	6.8%	1.4%	9.6%	1.4%
US Large Cap Value Eqty	7.8%	2.5%	10.0%	2.5%
US Mid Cap Eqty	8.4%	1.8%	10.5%	1.8%
US Small Cap Eqty	9.2%	1.5%	11.5%	1.5%
International Dev. Mkts. Eqty	9.4%	3.1%	9.9%	3.1%
Emerging Markets Eqty	9.9%	2.5%	11.3%	2.5%
Multi-strategy Hedge Funds	5.8%	0.9%	6.3%	0.9%
Global Macro Hedge Funds	4.6%	0.9%	4.7%	0.9%
Event Driven Hedge Funds	6.2%	0.9%	6.7%	1.0%
Relative Value Hedge Funds	5.8%	1.2%	5.8%	1.2%
Equity Hedge Funds	6.5%	0.7%	7.0%	0.7%
Private Equity Buyout	10.1%	0.0%	11.4%	0.0%
Private Equity Growth	10.8%	0.0%	12.3%	0.0%
Venture Capital	12.4%	0.0%	14.4%	0.0%
Private Equity Secondaries	9.4%	0.0%	10.4%	0.0%
Private Direct Lending	8.9%	7.6%	9.0%	7.7%
Private Distressed Credit	9.2%	1.4%	10.1%	1.5%
Private Real Estate	7.3%	5.8%	10.1%	8.1%
Opportunistic Private Real Estate	7.3%	5.8%	10.1%	8.1%
Private Infrastructure	7.0%	3.9%	9.0%	5.0%

Note: These CMAs are not guaranteed do not represent the return of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from these CMAs See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024

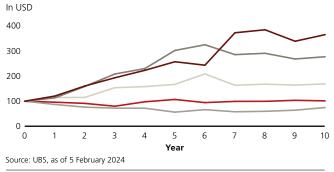
The equilibrium returns are generally higher than strategic returns for equities and now lower for fixed income. For the latter, the rise of interest rates during 2023 resulted in them overshooting our estimates for their long-run steady state values that are the basis for equilibrium return estimates. Consequently, the higher strategic returns reflect the assumption that US Treasury bond yields will decline over time. To estimate the equilibrium returns for all other asset classes, we add an appropriate risk premium to the US government fixed income equilibrium return assumptions, which results in higher equilibrium returns than strategic returns for almost all asset classes.

Yield estimates provide additional information about the estimated return composition, for both strategic and equilibrium horizons. They are estimates of the average annual income from the asset class over the entire investment horizon. The yield estimates for select asset classes are listed in Fig. 3. Fixed income yields are mostly below but close to the total return assumptions for both strategic and equilibrium horizons, as income constitutes the bulk of the total return over time. The incremental total return stems from price appreciation due to falling interest rates assumed over the strategic horizon and the rolldown price appreciation that investors earn when the Treasury yield curve is fixed and upward sloping, as is assumed for the equilibrium horizon. Most equity yields are near the historical average dividend yields for their respective regions and sizes, for both strategic and equilibrium horizons. Yields in the hedge fund and private equity asset classes are low or zero because most of the return is from price appreciation, while the opposite is true for the private real estate asset class.

Both the strategic and equilibrium returns are point estimates, but the actual annual returns can deviate quite a bit from these returns. An investment that increases in value by 20% one year might easily decline by 10% the following year. Combining the return and volatility estimates for an asset class helps provide a more realistic outlook for the potential range of returns. For example, based on our assumptions, US large-cap equity returns could reasonably fall between –9.8% (i.e., 7.2% – 16.9%) and 24.1% (i.e., 7.2% + 16.9%) over 12 months. This range of equity returns is illustrated in Fig. 4 with a number of simulated return paths for US large-cap equities over 10 years.



Fig. 4



### Why a CMA update was necessary

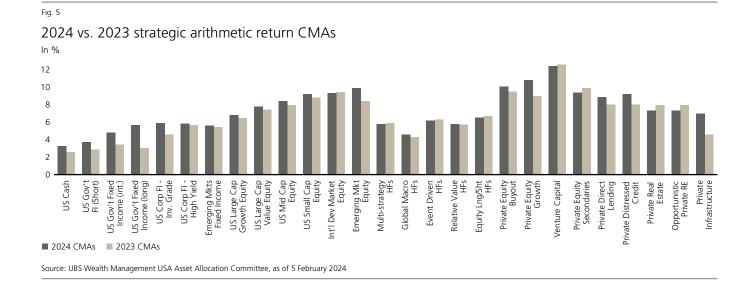
The drivers behind our CMA changes stem from the significant evolution of the global economic and policy environment over the past year. Inflation moderated globally throughout 2023, but US economic growth was surprisingly resilient, with the economy avoiding a widely expected recession. This combination contributed to very strong equity returns in 2023 and solid bond returns after two consecutive negative years. A byproduct of the good growth is that the Federal Reserve and other central banks continued to raise interest rates well into the year and are likely to start cutting rates only gradually later in 2024. As a result, yields across the entire Treasury curve reached their highest levels in over 16 years, though have since moderated. High-quality bond yields are now the most attractive that they've been in a number of years, and are the main driver in lifting strategic fixed income returns. US equities are more expensive than they were a year ago, but benefit from a better macroeconomic outlook for earnings.

### Changes to the major asset class CMAs

In our strategic CMAs, most US fixed income arithmetic returns have increased between 100 and 240 basis points (bps), while US equity returns increased between 30bps and 50bps (Fig.5). The increase in fixed income returns is due to the higher Treasury yields at the start of 2024 versus their levels in early 2023. Since our last CMA update in February 2023, the Fed has raised policy rates by 75bps. The biggest increase in estimated returns are in longer-maturity bonds, as their yields increased around 70bps over the past year, while yields on shorter-maturity bonds rose only about 15bps. We expect the Fed to begin cutting rates by the second quarter of 2024, and we further expect the policy rate to gradually return to about 2.75% for the remainder of the strategic forecast horizon. The declining policy rate, combined with higher starting yields, results in estimated returns over the full forecast horizon above the current yields for intermediate- and longer-maturity government bonds. Returns for shorter-maturity bonds are less than current yields because our forecasted yields for them over the full horizon are below current levels.

With this update, investment grade and high yield corporate bond returns also increase, but by less than those for government bonds. Investment grade returns go up 130bps, benefiting from the relatively high returns to medium- and longer-maturity bonds due to lower interest rates. But their spreads are relatively tight and we expect them to widen over the forecast horizon, acting as a slight drag on total returns. High yield bonds don't benefit to the same extent from the falling interest rate tailwind, and are also relatively expensive, in our view, leading to return estimates that go up 10bps. A similar dynamic accounts for the rise in emerging market bond returns. Equilibrium returns across almost all of fixed income rise by 10–40bps, driven by the assumption that over very long horizons interest rates will be higher than they have been in the past.

The strategic US equity arithmetic returns increase by 30–40bps. US equity valuations increased throughout 2023 in response to increasing optimism on the economy avoiding a recession and a better medium-term outlook. Valuations also got a significant boost from developments in artificial intelligence (Al), which has lifted earnings growth from the tech sector and possibly other sectors over the forecast horizon. Valuations for growth stocks are comfortably above their longterm averages, though they are less extreme after adjusting for earnings growth. Valuations for large-cap value stocks and mid- and small-cap equities remain near long-term averages. These valuations in aggregate suggest forward-looking returns should be slightly lower than a year ago, but that is more than



offset by incrementally better earnings growth projections. Developed market ex-US equity arithmetic returns are largely unchanged, as their valuations are still generally at or below long-term averages. Emerging market equity return assumptions are 150bps higher, largely because Chinese equities, roughly a third of the emerging market equity universe, are very cheap by historical standards.

Equilibrium returns increase by 130–140bps for US equities, reflecting the higher risk-free returns implied by our higher US government fixed income estimated returns, while the implicit equity risk premium is also increased further to be in line with long-term averages. Developed and emerging market equity equilibrium returns increase about 200bps, also benefiting from higher risk-free return assumptions and equity risk premium adjustments.

Our assumptions for private equity buyout are up 60bps and 100bps for the strategic and equilibrium return, respectively. We continue to expect private equity to produce returns that are 2–3% higher than public market equities, but the higher borrowing costs and starting valuations for public equities, and the large amounts of capital in search of deals, mitigate the relative rise in private equity returns. We estimate hedge fund strategic returns to be in the 4–7% range and with continued relatively low volatility, while the equilibrium returns are slightly higher. For private real estate, our strategic return remains near 7% as a result of rental income that can rise with inflation and due to opportunistic and value-added strategies that may take advantage of dislocations caused by the pandemic.

The estimated risks were also updated and they increase across almost all asset classes. The economic and policy environment is likely to remain uncertain and volatile as the global economy recovers after the central bank tightening cycle, with inflation staying above target being an elevated risk. In addition, geopolitical, energy security, and climate risks are likely to remain high and sources of additional market volatility. All of these factors are why we estimate the risks have gone up 50–70bps for equities and 10–70bps for fixed income, approximately.

### How we use CMAs

Capital Market Assumptions can be used in a range of activities, including Strategic Asset Allocation, financial planning, wealth projections, risk monitoring, and portfolio analysis. The strategic and equilibrium CMAs were designed not only for different investment horizons, as discussed earlier, but also with different intended applications.

Our strategic CMAs form a core input for creating our Strategic Asset Allocations. The SAAs are created to provide an attractive return-risk trade-off over the next full economic cycle. In addition, since strategic arithmetic returns are the estimate for average one-year return forecasts, they're essential for constructing SAAs as they set the midpoint for fluctuations due to volatility from year to year.

Strategic CMAs can also be used as a starting point for portfolio customization, providing a baseline to help analytically customize portfolios based on an investor's particular situation or need.

Our equilibrium CMAs are intended for longer-term investment horizons. Long-term planning integrates asset modeling (the investment portfolio asset allocation) and liability modeling (the investor's spending needs, goals, and objectives) to develop a prudent strategy. Equilibrium CMAs play a vital role in that process.

Arithmetic returns serve to help understand the estimated midpoint of year-to-year returns without the impact of volatility. However, volatility tends to produce a drag on average returns over time, which is reflected in the compound return. The differentiation between asset class returns and volatility allowed by arithmetic return assumptions is a useful property to evaluate the trade-off between risk and return and is central to designing SAAs. On the other hand, the compound returns are intended to reflect the anticipated annualized growth rate of an asset class over multiple years. Compound returns are typically the more common language investors speak when discussing returns and can provide a consistent comparison to historical and forward-looking returns.

The yield estimates may enable deeper portfolio insights and construction on multiple topics. A better understanding of the drivers of returns enhances the analysis of potential tax impact since income and capital gains have different tax treatments; this could help target specific long-term income expectations to support future spending needs.

# SAAs: Targeted changes to select institutional allocations

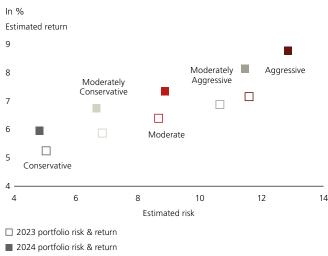
Our Strategic Asset Allocations are diversified model allocations that seek to produce a reasonable risk and return trade-off over a full economic cycle. We design the SAAs to be efficient, and to pursue the highest estimated return for a target level of risk, based on the CMA strategic return and risk assumptions. We publish SAAs by investor risk profile, ranging from Conservative to Aggressive. These include allocations for taxable and non-taxable investors; investors who only want to use traditional, publicly traded liquid assets; and those who want to also include non-traditional assets classes such as hedge funds and private investments. These SAAs provide a reference point for tactical shifts based on short-term considerations, and can be a starting point for portfolio analysis.

While there were no changes to the SAAs, their estimated returns and risks are updated to reflect the new CMA return and risk assumptions

Fig. 6 shows the moderate risk institutional SAAs, with and without non-traditional asset classes, and the updated SAA estimated returns and risks. Fig. 7 demonstrates the consequences of the CMA changes on the estimated return and risk for all five risk profiles of the SAAs with non-traditional asset classes. Across the five risk profiles, SAA risk falls slightly in Conservative and Moderately Conservative allocations, and increases from Moderate to Aggressive profiles. SAA returns increased considerably across risk profiles as the more conservative SAAs with higher allocations to fixed income benefit from the large increase in our estimated returns, while the more aggressive SAAs with higher equity allocations also benefit from the increase in our estimated equity returns. In short, the CMA changes moved the efficient frontier (which compares the risk-return trade-off of the allocations) largely up and slightly to the left. The full set of institutional SAAs can be found in Appendix 3.

#### Fig. 7

#### Institutional SAA risks and returns



Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024

#### Fig. 6 Moderate institutional SAAs

	With NTAs	Without NTAs	
Cash	2.0%	2.0%	
Fixed Income	30.0%	48.0%	
US Fixed Income	26.0%	42.0%	
US Gov't FI (short)	3.0%	5.0%	
US Gov't FI (intermediate)	6.5%	10.0%	
US Gov't FI (long)	2.5%	4.0%	
US IG Corp FI	10.0%	17.0%	
US HY Corp FI	4.0%	6.0%	
Int'l Fixed Income	4.0%	6.0%	
EM FI (hedged)	2.0%	4.0%	
EM FI (local)	2.0%	2.0%	
Equity	33.0%	50.0%	
US Equity	18.5%	28.0%	
US Large cap growth	6.5%	10.0%	
US Large cap value	6.5%	10.0%	
US Mid cap	3.5%	5.0%	
US Small cap	2.0%	3.0%	
International Equity	14.5%	22.0%	
Int'l Developed Markets	10.5%	16.0%	
Emerging Markets	4.0%	6.0%	
Non-traditional	35.0%	0.0%	
Hedge Funds	11.0%	0.0%	
Multi-Strategy	1.0%	0.0%	
Global Macro	2.0%	0.0%	
Event Driven	2.0%	0.0%	
Relative Value	3.0%	0.0%	
Equity Hedge	3.0%	0.0%	
Private Equity	13.5%	0.0%	
Buyout	8.5%	0.0%	
Growth Equity	3.0%	0.0%	
Secondaries	2.0%	0.0%	
Private Credit	5.0%	0.0%	
Direct Lending	3.5%	0.0%	
Distressed Credit	1.5%	0.0%	
Private Real Assets	5.5%	0.0%	
Core / Core + Real Estate	3.5%	0.0%	
Infrastructure	2.0%	0.0%	

Note: The estimated risk and returns of the allocations are provided for illustrative purposes only. The capital market assumptions used to estimate return and risk are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from the results shown.

Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

See Important Information and Disclosures section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024

# Appendix 1: 2024 CMAs

Broad Asset	Asset Class	Subclass	Style			•	rket Assump			
Class				Strategic assumptions Equilibrium assur Compound Arithmetic Yield Compound Arithmetic				- Di-la		
				Compound return	Arithmetic return	Yield	Compound return	Arithmetic return	Yield	Risk
		US	US Cash	3.2	3.2	3.0	2.9	2.9	2.8	0.1
Cash	Cash	International	International Cash	1.3	1.6	1.6	0.2	0.4	0.4	7.2
			Core	5.1	5.2	4.1	4.1	4.2	4.0	4.3
		US Fixed Income	Short	3.9	3.9	3.6	3.3	3.3	3.3	1.4
		US Fixed income	Intermediate Long	4.8	4.8 6.3	4.0	4.0	4.1	3.9 4.4	3.3 10.7
			Other	5.1	5.2	4.4	4.0	4.0	4.4	4.3
			Core	4.6	4.7	3.5	3.7	3.8	3.4	4.3
			Short	3.7	3.7	3.3	3.2	3.2	3.0	1.3
		Government	Intermediate	4.7	4.8	3.6	3.7	3.8	3.4	5.6
			Long	5.2	5.7	3.7	3.4	3.9	3.6	9.7
			Other	4.6	4.7	3.5 4.2	3.7	3.8	3.4 4.3	4.3
			Core Short	2.6	2.6	4.2	3.2	3.2	4.3	3.0
	US		Intermediate	4.4	4.4	4.3	3.2	3.2	4.4	3.0
		Municipals	Long	5.1	5.2	4.0	3.4	3.5	4.1	4.8
Fixed Income			High Yield	5.8	6.2	4.1	4.8	5.2	4.2	8.6
			Other	5.1	5.2	4.2	3.4	3.5	4.3	4.8
			Core	5.7	5.9	4.9	4.7	5.0	4.9	6.4
		Corporate Investment	Short	4.4	4.4	4.4	3.7	3.7	4.2	2.2
		Grade Credit	Intermediate	5.1	5.2	4.7	4.5	4.6	4.6	4.5
			Long Other	6.3 5.7	7.0	5.2 4.9	4.8	5.5	5.2 4.9	11.5 6.4
		Corporate High Yield	Corporate High Yield	5.3	5.8	7.8	6.1	6.6	8.2	9.8
		Puerto Rico Municipals	Puerto Rico Municipals	5.1	5.2	4.0	3.4	3.5	4.1	4.8
		Preferred	Preferred	5.3	6.0	6.6	6.5	7.2	6.3	11.6
		Convertibles	Convertibles	5.2	6.2	3.4	6.1	7.1	3.4	13.7
	Global	Global	Global	5.0	5.2	4.1	4.1	4.2	4.0	6.0
		International	International	3.2	3.6	3.9	4.1	4.5	4.0	8.2
	International	Developed Markets Emerging Markets	Developed Markets	3.2	3.6	3.9 6.7	4.1	<u>4.5</u> 5.3	4.0	8.2 10.5
			Emerging Markets		5.0	0.7	4./		0.9	10.5
			Core	5.8	7.3	1.9	8.3	9.9	1.9	17.1
			Growth	5.3	7.0	1.4	8.0	9.7	1.4	17.6
		US Equity	Value	6.3	7.9	2.4	8.5	10.1	2.4	17.3
			Master Limited Partnerships		13.6	8.0	8.5	13.6	8.0	30.4
			Public Real Estate	5.5	8.7	7.0	5.7	8.9	7.1	24.5
			Other Core	5.8	7.3	1.9 1.9	8.3	9.9 9.8	1.9	17.1 16.9
			Growth	5.2	6.8	1.9	7.9	9.6	1.9	17.4
			Value	6.2	7.8	2.5	8.4	10.0	2.5	17.1
		Large Cap	Master Limited Partnerships		13.6	8.0	8.5	13.6	8.0	30.4
			Public Real Estate	5.5	8.7	7.0	5.7	8.9	7.1	24.5
			Other	5.7	7.2	1.9	8.2	9.8	1.9	16.9
			Core	6.4	8.4	1.8	8.5	10.5	1.8	19.1
			Growth	5.9	8.0	1.2	8.1	10.2	1.2	19.5
		Mid Cap	Value Master Limited Partnerships	6.9 8.4	9.0 13.6	2.3 8.0	8.6 8.5	10.7 13.6	2.3	19.4 30.4
	US		Public Real Estate	5.5	8.7	7.0	5.7	8.9	7.1	24.5
			Other	6.4	8.4	1.8	8.5	10.5	1.8	19.1
Equity			Core	6.5	8.8	1.6	8.7	11.0	1.6	20.4
			Growth	6.1	8.4	0.9	8.4	10.7	0.9	20.8
		SMid Cap	Value	7.1	9.4	2.2	8.9	11.2	2.2	20.5
		Sivila Cap	Master Limited Partnerships		13.6	8.0	8.5	13.6	8.0	30.4
			Public Real Estate	5.5	8.7	7.0	5.7	8.9	7.1	24.5
			Other Core	6.5 6.7	8.8 9.2	1.6 1.5	<u>8.7</u> 9.0	11.0 11.5	1.6 1.5	20.4 21.4
			Growth	6.2	9.2	0.8	9.0	11.5	0.8	21.4
			Value	7.2	9.8	2.2	9.1	11.2	2.2	21.7
		Small Cap	Master Limited Partnerships		13.6	8.0	8.5	13.6	8.0	30.4
			Public Real Estate	5.5	8.7	7.0	5.7	8.9	7.1	24.5
			Other	6.7	9.2	1.5	9.0	11.5	1.5	21.4
		Preferred	Preferred	5.3	6.0	6.0	6.5	7.2	6.3	11.6
		Convertibles	Convertibles	5.2	6.2	3.1	6.1	7.1	3.4	13.7
			Core	6.7	8.0	2.3	8.6	9.9	2.3	15.6
	Clobal	Clobal	Growth	6.5	7.7	1.3	8.4	9.7	1.3	15.4
	Global	Global	Value Public Real Estate	7.4	8.6 6.6	3.4 5.3	8.9	<u> </u>	3.4 7.4	14.9
										20.4 15.6
			Other	6.7	8.0	2.3	8.6	9.9	2.3	15.0

Broad Asset	Asset Class	Subclass	Style		Capit	al Marke	et Assumption	s, in %		
Class				Strategic assumptions			Equili	brium assump	otions	
				Compound	Arithmetic	Yield	Compound	Arithmetic	Yield	Risk
				return	return		return	return		
			Core	8.1	9.5	2.9	8.7	10.2	2.9	16.4
			Growth	8.0	9.3	1.9	8.6	9.9	1.9	15.4
		International	Value	8.5	10.0	4.1	8.9	10.4	4.1	16.5
			Public Real Estate	4.4	6.5	5.2	7.0	9.1	7.3	19.9
			Other	8.1	9.5	2.9	8.7	10.2	2.9	16.4
- ··			Core	7.9	9.4	3.1	8.5	9.9	3.1	16.4
Equity	International	Developed Markets	Growth	7.7	9.1	2.0	8.3	9.7	2.0	16.1
			Value	8.1	9.8	4.2	8.4	10.1	4.2	17.7
			Other	7.9	9.4	3.1	8.5	9.9	3.1	16.4
			Core	7.8	9.9	2.5	9.2	11.3	2.5	19.6
		Emerging Markets	Growth	7.0	9.6	1.4 3.6	<u>8.5</u> 9.1	11.1	<u> </u>	21.6
			Value	7.8	10.4 9.9	2.5	9.1	11.5 11.3		21.1
			Other	7.0	9.9	2.5	9.2	11.5	2.5	19.6
			Commodities	7.6	9.2	3.2	5.3	6.9	2.9	17.1
			Energy	6.6	10.5	3.2	3.2	6.9	2.9	26.7
Commodities	Commodities	Commodities	Agriculture	9.7	11.6	3.2	6.2	7.9	2.9	18.2
Commodities	Commodities	Commodities	Industrial Metals	3.7	6.1	3.2	4.0	6.4	2.9	21.2
			Precious Metals	3.7	5.5	3.2	1.0	2.7	2.9	18.6
			Other	7.6	9.2	3.2	5.3	6.9	2.9	17.1
		Non-Traditional	Non-Traditional	7.1	7.6	2.2	8.8	9.2	3.0	8.9
		NON-ITAULUONAI	Multi Strategy	5.6	5.8	0.9	6.1	6.3	0.9	6.6
	Non-Traditional		Diversified Fund of Funds	4.5	4.7	0.9	4.8	5.0	0.9	5.5
		Hedge Funds	Global Macro	4.5	4.7	0.7	4.6	4.7	0.8	4.9
			Event Driven	5.7	6.2	0.9	6.2	6.7	1.0	10.1
Non-Traditional			Relative Value	5.7	5.8	1.2	5.7	5.8	1.0	5.0
Non-Inductional			Managed Futures	2.2	2.3	0.3	2.3	2.4	0.4	5.3
			Equity Long/Short	5.7	6.5	0.7	6.2	7.0	0.7	12.0
			Other	5.6	5.8	0.9	6.1	6.3	0.9	6.6
		Private Equity	US Private Equity	8.6	9.6	0.0	10.2	11.2	0.0	13.8
		Private Real Estate	Private Real Estate	6.7	7.3	5.8	9.5	10.1	8.1	10.7
	Other	Other	Other	6.1	6.5	3.2	6.6	7.0	3.1	9.3
	Balanced	Balanced	Balanced	6.1	6.5	3.2	6.6	7.0	3.1	9.3
		Insured Solutions	Insured Solutions	4.8	5.1	4.6	6.1	6.4	5.8	7.4
			Other	4.8	5.1	4.6	6.1	6.4	5.8	7.4
			Fixed	4.6	4.7	4.2	3.7	3.8	3.4	4.3
		Annuities	Variable	4.8	5.1	4.6	6.1	6.4	5.8	7.4
			Immediate	4.6	4.7	4.2	3.7	3.8	3.4	4.3
			Indexed	4.8	5.1	4.6	6.1	6.4	5.8	7.4
			Other Tame Life	4.3	4.4	4.0	5.2	5.3 2.9	4.8	4.9
0.1			Term Life	3.2	3.2				2.6	0.1
Other	Insured Solutions		Whole Life	4.6	4.7	4.2	3.7	3.8	3.4	4.3
	insured solutions		Survivorship Whole Life							4.3
			Universal Life Survivorship Universal Life	4.6	4.7	4.2	3.7	3.8	3.4	4.3
		Insurance	Variable Universal Life	4.8	5.1	4.2	6.1	6.4	5.8	7.4
		insulance	Survivorship Variable Universal Life		5.1	4.6	6.1	6.4	5.8	7.4
			Indexed Universal Life	4.8	5.1	4.6	6.1	6.4	5.8	7.4
			Hybrid Universal Life	4.6	4.7	4.0	3.7	3.8	3.4	4.3
			Hybrid Whole Life	4.6	4.7	4.2	3.7	3.8	3.4	4.3
			LTC	3.2	3.2	2.9	2.9	2.9	2.6	0.1
			Disability	3.2	3.2	2.9	2.9	2.9	2.6	0.1
			Disability	5.2	3.2	2.3	2.9	2.9	2.0	0.1
Inflation	Inflation	Inflation	Inflation			2.4			2.4	
	innucion					2.7			2.7	

Note: The Capital Market Assumptions (CMAs) are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. These CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from these CMAs. Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024. See Important Information section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

# Appendix 2: Supplemental non-traditional CMAs

Broad Asset	Asset Class	Subclass	Style		Capi	ital Marke	et Assumption	s, in %		
Class				Strateg	gic assumption	ic assumptions		Equilibrium assumptions		
				Compound	Arithmetic	Yield	Compound	Arithmetic	Yield	Risk
				return	return		return	return		
			Global	9.5	10.6	0.0	10.7	11.8	0.0	14.0
			Fund-of-Funds	9.5	10.6	0.0	10.7	11.8	0.0	14.0
			Buyouts	9.1	10.1	0.0	10.4	11.4	0.0	13.3
		Private Equity	Growth	9.5	10.8	0.0	11.0	12.3	0.0	15.1
			Venture Capital	10.0	12.4	0.0	12.0	14.4	0.0	20.8
			Secondaries	8.7	9.4	0.0	9.7	10.4	0.0	11.0
Non-Traditional	Non-Traditional		Coinvestments	9.5	10.6	0.0	10.7	11.8	0.0	14.0
			Private Credit	8.5	9.0	4.5	8.7	9.2	4.6	10.0
		Private Credit	Direct Lending	8.6	8.9	7.6	8.8	9.0	7.7	7.1
			Distressed	8.3	9.2	1.4	9.2	10.1	1.5	13.0
		Drivata Real Estate	Core/Value-Add	6.7	7.3	5.8	9.5	10.1	8.1	10.7
		Private Real Estate	Opportunistic	6.7	7.3	5.8	9.5	10.1	8.1	10.7
		Private Infrastructure	Infrastructure	6.6	7.0	3.9	8.6	9.0	5.0	8.2

Note: The Capital Market Assumptions (CMAs) are UBS's estimated risk and return assumptions for various asset classes and are based on our proprietary methodology. These CMAs are not guaranteed, do not represent the return or risk of a particular security, investment, portfolio or strategy, and do not take into consideration the fees, costs or charges associated with any particular product, investment, portfolio or strategy. Actual performance can differ, perhaps significantly, from these CMAs. Source: UBS Wealth Management USA Asset Allocation Committee, as of 5 February 2024. See Important Information section, Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models, for more information.

# Important Information and Disclosures

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Wealth Management USA Asset Allocation Committee and the UBS Capital Market Assumptions and Strategic Asset Allocation Models The capital market assumptions and strategic asset allocation models discussed in this publication were vetted and approved by the Wealth Management USA Asset Allocation Committee (WM USA AAC).

The capital market assumptions are estimates of forward-looking average annual returns for a particular asset class. They are not guaranteed and do not represent the return of a particular security or investment. The actual performance of any particular security, investment or strategy can differ, perhaps significantly, from these CMAs.

The strategic asset allocation models are intended to provide a general framework to assist our clients in making informed investment decisions. They are provided for illustrative purposes, and were designed by the WM USA AAC for hypothetical U.S. investors with a total return objective under five different investor risk profiles: conservative, moderate conservative, moderate, moderate aggressive and aggressive. UBS Financial Services Inc. Institutional Consultant can help you determine how a strategic allocation could be applied or modified according to your risk profile and investment goals.

The CMAs and SAAs do not take into consideration the fees, costs or charges associated with any security, investment, or strategy, including those that may be incurred when implementing an asset allocation.

#### Asset allocation does not assure profits or prevent against losses from an investment portfolio or accounts in a declining market.

Please note that UBS has changed its capital market assumptions and strategic asset allocation models in the past and may do so in the future.

#### Index performance data

Index information is provided for illustrative purposes only. Indexes are not available for direct investment and represent an unmanaged universe of securities which does not take into account advisory or transaction fees, all of which will reduce overall return.

#### **Investment Risks**

Asset Class is a term that broadly defines a category of investments that share common investment characteristics. Typical broad asset classes include equities, fixed income securities, cash and cash alternatives. This section describes some of the asset classes used in this report and some of the general risk considerations. All investments involve risks which you should carefully consider prior to implementing an investment strategy.

**Cash**: Cash and cash alternatives typically include money market securities or three-month T-Bills. These securities have short maturity dates and they typically provide a stable investment value as compared to other investments and current interest income. These investments may be subject to credit risks and inflation risks. Treasuries also carry liquidity risks for sales prior to maturity. Investments in money market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation (FDIC), the U.S. government or any other government agency. There can be no assurance that the funds will be able to maintain a stable net asset value at \$1.00 per share or unit.

**Equities**: Equity securities are subject to market risk and will undergo price fluctuations in which downward and upward trends may occur over short or extended periods. Historically, equities have shown greater growth potential than other types of securities, but they have also shown greater volatility. In addition to these risks, securities issued by small-cap companies may be relatively highly volatile because their earnings and business prospects typically fluctuate more than those of larger-cap companies. Securities issued by non-U.S. companies can have risks not typically associated with domestic securities, including risks associated with changes in currency values, economic, political and social conditions, loss of market liquidity, the regulatory environments of the respective countries and difficulties in receiving current or accurate information.

**Fixed Income:** Fixed Income represents debt issued by private corporations, governments or Federal agencies. Two main risks related to fixed income investing are interest rate risk and credit risk. Typically, when interest rates rise, there is a corresponding decline in the market value of bonds. Credit risk refers to the possibility that the issuer of the bond will not be able to make principal and interest payments. High yield investments are high yielding securities but may also carry more risk. A bond fund's yield and value of its portfolio fluctuate and can be affected by changes in interest rates, general market conditions and other political, social and economic developments.

**Corporate Bonds:** Fixed income securities are subject to market risk and interest rate risk. If sold in the secondary market prior to maturity, investors may experience a gain or loss depending on interest rates, market conditions and issuer credit quality.

Municipal Securities: Income from municipal bonds may be subject to state and local taxes based on residency of the investor and may be subject to the Alternative Minimum Tax. Call features may exist that can impact yield. If sold prior to maturity, investments in municipal securities are subject to gains/losses based on the level of interest rates, market conditions and credit quality of the issuer.

**Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

**Emerging Markets**: Investing in emerging market securities can pose some risks different from, and greater than, risks of investing in U.S. or developed markets securities. These risks include: a risk of loss due to political instability; exposure to economic structures that are generally less diverse and mature, and to political systems which may have less stability, than those of more developed countries; smaller market capitalization of securities markets, which may suffer periods of relative illiquidity; significant price volatility; restrictions on foreign investment; and possible repatriation of investment income and capital.

Non-Traditional Asset Classes: Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate, (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-US securities and illiquid investments.
- Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.

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Investment Solutions Portfolio Analysis

Gwinnett Equilibrium 2024 with RE

February 05, 2024

Prepared By : UBS Institutional Consulting

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# **UBS Asset Allocation Study**

# **IMPORTANT:** The projections or other information generated by the Zephyr Asset Allocation Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results will vary with each use and over time.

Results reflect the reinvestment of income, but not the impact of transaction costs, advisory fees, taxes and inflation (unless otherwise indicated). If these factors were included, the results shown would be lower.

Historic results are provided for illustrative purposes only and are based on the retroactive application of historic index data to the asset allocation(s) analyzed. The Zephyr tool calculates hypothetical portfolio performance results for the period shown using long-term performance of representative indices as proxies for the hypothetical performance of the asset classes included in the portfolio(s) analyzed. The calculation assumes that the portfolio was rebalanced monthly, which does not necessarily reflect how an actual portfolio would have been managed. Allocations were developed with the benefit of hindsight and results do not consider the impact that material economic and market factors might have had on investment decision-making during the time period. Actual results may be lower than the hypothetical returns and will vary depending on market conditions and the specific composition and implementation of the portfolio. Past performance or historic results provide no guarantee of future returns.

Please see Appendix for important information about this report.

The information herein is based on data and computations by Zephyr Associates and is believed to be reliable but UBS does not warrant its completeness or accuracy.



#### UBS Capital Market Assumptions

The asset class return, risk, and correlation results used and displayed in this report are based on UBS's estimated forward-looking return, risk measured by standard deviation and correlation assumptions ("capital market assumptions") as vetted and approved by the Wealth Management Americas Asset Allocation Committee ("UBS WMA AAC"), which are based on UBS proprietary research. The development process includes a review of a variety of factors, including the return, risk, correlations and historical performance of various asset classes, inflation and risk premium.

UBS WMA AAC has developed two sets of return assumptions that are designed for different investment time horizons. The "strategic" returns in the UBS capital market assumptions reflect UBS WMA AAC's expectations for the average annual total return for various asset classes over one full business cycle. The "equilibrium" return assumptions reflect our expectations for average annual returns over multiple business cycles based on certain structural assumptions about the economy, including the long-term potential growth rate and the neutral rate of interest.

UBS WMA AAC's risk assumptions and asset class correlation assumptions remain the same when using strategic or equilibrium return assumptions.

#### This Analysis uses Equilibrium Return Assumptions

The strategic return assumptions are applicable for short- to long-term investment horizons over a full business cycle, such as when constructing strategic asset allocations or performing custom portfolio analysis or risk monitoring. In contrast, equilibrium return assumptions are appropriate for multi-cycle investment horizons that are typical of long-term planning. You have requested that this analysis use "equilibrium" return assumptions which are shown on the following "Scenario Analysis" page. Using equilibrium return assumptions may be appropriate in certain circumstances for multi-cycle investment horizons to help assess the potential success of a long-term financial plan or the funding status of an institutional pension plan; however, equilibrium return assumptions have limitations for portfolio construction because they do not consider cyclical developments or current economic or market conditions. We recommend using strategic return assumptions to construct and evaluate strategic asset allocations because strategic return assumptions reflect our current return expectations for the cycle.

You should review this analysis in conjunction with the analysis you received using UBS WMA AAC's strategic return assumptions. Please contact your UBS Consultant if you have not received a report using strategic return assumptions.

UBS capital market assumptions are not guarantees and are subject to change at any time at our discretion and without notice. UBS has changed its return, risk and correlation assumptions in the past and may do so in the future. Neither UBS nor your UBS Consultant is required to provide you with an updated analysis based upon changes to these or other underlying assumptions.

Capital market assumptions set by the UBS WMA AAC may differ or be contrary to those established by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. In addition, UBS has a variety of analyses and services that provide portfolio review, including asset allocation strategies. The recommendations and types of analysis may vary depending on the asset allocation analysis used.

Since assumptions are subject to uncertainty, including market forces and factors outside of our control, you should also understand that the assumptions used are estimates, are not guarantees or projections of future results. There is no certainty that the assumptions for the model will accurately estimate asset class return rates going forward. Actual long-term results for each asset class may differ from our assumptions, with those for classes with limited histories potentially diverging more. As a result, UBS will not be responsible for omissions in the analysis, regardless of the source of such inaccuracies, errors, or omissions. In addition, capital market assumptions pertain to the asset or sub-asset class in general, not the performance of specific securities or investments. Particular investment products may have higher or lower returns than the range for the corresponding asset class used in this analysis. Your actual results may vary significantly from the results shown in this report.

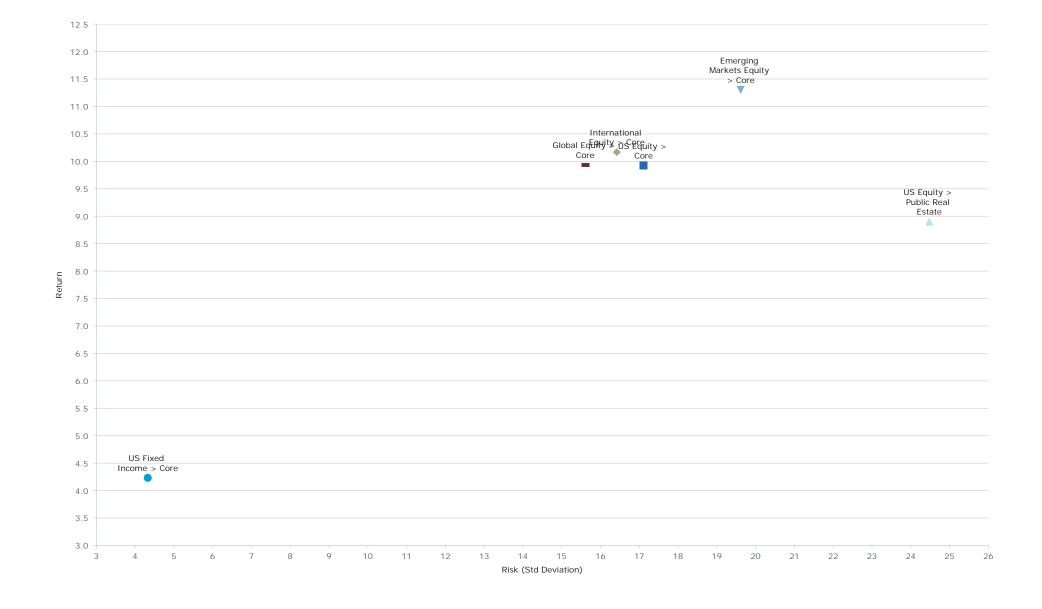
# Scenario Assumptions

				CONST	RAINTS		
NAME	PROXY	RETURN	STDEV	MIN	MAX		
UNGROUPED							
US Equity > Core	Russell 3000	9.92%	17.11%	35.00%	55.00%		
US Fixed Income > Core	Bloomberg U.S. Aggregate	4.23%	4.33%	15.00%	48.00%		
US Equity > Public Real Estate	FTSE Nareit Equity REITs	8.90%	24.48%	0.00%	7.00%		
International Equity > Core	MSCI ACWI ex USA (Net)	10.17%	16.42%	0.00%	15.00%		
Emerging Markets Equity > Core	MSCI EM (EMERGING MARKETS)	11.30%	19.61%	0.00%	5.00%		
Global Equity > Core	MSCI ACWI (Net)	9.93%	15.61%	0.00%	15.00%		

# Scenario Assumptions - Correlation Matrix

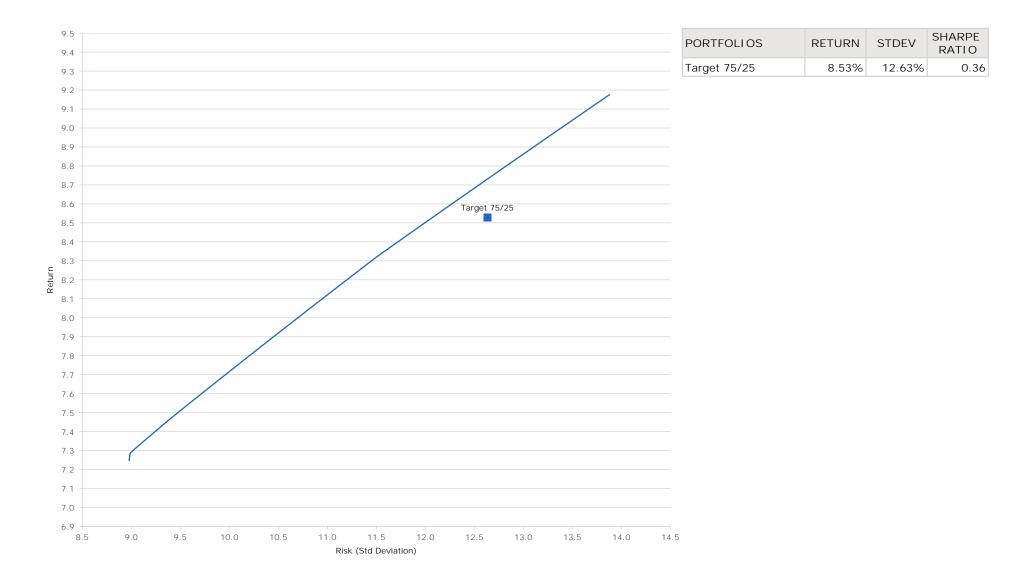


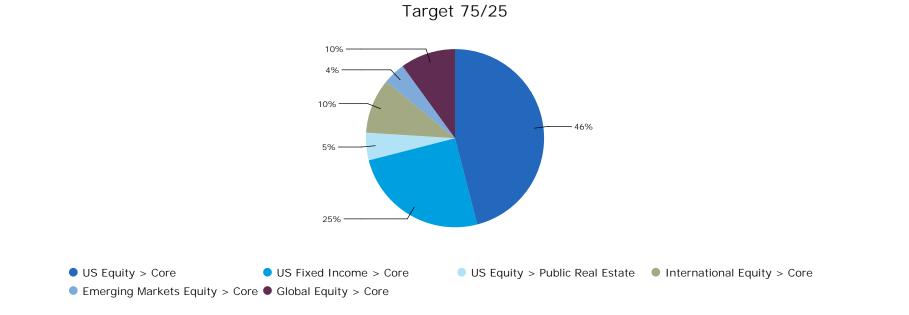
ASSETS	А	В	С	D	E	F
A. US Equity > Core	1.00	0.12	0.82	0.84	0.69	0.96
B. US Fixed Income > Core	0.12	1.00	0.25	0.13	0.11	0.12
C. US Equity > Public Real Estate	0.82	0.25	1.00	0.70	0.57	0.79
D. International Equity > Core	0.84	0.13	0.70	1.00	0.89	0.95
E. Emerging Markets Equity > Core	0.69	0.11	0.57	0.89	1.00	0.81
F. Global Equity > Core	0.96	0.12	0.79	0.95	0.81	1.00



# Efficient Frontier







	TARGET 75/25
Return	8.53%
Standard Deviation	12.63%
Sharpe Ratio	0.36

ALLOCATIONS WEIGHTS	TARGET 75/25		
US Equity > Core	46.00		
US Fixed Income > Core	25.00		
US Equity > Public Real Estate	5.00		
International Equity > Core	10.00		
Emerging Markets Equity > Core	4.00		
Global Equity > Core	10.00		
Return	8.53		
Standard Deviation	12.63		
Sharpe Ratio	0.36		



# Range of Returns

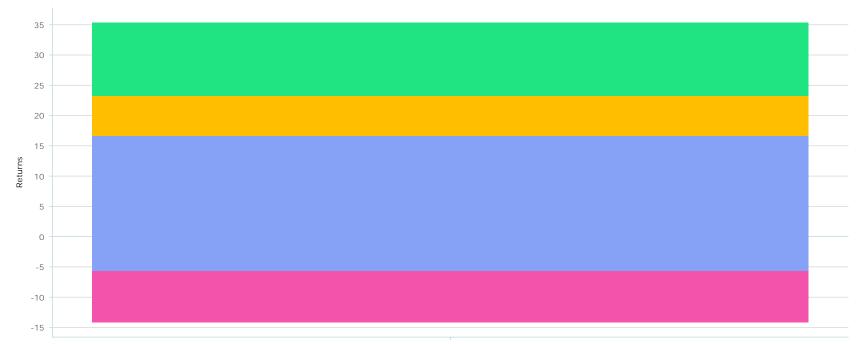
Worst Case Expected Best Case

	ONE YEAR	THREE YEAR	FIVE YEAR	TEN YEAR	TWENTY YEAR
Best Case	35.32%	22.92%	19.34%	15.84%	13.42%
Expected	8.53%	8.04%	7.95%	7.87%	7.84%
Worst Case	(14.13%)	(5.46%)	(2.62%)	0.32%	2.46%
Expected Risk	12.63%	7.25%	5.60%	3.96%	2.80%

#### Allocation Case: Gwinnett Equilibrium 2024 with RE

\*

UBS



### Distribution of Returns - 1 Year

PERCENTILE	TARGET 75/25
Best Case	35.32
Expected	8.53
Worst Case	(14.13)

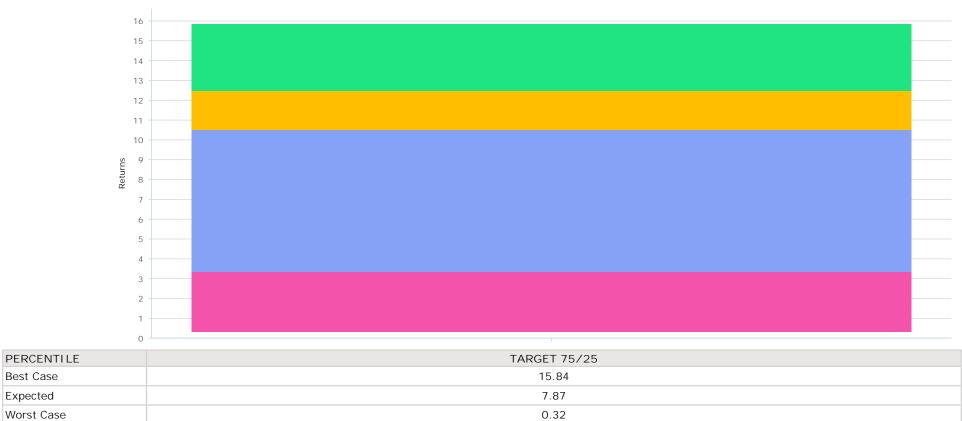
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Distribution of Returns - 5 Years

PERCENTILE	TARGET 75/25
Best Case	19.34
Expected	7.95
Worst Case	(2.62)

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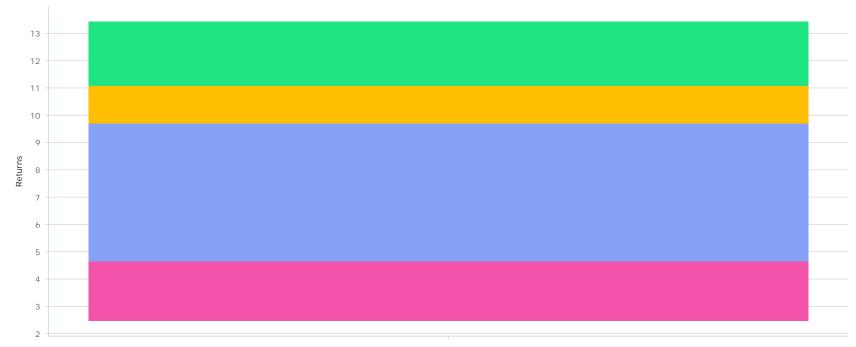


Distribution of Returns - 10 Years

Best Case

Expected

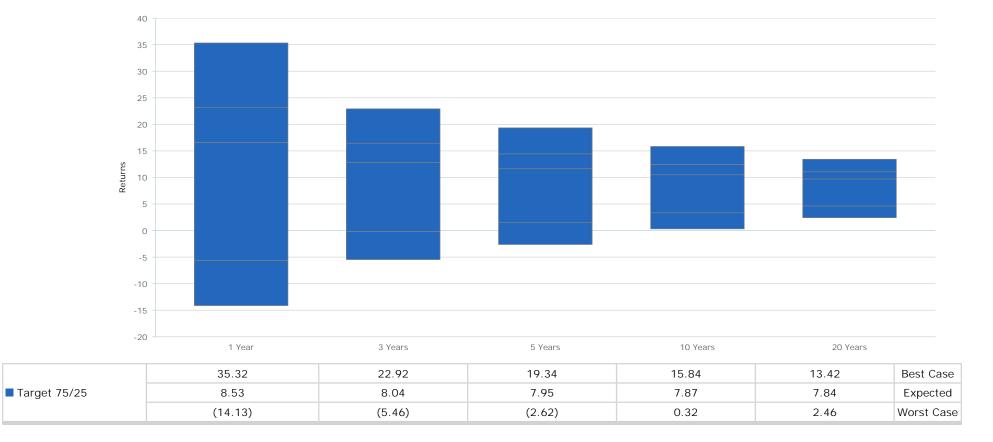
**WBS** 



Distribution of Returns - 20 Years

PERCENTILE	TARGET 75/25
Best Case	13.42
Expected	7.84
Worst Case	2.46

**WBS** 



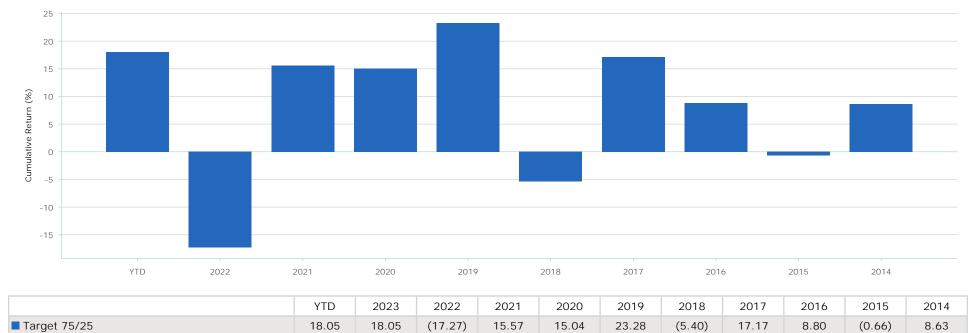
#### Allocation Case: Gwinnett Equilibrium 2024 with RE

**WBS** 



## Calendar Year Cumulative Return

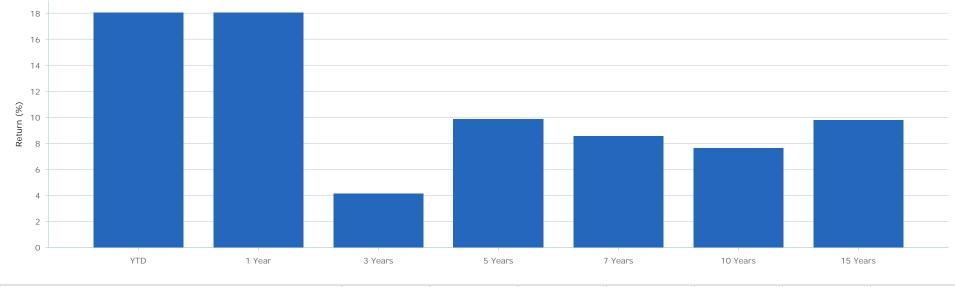
As of December 2023





## Trailing Year Returns

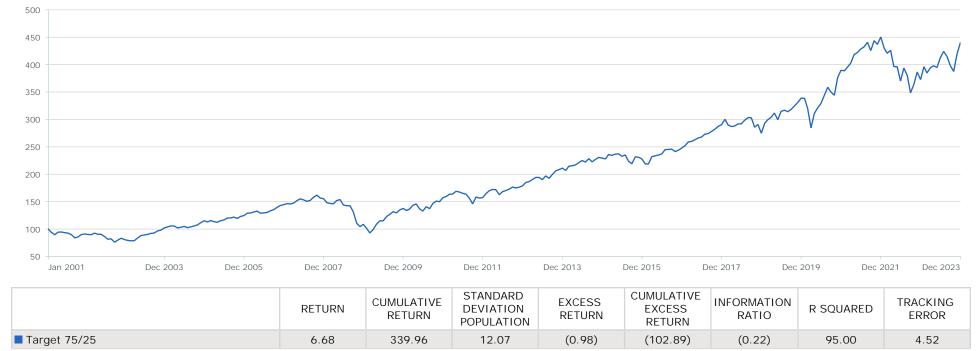
### As of December 2023



	YTD	1 YEAR	3 YEARS	5 YEARS	7 YEARS	10 YEARS	15 YEARS
Target 75/25	18.05	18.05	4.12	9.87	8.54	7.62	9.78



## Manager Performance





## Periodic Returns

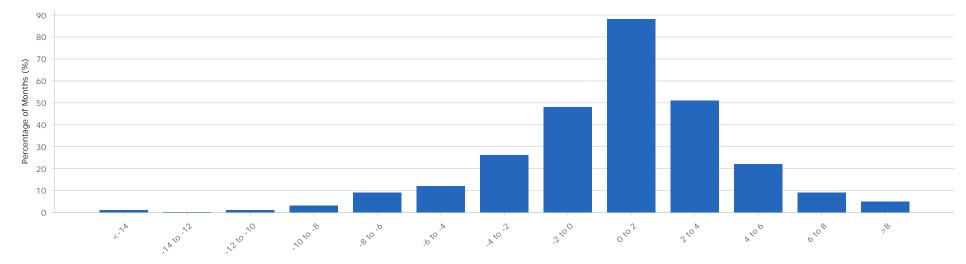
### As of December 2023

		JAN	FEB	MAR	Q1	APR	MAY	JUN	Q2	JUL	AUG	SEP	Q3	OCT	NOV	DEC	Q4	YEAR
	2023	6.31	(2.86)	2.41	5.77	0.96	(0.79)	4.49	4.66	2.80	(2.18)	(4.00)	(3.46)	(2.70)	8.09	5.03	10.47	18.05
Target 75/25	2022	(4.52)	(2.17)	1.27	(5.41)	(6.95)	(0.11)	(6.58)	(13.16)	6.41	(3.39)	(8.38)	(5.81)	4.47	6.16	(3.59)	6.93	(17.27)
Target 75/25	2021	(0.28)	1.74	1.90	3.38	3.80	0.90	1.52	6.33	0.94	1.90	(3.44)	(0.68)	4.27	(1.51)	3.08	5.86	15.57
	2020	(0.07)	(5.53)	(10.98)	(15.96)	9.15	3.38	2.43	15.58	4.52	4.30	(2.48)	6.31	(1.61)	9.34	3.57	11.41	15.04



## Histogram of Returns

### February 2001 - December 2023



Returns Range (%)

	SKEWNESS	KURTOSIS	NUMBER OF DOWN PERIODS	AVERAGE NEGATIVE RETURN	DOWNSIDE DEVIATION (MAR = 0.00%)	NUMBER OF UP PERIODS	AVERAGE POSITIVE RETURN	UPSIDE DEVIATION (MAR = 0.00%)
Target 75/25	(0.65)	1.84	100	(2.90)	8.23	175	2.61	9.07



## Historical Index Performance Comparison

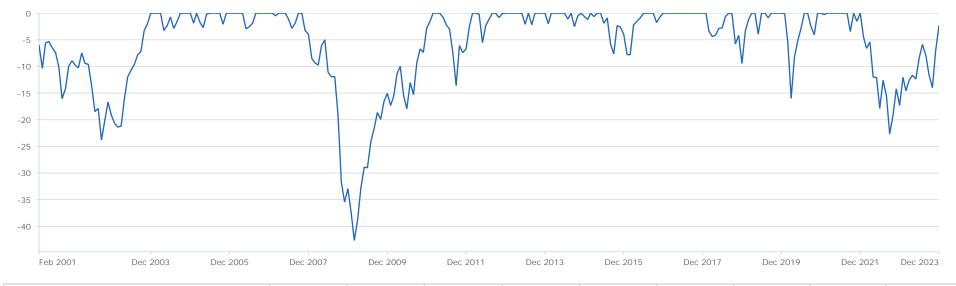
As of December 2023

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.17	15.97	7.65	(30.20)	26.69	14.38	0.10	13.67	17.94	8.63	(0.66)	8.80	17.17	(5.40)	23.28	15.04	15.57	(17.27)	18.05	18.05

1 Target 75/25



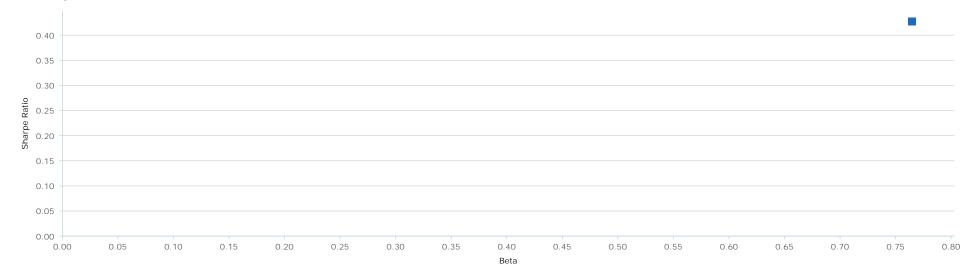
### Drawdown of Cumulative Return



		MAXIMUM DRAWDOWN START DATE		MAXIMUM DRAWDOWN LENGTH	MAXIMUM DRAWDOWN RECOVERY DATE	HIGH WATER MARK DATE	HIGH WATER MARK	PAIN INDEX	PAIN RATIO
Target 75/25	(42.65)	Nov 2007	Feb 2009	16	Feb 2011	Dec 2021	2.39	5.85	0.88



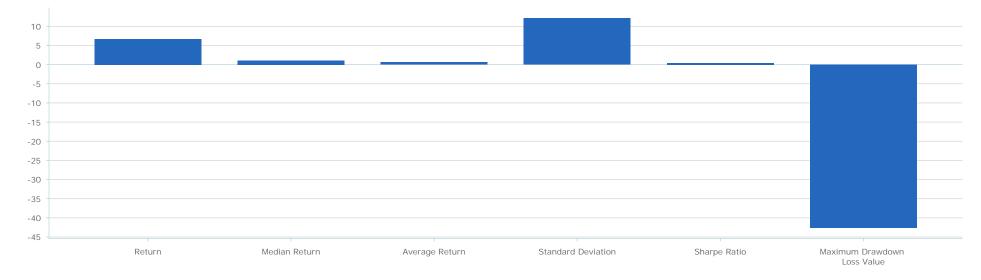
## Sharpe Ratio / Beta vs Benchmark



	RETURN	STANDARD DEVIATION	ALPHA	BETA	EXCESS RETURN	SHARPE RATIO	TRACKING ERROR	R SQUARED
Target 75/25	6.68	12.09	0.64	0.76	(0.98)	0.43	4.52	95.00



## Multi-Statistic

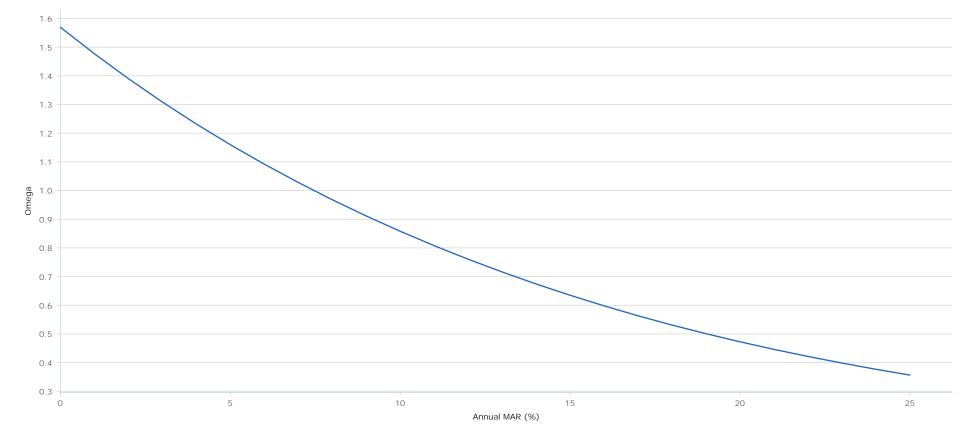


	RETURN	MEDIAN RETURN	AVERAGE RETURN	STANDARD DEVIATION	SHARPE RATIO	MAXIMUM DRAWDOWN LOSS VALUE
Target 75/25	6.68	1.08	0.60	12.09	0.43	(42.65)

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## Omega

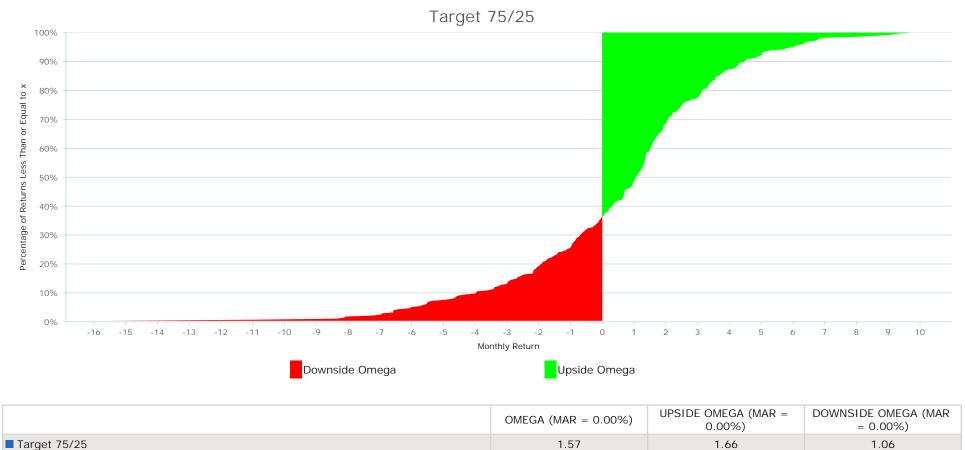
February 2001 - December 2023



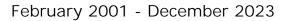
Target 75/25

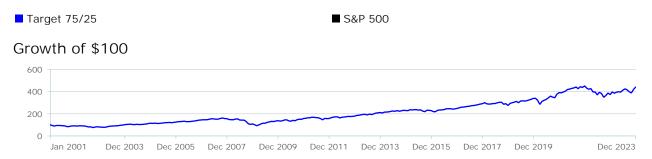


## Cumulative Distribution of Returns



### Performance Risk Summary

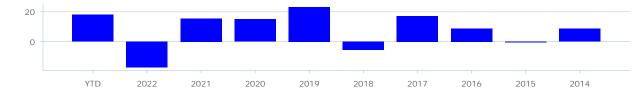




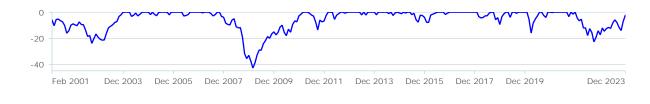
### Annualized Return

	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	10 YEARS
Target 75/25	18.05	(1.18)	4.12	6.75	9.87	7.62

### Calendar Year Return



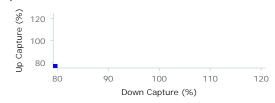
### Drawdown



Index relative statistics vs S&P 500



### Upside / Downside



### **Summary Statistics**

	MANAGER
Return	6.68
Standard Deviation	12.09
Sharpe Ratio	0.43
Excess Return	(0.98)
Tracking Error	4.52
Information Ratio	(0.22)
Alpha	0.64
Beta	0.76
Up Capture	75.26
Down Capture Ratio	79.20
Maximum Drawdown Loss Value	(42.65)
Pain Index	5.85
Pain Ratio	0.88

#### Important Information About Your Report

The projections and other information contained in this report have been generated by a digital asset allocation analysis tool developed by Zephyr Associates (the "Zephyr Asset Allocation Tool" or "Zephyr tool"). The goal of the tool is to aid and educate our UBS Consultants, clients and prospective clients in understanding the scope of our service offerings, the issues that should be considered before engaging in an investment strategy or transaction, the basic tenants of investing (particularly with a view towards long-term investing), our views of long-term economic trends and projections and, subject to certain assumptions, the potential effects that a particular strategy, investment program or product or series of transactions may have on a portfolio. You and your UBS Consultant can use this tool to analyze the composition and hypothetical growth of an asset allocation or series of several asset allocations (e.g., your current allocation, a UBS strategic asset allocation model, a custom allocation develop by you and your UBS Consultant based on your individual investment policy, etc.).

The information in this report is based on data and computations provided by Zephyr Associates and other third parties. UBS believes this information to be reliable but we have not independently verified and do not guarantee the accuracy or completeness of the data and computations.

IMPORTANT: The projections or other information generated by the Zephyr Asset Allocation Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results.

Actual results may vary with each use and over time depending on the specific composition of the investor's portfolio, when the portfolio is implemented, and with changing market conditions. All results reflect realized and unrealized gains and losses and the reinvestment of income. Unless otherwise indicated, results do not include the impact of transaction costs (e.g., commissions, mark-ups, mark-downs, fees), advisory fees, or taxes. If these factors were included, the results shown would be lower. Assets are classified based on UBS' proprietary classification methodology (assets held at UBS) or as identified by you (assets held at other financial institutions). Rebalancing to the asset allocation shown is assumed to have occurred at the beginning of each month for the period shown.

#### Scope of our Services

UBS Financial Services Inc. ("UBS") makes the interactive Zephyr Asset Allocation Tool available to certain UBS Consultants, clients and prospective clients to conduct certain asset allocation analyses. This Zephyr Asset Allocation Tool report is provided for informational purpose only and is not an offer to buy or sell any security or investment strategy, is not meant to be a comprehensive financial plan, and does not create an investment advisory relationship between you and UBS or your UBS Consultant.

This report is intended to aid (and be used by) your UBS Consultant in providing you with actual individualized investment advice. Therefore, the report should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant, our standard account documents, agreements and disclosures and the additional factors that warrant consideration for your particular financial situation, including costs.

If this output is provided as part of a proposal, it is marketing material. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. This report should be used solely for the purposes of discussion with your prospective UBS Consultant and your independent consideration. UBS does not intend this to be fiduciary or best interest investment advice or a recommendation that you take a particular course of action. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

Conflicts of Interest. UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationship/ithubs, or ask your UBS Financial Advisor for a copy.

Neither UBS Financial Services nor any of its employees provide tax or legal advice. You must consult with your legal or tax advisors regarding your personal circumstances.

You are not required to implement any of the asset allocation strategies modeled in this report. If you would like UBS to assist you in making any changes to your current asset allocation strategy, the capacity in which we act will depend on, and vary by, the nature of the product, service or account that you select for implementation (i.e., brokerage or advisory). Understanding the ways in which we can conduct business under applicable laws and regulations is essential to the relationship between You and Us.

As a firm providing wealth management services to clients in the U.S., UBS Financial Services Inc. is registered with the U.S. Securities and Exchange Commission as an investment adviser and a broker-dealer, offering both investment advisory and brokerage services. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. At the end of this report you will find a detailed explanation regarding the distinctions between investment advisory programs and brokerage service, including how we charge for these services and our respective responsibilities to you. See Conducting Business with UBS: Investment Advisory and Broker-Dealer Services. It is important that you review and understand the agreements and disclosures we provide to you about the products or services offered. If at any time you would like clarification on the nature of your accounts or the services you are receiving, please speak with your UBS Consultant or visit our website at http://www.ubs.com/workingwithus.

#### Overview

This report is presented for illustrative purposes as a general assessment of the asset allocation strategies displayed. The asset allocations analyzed may include a number of your existing accounts, each with a potentially different investment objective and risk parameter. Where applicable, these accounts have been considered as a whole in helping you develop an overall asset allocation strategies presented, to buy or sell securities, or to participate in any UBS program, you should carefully review the impact of such changes on each account involved and the impact on the overall portfolio.

Please note that it is your responsibility to determine whether to implement any of the allocation strategies identified in this report and how such implementation would be accomplished. UBS will not track or monitor specific investments you make to determine whether they complement your existing investment objectives, investment policy or any asset allocation strategy you may adopt, unless you have specifically engaged us to provide such monitoring. In addition, this report will not be updated to reflect any changes in your investment strategies, risk tolerances or market conditions.

If your assets are held at UBS Financial Services Inc., your UBS Financial Services Inc. account statements are the only official record of your UBS holdings and account and are not replaced, amended or superseded by any of the information presented in this report.

This report is not intended to provide you with consolidated information or reporting regarding your holdings at other firms. However, at your request, this report may include information regarding assets that you hold at other financial institutions so that we may review your asset allocation and/or investment strategy in the context of your overall holdings. If your assets are held at other financial institutions, this report will be based on information regarding holdings, balances and values of assets you provided to us. We have not verified, and are not responsible for, the accuracy or completeness of this information. If the information you provided is not current, inclusion of these assets will impact the accuracy of the current asset allocation and other analysis presented. You should review the account statements and other documentation you receive from your third party custodian for their record of the assets and asset values held in your accounts. The account statements you receive from your third party custodian regarding the assets you hold with them are the official record of your holdings and accounts and are not impacted or superseded by the information in this report.

UBS's SIPC coverage only applies to assets held at UBS. If you maintain assets at other firms that may be SIPC members, you should contact their financial representative or the other entity or refer to the other entity's statement regarding SIPC membership.

#### Asset Allocation Presented and Analysis Assumptions:

The results in this report are based on information regarding your investment objectives (as reflected by your allocation criteria), risk tolerance, cash flow requirements, time horizon and other views and requirements. We rely on the accuracy of the information you provide to us in developing this report. Please review the client inputs described in this report carefully as inaccuracies can materially impact the analysis, and advise your UBS Consultant if any change is necessary.

The asset allocation(s) analyzed can be your current asset allocation, a UBS strategic asset allocation or a customized asset allocation developed by you and your UBS Consultant based on your investment policy and risk profile. All asset allocations analyzed were identified by you and/or your UBS Consultant. You should understand that the asset allocation can be modeled at the asset class (e.g., equities, fixed income, etc.) or the sub-asset class (e.g., large-cap equities, emerging market equities) and that there may be asset or sub-asset classes not presented that have characteristics similar or superior to those analyzed in this report. Your UBS Consultant can provide additional information regarding the allocation model(s) analyzed in this report.

UBS strategic asset allocation models are developed using a proprietary process based on UBS capital market assumptions (see Return, Risk, and Correlation Assumptions). UBS has changed its asset allocation models in the past and may do so in the future as circumstances warrant. If UBS strategic asset allocations are used in this report, neither UBS nor your UBS Consultant is required to provide you with an updated analysis based upon changes to asset allocation or other underlying assumptions.

Asset allocation does not assure a profit or eliminate the risk of a loss.

#### Efficient Frontier Analysis:

Mean-Variance Optimization tools may be used to help determine optimal allocations to different asset classes within a portfolio given a certain level of acceptable risk. The Efficient Frontier analysis is a meanvariance optimization methodology that calculates a series of optimal portfolios that offer the highest expected return for a given level of risk or the lowest risk for a given level of expected return. The Efficient Frontier is determined based on estimated forward-looking risk, return, and correlation of assets assumptions established by UBS (see Return, Risk, and Correlation Assumptions section) and your specific guidelines regarding time horizon and investment objective/ risk tolerance (as reflected in allocation constraints). Each point on the frontier is theoretically efficient based on the given assumptions. An "inefficient portfolio" does not lie on the frontier because alternate portfolios can be found that offers more return for the same amount of risk or the same expected return with a less risk. "Efficient" portfolios on the frontier line are more desirable to investors trying to maximize return and minimize risk. The selection of a proper portfolio depends upon the investor's goals and risk tolerance.

Mean-variance optimization is very sensitive to changes in the forward-looking capital market assumptions and may result in asset allocations and portfolios that are highly concentrated. Your UBS Consultant can provide additional information regarding the Efficient Frontier analysis in this report.

#### Deterministic Analysis:

Except for any probabilistic analysis sections of this report, a deterministic analysis is used to illustrate the hypothetical growth of the asset allocation strategies presented based on an assumed rate of return, risk and correlation for each asset or sub-asset class identified within the strategy. The rate of return, risk and correlations used are based on estimated forward-looking assumptions established by UBS (see Return, Risk, and Correlation Assumptions section below).

In order to create the analysis presented, the rates of return for each asset or sub-asset class are combined in the same proportion as the asset allocation(s) illustrated (e.g., if the asset allocation indicates 40% equities, then 40% of the results shown for the allocation will be based on the estimated forward-looking risk, return, and correlation assumptions for equities based on UBS proprietary research).

#### Simulated Portfolio Value Probability Analysis:

Simulated Portfolio Value Probability Analysis (frequently referred to as "Monte Carlo" simulations), is another tool for evaluating the potential future performance of the asset allocation strategies presented. Monte Carlo analyses incorporate future uncertainty by simulating possible return scenarios for a portfolio under variable market conditions. Monte Carlo analysis generally performs several thousand simulations, each simulating the growth of the modeled asset allocation over a specified period of time and assuming certain client inputs and a variety of returns and scenarios, all of which are subject to change as a result of market volatility, economic factors and world events. Monte Carlo results present the probability of achieving certain targets based on the results of the simulations.

IMPORTANT: The projections or other information in this report regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investments results and are not guarantees of future results.

#### Monte Carlo simulations are based on estimated forward-looking return, risk and correlation assumptions established by UBS (see Return, Risk and Correlation Assumptions section).

Unless noted otherwise, the analysis assumes a constant rate of inflation and does not account for variations in inflation rate over time. Monte Carlo simulations also account for certain client inputs and assumptions regarding inflation and cash flows, the accuracy of which will materially impact the results of the analysis. Please review the client inputs described and advise your UBS Consultant if any change is necessary. Unless specifically included as an outflow, the analysis will not account for investment advisory fees, transaction fees or taxes.

Monte Carlo results are intended to represent a spectrum of possible return outcomes for the modeled asset classes based on the established assumptions. The portfolio value at the end of each scenario is recorded and compared against the established portfolio target. The probability of achieving a target is calculated by dividing the number of scenarios where the portfolio value equaled or exceeded the target by the total number of scenarios. Note that the highest likelihood of success is 99% because there is never a guarantee that a particular result will be actualized. Results should only be viewed as reasonable estimates of possible outcomes and not as a guarantee, prediction or projection. The results shown may vary with each use and over time and if any of the underlying assumptions change. Your actual results can vary materially from the results shown in this analysis.

Monte Carlo analysis does not take into account actual market conditions that may severely affect your portfolio results over the long-term. It does not reflect the average periods of bull and bear markets, which can be longer than those modeled.

The analysis also does not consider short-term correlations among asset class returns and does not consider the results that could occur from an extreme market event, either positive or negative, due to the low probability of such an occurrence. A market crises can cause asset classes to perform similarly, lowering the accuracy of our return assumptions and diminishing the benefits of diversification in ways not captured by the analysis. As a result, returns actually experienced by the investor may be more volatile than those used in our analysis.

Your UBS Consultant can provide additional information regarding the Monte Carlo/Simulated Portfolio Value Probability analysis reflected in this report.

#### Historic Asset Allocation Backtest:

If the historical performance of an asset allocation is provided, the historical performance does not reflect your actual performance but, rather, was calculated by the retroactive application of historic index results to the asset allocation(s) analyzed. This performance is based on the long-term performance of certain indexes that have been selected by UBS (or as requested by the Client) as a representative proxy for the asset classes in the asset allocation(s) or portfolio(s) analyzed. See the Scenario Assumptions section for a description of the index proxies used for each asset class in this analysis. UBS selects proxy indices based on our research and understanding of the asset class or the allocation and strategy of the investments in your portfolio, or as requested by the client. Because the asset allocations were structured with the benefit of knowing how each asset class and benchmark performed during the period shown, the hypothetical returns may be higher than the returns of a portfolio that would have been recommended during the time period shown. In addition, backtested performance does not reflect the impact of transaction costs, advisory fees, taxes and inflation. If these were included, the results shown would be lower. Please note that the historical backtest analysis considers data over the period shown and assumes that the asset allocation was rebalanced at the beginning of each month back to the initial asset allocation. This rebalancing frequency does not necessarily reflect how an actual portfolio would have been managed. There is no guarantee that these backtested results could, or would, have been achieved had this asset allocation been used during the years presented.

#### Past performance or historic results provide no guarantee of future returns.

#### Return, Risk and Correlation – Assumptions Forward-Looking Estimates:

The asset class risk and return results used and displayed in this report, as well as the asset class correlations, are based on estimated forward-looking return, risk?as measured by standard deviation?and correlation assumptions ("capital market assumptions"), which are based on UBS proprietary research. The development process includes a review of a variety of factors, including the return, risk, correlations and historical performance of various asset classes, inflation and risk premium.

The strategic returns in the UBS capital market assumptions consider returns over a full business cycle. The capital market assumptions are subject to change at any time at our discretion and without notice. UBS has changed its return, risk and correlation assumptions in the past and may do so in the future. Neither UBS nor your UBS Consultant is required to provide you with an updated analysis based upon changes to these or other underlying assumptions.

Since assumptions are subject to uncertainty, including market forces and factors outside of our control, you should also understand that the assumptions used are estimates, are not guarantees or projections of future results. There is no certainty that the assumptions for the model will accurately estimate asset class return rates going forward. Actual long-term results for each asset class may differ from our assumptions, with those for classes with limited histories potentially diverging more. As a result, UBS will not be responsible for omissions in the analysis, regardless of the source of such inaccuracies, errors, or omissions. In addition, capital market assumptions pertain to the asset or sub-asset class in general, not the performance of specific securities or investments. Particular investment products may have higher or lower returns than the range for the corresponding asset class used in this analysis.

Your actual results may vary significantly from the results shown in this report.

#### Periodic Reviews:

This report is based on information you have provided as of the date indicated. Over time, your financial circumstances or the other assumptions and estimates that underlie this report may change. For this reason, you should periodically meet with your UBS Consultant to re-evaluate your financial situation, reassess your asset allocation strategy, and review the assumptions upon which this information is based.

#### Asset Class Risk Considerations:

Some of the general risk considerations associated with the asset classes included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. Individual funds and investments will have specific risks related to their investment programs that will vary from fund to fund. Clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

Alternative Investment Strategies –Alternative investment strategies are investment vehicles that are formed by professional money managers to afford them greater flexibility to manage money in any market environment. These strategies typically have flexibility regarding the types of securities in which they can invest (e.g., options and futures contracts), the types of positions they can take (e.g., long and short positions) and the amount of leverage they are permitted to employ. A professional money manager can use these and other techniques to modify market exposure and create portfolio characteristics that may be desirable for certain clients (e.g., reduced correlation to financial markets, potential lower volatility, and better performance in "down" markets). This flexibility can add value when used skillfully. This flexibility does, however, add additional elements of risk and complexity, including that alternative investments are often long-term, illiquid investments that are subject to restrictions on transfer and not easily valued. Note that due to the nature of alternative investments, the risk and return assumptions used in this analysis may tend to overstate potential benefits but not fully reflect potential risks.

Interests of Non-Traditional Investment Strategies are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of the funds, and which Clients are urged to read carefully before subscribing and retain. An investment in a fund is speculative and involves significant risks. The funds' performance may be volatile, and investors may lose all or a substantial amount of their investment in a fund. The funds may engage in leveraging and other speculative investment practices that may increase the risk of investment loss. The funds are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in a fund. Investors should consider a fund as a supplement to an overall investment program.

Investing in the fixed income market is subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. Derivatives may involve certain costs and risks such as liquidity, interest rate, market, credit, management, default risk, and the risk that the position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

Equity investments represent ownership interest in a company. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. The value of investments in equity securities will fluctuate in response to general economic conditions and to changes in the prospects of particular companies and/or sectors in the economy. The risk of equity investments can vary based on the market capitalization (market value) of the company, for example, Large, Mid, and Smid. Investments in small cap and medium company stocks can be more volatile over the short term than investments in large company stocks.

Non-U.S. Equity and Fixed Income represent ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have "Developed Markets" or "Emerging Markets." Foreign investing involves risks, including, but not limited to, risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks.

#### **Calculation Definitions**

This section includes descriptions for the terms and calculations used within this report. Your UBS Consultant can provide additional information regarding the terms, calculations, and results contained within this report.

Alpha: Alpha is a measure of risk-adjusted return. It measures the difference between a portfolio's returns and the returns the portfolio might be expected to deliver based on the portfolio's level of risk (beta) and a benchmark index over the date range shown. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating alpha. A positive alpha means the portfolio outperformed expectations for the period shown, while a negative alpha indicates that the portfolio underperformed expectations during the period shown. If two portfolios have the same return, but one has a lower beta, that portfolio would have a higher alpha.

Annualized Returns: An annualized return is the geometric average return of a portfolio for each year over the time period shown. Annualized returns take into account compounding returns by considering the portfolio's cumulative return (the total compounded portfolio return over the time period) and expressing that as a per year figure. Annualized returns only provide a snapshot of investment performance as of a given date and do not indicate volatility over the time period analyzed.

Average Positive Return/Average Positive Return: To calculate the average positive return and average negative return for a portfolio over a given date range, the Zephyr Asset Allocation Tool partitions the portfolio's series of returns into two parts, one made up of the positive periods of returns (up periods), the other of the zero and negative periods of returns (down periods). The average positive/up and negative /down returns are the respective averages of these two series.

Batting Average: The batting average of a portfolio is the ratio between the number of periods where the portfolio outperforms a benchmark and the total number of periods. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating batting average.

Best Case/Worse Case: See Range of Returns.

Best Month Return/Worse Month Return: The best month return is simply the maximum of the monthly returns inside the given date range. Similarly, the worst month return is the minimum of the monthly returns inside the date range.

Best Quarter Return/Worse Quarter Return: The best quarter return is simply the maximum of the quarterly returns inside the given date range. Similarly, the worst month return is the minimum of the quarter returns inside the date range.

Best Year Return/Worse Year Return: To calculate the best one-year return for a given portfolio, the Zephyr Asset Allocation moves a one-year time window along the series and calculates the compound return for each of these windows. The best one-year return is the maximum of the returns thus found. Similarly, the worst one-year return is the minimum of the returns thus found. Note that best and worst one-year returns do not refer to calendar years. Rather, they refer to arbitrarily placed one-year periods.

Beta: Beta represents the systematic risk of an analyzed portfolio. Beta measures how the analyzed portfolio performed in relation to the performance of a benchmark index during the time period shown. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark index for calculating beta. A portfolio with a beta of one is considered to be as volatile (risky) as the benchmark and would therefore have provided returns equal to those of the market benchmark during both up and down periods over the date range analyzed. A portfolio with a beta of two would have moved approximately twice as much as the benchmark.

Conditional Value at Risk: See Value at Risk.

Constraints, Min and Max: Portfolio asset classe constraints established by the Client to force minimum or maximum allocations to selected asset classes when generating an Efficient Frontier.

Correlation (R): Correlation represents the degree to which an investment's return moves in tandem with another and is a critical component of diversified portfolio construction. The Correlation of assets varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). A correlation of 0 indicates no relationship between the investments. When included within a portfolio, assets with lower Correlations to the other assets in the portfolio enhance diversification and result in better risk-adjusted expected returns for the portfolios. An R of less than 0.3 is often considered low Correlation. Correlation may also be used to represent the degree to which a portfolio's return moves in tandem with a benchmark or an asset class moves in tandem with another asset class.

#### Cumulative Distribution of Return: See Omega.

Cumulative Excess Return: See Excess Return.

Distribution of Returns: The range of possible outcomes that may be expected for a portfolio compounded over the time period(s) shown based on the asset class return, risk (standard deviation), and correlation assumptions set by UBS (and accounting for any Constraints imposed by the Client). The distribution of returns presents the annualized returns after the period(s) shown and displays various percentiles which represent the percentage of possible return outcomes that may be expected to be equal to or lower than the stated return. The percentiles displayed include the 5th percentile, 25th percentile, 50th percentile (which is a median return), 75th percentile.

Down Capture: See Up Capture/Down Capture.

Drawdown: Any sub-period of time during the date range analyzed where the portfolio had a negative loss percentage starting from the date of the loss began (drawdown start date) and ending on the date of the lowest value before the portfolio recovered to its value before the loss began (drawdown end date). Conceptually, this is the "peak to trough" of the drawdown when displayed on a graph. Drawdown measures the loss percentage (compounded, not annualized) that a portfolio incurred during any sub-period of the date range analyzed. See Maximum Drawdown.

Drawdown Average: The arithmetic average of all returns during all drawdowns over the date range analyzed. The drawdown average is based on drawdowns that begin with a drawdown start date and end with a drawdown end date. Compare to Average Negative Return which is the arithmetic return of all periods (e.g., calendar months) that had a negative return during that period.

Efficient Frontier: Nobel Laureate Harry Markowitz developed mean-variance optimization as a way to create optimal portfolios based on risk-return trade-offs. The optimization, which results in an Efficient Frontier, uses three inputs – returns, standard deviations (risk), and correlations – to combine assets into portfolios that maximize return for any given level of risk.

Excess Return: Excess return represents the difference between the return of the analyzed portfolio and the return of a benchmark. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating excess return. A positive excess return implies that the portfolio outperformed the benchmark. Cumulative excess returns represent the difference between the total returns in the portfolio and the total returns for the benchmark during a given date range and annualized excess returns represent the difference between the annualized returns of the portfolio series and the annualized returns of the benchmark during a given date range.

#### Expected Return:See Range of Returns.

Expected Risk: See Range of Returns.

Information Ratio: Information Ratio measures the consistency of excess returns of a portfolio compared to a benchmark. The information ratio is the portfolio's annualized excess return over a benchmark divided by the portfolio's annualized standard deviation of excess return over the benchmark (i.e. tracking error). Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating the information ratio.

Inflation: The Monte Carlo simulation projections can include an inflation rate that would be applied to each year being simulated.

Interpolate: The Monte Carlo Simulation allows Clients to use multiple expected return distributions using the interpolate option. Clients can enter supplementary mean and standard deviation values in addition to the mean and standard deviation values established by the UBS capital market assumptions. The mean and standard deviation define a distribution that represents possible future returns. Clients can also choose the distribution type as either normal or log-normal. Log-normal distribution intends to account for observations that returns are never less than -100% and that over longer time periods (such as a year) returns are positively skewed. Please speak with your UBS Consultant for more information regarding additional mean and standard deviation values and log-normal distribution.

Kurtosis: Kurtosis characterizes the relative peakedness or flatness of a distribution of returns compared with a normal distribution. Positive kurtosis indicates a relatively peaked distribution. Negative kurtosis indicates a relatively flat distribution.

MAR (minimal acceptable return): A minimal return figure established to assess a portfolio's ability to achieve a certain target. See Sortino Ratio and Omega.

Maximum Drawdown: Maximum drawdown is the maximum loss percentage (compounded, not annualized) that a portfolio incurred during any sub-period of the date range analyzed. Conceptually, this is the biggest "peak to trough" loss, beginning with the maximum drawdown start date (the date the maximum loss percentage started) and ending with the maximum drawdown end date (the date that the portfolio hit its lowest point before recovering to the peak level reached before the maximum drawdown). The calculation looks at all sub-periods of the entire time period analyzed and calculates the compounded return of the portfolio or index over that period. The maximum drawdown loss value is the largest negative value of all these compounded return periods (or zero if there were no drawdowns during the period analyzed). The maximum drawdown length is the number of periods (days, months, or quarters depending on the periodicity of the data) between the maximum drawdown start date and the maximum drawdown end date. The maximum drawdown recovery date is the date that the portfolio returns to the drawdown start date (the date at which the compounded returns regain the peak level that was reached before the maximum drawdown necovery length is the number of periods it takes to reach the recovery level from maximum drawdown end date.

Monte Carlo Percentiles: Probability distributions of asset value outcomes generated from the Monte Carlo Simulations.

Monte Carlo Probabilities: The probability of the wealth goal (or target) is the number of simulation trials that meet or exceed the wealth goal (or target) divided by the total number of trials.

Omega: Omega relative to a given minimal acceptable return (MAR) is the ratio between the price of a European call option written against the investment and the price of a European put option written against the investment, with the strike price being equal to the MAR in both cases. Omega is represented graphically as a cumulative distribution of returns function where the x-axis (horizontal axis) of the graph displays returns and the y-axis (vertical axis) of the graph displays the probability that a given portfolio will achieve or exceed that return figure. Upside Omega is the area on a cumulative distribution above the MAR. This is highlighted in green on the Cumulative Distribution of Returns slide(s). It is the numerator in the omega calculation. Downside Omega is the area on a cumulative distribution between the vertical minimum acceptable return line (MAR) and the distribution below the MAR. This is highlighted in red on the Cumulative Distribution of Returns slide(s). It is the numerator in the omega calculation.

Pain Index: The Pain Index is a statistic developed by Zephyr exclusively for use within the Zephyr Asset Allocation tool. It represents the frequency, the depth, and the width of the portfolio's drawdowns by calculating the area enclosed by the downward drawdown graph and the zero drawdown line, divided by the length of the time interval. The pain index is an attempt to capture in one single number as much of the information that is contained in the drawdown graph as possible, rather than just the maximum drawdown number. This number increases as the spikes grow more frequent, deeper, or wider during the same time period.

Pain Ratio: The Pain Ratio indicates the excess return per unit of total risk as measured by the pain index of the portfolio. It is a ratio of the portfolio's annualized excess returns over the risk-free rate to the portfolio's pain index. The pain ratio is a measure of the premium earned for the risk incurred by the portfolio.

Range of Returns: A Range of Returns indicates the range of possible outcomes calculated by the cumulative returns compounded over the period(s) shown for a given portfolio based on UBS return, risk, and correlation assumptions (and Client Constraints). The expected return is the annualized return after the period(s) shown under a base case scenario. The best/worst case return is the annualized return after the period(s) shown under a base case scenario, and the expected risk is the standard deviation of the expected return. As the time horizon increases, the expected risk moves towards zero. For any given portfolio, the expected return for a time period is represented by the 50th percentile (which is a mean return) and the expected best case scenario by the 95th percentile and the expected worst case scenario by the 5th percentile. The likelihood of obtaining a total portfolio value that is more extreme than the best/worst case cumulative value (given the capital market assumptions and Constraints) is approximately 2.5%.

R-Squared: The R-Squared (R2) of a portfolio measures the variance of the portfolio's returns compared to the variance of a benchmark's returns in order to determine how closely the portfolio tracks the benchmark. R2 ranges between zero and 100%. An R2 of 100% indicates perfect tracking, while an R2 of zero indicates no tracking at all. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark for calculating R2.

Relative Constraints: These are portfolio asset allocation constraints established by the Client indicating the allocation to an asset class or asset class group has to be less than, greater than or equal to another asset class or asset class group.

Return, Risk, and Correlation assumptions: Mean-Variance optimization uses three inputs to generate the Efficient Frontier: Returns, Standard Deviations (Risk) and Correlations. These are commonly referred to as the Capital Market Assumptions for generating the Efficient Frontier. These values are based on UBS estimated forward-looking assumptions based on UBS proprietary research (see the Return, Risk, and Correlation Assumptions – Forward-looking Estimates section for more information).

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by standard deviation. It is a ratio of the portfolio's arithmetic average of excess returns over the risk-free rate to the portfolio's standard deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio. The Sharpe Ratio – Internal is similar to the Sharpe Ratio, but the denominator is the standard deviation of the portfolio's excess returns over the risk-free rate (i.e. tracking error). This captures the risk associated with the excess returns instead of the risk solely associated with the portfolio.

Skewness: Skewness characterizes the degree of asymmetry of a distribution around its mean. Positive skewness indicates a distribution with an asymmetric tail extending toward more positive values. Negative skewness indicates a distribution with an asymmetric tail extending toward more negative values.

Sortino Ratio: The Sortino Ratio indicates the excess return per unit of total risk as measured by downside deviation. It is a ratio of the portfolio's arithmetic average of excess returns over a minimum acceptable return (MAR) to the portfolio's downside deviation. The Sortino ratio uses the downside deviation with a constant MAR indicated. Downside deviation measures the deviation between returns that are less than the MAR and the MAR.

Standard Deviation: A measure of the extent to which observations in a series vary from the mean of the series. The standard deviation of a series of asset returns is a measure of volatility or risk of the asset. A large standard deviation implies that there have been large swings in the return series. The standard deviation calculation assumes that the return series is a sample of possible returns, while the population standard deviation assumes that the series has all of the returns in the population.

Tracking Error: Tracking Error measures the difference between the returns of the analyzed portfolio and those of a benchmark. Tracking error is calculated as the annualized standard deviation of the excess return of the portfolio compared to the benchmark return. The lower the tracking error, the more closely the portfolio's returns tracked those of the benchmark. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating tracking error.

Trailing Year Returns: Returns trailing from the date analyzed. All returns over one year are annualized.

Treynor Ratio: The Treynor Ratio is a risk-adjusted measure of return which uses beta to represent risk. It is the portfolio's excess return over the risk-free rate divided by the portfolio's beta to the selected benchmark. The Treynor Ratio differs from the Sharpe Ratio insofar as the beta to the market benchmark is used as the measure of risk rather than the standard deviation of the portfolio series.

Up Capture/Down Capture: The up and down capture measure how well the portfolio was able to replicate or improve on phases of positive benchmark returns and how badly the portfolio was affected by phases of negative benchmark returns. To calculate the up capture, we first form a new return series from the portfolio and benchmark return series by dropping all time periods where the benchmark return is zero or negative. The up capture is then the ratio of the annualized return of the resulting portfolio series to the annualized return of the resulting benchmark series. The down capture is calculated analogously. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark for calculating the up capture and down capture.

Upside/Downside Deviation: Downside deviation measures the deviation between returns that are less than a target return and the target return. Upside deviation measures the deviation between returns that are more than a target return and the target return. Target returns may be referred to as a minimal acceptable return (MAR).

Value at Risk: Nonparametric Value at Risk (VaR) attempts to evaluate risk by applying historical returns for a portfolio and determining a VaR value where a certain percentage (called the confidence level) of the rest of the portfolio's returns exceeded that VaR value. For example, if the confidence level is 95%, that means that 95% of the portfolio's historical returns over the given date range were more than the VaR and analogously that 5% of the portfolio's historical returns over the given time frame were less than the VaR. If the confidence level is 99%, that means that 99% of the portfolio's historical returns exceeded the VaR and 1% of the portfolio's returns were less than the VaR. Conditional Value at Risk (CVaR) quantifies the amount of tail risk for an investment portfolio by calculating the average return of the portfolio's historical returns that exceeded a given confidence level. For example, if the confidence level is 95%, the CVaR calculates the average return of the worst 5% of historical returns over the given time frame. CVaR provides an average historical loss whereas VaR provides a range of the historical losses.

Worst Month Return/Worst Quarter Return: See Upside/Downside.

#### Conducting Business with UBS: Investment Advisory and Broker Dealer Services:

As a wealth management firm providing services to clients in the United States, UBS Financial Services Inc. is registered with the U.S. Securities and Exchange Commission (SEC) as a broker-dealer and an investment adviser, offering both brokerage and investment advisory services.

Our clients work with their UBS Consultants to determine the services that are most appropriate given their financial goals and circumstances. Based on the services you request, we can fulfill your wealth management needs in our capacity as a broker-dealer, as an investment adviser, or as both. Most of our UBS Consultants are qualified and licensed to provide both brokerage and investment advisory services depending on the services requested by their clients.

In addition, some of our UBS Consultants hold educational or professional credentials, such as the Certified Financial Planner<sup>™</sup> (CFP®) designation (Certified Financial Planner Board of Standards Inc. owns these certification marks in the U.S., which it awards to individuals who successfully complete CFP Board's initial and ongoing certification requirements). Holding a professional designation typically indicates that the UBS Consultant has completed certain courses or continuing education. However, a UBS Consultant's professional designation does not change the obligation of UBS or the UBS Consultant to you in providing investment advisory or brokerage services to you.

It is important to understand that brokerage and investment advisory services are separate and distinct and each is governed by different laws and separate arrangements that we may have with you. While there are similarities between the brokerage and investment advisory services we provide, depending on the capacity in which we act, our relationship and legal duties to you are subject to a number of important differences as described in our applicable contracts with you.

This document is intended to inform you about the key distinctions between brokerage and investment advisory services and our respective duties and obligations. We encourage you to review this document carefully and discuss it with your UBS Consultant.

Our Services as a Broker-Dealer and Relationship with You:

As a full-service broker-dealer, our services are not limited to taking customer orders and executing securities transactions. In our capacity as broker-dealer, we may provide a variety of services relating to investments in securities, including investment research, trade execution and custody services. In a brokerage account, you pay us commissions and applicable fees each time we execute a transaction in your account.

We also may make recommendations to our brokerage clients about whether to buy, sell or hold securities. We consider this to be part of our brokerage services and do not charge a separate fee for this advice. Our recommendations must be suitable for you in light of your particular financial circumstances, goals and tolerance for risk. When we provide recommendations with respect to a retirement account such as an IRA, we do so pursuant to the laws, regulations and exemptions that apply to these accounts.

When we work with you in our capacity as broker-dealer, we do not make investment decisions for you or manage your accounts on a discretionary basis. We will only buy or sell securities for brokerage clients based on specific directions from you.

Our Responsibilities to You as a Broker-Dealer:

When we act as your broker, we are subject to the Securities Exchange Act of 1934, the Securities Act of 1933, the rules of self-regulatory organizations such as the Financial Industry Regulatory Authority (FINRA), the rules of the New York Stock Exchange and applicable state laws.

The standards for broker-dealers under these rules and regulations include the following:

- As your broker-dealer, we have a duty to deal fairly with you. Consistent with our duty of fairness, we are obligated to make sure that the prices you receive when we execute transactions for you are
  reasonable and fair in light of prevailing market conditions and that the commissions and other fees we charge you are not excessive.
- We must have a reasonable basis for believing that any securities recommendations we make to you are suitable and appropriate for you, given your individual financial circumstances, needs and goals.
- We are permitted to trade with you for our own account ("principal trading") or for an affiliate or another client and may earn a profit on those trades. When we engage in these trades, we disclose the capacity in which we acted on your confirmation, though we are not required to communicate this or obtain your consent in advance or to inform you of the profit earned on the trades.
- When we act as your broker-dealer, we do not generally enter into a fiduciary relationship with you; however, special rules apply to our activities, obligations and fiduciary status when we provide recommendations with respect to a retirement account. Absent special circumstances (which would include the special rules applicable to recommendations with respect to retirement accounts) we are not held to the same legal standards that apply when providing investment advisory services to you. Our legal obligations to disclose detailed information to you about the nature and scope of our business, personnel, fees, conflicts between our interests and your interests and other matters are more limited than when we are providing investment advisory services to you. Nevertheless, when we provide recommendations with respect to a retirement account, we do so pursuant to the laws, regulations and exemptions applicable to those retirement accounts.

UBS Institutional Consulting program is an investment advisory program. Details regarding the program including fees, services, features and suitability are provided in the Form ADV Disclosure, available from your UBS Consultant.



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## 🗱 UBS

**Investment Solutions Portfolio Analysis** 

Gwinnett Strategic 2024 with RE

February 05, 2024

Prepared By : UBS Institutional Consulting

## 🗱 UBS

### **UBS Asset Allocation Study**

# **IMPORTANT:** The projections or other information generated by the Zephyr Asset Allocation Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results will vary with each use and over time.

Results reflect the reinvestment of income, but not the impact of transaction costs, advisory fees, taxes and inflation (unless otherwise indicated). If these factors were included, the results shown would be lower.

Historic results are provided for illustrative purposes only and are based on the retroactive application of historic index data to the asset allocation(s) analyzed. The Zephyr tool calculates hypothetical portfolio performance results for the period shown using long-term performance of representative indices as proxies for the hypothetical performance of the asset classes included in the portfolio(s) analyzed. The calculation assumes that the portfolio was rebalanced monthly, which does not necessarily reflect how an actual portfolio would have been managed. Allocations were developed with the benefit of hindsight and results do not consider the impact that material economic and market factors might have had on investment decision-making during the time period. Actual results may be lower than the hypothetical returns and will vary depending on market conditions and the specific composition and implementation of the portfolio. Past performance or historic results provide no guarantee of future returns.

Please see Appendix for important information about this report.

The information herein is based on data and computations by Zephyr Associates and is believed to be reliable but UBS does not warrant its completeness or accuracy.

## Scenario Assumptions

				CONSTRAINTS	
NAME	PROXY	RETURN	STDEV	MIN	MAX
UNGROUPED					
US Equity > Core	Russell 3000	7.32%	17.11%	35.00%	55.00%
US Fixed Income > Core	Bloomberg U.S. Aggregate	5.18%	4.33%	15.00%	48.00%
US Equity > Public Real Estate	FTSE Nareit Equity REITs	8.70%	24.48%	0.00%	7.00%
International Equity > Core	MSCI ACWI ex USA (Net)	9.55%	16.42%	0.00%	15.00%
Emerging Markets Equity > Core	MSCI EM (EMERGING MARKETS)	9.89%	19.61%	0.00%	5.00%
Global Equity > Core	MSCI ACWI (Net)	8.04%	15.61%	0.00%	15.00%

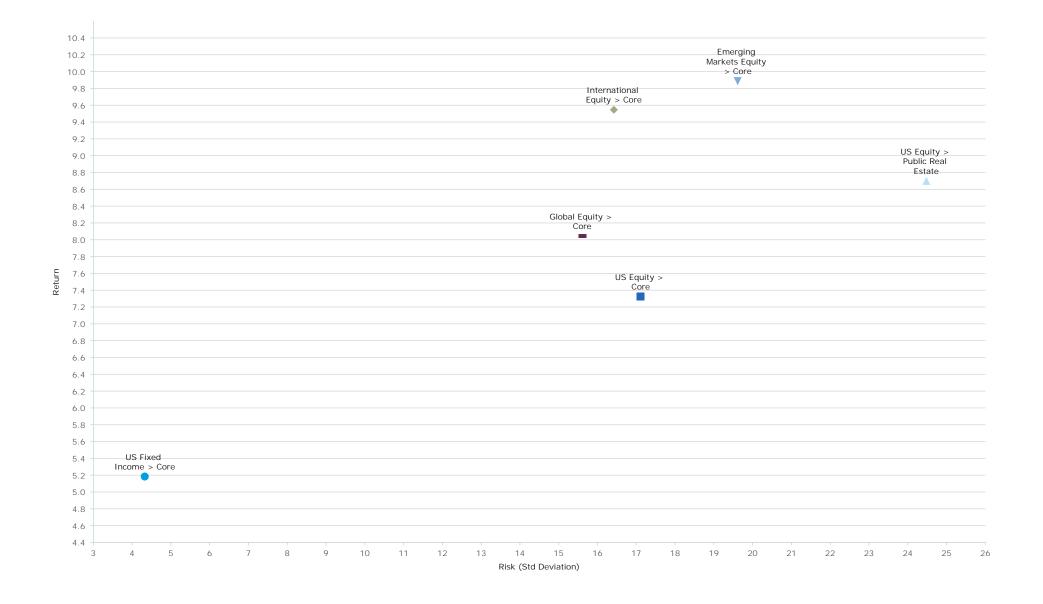
Allocation Case: Gwinnett Strategic 2024 with RE

## Scenario Assumptions - Correlation Matrix



ASSETS	А	В	С	D	E	F
A. US Equity > Core	1.00	0.12	0.82	0.84	0.69	0.96
B. US Fixed Income > Core	0.12	1.00	0.25	0.13	0.11	0.12
C. US Equity > Public Real Estate	0.82	0.25	1.00	0.70	0.57	0.79
D. International Equity > Core	0.84	0.13	0.70	1.00	0.89	0.95
E. Emerging Markets Equity > Core	0.69	0.11	0.57	0.89	1.00	0.81
F. Global Equity > Core	0.96	0.12	0.79	0.95	0.81	1.00

Allocation Case: Gwinnett Strategic 2024 with RE

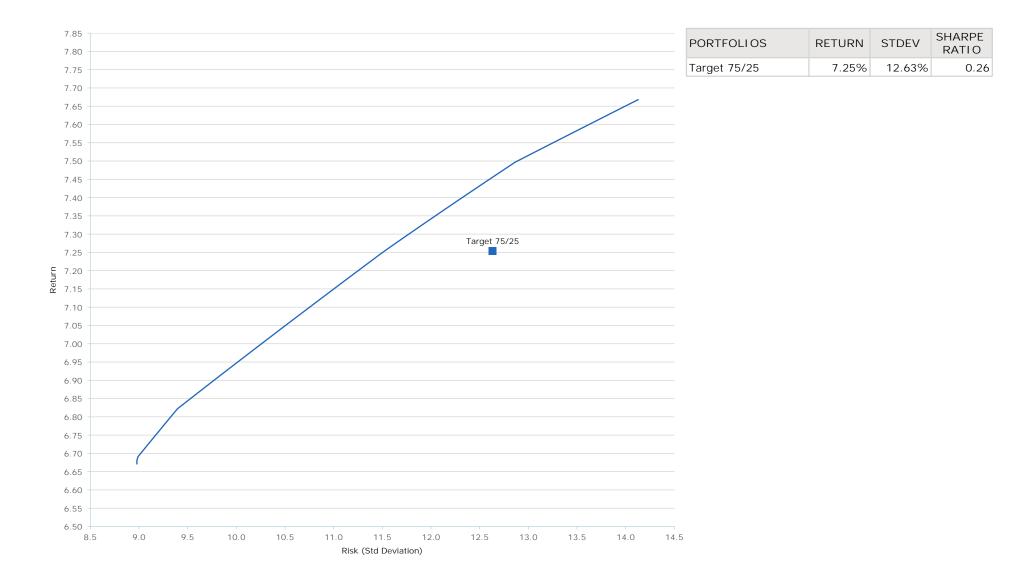


#### Allocation Case: Gwinnett Strategic 2024 with RE

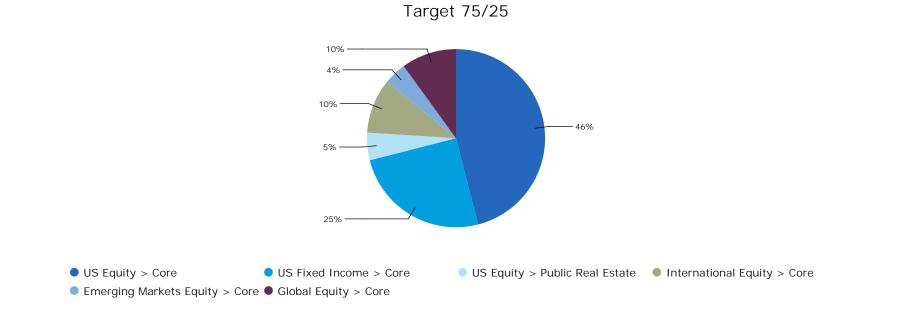
S

### Efficient Frontier





Allocation Case: Gwinnett Strategic 2024 with RE



	TARGET 75/25	
Return	7.25%	
Standard Deviation	12.63%	
Sharpe Ratio	0.26	

#### Allocation Case: Gwinnett Strategic 2024 with RE

ALLOCATIONS WEIGHTS	TARGET 75/25
US Equity > Core	46.00
US Fixed Income > Core	25.00
US Equity > Public Real Estate	5.00
International Equity > Core	10.00
Emerging Markets Equity > Core	4.00
Global Equity > Core	10.00
Return	7.25
Standard Deviation	12.63
Sharpe Ratio	0.26



Range of Returns Target 75/25

Worst Case Expected Best Case

	ONE YEAR	THREE YEAR	FIVE YEAR	TEN YEAR	TWENTY YEAR
Best Case	34.07%	21.65%	18.06%	14.56%	12.14%
Expected	7.25%	6.76%	6.66%	6.59%	6.55%
Worst Case	(15.38%)	(6.73%)	(3.90%)	(0.96%)	1.18%
Expected Risk	12.63%	7.24%	5.60%	3.96%	2.80%

#### Allocation Case: Gwinnett Strategic 2024 with RE

\*

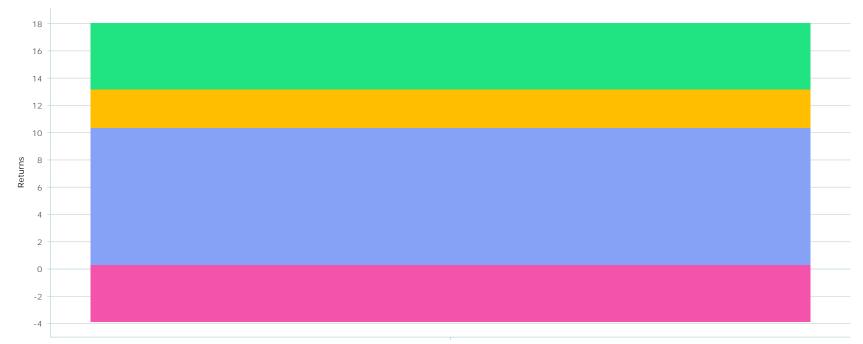
UBS



### Distribution of Returns - 1 Year

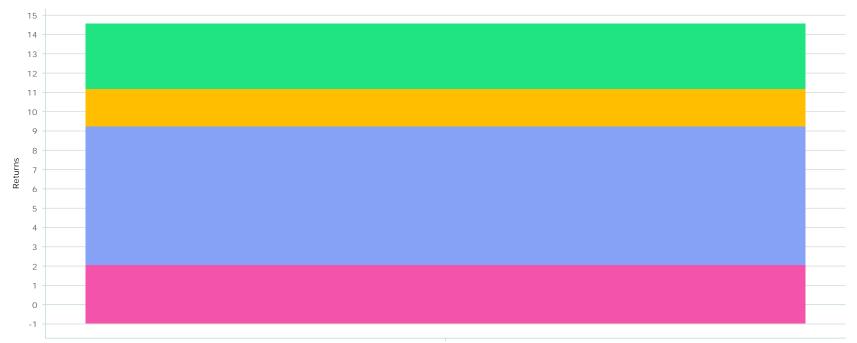
PERCENTILE	TARGET 75/25
Best Case	34.07
Expected	7.25
Worst Case	(15.38)

🗱 UBS



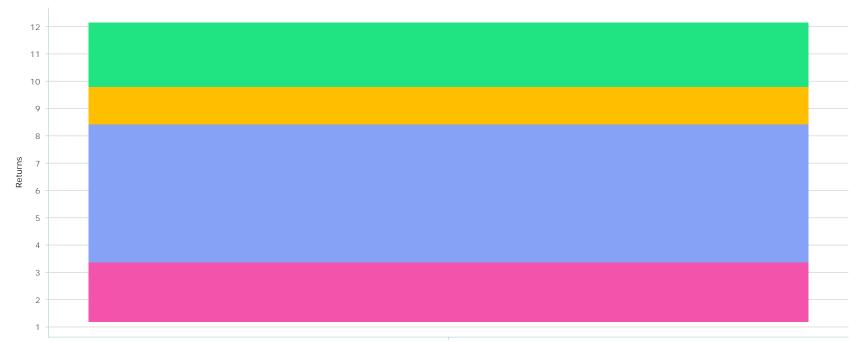
Distribution of Returns - 5 Years

PERCENTILE	TARGET 75/25
Best Case	18.06
Expected	6.66
Worst Case	(3.90)



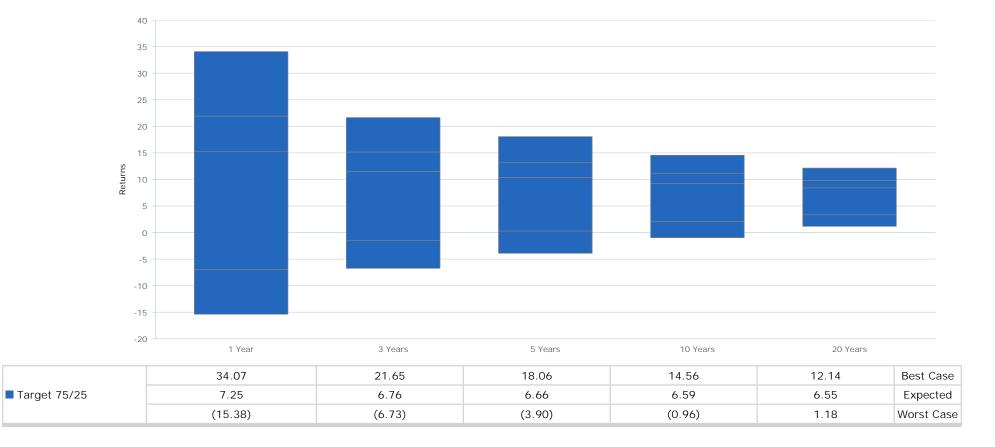
Distribution of Returns - 10 Years

PERCENTILE	TARGET 75/25
Best Case	14.56
Expected	6.59
Worst Case	(0.96)



## Distribution of Returns - 20 Years

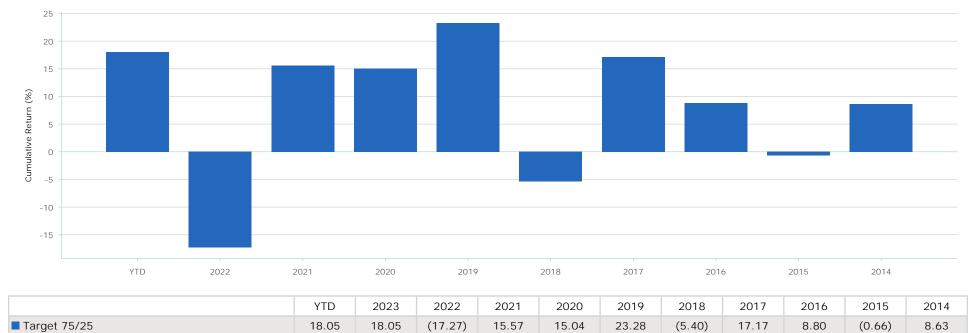
PERCENTILE	TARGET 75/25
Best Case	12.14
Expected	6.55
Worst Case	1.18





## Calendar Year Cumulative Return

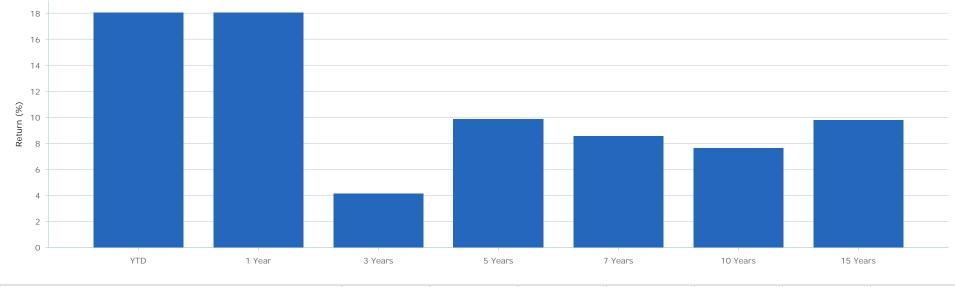
As of December 2023





## Trailing Year Returns

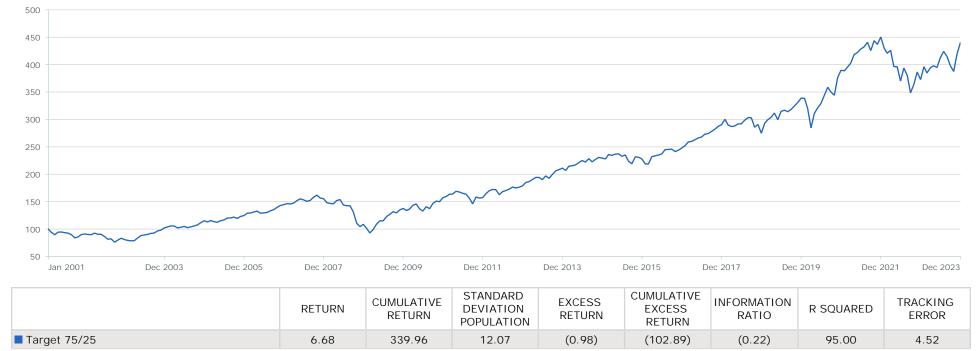
## As of December 2023



	YTD	1 YEAR	3 YEARS	5 YEARS	7 YEARS	10 YEARS	15 YEARS
Target 75/25	18.05	18.05	4.12	9.87	8.54	7.62	9.78



## Manager Performance





## Periodic Returns

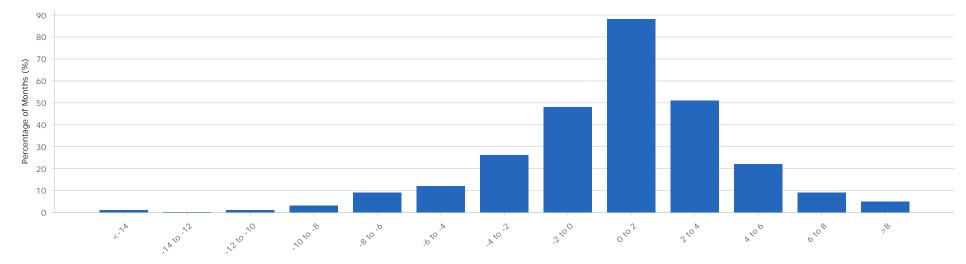
## As of December 2023

		JAN	FEB	MAR	Q1	APR	MAY	JUN	Q2	JUL	AUG	SEP	Q3	OCT	NOV	DEC	Q4	YEAR
	2023	6.31	(2.86)	2.41	5.77	0.96	(0.79)	4.49	4.66	2.80	(2.18)	(4.00)	(3.46)	(2.70)	8.09	5.03	10.47	18.05
Target 75/25	2022	(4.52)	(2.17)	1.27	(5.41)	(6.95)	(0.11)	(6.58)	(13.16)	6.41	(3.39)	(8.38)	(5.81)	4.47	6.16	(3.59)	6.93	(17.27)
Target 75/25	2021	(0.28)	1.74	1.90	3.38	3.80	0.90	1.52	6.33	0.94	1.90	(3.44)	(0.68)	4.27	(1.51)	3.08	5.86	15.57
	2020	(0.07)	(5.53)	(10.98)	(15.96)	9.15	3.38	2.43	15.58	4.52	4.30	(2.48)	6.31	(1.61)	9.34	3.57	11.41	15.04



## Histogram of Returns

## February 2001 - December 2023



Returns Range (%)

	SKEWNESS	KURTOSIS	NUMBER OF DOWN PERIODS	AVERAGE NEGATIVE RETURN	DOWNSIDE DEVIATION (MAR = 0.00%)	NUMBER OF UP PERIODS	AVERAGE POSITIVE RETURN	UPSIDE DEVIATION (MAR = 0.00%)
Target 75/25	(0.65)	1.84	100	(2.90)	8.23	175	2.61	9.07



## Historical Index Performance Comparison

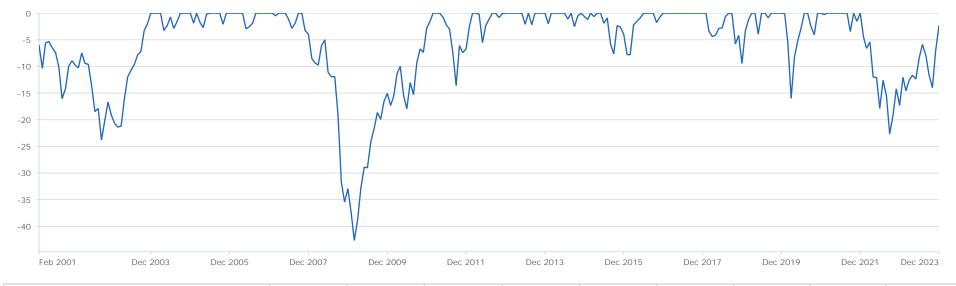
As of December 2023

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.17	15.97	7.65	(30.20)	26.69	14.38	0.10	13.67	17.94	8.63	(0.66)	8.80	17.17	(5.40)	23.28	15.04	15.57	(17.27)	18.05	18.05

1 Target 75/25



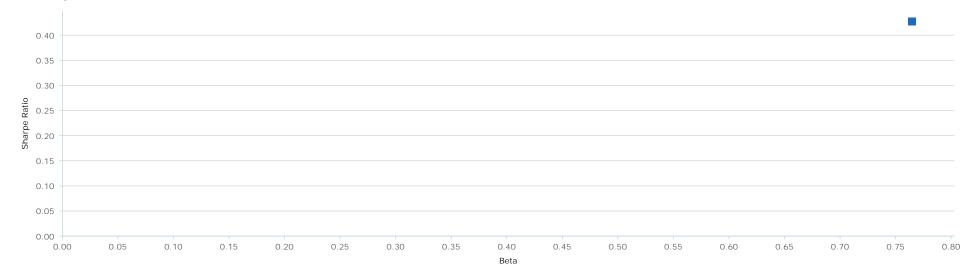
## Drawdown of Cumulative Return



		MAXIMUM DRAWDOWN START DATE		MAXIMUM DRAWDOWN LENGTH	MAXIMUM DRAWDOWN RECOVERY DATE	HIGH WATER MARK DATE	HIGH WATER MARK	PAIN INDEX	PAIN RATIO
Target 75/25	(42.65)	Nov 2007	Feb 2009	16	Feb 2011	Dec 2021	2.39	5.85	0.88



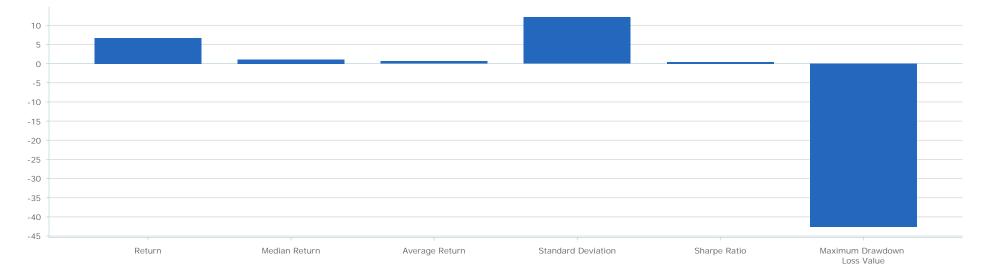
## Sharpe Ratio / Beta vs Benchmark



	RETURN	STANDARD DEVIATION	ALPHA	ВЕТА	EXCESS RETURN	SHARPE RATIO	TRACKING ERROR	R SQUARED
Target 75/25	6.68	12.09	0.64	0.76	(0.98)	0.43	4.52	95.00



## Multi-Statistic

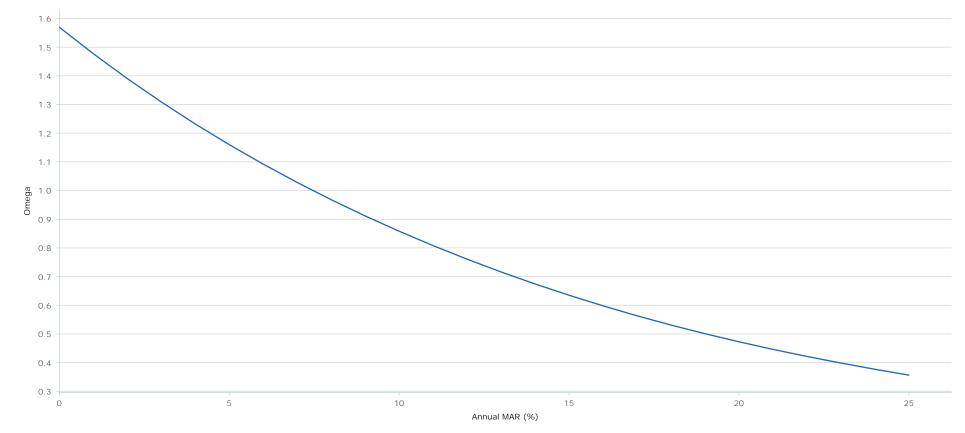


	RETURN	MEDIAN RETURN	AVERAGE RETURN	STANDARD DEVIATION	SHARPE RATIO	MAXIMUM DRAWDOWN LOSS VALUE
Target 75/25	6.68	1.08	0.60	12.09	0.43	(42.65)

## 🗱 UBS

## Omega

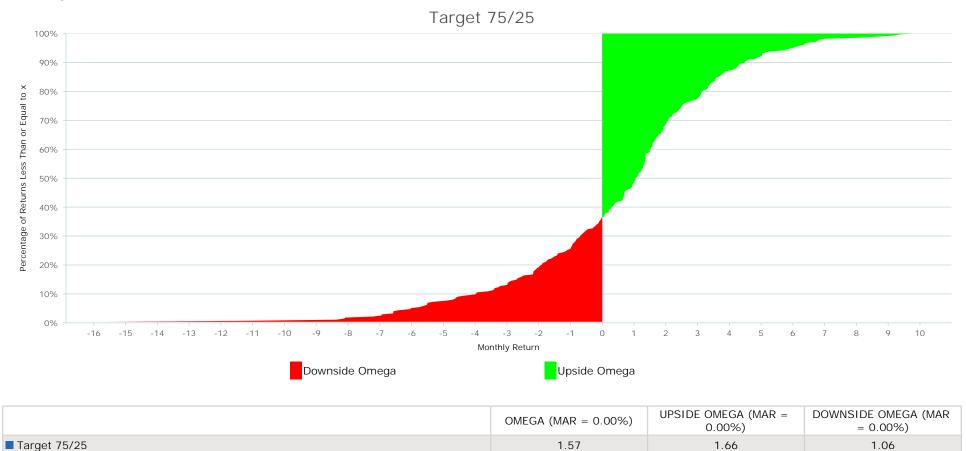
February 2001 - December 2023



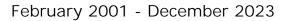
Target 75/25

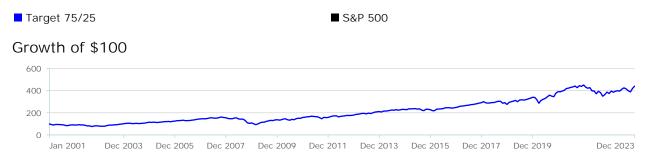


## Cumulative Distribution of Returns



## Performance Risk Summary

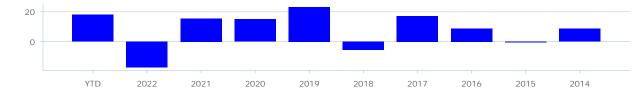




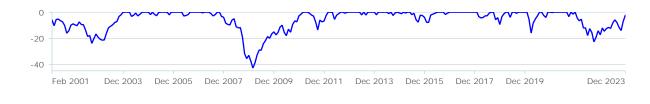
### Annualized Return

	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	10 YEARS
Target 75/25	18.05	(1.18)	4.12	6.75	9.87	7.62

## Calendar Year Return



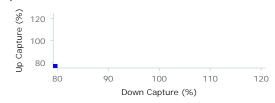
### Drawdown



Index relative statistics vs S&P 500



## Upside / Downside



## **Summary Statistics**

	MANAGER
Return	6.68
Standard Deviation	12.09
Sharpe Ratio	0.43
Excess Return	(0.98)
Tracking Error	4.52
Information Ratio	(0.22)
Alpha	0.64
Beta	0.76
Up Capture	75.26
Down Capture Ratio	79.20
Maximum Drawdown Loss Value	(42.65)
Pain Index	5.85
Pain Ratio	0.88



#### Important Information About Your Report

The projections and other information contained in this report have been generated by a digital asset allocation analysis tool developed by Zephyr Associates (the "Zephyr Asset Allocation Tool" or "Zephyr tool"). The goal of the tool is to aid and educate our UBS Consultants, clients and prospective clients in understanding the scope of our service offerings, the issues that should be considered before engaging in an investment strategy or transaction, the basic tenants of investing (particularly with a view towards long-term investing), our views of long-term economic trends and projections and, subject to certain assumptions, the potential effects that a particular strategy, investment program or product or series of transactions may have on a portfolio. You and your UBS Consultant can use this tool to analyze the composition and hypothetical growth of an asset allocation or series of several asset allocations (e.g., your current allocation, a UBS strategic asset allocation model, a custom allocation develop by you and your UBS Consultant based on your individual investment policy, etc.).

The information in this report is based on data and computations provided by Zephyr Associates and other third parties. UBS believes this information to be reliable but we have not independently verified and do not guarantee the accuracy or completeness of the data and computations.

IMPORTANT: The projections or other information generated by the Zephyr Asset Allocation Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results.

Actual results may vary with each use and over time depending on the specific composition of the investor's portfolio, when the portfolio is implemented, and with changing market conditions. All results reflect realized and unrealized gains and losses and the reinvestment of income. Unless otherwise indicated, results do not include the impact of transaction costs (e.g., commissions, mark-ups, mark-downs, fees), advisory fees, or taxes. If these factors were included, the results shown would be lower. Assets are classified based on UBS' proprietary classification methodology (assets held at UBS) or as identified by you (assets held at other financial institutions). Rebalancing to the asset allocation shown is assumed to have occurred at the beginning of each month for the period shown.

#### Scope of our Services

UBS Financial Services Inc. ("UBS") makes the interactive Zephyr Asset Allocation Tool available to certain UBS Consultants, clients and prospective clients to conduct certain asset allocation analyses. This Zephyr Asset Allocation Tool report is provided for informational purpose only and is not an offer to buy or sell any security or investment strategy, is not meant to be a comprehensive financial plan, and does not create an investment advisory relationship between you and UBS or your UBS Consultant.

This report is intended to aid (and be used by) your UBS Consultant in providing you with actual individualized investment advice. Therefore, the report should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant, our standard account documents, agreements and disclosures and the additional factors that warrant consideration for your particular financial situation, including costs.

If this output is provided as part of a proposal, it is marketing material. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. This report should be used solely for the purposes of discussion with your prospective UBS Consultant and your independent consideration. UBS does not intend this to be fiduciary or best interest investment advice or a recommendation that you take a particular course of action. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

Conflicts of Interest. UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationship/withubs, or ask your UBS Financial Advisor for a copy.

Neither UBS Financial Services nor any of its employees provide tax or legal advice. You must consult with your legal or tax advisors regarding your personal circumstances.

You are not required to implement any of the asset allocation strategies modeled in this report. If you would like UBS to assist you in making any changes to your current asset allocation strategy, the capacity in which we act will depend on, and vary by, the nature of the product, service or account that you select for implementation (i.e., brokerage or advisory). Understanding the ways in which we can conduct business under applicable laws and regulations is essential to the relationship between You and Us.

As a firm providing wealth management services to clients in the U.S., UBS Financial Services Inc. is registered with the U.S. Securities and Exchange Commission as an investment adviser and a broker-dealer, offering both investment advisory and brokerage services. Investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. At the end of this report you will find a detailed explanation regarding the distinctions between investment advisory programs and brokerage service, including how we charge for these services and our respective responsibilities to you. See Conducting Business with UBS: Investment Advisory and Broker-Dealer Services. It is important that you review and understand the agreements and disclosures we provide to you about the products or services offered. If at any time you would like clarification on the nature of your accounts or the services you are receiving, please speak with your UBS Consultant or visit our website at http://www.ubs.com/workingwithus.

#### Overview

This report is presented for illustrative purposes as a general assessment of the asset allocation strategies displayed. The asset allocations analyzed may include a number of your existing accounts, each with a potentially different investment objective and risk parameter. Where applicable, these accounts have been considered as a whole in helping you develop an overall asset allocation strategies presented, to buy or sell securities, or to participate in any UBS program, you should carefully review the impact of such changes on each account involved and the impact on the overall portfolio.

Please note that it is your responsibility to determine whether to implement any of the allocation strategies identified in this report and how such implementation would be accomplished. UBS will not track or monitor specific investments you make to determine whether they complement your existing investment objectives, investment policy or any asset allocation strategy you may adopt, unless you have specifically engaged us to provide such monitoring. In addition, this report will not be updated to reflect any changes in your investment strategies, risk tolerances or market conditions.

If your assets are held at UBS Financial Services Inc., your UBS Financial Services Inc. account statements are the only official record of your UBS holdings and account and are not replaced, amended or superseded by any of the information presented in this report.

This report is not intended to provide you with consolidated information or reporting regarding your holdings at other firms. However, at your request, this report may include information regarding assets that you hold at other financial institutions so that we may review your asset allocation and/or investment strategy in the context of your overall holdings. If your assets are held at other financial institutions, this report will be based on information regarding holdings, balances and values of assets you provided to us. We have not verified, and are not responsible for, the accuracy or completeness of this information. If the information you provided is not current, inclusion of these assets will impact the accuracy of the current asset allocation and other analysis presented. You should review the account statements and other documentation you receive from your third party custodian for their record of the assets and asset values held in your accounts. The account statements you receive from your third party custodian regarding the assets you hold with them are the official record of your holdings and accounts and are not impacted or superseded by the information in this report.

UBS's SIPC coverage only applies to assets held at UBS. If you maintain assets at other firms that may be SIPC members, you should contact their financial representative or the other entity or refer to the other entity's statement regarding SIPC membership.

#### Asset Allocation Presented and Analysis Assumptions:

The results in this report are based on information regarding your investment objectives (as reflected by your allocation criteria), risk tolerance, cash flow requirements, time horizon and other views and requirements. We rely on the accuracy of the information you provide to us in developing this report. Please review the client inputs described in this report carefully as inaccuracies can materially impact the analysis, and advise your UBS Consultant if any change is necessary.

The asset allocation(s) analyzed can be your current asset allocation, a UBS strategic asset allocation or a customized asset allocation developed by you and your UBS Consultant based on your investment policy and risk profile. All asset allocations analyzed were identified by you and/or your UBS Consultant. You should understand that the asset allocation can be modeled at the asset class (e.g., equities, fixed income, etc.) or the sub-asset class (e.g., large-cap equities, emerging market equities) and that there may be asset or sub-asset classes not presented that have characteristics similar or superior to those analyzed in this report. Your UBS Consultant can provide additional information regarding the allocation model(s) analyzed in this report.

UBS strategic asset allocation models are developed using a proprietary process based on UBS capital market assumptions (see Return, Risk, and Correlation Assumptions). UBS has changed its asset allocation models in the past and may do so in the future as circumstances warrant. If UBS strategic asset allocations are used in this report, neither UBS nor your UBS Consultant is required to provide you with an updated analysis based upon changes to asset allocation or other underlying assumptions.

Asset allocation does not assure a profit or eliminate the risk of a loss.

#### Efficient Frontier Analysis:

Mean-Variance Optimization tools may be used to help determine optimal allocations to different asset classes within a portfolio given a certain level of acceptable risk. The Efficient Frontier analysis is a meanvariance optimization methodology that calculates a series of optimal portfolios that offer the highest expected return for a given level of risk or the lowest risk for a given level of expected return. The Efficient Frontier is determined based on estimated forward-looking risk, return, and correlation of assets assumptions established by UBS (see Return, Risk, and Correlation Assumptions section) and your specific guidelines regarding time horizon and investment objective/ risk tolerance (as reflected in allocation constraints). Each point on the frontier is theoretically efficient based on the given assumptions. An "inefficient portfolio" does not lie on the frontier because alternate portfolios can be found that offers more return for the same amount of risk or the same expected return with a less risk. "Efficient" portfolios on the frontier line are more desirable to investors trying to maximize return and minimize risk. The selection of a proper portfolio depends upon the investor's goals and risk tolerance.

Mean-variance optimization is very sensitive to changes in the forward-looking capital market assumptions and may result in asset allocations and portfolios that are highly concentrated. Your UBS Consultant can provide additional information regarding the Efficient Frontier analysis in this report.

#### Deterministic Analysis:

Except for any probabilistic analysis sections of this report, a deterministic analysis is used to illustrate the hypothetical growth of the asset allocation strategies presented based on an assumed rate of return, risk and correlation for each asset or sub-asset class identified within the strategy. The rate of return, risk and correlations used are based on estimated forward-looking assumptions established by UBS (see Return, Risk, and Correlation Assumptions section below).

In order to create the analysis presented, the rates of return for each asset or sub-asset class are combined in the same proportion as the asset allocation(s) illustrated (e.g., if the asset allocation indicates 40% equities, then 40% of the results shown for the allocation will be based on the estimated forward-looking risk, return, and correlation assumptions for equities based on UBS proprietary research).

#### Simulated Portfolio Value Probability Analysis:

Simulated Portfolio Value Probability Analysis (frequently referred to as "Monte Carlo" simulations), is another tool for evaluating the potential future performance of the asset allocation strategies presented. Monte Carlo analyses incorporate future uncertainty by simulating possible return scenarios for a portfolio under variable market conditions. Monte Carlo analysis generally performs several thousand simulations, each simulating the growth of the modeled asset allocation over a specified period of time and assuming certain client inputs and a variety of returns and scenarios, all of which are subject to change as a result of market volatility, economic factors and world events. Monte Carlo results present the probability of achieving certain targets based on the results of the simulations.

IMPORTANT: The projections or other information in this report regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investments results and are not guarantees of future results.

#### Monte Carlo simulations are based on estimated forward-looking return, risk and correlation assumptions established by UBS (see Return, Risk and Correlation Assumptions section).

Unless noted otherwise, the analysis assumes a constant rate of inflation and does not account for variations in inflation rate over time. Monte Carlo simulations also account for certain client inputs and assumptions regarding inflation and cash flows, the accuracy of which will materially impact the results of the analysis. Please review the client inputs described and advise your UBS Consultant if any change is necessary. Unless specifically included as an outflow, the analysis will not account for investment advisory fees, transaction fees or taxes.

Monte Carlo results are intended to represent a spectrum of possible return outcomes for the modeled asset classes based on the established assumptions. The portfolio value at the end of each scenario is recorded and compared against the established portfolio target. The probability of achieving a target is calculated by dividing the number of scenarios where the portfolio value equaled or exceeded the target by the total number of scenarios. Note that the highest likelihood of success is 99% because there is never a guarantee that a particular result will be actualized. Results should only be viewed as reasonable estimates of possible outcomes and not as a guarantee, prediction or projection. The results shown may vary with each use and over time and if any of the underlying assumptions change. Your actual results can vary materially from the results shown in this analysis.

Monte Carlo analysis does not take into account actual market conditions that may severely affect your portfolio results over the long-term. It does not reflect the average periods of bull and bear markets, which can be longer than those modeled.

The analysis also does not consider short-term correlations among asset class returns and does not consider the results that could occur from an extreme market event, either positive or negative, due to the low probability of such an occurrence. A market crises can cause asset classes to perform similarly, lowering the accuracy of our return assumptions and diminishing the benefits of diversification in ways not captured by the analysis. As a result, returns actually experienced by the investor may be more volatile than those used in our analysis.

Your UBS Consultant can provide additional information regarding the Monte Carlo/Simulated Portfolio Value Probability analysis reflected in this report.

#### Historic Asset Allocation Backtest:

If the historical performance of an asset allocation is provided, the historical performance does not reflect your actual performance but, rather, was calculated by the retroactive application of historic index results to the asset allocation(s) analyzed. This performance is based on the long-term performance of certain indexes that have been selected by UBS (or as requested by the Client) as a representative proxy for the asset classes in the asset allocation(s) or portfolio(s) analyzed. See the Scenario Assumptions section for a description of the index proxies used for each asset class in this analysis. UBS selects proxy indices based on our research and understanding of the asset class or the allocation and strategy of the investments in your portfolio, or as requested by the client. Because the asset allocations were structured with the benefit of knowing how each asset class and benchmark performed during the period shown, the hypothetical returns may be higher than the returns of a portfolio that would have been recommended during the time period shown. In addition, backtested performance does not reflect the impact of transaction costs, advisory fees, taxes and inflation. If these were included, the results shown would be lower. Please note that the historical backtest analysis considers data over the period shown and assumes that the asset allocation was rebalanced at the beginning of each month back to the initial asset allocation. This rebalancing frequency does not necessarily reflect how an actual portfolio would have been managed. There is no guarantee that these backtested results could, or would, have been achieved had this asset allocation been used during the years presented.

#### Past performance or historic results provide no guarantee of future returns.

#### Return, Risk and Correlation – Assumptions Forward-Looking Estimates:

The asset class risk and return results used and displayed in this report, as well as the asset class correlations, are based on estimated forward-looking return, risk?as measured by standard deviation?and correlation assumptions ("capital market assumptions"), which are based on UBS proprietary research. The development process includes a review of a variety of factors, including the return, risk, correlations and historical performance of various asset classes, inflation and risk premium.

The strategic returns in the UBS capital market assumptions consider returns over a full business cycle. The capital market assumptions are subject to change at any time at our discretion and without notice. UBS has changed its return, risk and correlation assumptions in the past and may do so in the future. Neither UBS nor your UBS Consultant is required to provide you with an updated analysis based upon changes to these or other underlying assumptions.

Since assumptions are subject to uncertainty, including market forces and factors outside of our control, you should also understand that the assumptions used are estimates, are not guarantees or projections of future results. There is no certainty that the assumptions for the model will accurately estimate asset class return rates going forward. Actual long-term results for each asset class may differ from our assumptions, with those for classes with limited histories potentially diverging more. As a result, UBS will not be responsible for omissions in the analysis, regardless of the source of such inaccuracies, errors, or omissions. In addition, capital market assumptions pertain to the asset or sub-asset class in general, not the performance of specific securities or investments. Particular investment products may have higher or lower returns than the range for the corresponding asset class used in this analysis.

Your actual results may vary significantly from the results shown in this report.

#### Periodic Reviews:

This report is based on information you have provided as of the date indicated. Over time, your financial circumstances or the other assumptions and estimates that underlie this report may change. For this reason, you should periodically meet with your UBS Consultant to re-evaluate your financial situation, reassess your asset allocation strategy, and review the assumptions upon which this information is based.

#### Asset Class Risk Considerations:

Some of the general risk considerations associated with the asset classes included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. Individual funds and investments will have specific risks related to their investment programs that will vary from fund to fund. Clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

Alternative Investment Strategies –Alternative investment strategies are investment vehicles that are formed by professional money managers to afford them greater flexibility to manage money in any market environment. These strategies typically have flexibility regarding the types of securities in which they can invest (e.g., options and futures contracts), the types of positions they can take (e.g., long and short positions) and the amount of leverage they are permitted to employ. A professional money manager can use these and other techniques to modify market exposure and create portfolio characteristics that may be desirable for certain clients (e.g., reduced correlation to financial markets, potential lower volatility, and better performance in "down" markets). This flexibility can add value when used skillfully. This flexibility does, however, add additional elements of risk and complexity, including that alternative investments are often long-term, illiquid investments that are subject to restrictions on transfer and not easily valued. Note that due to the nature of alternative investments, the risk and return assumptions used in this analysis may tend to overstate potential benefits but not fully reflect potential risks.

Interests of Non-Traditional Investment Strategies are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of the funds, and which Clients are urged to read carefully before subscribing and retain. An investment in a fund is speculative and involves significant risks. The funds' performance may be volatile, and investors may lose all or a substantial amount of their investment in a fund. The funds may engage in leveraging and other speculative investment practices that may increase the risk of investment loss. The funds are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in a fund. Investors should consider a fund as a supplement to an overall investment program.

Investing in the fixed income market is subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. Derivatives may involve certain costs and risks such as liquidity, interest rate, market, credit, management, default risk, and the risk that the position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

Equity investments represent ownership interest in a company. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. The value of investments in equity securities will fluctuate in response to general economic conditions and to changes in the prospects of particular companies and/or sectors in the economy. The risk of equity investments can vary based on the market capitalization (market value) of the company, for example, Large, Mid, and Smid. Investments in small cap and medium company stocks can be more volatile over the short term than investments in large company stocks.

Non-U.S. Equity and Fixed Income represent ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have "Developed Markets" or "Emerging Markets." Foreign investing involves risks, including, but not limited to, risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks.

#### **Calculation Definitions**

This section includes descriptions for the terms and calculations used within this report. Your UBS Consultant can provide additional information regarding the terms, calculations, and results contained within this report.

Alpha: Alpha is a measure of risk-adjusted return. It measures the difference between a portfolio's returns and the returns the portfolio might be expected to deliver based on the portfolio's level of risk (beta) and a benchmark index over the date range shown. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating alpha. A positive alpha means the portfolio outperformed expectations for the period shown, while a negative alpha indicates that the portfolio underperformed expectations during the period shown. If two portfolios have the same return, but one has a lower beta, that portfolio would have a higher alpha.

Annualized Returns: An annualized return is the geometric average return of a portfolio for each year over the time period shown. Annualized returns take into account compounding returns by considering the portfolio's cumulative return (the total compounded portfolio return over the time period) and expressing that as a per year figure. Annualized returns only provide a snapshot of investment performance as of a given date and do not indicate volatility over the time period analyzed.

Average Positive Return/Average Positive Return: To calculate the average positive return and average negative return for a portfolio over a given date range, the Zephyr Asset Allocation Tool partitions the portfolio's series of returns into two parts, one made up of the positive periods of returns (up periods), the other of the zero and negative periods of returns (down periods). The average positive/up and negative /down returns are the respective averages of these two series.

Batting Average: The batting average of a portfolio is the ratio between the number of periods where the portfolio outperforms a benchmark and the total number of periods. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating batting average.

Best Case/Worse Case: See Range of Returns.

Best Month Return/Worse Month Return: The best month return is simply the maximum of the monthly returns inside the given date range. Similarly, the worst month return is the minimum of the monthly returns inside the date range.

Best Quarter Return/Worse Quarter Return: The best quarter return is simply the maximum of the quarterly returns inside the given date range. Similarly, the worst month return is the minimum of the quarter returns inside the date range.

Best Year Return/Worse Year Return: To calculate the best one-year return for a given portfolio, the Zephyr Asset Allocation moves a one-year time window along the series and calculates the compound return for each of these windows. The best one-year return is the maximum of the returns thus found. Similarly, the worst one-year return is the minimum of the returns thus found. Note that best and worst one-year returns do not refer to calendar years. Rather, they refer to arbitrarily placed one-year periods.

Beta: Beta represents the systematic risk of an analyzed portfolio. Beta measures how the analyzed portfolio performed in relation to the performance of a benchmark index during the time period shown. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark index for calculating beta. A portfolio with a beta of one is considered to be as volatile (risky) as the benchmark and would therefore have provided returns equal to those of the market benchmark during both up and down periods over the date range analyzed. A portfolio with a beta of two would have moved approximately twice as much as the benchmark.

Conditional Value at Risk: See Value at Risk.

Constraints, Min and Max: Portfolio asset classe constraints established by the Client to force minimum or maximum allocations to selected asset classes when generating an Efficient Frontier.

Correlation (R): Correlation represents the degree to which an investment's return moves in tandem with another and is a critical component of diversified portfolio construction. The Correlation of assets varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). A correlation of 0 indicates no relationship between the investments. When included within a portfolio, assets with lower Correlations to the other assets in the portfolio enhance diversification and result in better risk-adjusted expected returns for the portfolios. An R of less than 0.3 is often considered low Correlation. Correlation may also be used to represent the degree to which a portfolio's return moves in tandem with a benchmark or an asset class moves in tandem with another asset class.

#### Cumulative Distribution of Return: See Omega.

Cumulative Excess Return: See Excess Return.

Distribution of Returns: The range of possible outcomes that may be expected for a portfolio compounded over the time period(s) shown based on the asset class return, risk (standard deviation), and correlation assumptions set by UBS (and accounting for any Constraints imposed by the Client). The distribution of returns presents the annualized returns after the period(s) shown and displays various percentiles which represent the percentage of possible return outcomes that may be expected to be equal to or lower than the stated return. The percentiles displayed include the 5th percentile, 25th percentile, 50th percentile (which is a median return), 75th percentile.

#### Down Capture: See Up Capture/Down Capture.

Drawdown: Any sub-period of time during the date range analyzed where the portfolio had a negative loss percentage starting from the date of the loss began (drawdown start date) and ending on the date of the lowest value before the portfolio recovered to its value before the loss began (drawdown end date). Conceptually, this is the "peak to trough" of the drawdown when displayed on a graph. Drawdown measures the loss percentage (compounded, not annualized) that a portfolio incurred during any sub-period of the date range analyzed. See Maximum Drawdown.

Drawdown Average: The arithmetic average of all returns during all drawdowns over the date range analyzed. The drawdown average is based on drawdowns that begin with a drawdown start date and end with a drawdown end date. Compare to Average Negative Return which is the arithmetic return of all periods (e.g., calendar months) that had a negative return during that period.

Efficient Frontier: Nobel Laureate Harry Markowitz developed mean-variance optimization as a way to create optimal portfolios based on risk-return trade-offs. The optimization, which results in an Efficient Frontier, uses three inputs – returns, standard deviations (risk), and correlations – to combine assets into portfolios that maximize return for any given level of risk.

Excess Return: Excess return represents the difference between the return of the analyzed portfolio and the return of a benchmark. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating excess return. A positive excess return implies that the portfolio outperformed the benchmark. Cumulative excess returns represent the difference between the total returns in the portfolio and the total returns for the benchmark during a given date range and annualized excess returns represent the difference between the annualized returns of the portfolio series and the annualized returns of the benchmark during a given date range.

#### Expected Return:See Range of Returns.

Expected Risk: See Range of Returns.

Information Ratio: Information Ratio measures the consistency of excess returns of a portfolio compared to a benchmark. The information ratio is the portfolio's annualized excess return over a benchmark divided by the portfolio's annualized standard deviation of excess return over the benchmark (i.e. tracking error). Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating the information ratio.

Inflation: The Monte Carlo simulation projections can include an inflation rate that would be applied to each year being simulated.

Interpolate: The Monte Carlo Simulation allows Clients to use multiple expected return distributions using the interpolate option. Clients can enter supplementary mean and standard deviation values in addition to the mean and standard deviation values established by the UBS capital market assumptions. The mean and standard deviation define a distribution that represents possible future returns. Clients can also choose the distribution type as either normal or log-normal. Log-normal distribution intends to account for observations that returns are never less than -100% and that over longer time periods (such as a year) returns are positively skewed. Please speak with your UBS Consultant for more information regarding additional mean and standard deviation values and log-normal distribution.

Kurtosis: Kurtosis characterizes the relative peakedness or flatness of a distribution of returns compared with a normal distribution. Positive kurtosis indicates a relatively peaked distribution. Negative kurtosis indicates a relatively flat distribution.

MAR (minimal acceptable return): A minimal return figure established to assess a portfolio's ability to achieve a certain target. See Sortino Ratio and Omega.

Maximum Drawdown: Maximum drawdown is the maximum loss percentage (compounded, not annualized) that a portfolio incurred during any sub-period of the date range analyzed. Conceptually, this is the biggest "peak to trough" loss, beginning with the maximum drawdown start date (the date the maximum loss percentage started) and ending with the maximum drawdown end date (the date that the portfolio hit its lowest point before recovering to the peak level reached before the maximum drawdown). The calculation looks at all sub-periods of the entire time period analyzed and calculates the compounded return of the portfolio or index over that period. The maximum drawdown loss value is the largest negative value of all these compounded return periods (or zero if there were no drawdowns during the period analyzed). The maximum drawdown length is the number of periods (days, months, or quarters depending on the periodicity of the data) between the maximum drawdown start date and the maximum drawdown end date. The maximum drawdown recovery date is the date that the portfolio returns to the drawdown start date (the date at which the compounded returns regain the peak level that was reached before the maximum drawdown recovery length is the number of periods it takes to reach the recovery level from maximum drawdown end date.

Monte Carlo Percentiles: Probability distributions of asset value outcomes generated from the Monte Carlo Simulations.

Monte Carlo Probabilities: The probability of the wealth goal (or target) is the number of simulation trials that meet or exceed the wealth goal (or target) divided by the total number of trials.

Omega: Omega relative to a given minimal acceptable return (MAR) is the ratio between the price of a European call option written against the investment and the price of a European put option written against the investment, with the strike price being equal to the MAR in both cases. Omega is represented graphically as a cumulative distribution of returns function where the x-axis (horizontal axis) of the graph displays returns and the y-axis (vertical axis) of the graph displays the probability that a given portfolio will achieve or exceed that return figure. Upside Omega is the area on a cumulative distribution above the MAR. This is highlighted in green on the Cumulative Distribution of Returns slide(s). It is the numerator in the omega calculation. Downside Omega is the area on a cumulative distribution between the vertical minimum acceptable return line (MAR) and the distribution below the MAR. This is highlighted in red on the Cumulative Distribution of Returns slide(s). It is the numerator in the omega calculation.

Pain Index: The Pain Index is a statistic developed by Zephyr exclusively for use within the Zephyr Asset Allocation tool. It represents the frequency, the depth, and the width of the portfolio's drawdowns by calculating the area enclosed by the downward drawdown graph and the zero drawdown line, divided by the length of the time interval. The pain index is an attempt to capture in one single number as much of the information that is contained in the drawdown graph as possible, rather than just the maximum drawdown number. This number increases as the spikes grow more frequent, deeper, or wider during the same time period.

Pain Ratio: The Pain Ratio indicates the excess return per unit of total risk as measured by the pain index of the portfolio. It is a ratio of the portfolio's annualized excess returns over the risk-free rate to the portfolio's pain index. The pain ratio is a measure of the premium earned for the risk incurred by the portfolio.

Range of Returns: A Range of Returns indicates the range of possible outcomes calculated by the cumulative returns compounded over the period(s) shown for a given portfolio based on UBS return, risk, and correlation assumptions (and Client Constraints). The expected return is the annualized return after the period(s) shown under a base case scenario. The best/worst case return is the annualized return after the period(s) shown under a base case scenario, and the expected risk is the standard deviation of the expected return. As the time horizon increases, the expected risk moves towards zero. For any given portfolio, the expected return for a time period is represented by the 50th percentile (which is a mean return) and the expected best case scenario by the 95th percentile and the expected worst case scenario by the 5th percentile. The likelihood of obtaining a total portfolio value that is more extreme than the best/worst case cumulative value (given the capital market assumptions and Constraints) is approximately 2.5%.

R-Squared: The R-Squared (R2) of a portfolio measures the variance of the portfolio's returns compared to the variance of a benchmark's returns in order to determine how closely the portfolio tracks the benchmark. R2 ranges between zero and 100%. An R2 of 100% indicates perfect tracking, while an R2 of zero indicates no tracking at all. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark for calculating R2.

Relative Constraints: These are portfolio asset allocation constraints established by the Client indicating the allocation to an asset class or asset class group has to be less than, greater than or equal to another asset class or asset class group.

Return, Risk, and Correlation assumptions: Mean-Variance optimization uses three inputs to generate the Efficient Frontier: Returns, Standard Deviations (Risk) and Correlations. These are commonly referred to as the Capital Market Assumptions for generating the Efficient Frontier. These values are based on UBS estimated forward-looking assumptions based on UBS proprietary research (see the Return, Risk, and Correlation Assumptions – Forward-looking Estimates section for more information).

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by standard deviation. It is a ratio of the portfolio's arithmetic average of excess returns over the risk-free rate to the portfolio's standard deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio. The Sharpe Ratio – Internal is similar to the Sharpe Ratio, but the denominator is the standard deviation of the portfolio's excess returns over the risk-free rate (i.e. tracking error). This captures the risk associated with the excess returns instead of the risk solely associated with the portfolio.

Skewness: Skewness characterizes the degree of asymmetry of a distribution around its mean. Positive skewness indicates a distribution with an asymmetric tail extending toward more positive values. Negative skewness indicates a distribution with an asymmetric tail extending toward more negative values.

Sortino Ratio: The Sortino Ratio indicates the excess return per unit of total risk as measured by downside deviation. It is a ratio of the portfolio's arithmetic average of excess returns over a minimum acceptable return (MAR) to the portfolio's downside deviation. The Sortino ratio uses the downside deviation with a constant MAR indicated. Downside deviation measures the deviation between returns that are less than the MAR and the MAR.

Standard Deviation: A measure of the extent to which observations in a series vary from the mean of the series. The standard deviation of a series of asset returns is a measure of volatility or risk of the asset. A large standard deviation implies that there have been large swings in the return series. The standard deviation calculation assumes that the return series is a sample of possible returns, while the population standard deviation assumes that the series has all of the returns in the population.

Tracking Error: Tracking Error measures the difference between the returns of the analyzed portfolio and those of a benchmark. Tracking error is calculated as the annualized standard deviation of the excess return of the portfolio compared to the benchmark return. The lower the tracking error, the more closely the portfolio's returns tracked those of the benchmark. Unless otherwise described, the Zephyr tool uses the S&P 500 as the market benchmark for calculating tracking error.

Trailing Year Returns: Returns trailing from the date analyzed. All returns over one year are annualized.

Treynor Ratio: The Treynor Ratio is a risk-adjusted measure of return which uses beta to represent risk. It is the portfolio's excess return over the risk-free rate divided by the portfolio's beta to the selected benchmark. The Treynor Ratio differs from the Sharpe Ratio insofar as the beta to the market benchmark is used as the measure of risk rather than the standard deviation of the portfolio series.

Up Capture/Down Capture: The up and down capture measure how well the portfolio was able to replicate or improve on phases of positive benchmark returns and how badly the portfolio was affected by phases of negative benchmark returns. To calculate the up capture, we first form a new return series from the portfolio and benchmark return series by dropping all time periods where the benchmark return is zero or negative. The up capture is then the ratio of the annualized return of the resulting portfolio series to the annualized return of the resulting benchmark series. The down capture is calculated analogously. Unless otherwise described, the Zephyr tool uses the S&P 500 as the benchmark for calculating the up capture and down capture.

Upside/Downside Deviation: Downside deviation measures the deviation between returns that are less than a target return and the target return. Upside deviation measures the deviation between returns that are more than a target return and the target return. Target returns may be referred to as a minimal acceptable return (MAR).

Value at Risk: Nonparametric Value at Risk (VaR) attempts to evaluate risk by applying historical returns for a portfolio and determining a VaR value where a certain percentage (called the confidence level) of the rest of the portfolio's returns exceeded that VaR value. For example, if the confidence level is 95%, that means that 95% of the portfolio's historical returns over the given date range were more than the VaR and analogously that 5% of the portfolio's historical returns over the given time frame were less than the VaR. If the confidence level is 99%, that means that 99% of the portfolio's historical returns exceeded the VaR and 1% of the portfolio's returns were less than the VaR. Conditional Value at Risk (CVaR) quantifies the amount of tail risk for an investment portfolio by calculating the average return of the portfolio's historical returns that exceeded a given confidence level. For example, if the confidence level is 95%, the CVaR calculates the average return of the worst 5% of historical returns over the given time frame. CVaR provides an average historical loss whereas VaR provides a range of the historical losses.

Worst Month Return/Worst Quarter Return: See Upside/Downside.

#### Conducting Business with UBS: Investment Advisory and Broker Dealer Services:

As a wealth management firm providing services to clients in the United States, UBS Financial Services Inc. is registered with the U.S. Securities and Exchange Commission (SEC) as a broker-dealer and an investment adviser, offering both brokerage and investment advisory services.

Our clients work with their UBS Consultants to determine the services that are most appropriate given their financial goals and circumstances. Based on the services you request, we can fulfill your wealth management needs in our capacity as a broker-dealer, as an investment adviser, or as both. Most of our UBS Consultants are qualified and licensed to provide both brokerage and investment advisory services depending on the services requested by their clients.

In addition, some of our UBS Consultants hold educational or professional credentials, such as the Certified Financial Planner<sup>™</sup> (CFP®) designation (Certified Financial Planner Board of Standards Inc. owns these certification marks in the U.S., which it awards to individuals who successfully complete CFP Board's initial and ongoing certification requirements). Holding a professional designation typically indicates that the UBS Consultant has completed certain courses or continuing education. However, a UBS Consultant's professional designation does not change the obligation of UBS or the UBS Consultant to you in providing investment advisory or brokerage services to you.

It is important to understand that brokerage and investment advisory services are separate and distinct and each is governed by different laws and separate arrangements that we may have with you. While there are similarities between the brokerage and investment advisory services we provide, depending on the capacity in which we act, our relationship and legal duties to you are subject to a number of important differences as described in our applicable contracts with you.

This document is intended to inform you about the key distinctions between brokerage and investment advisory services and our respective duties and obligations. We encourage you to review this document carefully and discuss it with your UBS Consultant.

Our Services as a Broker-Dealer and Relationship with You:

As a full-service broker-dealer, our services are not limited to taking customer orders and executing securities transactions. In our capacity as broker-dealer, we may provide a variety of services relating to investments in securities, including investment research, trade execution and custody services. In a brokerage account, you pay us commissions and applicable fees each time we execute a transaction in your account.

We also may make recommendations to our brokerage clients about whether to buy, sell or hold securities. We consider this to be part of our brokerage services and do not charge a separate fee for this advice. Our recommendations must be suitable for you in light of your particular financial circumstances, goals and tolerance for risk. When we provide recommendations with respect to a retirement account such as an IRA, we do so pursuant to the laws, regulations and exemptions that apply to these accounts.

When we work with you in our capacity as broker-dealer, we do not make investment decisions for you or manage your accounts on a discretionary basis. We will only buy or sell securities for brokerage clients based on specific directions from you.

Our Responsibilities to You as a Broker-Dealer:

When we act as your broker, we are subject to the Securities Exchange Act of 1934, the Securities Act of 1933, the rules of self-regulatory organizations such as the Financial Industry Regulatory Authority (FINRA), the rules of the New York Stock Exchange and applicable state laws.

The standards for broker-dealers under these rules and regulations include the following:

- As your broker-dealer, we have a duty to deal fairly with you. Consistent with our duty of fairness, we are obligated to make sure that the prices you receive when we execute transactions for you are
  reasonable and fair in light of prevailing market conditions and that the commissions and other fees we charge you are not excessive.
- We must have a reasonable basis for believing that any securities recommendations we make to you are suitable and appropriate for you, given your individual financial circumstances, needs and goals.
- We are permitted to trade with you for our own account ("principal trading") or for an affiliate or another client and may earn a profit on those trades. When we engage in these trades, we disclose the capacity in which we acted on your confirmation, though we are not required to communicate this or obtain your consent in advance or to inform you of the profit earned on the trades.
- When we act as your broker-dealer, we do not generally enter into a fiduciary relationship with you; however, special rules apply to our activities, obligations and fiduciary status when we provide recommendations with respect to a retirement account. Absent special circumstances (which would include the special rules applicable to recommendations with respect to retirement accounts) we are not held to the same legal standards that apply when providing investment advisory services to you. Our legal obligations to disclose detailed information to you about the nature and scope of our business, personnel, fees, conflicts between our interests and your interests and other matters are more limited than when we are providing investment advisory services to you. Nevertheless, when we provide recommendations with respect to a retirement account, we do so pursuant to the laws, regulations and exemptions applicable to those retirement accounts.

UBS Institutional Consulting program is an investment advisory program. Details regarding the program including fees, services, features and suitability are provided in the Form ADV Disclosure, available from your UBS Consultant.



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#### **Investment Performance**

Period Ending June 30, 2024

Prepared for: Gwinnett County Employees Retirement System July 16, 2024

**Prepared by:** Earle Dodd, Scott Olsen, Ray Vuicich

# **Gwinnett County Composite**

Please contact your UBS Institutional Consultant if you have any questions regarding this report, if your financial situation, individual needs or investment objectives have changed, or if you would like to initiate or modify any investment restrictions on this account.

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## Gwinnett County Employees Retirement System June 30, 2024

### Accounts Included in this Report

UBS account statements represent the only official record of holdings, balances, transactions and security values of assets in your UBS Financial Services Inc. account and are not replaced, amended or superseded by any information presented in this report. As an accommodation to you, values of accounts that you hold at other financial institutions may be included as part of your UBS IC Consulting Services Agreement based on information, including pricing information, provided to us. UBS does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. Please see the 'Important Information' section at the end of this report for detailed pricing information.

Account Name	Account Number	Custodian Name
1607 Capital Partners	GWxxxxxx02	BNY Mellon
Multiple Funds	GWxxxxxx02	BNY Mellon
Columbia Mort	GWxxxxxx02	BNY Mellon
Hartford Str	GWxxxxxx02	BNY Mellon
PIMCO Inc Fd	GWxxxxxx02	BNY Mellon
SLC Management	GWxxxxxx02	BNY Mellon
Voya	GWxxxxxx02	BNY Mellon
Global Allocation	GWxxxxxx02	BNY Mellon
TCW Institutional	GWxxxxxx02	BNY Mellon
Invesco REIT	GWxxxxxx02	BNY Mellon
Atlanta Capital	GWxxxxxx02	BNY Mellon
Vaughan Nelson	GWxxxxxx02	BNY Mellon
Brown Advisory MCG	GWxxxxxx02	BNY Mellon
Bahl Gaynor	GWxxxxxx02	BNY Mellon
The London Company	GWxxxxxx02	BNY Mellon
Barrow Hanley	GWxxxxxx02	BNY Mellon

### Gross of Fees Summary Statement Gwinnett County Employees Retirement System

Account	Inception Date	06/30/2024 Market Value	Latest OTR	%tile Ranking	Year to Date	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	g Inception I	%tile Ranking
Consolidated Portfolio*(1)		\$1,496,772,202	0.98%	<b>v</b>	6.07%		13.34%	¥	2.27%	nannig	7.46%		7.20%	Junio
Policy Index		.,,,,	0.79%		5.48%		11.90%		1.85%		6.97%		6.32%	
Dynamic Index			0.59%		5.59%		12.19%	,	1.96%		7.14%			
Large Cap Growth Equities														
TCW Institutional	04/02/2013	\$86,242,803	7.97%	14	22.93%	17	38.55%	2	8.06%	35	17.19%	21	15.96%	18
Russell 1000 Growth			8.33%	9	20.70%	34	33.48%	31	11.28%	1	19.34%	2	17.07%	4
Brown Advisory LCG	09/22/2023	\$80,632,791	3.11%	75	14.18%	77							30.73%	74
Russell 1000 Growth			8.33%	9	20.70%	34							37.42%	36
Fidelity LCG	09/11/2023	\$80,686,032	8.42%	7	20.66%	35							30.55%	36
Russell 1000 Growth			8.33%	9	20.70%	34							30.51%	36
Large Cap Value Equities														
Barrow Hanley	01/03/2007	\$118,569,196	-1.01%	32	8.80%		17.93%	18	10.06%	1	12.08%	7	8.79%	2
Russell 1000 Value			-2.17%	68	6.62%	62	13.06%	66	5.52%	75	9.01%	66	6.99%	58
The London Company	12/31/2016	\$111,689,922	-1.64%	52	3.88%	91	6.02%	99	2.66%	99	8.27%		9.05%	55
Russell 1000 Value			-2.17%	68	6.62%	62	13.06%	66	5.52%	75	9.01%	66	8.67%	66
Mid Cap Core														
Bahl Gaynor	03/13/2019	\$39,165,463	-1.90%	7	5.44%	43	12.27%		5.05%	16	8.12%		9.14%	54
Russell 2500			-4.27%	67	2.35%	89	10.47%	73	-0.29%	89	8.31%	79	8.36%	80
Mid Cap Growth														
Brown Advisory MCG	04/28/2021	\$39,090,195	-2.12%		6.07%		15.12%		-2.13%	52			-1.15%	49
Russell Midcap Grwth			-3.21%	34	5.98%	42	15.05%	20	-0.08%	22			1.00%	13
Mid Cap Value														
Vaughan Nelson	03/30/2012	\$40,017,592	-4.82%		6.34%		18.27%		5.27%	47	11.04%		10.63%	12
Russell Midcap Value			-3.40%	31	4.54%	35	11.98%	42	3.65%	71	8.49%	52	10.19%	24
Small Cap Blend														
Atlanta Capital	01/31/2007	\$115,285,583	-2.02%	20	0.25%		8.94%		5.70%	1	9.21%		11.52%	1
Russell 2000			-3.28%	45	1.73%	58	10.06%	48	-2.58%	92	6.94%	71	7.00%	62
REITs														
Invesco REIT	01/05/2007	\$68,373,521	-1.21%		-2.78%	77	4.23%		-1.76%	50	2.52%		5.25%	22
NAREIT Equity			0.06%	27	-0.13%	16	7.79%	3	0.30%	1	3.90%	30		31
Foreign Developed Blend														
1607 Capital Partners	06/30/2008	\$204,682,485	3.16%		5.68%	45	11.26%		-0.68%	86	6.77%		5.86%	1
MSCI AC WId X US Net			0.96%	30	5.69%	45	11.62%	30	0.46%	64	5.55%	69	3.39%	66

### Gross of Fees Summary Statement Gwinnett County Employees Retirement System

Account	Inception Date	06/30/2024 Market Value	Latest QTR	%tile Ranking	Year to Date	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	Inception <b>R</b>	%tile Ranking
Global Allocation			•											
Global Allocation	12/16/2014	\$158,659,765	1.11%	24	7.91%	8	14.47%	9	3.57%	20	6.49%	14	5.45%	30
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Global Allocation														
First Eagle SGIIX	12/16/2014	\$79,695,949	1.14%	22	7.76%	9	11.49%	31	5.06%	1	7.99%	2	7.40%	1
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Loomis Sayles LSWWX	12/16/2014	\$78,963,816	1.08%	25	8.06%	7	17.65%	1	2.14%	37	7.44%	5	8.38%	1
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Core Fixed Income														
Voya	12/10/2007	\$140,117,303	0.40%	9	0.18%	8	3.69%	12	-2.61%	14	0.31%	14	3.40%	1
Bloomberg US Agg			0.07%	79	-0.71%	80	2.63%	68	-3.02%	38	-0.23%	55	2.77%	52
SLC Management	04/03/2012	\$142,286,916	0.31%	18	0.70%	1	4.39%	2	-2.47%	10	0.49%	7	2.43%	1
Bloomberg US Agg			0.07%	79	-0.71%	80	2.63%	68	-3.02%	38	-0.23%	55	1.58%	52
Unconstrained														
Unconstrained	12/22/2021	\$71,272,635	0.44%	76	1.67%	69	7.43%	33					-1.17%	82
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
PIMCO Inc Fd	12/22/2021	\$24,604,669	0.44%	76	1.82%	67	7.24%	36					1.25%	48
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
Hartford Str	12/22/2021	\$24,763,932	0.91%	52	3.34%	16	9.40%	5					-0.14%	71
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
Columbia Mort	12/22/2021	\$21,904,034	-0.09%	87	-0.31%	90	5.51%	75					-4.78%	98
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94

1 Public Funds Universe greater than \$1B.

### Net of Fees Summary Statement Gwinnett County Employees Retirement System

Account	Inception Date	06/30/2024 Market Value	Latest OTR	%tile Ranking	Year to Date	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking	Inception F	%tile Ranking
Consolidated Portfolio*(1)		\$1,496,772,202	0.88%	¥	5.87%	Ranking	12.92%		1.93%	Kariking	7.06%		6.77%	annig
Policy Index		.,,,,	0.79%		5.48%		11.90%	ı	1.85%		6.97%		6.32%	
Dynamic Index			0.59%		5.59%		12.19%		1.96%		7.14%			
Large Cap Growth Equities														
TCW Institutional	04/02/2013	\$86,242,803	7.82%	16	22.59%	20	37.79%	4	7.52%	43	16.59%	30	15.39%	33
Russell 1000 Growth			8.33%	9	20.70%	34	33.48%	31	11.28%	1	19.34%	2	17.07%	4
Brown Advisory LCG	09/22/2023	\$80,632,791	2.97%	76	13.87%	78							30.37%	76
Russell 1000 Growth			8.33%	9	20.70%	34							37.42%	36
Fidelity LCG	09/11/2023	\$80,686,032	8.42%	7	20.66%	35							30.55%	36
Russell 1000 Growth			8.33%	9	20.70%	34							30.51%	36
Large Cap Value Equities														
Barrow Hanley	01/03/2007	\$118,569,196	-1.08%	35	8.62%	26	17.45%	21	9.73%	1	11.72%	12	8.43%	8
Russell 1000 Value			-2.17%	68	6.62%	62	13.06%	66	5.52%	75	9.01%	66	6.99%	58
The London Company	12/31/2016	\$111,689,922	-1.75%	56	3.65%	94	5.57%		2.31%	99	7.84%		8.60%	68
Russell 1000 Value			-2.17%	68	6.62%	62	13.06%	66	5.52%	75	9.01%	66	8.67%	66
Mid Cap Core														
Bahl Gaynor	03/13/2019	\$39,165,463	-2.00%	9	5.21%	45	11.77%	64	4.55%	24	7.63%		8.67%	70
Russell 2500			-4.27%	67	2.35%	89	10.47%	73	-0.29%	89	8.31%	79	8.36%	80
Mid Cap Growth														
Brown Advisory MCG	04/28/2021	\$39,090,195	-2.25%		5.81%		14.52%		-2.58%	57			-1.57%	54
Russell Midcap Grwth			-3.21%	34	5.98%	42	15.05%	20	-0.08%	22			1.00%	13
Mid Cap Value														
Vaughan Nelson	03/30/2012	\$40,017,592	-4.93%		6.09%	20	17.60%		4.62%	58	10.30%		9.83%	37
Russell Midcap Value			-3.40%	31	4.54%	35	11.98%	42	3.65%	71	8.49%	52	10.19%	24
Small Cap Blend														
Atlanta Capital	01/31/2007	\$115,285,583	-2.20%	22	-0.14%	84	8.14%		4.93%	3	8.46%		10.79%	1
Russell 2000			-3.28%	45	1.73%	58	10.06%	48	-2.58%	92	6.94%	71	7.00%	62
REITs														
Invesco REIT	01/05/2007	\$68,373,521	-1.37%		-3.10%	86	3.46%		-2.45%	75	1.75%		4.49%	54
NAREIT Equity			0.06%	27	-0.13%	16	7.79%	3	0.30%	1	3.90%	30		31
Foreign Developed Blend														_
1607 Capital Partners	06/30/2008	\$204,682,485	2.99%	1	5.32%	56	10.52%		-1.30%	93	6.06%		5.13%	5
MSCI AC WId X US Net			0.96%	30	5.69%	45	11.62%	30	0.46%	64	5.55%	69	3.39%	66

### Net of Fees Summary Statement Gwinnett County Employees Retirement System

Account	Inception Date	06/30/2024 Market Value	Latest QTR	%tile Ranking	Year to Date	%tile Ranking	1 Year	%tile Ranking	3 Year	%tile Ranking	5 Year	%tile Ranking l	nception F	%tile Ranking
Global Allocation				j		j		<b>j</b>		j		j		<u> </u>
Global Allocation	12/16/2014	\$158,659,765	1.11%	24	7.91%	8	14.47%	9	3.57%	20	6.49%	14	5.45%	30
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Global Allocation														
First Eagle SGIIX	12/16/2014	\$79,695,949	1.14%	22	7.76%	9	11.49%	31	5.06%	1	7.99%	2	7.40%	1
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Loomis Sayles LSWWX	12/16/2014	\$78,963,816	1.08%	25	8.06%	7	17.65%	1	2.14%	37	7.44%	5	8.38%	1
HFRX Global Index			0.37%	57	2.89%	76	5.42%	96	0.46%	67	3.19%	93		99
Core Fixed Income														
Voya	12/10/2007	\$140,117,303	0.35%	12	0.07%	13	3.48%	20	-2.84%	25	0.07%	30	3.13%	11
Bloomberg US Agg			0.07%	79	-0.71%	80	2.63%	68	-3.02%	38	-0.23%	55	2.77%	52
SLC Management	04/03/2012	\$142,286,916	0.27%	27	0.61%	1	4.20%	3	-2.73%	18	0.22%	22	2.14%	4
Bloomberg US Agg			0.07%	79	-0.71%	80	2.63%	68	-3.02%	38	-0.23%	55	1.58%	52
Unconstrained														
Unconstrained	12/22/2021	\$71,272,635	0.44%	76	1.67%	69	7.43%	33					-1.17%	82
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
PIMCO Inc Fd	12/22/2021	\$24,604,669	0.44%	76	1.82%	67	7.24%	36					1.25%	48
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
Hartford Str	12/22/2021	\$24,763,932	0.91%	52	3.34%	16	9.40%	5					-0.14%	71
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94
Columbia Mort	12/22/2021	\$21,904,034	-0.09%	87	-0.31%	90	5.51%	75					-4.78%	98
Bloomberg US Agg			0.07%	83	-0.71%	95	2.63%	93					-3.62%	94

1 Public Funds Universe greater than \$1B.

## **Gwinnett County Employees Retirement System**

## Period Ending June 30, 2024

Account Values							
	Latest Quarter	Fiscal YTD	Year to Date	One Year	Three Years	Five Years	Since Inception
Beginning Mkt Value	\$1,512,391,625.64	\$1,453,880,281.58	\$1,453,880,281.58	\$1,390,655,604.76	\$1,562,063,004.24	\$1,240,324,626.79	N/A
Net Contributions	(\$30,000,000.00)	(\$45,000,000.00)	(\$45,000,000.00)	(\$73,683,256.94)	(\$148,806,904.77)	(\$228,952,215.19)	(\$290,288,656.43)
Investment Earnings	\$14,380,575.86	\$87,891,919.92	\$87,891,919.92	\$179,799,853.68	\$83,516,102.03	\$485,399,789.90	\$0.00
Ending Mkt Value	\$1,496,772,201.50	\$1,496,772,201.50	\$1,496,772,201.50	\$1,496,772,201.50	\$1,496,772,201.50	\$1,496,772,201.50	\$1,496,772,201.50

Returns												
	Latest	Quarter	Fiscal YTD	Calendar YTD	One Year	Three `	Years	Five Years	Ten Years	Fi	fteen Years	Since Inception
Account	0.9	98%	6.07%	6.07%	13.34%	2.27	'%	7.46%	7.11%			7.20%
Policy Index	0.7	79%	5.48%	5.48%	11.90%	1.85	%	6.97%	6.43%			6.32%
Difference	0.1	19%	0.60%	0.60%	1.45%	0.42	%	0.49%	0.68%			0.88%
Calendar Year R	Returns											
	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Account	6.07%	16.38%	-16.96%	14.69%	14.32%	23.04%	-5.06%	16.26%	6.77%	0.11%	7.30%	17.85%
Policy Index	5.48%	14.77%	-15.69%	13.08%	13.62%	21.06%	-5.81%	14.78%	7.95%	-0.73%	7.50%	14.36%
Difference	0.60%	1.61%	-1.27%	1.61%	0.70%	1.97%	0.75%	1.48%	-1.18%	0.84%	-0.20%	3.50%

Policy Index: 25.00% Bloomberg US Aggregate Bond, 15.00% Russell 1000 Growth, 15.00% Russell 1000 Value, 10.00% HFRX Global Index, 10.00% MSCI AC World X US Net, 7.50% Russell 2000, 7.50% Russell Midcap, 5.00% MSCI Net Emerging Markets, 5.00% NAREIT

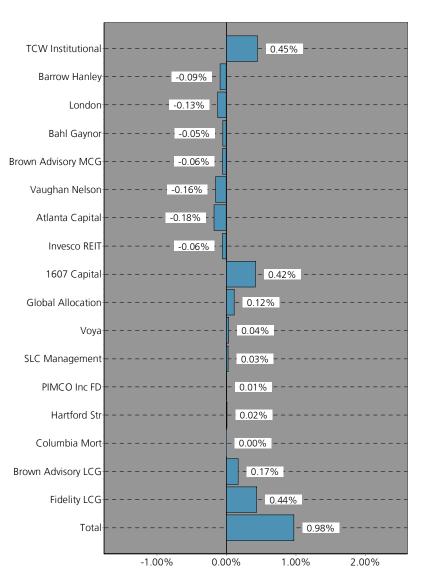
## Gwinnett County Employees Retirement System Executive Summary

## Period Ending: 06/24

Quarter to Date

Fund	Beginning Value	lnvest. Gain	Ending Value	% Return
Consolidated Portfolio	\$1,512,391,626	\$14,380,576	\$1,496,772,202	0.98%
Policy Index				0.79%
Dynamic Index				0.59%
Large Cap Growth				
TCW Institutional	\$84,526,191	\$6,716,612	\$86,242,803	7.97%
Brown Advisory LCG	\$83,052,449	\$2,580,342	\$80,632,791	3.11%
Fidelity LCG	\$79,124,077	\$6,561,955	\$80,686,032	8.42%
Large Cap Value	• · · · • • • • • • • • •	( <b>1</b> ,		
Barrow Hanley	\$119,957,775	(\$1,388,579)	\$118,569,196	-1.01%
The London Company	\$113,550,859	(\$1,860,937)	\$111,689,922	-1.64%
Large Cap Core				
Mid Cap Core				
Bahl Gaynor	\$44,951,299	(\$785,836)	\$39,165,463	-1.90%
Mid Cap Growth	\$39,937,760	(\$847,565)	\$39,090,195	-2.12%
Brown Advisory MCG	\$39,937,760	(\$847,565)	\$39,090,195	-2.12%
Mid Cap Value				
Vaughan Nelson	\$47,348,221	(\$2,330,629)	\$40,017,592	-4.82%
Small Cap Blend				
Atlanta Capital	\$122,922,698	(\$2,637,115)	\$115,285,583	-2.02%
REITS				
Invesco REIT	\$69,326,367	(\$952,846)	\$68,373,521	-1.21%
Foreign Developed Blend				
1607 Capital Partners	\$198,404,044	\$6,278,441	\$204,682,485	3.16%
Emerging Markets				
Global Allocation				
Global Allocation	\$156,920,711	\$1,739,054	\$158,659,765	1.11%
Core Fixed Income				
Voya	\$139,563,661	\$553,642	\$140,117,303	0.40%
SLC Management	\$141,844,377	\$442,539	\$142,286,916	0.31%
Global Fixed Income				
Unconstrained	\$70,961,137	\$311,498	\$71,272,635	0.44%
PIMCO Inc Fd	\$24,497,301	\$107,368	\$24,604,669	0.44%
Hartford Str	\$24,540,596	\$223,336	\$24,763,932	0.91%
Columbia Mort	\$21,923,240	(\$19,206)	\$21,904,034	-0.09%

#### **Quarterly Contribution Analysis**



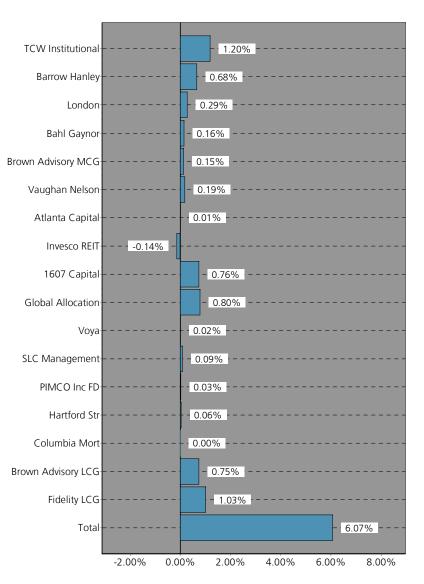
# Gwinnett County Employees Retirement System Executive Summary

## Period Ending: 06/24

Year to Date

Fund	Beginning Value	lnvest. Gain	Ending Value	% Return
TOTAL FUND	\$1,453,880,282	\$87,891,920	\$1,496,772,202	6.07%
Policy Index				5.48%
Dynamic Index				5.59%
Large Cap Growth				
TCW Institutional	\$78,787,470	\$17,455,333	\$86,242,803	22.93%
Brown Advisory LCG	\$79,790,146	\$10,842,645	\$80,632,791	14.18%
Fidelity LCG	\$75,734,497	\$14,951,534	\$80,686,032	20.66%
Large Cap Value	4400 770 000	to 700 007		0.000/
Barrow Hanley	\$108,772,299	\$9,796,897	\$118,569,196	8.80%
The London Company	\$107,514,302	\$4,175,620	\$111,689,922	3.88%
Large Cap Core Mid Cap Core				
Bahl Gaynor	\$41,875,545	\$2,289,918	\$39,165,463	5.44%
Mid Cap Growth	\$36,852,016	\$2,238,179	\$39,090,195	6.07%
Brown Advisory MCG	\$36,852,016	\$2,238,179	\$39,090,195	6.07%
Mid Cap Value	· · ·	· · ·	· · ·	
Vaughan Nelson	\$42,292,558	\$2,725,035	\$40,017,592	6.34%
Small Cap Blend				
Atlanta Capital	\$120,073,152	\$212,430	\$115,285,583	0.25%
REITS				
Invesco REIT	\$70,562,311	(\$2,188,790)	\$68,373,521	-2.78%
Foreign Developed Blend				
1607 Capital Partners	\$193,674,356	\$11,008,129	\$204,682,485	5.68%
Emerging Markets				
Global Allocation				
Global Allocation	\$147,034,328	\$11,625,436	\$158,659,765	7.91%
Core Fixed Income	•			
Voya	\$139,868,300	\$249,003	\$140,117,303	0.18%
SLC Management	\$140,949,246	\$1,337,670	\$142,286,916	0.70%
Global Fixed Income	*			
Unconstrained	\$70,099,754	\$1,172,881	\$71,272,635	1.67%
PIMCO Inc Fd	\$24,164,811	\$439,858	\$24,604,669	1.82%
Hartford Str	\$23,962,873	\$801,060	\$24,763,932	3.34%
Columbia Mort	\$21,972,070	(\$68,036)	\$21,904,034	-0.31%

#### Year To Date Contribution Analysis



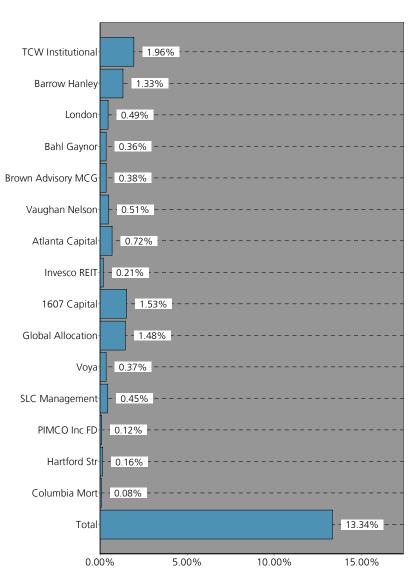
# Gwinnett County Employees Retirement System Executive Summary

## Period Ending: 06/24

Trailing One Year

Fund	Beginning Value	Invest. Gain	Ending Value	% Return
Consolidated Portfolio	\$1,390,655,605	\$179,799,854	\$1,496,772,202	13.34%
Policy Index				11.90%
Dynamic Index				12.19%
Large Cap Growth	£02.270.070	fac 474 000	£06.242.002	
TCW Institutional	\$82,270,870	\$26,471,933	\$86,242,803	38.55%
Brown Advisory LCG		\$20,632,791	\$80,632,791	N/A N/A
Fidelity LCG Large Cap Value		\$20,686,032	\$80,686,032	N/A
Barrow Hanley	\$103,043,001	\$18,026,195	\$118,569,196	17.93%
The London Company	\$95,119,189	\$6,570,733	\$111,689,922	6.02%
Large Cap Core	\$95,119,109	\$0,570,755	JTT,009,922	0.02 /0
Mid Cap Core				
Bahl Gaynor	\$39,331,233	\$4,834,230	\$39,165,463	12.27%
Mid Cap Growth	\$33,957,023	\$5,133,172	\$39,090,195	15.12%
Brown Advisory MCG	\$33,957,023	\$5,133,172	\$39,090,195	15.12%
Mid Cap Value	. , ,		. , ,	
Vaughan Nelson	\$38,107,893	\$6,909,699	\$40,017,592	18.27%
Small Cap Blend				
Atlanta Capital	\$115,578,456	\$9,707,127	\$115,285,583	8.94%
REITS				
Invesco REIT	\$66,039,502	\$2,334,019	\$68,373,521	4.23%
Foreign Developed Blend				
1607 Capital Partners	\$183,963,950	\$20,718,535	\$204,682,485	11.26%
Emerging Markets				
Global Allocation	·	·		
Global Allocation	\$143,699,562	\$19,960,203	\$158,659,765	14.47%
Core Fixed Income				
Voya	\$130,030,585	\$5,047,763	\$140,117,303	3.69%
SLC Management	\$131,197,141	\$6,089,775	\$142,286,916	4.39%
Global Fixed Income	¢CC 240 245	¢4.022.200	¢74 272 625	7 420/
	\$66,340,245	\$4,932,390	\$71,272,635	7.43%
PIMCO Inc Fd Hartford Str	\$22,944,621 \$22,625,756	\$1,660,048 \$2,128,176	\$24,604,669 \$24,763,932	7.24% 9.40%
Columbia Mort	\$22,635,756 \$20,759,869	\$2,128,176 \$1,144,166	\$24,763,932 \$21,904,034	9.40% 5.51%
	\$20,759,009	٥١, ١٩٩, ١٥٥	\$21,304,034	0/ וכ.כ

#### **Trailing 1Y Contribution Analysis**



# The Case for Style Diversification

#### Historical Review of Market Leadership

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Small/Mid Cap	Real Estate	Large Growth	Small/Mid Cap	Large Growth	U.S. Bonds	Large Growth	Large Growth	Real Estate	Commodities	Large Growth	Large Growth
36.80%	28.01%	5.67%	17.59%	30.21%	0.01%	36.39%	38.49%	41.30%	16.09%	42.68%	20.70%
Large Growth	Large Value	Real Estate	Large Value	Int'i	Large Growth	Real Estate	Small/Mid Cap	Large Growth	Large Value	Int'i	Large Value
33.48%	13.45%	2.82%	17.34%	25.03%	-1.51%	28.66%	19.99%	27.60%	-7.54%	18.24%	6.62%
Large Value	Large Growth	U.S. Bonds	Corporate High Yield	Small/Mid Cap	Intl Fixed Income	Small/Mid Cap	Intl Fixed Income	Commodities	Corporate High Yield	Small/Mid Cap	Int'i
32.53%	13.05%	0.55%	17.13%	16.81%	-1.82%	27.77%	10.78%	27.11%	-11.19%	17.42%	5.34%
int'i	Small/Mid Cap	Int'l	Commodities	Large Value	Corporate High Yield	Large Value	Int'l	Large Value	U.S. Bonds	Corporate High Yield	Commodities
22.78%	7.07%	-0.81%	11.77%	13.66%	-2.08%	26.54%	7.82%	25.16%	-13.01%	13.44%	5.14%
Corporate High Yield	U.S. Bonds	Small/Mid Cap	Real Estate	Intl Fixed Income	Real Estate	int'i	U.S. Bonds	Small/Mid Cap	int'i	Large Value	Corporate High Yield
7.44%	5.97%	-2.90%	8.63%	10.33%	-4.39%	22.01%	7.51%	18.18%	-14.45%	11.46%	2.58%
Real Estate	Corporate High Yield	Large Value	Large Growth	Real Estate	Large Value	Corporate High Yield	Corporate High Yield	Int'l	Small/Mid Cap	Real Estate	Small/Mid Cap
2.85%	2.45%	-3.83%	7.08%	8.67%	-8.27%	14.32%	7.11%	11.26%	-18.37%	11.36%	2.35%
U.S. Bonds	Intl Fixed Income	Corporate High Yield	U.S. Bonds	Corporate High Yield	Small/Mid Cap	U.S. Bonds	Large Value	Corporate High Yield	Intl Fixed Income	Intl Fixed Income	U.S. Bonds
-2.02%	-2.68%	-4.40%	2.65%	7.50%	-10.00%	8.72%	2.80%	5.28%	-22.07%	5.83%	-0.71%
Intl Fixed Income	Int'l	Intl Fixed Income	Intl Fixed Income	U.S. Bonds	Commodities	Commodities	Commodities	U.S. Bonds	Real Estate	U.S. Bonds	Real Estate
-4.57%	-4.90%	-5.54%	1.81%	3.54%	-11.25%	7.69%	-3.12%	-1.54%	-24.95%	5.53%	-2.19%
Commodities	Commodities	Commodities	Int'l	Commodities	Int'l	Intl Fixed Income	Real Estate	Intl Fixed Income	Large Growth	Commodities	Intl Fixed Income
-9.52%	-17.01%	-24.66%	1.00%	1.70%	-13.79%	5.32%	-5.12%	-9.68%	-29.14%	-7.89%	-6.17%

MSCI NET EAFE

RUSSELL 1000 VALUE

RUSSELL 1000 GROWTH RUSSELL 2500 BBG HY US CORP

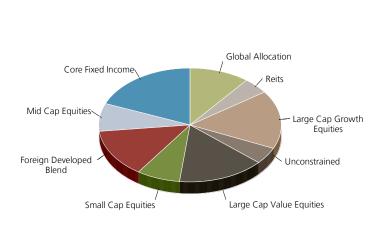
FTSE NON-USD WLD GOV

BLOOMBERG US AGG

NAREIT

BLOOMBERG COMMODITY

#### Actual vs Target Asset Allocation As of June 30, 2024



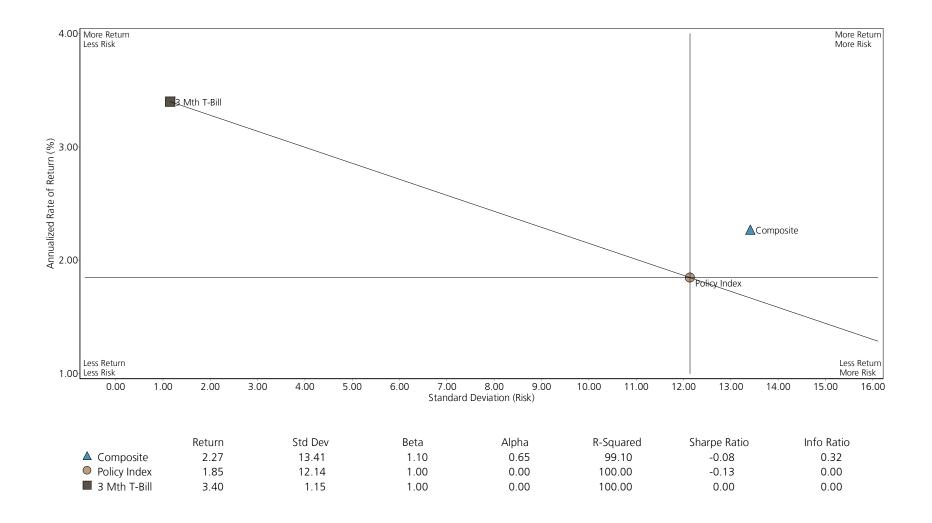
Actual Asset Allocation

Emerging Markets Core Fixed Income Mid Cap Equities Foreign Developed Blend Small Cap Equities Global Allocation Reits Large Cap Growth Equities Large Cap Value Equities

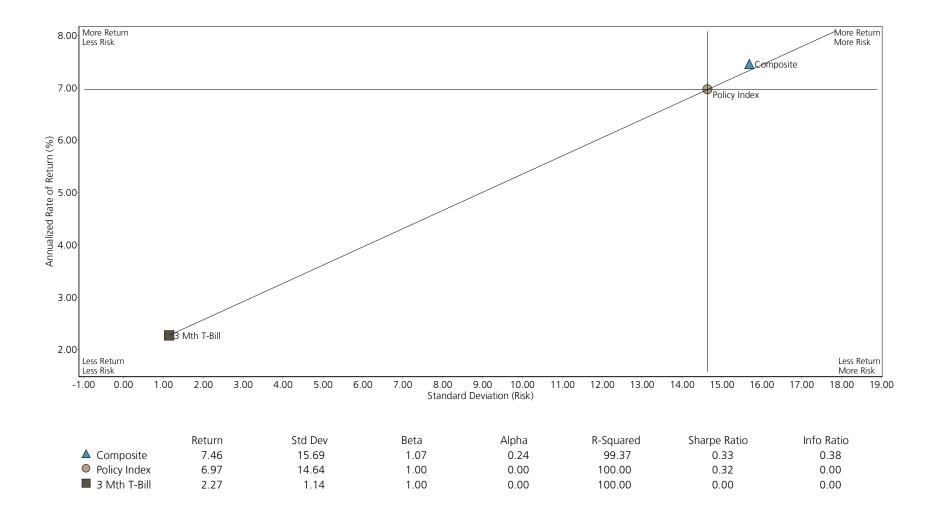
Target Asset Allocation

	Market Value Actual	Percent Actual	Market Value Target	Percent Target	Market Value Difference	Percent Difference
		10.004		<b>22</b> 22/	(40.050.004.0)	(4.40)
Core Fixed Income	282,404,219.0	18.9%	299,354,440.3	20.0%	(16,950,221.3)	(1.1%)
Large Cap Growth Equities	247,561,625.7	16.5%	224,515,830.2	15.0%	23,045,795.5	1.5%
Large Cap Value Equities	230,259,117.8	15.4%	224,515,830.2	15.0%	5,743,287.6	0.4%
Foreign Developed Blend	204,682,485.0	13.7%	149,677,220.1	10.0%	55,005,264.9	3.7%
Global Allocation	158,659,764.6	10.6%	149,677,220.1	10.0%	8,982,544.5	0.6%
Mid Cap Equities	118,273,250.3	7.9%	112,257,915.1	7.5%	6,015,335.2	0.4%
Small Cap Equities	115,285,582.9	7.7%	112,257,915.1	7.5%	3,027,667.8	0.2%
Unconstrained	71,272,635.5	4.8%	74,838,610.1	5.0%	(3,565,974.6)	(0.2%)
REITs	68,373,520.7	4.6%	74,838,610.1	5.0%	(6,465,089.4)	(0.4%)
Emerging Markets	0.0	0.0%	74,838,610.1	5.0%	(74,838,610.1)	(5.0%)
Total Fund	\$1,496,772,201.5	100.0%	\$1,496,772,201.5	100.0%	\$0.0	0.0%

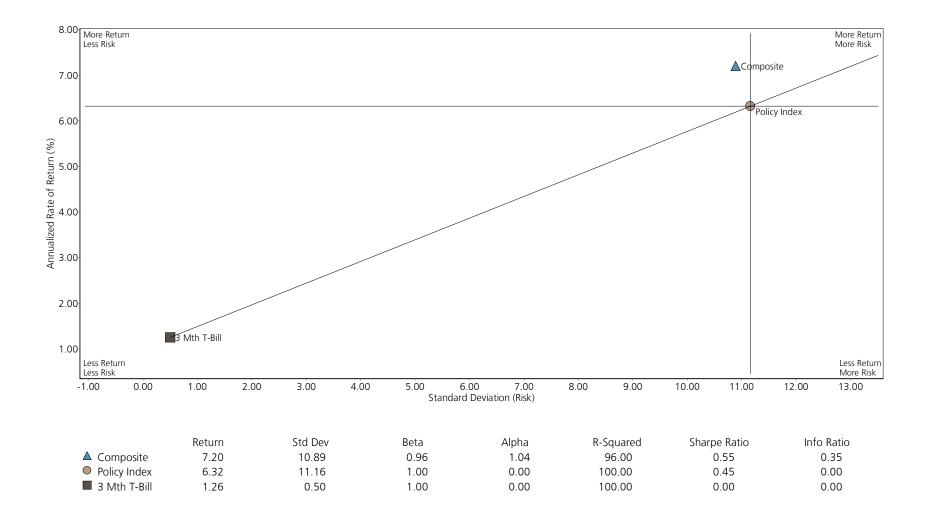
#### Risk versus Reward Analysis June 30, 2021 Through June 30, 2024



#### Risk versus Reward Analysis June 30, 2019 Through June 30, 2024



#### Risk versus Reward Analysis December 31, 2006 Through June 30, 2024



**Trailing Periods** 

20 10 11- kate 10- Return 20- Return 20-	) )														  		+				
	202	<u>3 2022</u>	2 2	021	2020	2	019	201	8	201	7	2016		2015		2014	ŀ	201	3	201	2
Highest Value	18.7	'3 -5.1	7 2	0.57	18.39	92	3.20	1.0	01	18.7	'9	9.91		2.32	2	9.9	9	21.9	9	15.2	5
First Quartile	14.4	-10.2	51	5.83	14.0	1 2	0.41	-2.4	44	16.0	)3	8.16	5	0.62	2	7.0	3	17.6	2	13.1	3
Median Value	12.1	1 -13.3	6 1	3.15	12.22	21	8.26	-4.0	01	14.6	6	7.09	)	-0.30	)	5.7	6	14.7	6	11.8	52
Third Quartile	9.7	'6 -15.4	5	9.57	10.10	D 1	5.74	-5.		12.3	4	5.79	)	-1.50		4.5	3	11.1	4	9.8	
Lowest Value	5.6	57 -21.7	5	0.58	6.24	4 1	0.06	-7.4	46	6.0	)3	2.99	)	-3.67	7	1.8	7	1.4	7	5.0	19
Mean	12.1	4 -12.9	6 1	2.39	12.08	81	7.92	-3.	86	13.9	97	6.91		-0.44	ł	5.7	9	14.0	4	11.3	7
		Rank Returr R 11 -16.96 21 -15.69 21 -15.78	ank Retur 84 14.6 76 13.0 76 14.0	9 34 8 50	Returr Ra 14.32 13.62 13.66	ank Retur 22 23.0 30 21.0 28 20.5	4 2 6 16	Returr -5.06 -5.81 -6.32	67 82	Returr R 16.26 14.78 14.57	lank 21 47 51	6.77	56 ( 30 -(	D.11 D.73	38 60	eturr R 7.30 7.50 7.49	20 18	Returr R 17.85 14.36 15.64	23 54	Returr F 12.34 11.79 11.41	Rank 42 50 55

Annual Periods

**Trailing Periods** 

20 01 02- Rate 02- 20-	)																		
	202	<u>3 2022</u>	202	1 202	0 2	019	2018	<u>3</u>	2017		2016	20	15	2014	4	2013	3	<u>2012</u>	
Highest Value	18.7	'3 -5.1	7 20.	57 18.	39 2	3.20	1.0	)1	18.79	9	9.91	2	.32	9.9	9	21.9	9	15.2	5
First Quartile	14.4	-10.2	5 15.	83 14.	D1 2	20.41	-2.4	4	16.03	3	8.16	0	.62	7.0	13	17.6	2	13.1	3
Median Value	12.1	1 -13.3	6 13.	15 12.	22 1	8.26	-4.0	)1	14.66	5	7.09	-0	.30	5.7	6	14.7	6	11.8	2
Third Quartile	9.7	'6 -15.4	59.	57 10.	10 1	5.74	-5.3	9	12.34	4	5.79		.50	4.5	3	11.1	4	9.8	
Lowest Value	5.6	57 -21.7	50.	58 6.	24 1	0.06	-7.4	-6	6.03	3	2.99	-3	.67	1.8	57	1.4	7	5.0	9
Mean	12.1	4 -12.9	6 12.	39 12.	08 1	7.92	-3.8	6	13.97	7	6.91	-0	.44	5.7	9	14.0	4	11.3	7
	Returr R 16.38 14.77 14.74	Rank Returr R 11 -16.96 21 -15.69 21 -15.78	ank Returr 84 14.69 76 13.08 76 14.05	Rank Returr 34 14.32 50 13.62 40 13.66	Rank Retu 22 23.0 30 21.0 28 20.5	)4 2 )6 16	-5.06 -5.81	67 82		ank F 21 47 51	6.77 5 7.95 3	nk Returr 56 0.11 30 -0.73 16 -1.74	38	7.30 7.50	20 18	Returr R 17.85 14.36 15.64	23 1	2.34 1.79	ank 42 50 55

Annual Periods

#### **Benchmark Comparisons Used In This Report**

The primary index comparison for your portfolio and each of its asset classes is listed below.

#### **COMPOSITE BENCHMARK**

09/01/2023 - Present	
25.00%	Bloomberg US Aggregate Bond
15.00%	Russell 1000 Growth
15.00%	Russell 1000 Value
10.00%	HFRX Global Index
10.00%	MSCI AC World X US Net
7.50%	Russell 2000
7.50%	Russell Midcap
5.00%	MSCI Net Emerging Markets
5.00%	NAREIT
08/01/2019 - 08/31/2023	
25.00%	Bloomberg US Aggregate Bond
12.50%	Russell 1000 Growth
12.50%	Russell 1000 Value
10.00%	HFRX Global Index
10.00%	MSCI AC World X US Net
7.50%	Russell 2000
7.50%	Russell Midcap
5.00%	MSCI Net Emerging Markets
5.00%	NAREIT
5.00%	S&P 500 Index
07/01/2017 - 07/31/2019	
20.00%	Bloomberg US Aggregate Bond
12.50%	Russell 1000 Growth
12.50%	Russell 1000 Value
	HFRX Global Index
10.00%	MSCI AC World X US Net
	Russell 2000
7.50%	Russell Midcap

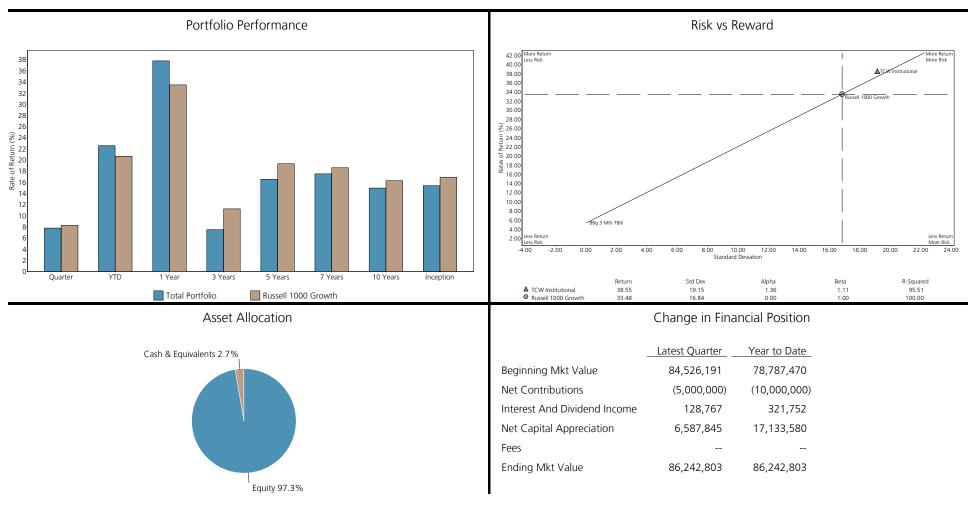
#### Benchmark Comparisons Used In This Report

#### **COMPOSITE BENCHMARK**

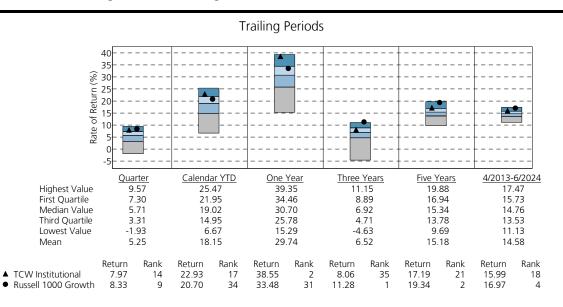
5.00%	FTSE World Govt Bond
5.00%	MSCI Net Emerging Markets
5.00%	NAREIT
5.00%	S&P 500 Index
12/01/2011 - 06/30/2017	
35.00%	Bloomberg US Aggregate Bond
15.00%	MSCI AC World X US Net
12.50%	Russell 1000 Growth
12.50%	Russell 1000 Value
7.50%	Russell 2000
7.50%	Russell Midcap
5.00%	FTSE World Govt Bond
5.00%	NAREIT
06/30/2005 - 11/30/2011	
35.00%	Bloomberg US Aggregate Bond
15.00%	MSCI AC World X US Net
12.50%	Russell 1000 Growth
12.50%	Russell 1000 Value
7.50%	Russell 2000
7.50%	Russell Midcap
5.00%	JP Morgan Emerging Mkt Bnd + Index
/	

5.00% NAREIT

#### Executive Summary as of June 30, 2024 TCW Institutional



#### **Total Portfolio Peer Universe Comparison versus Large Growth Managers**

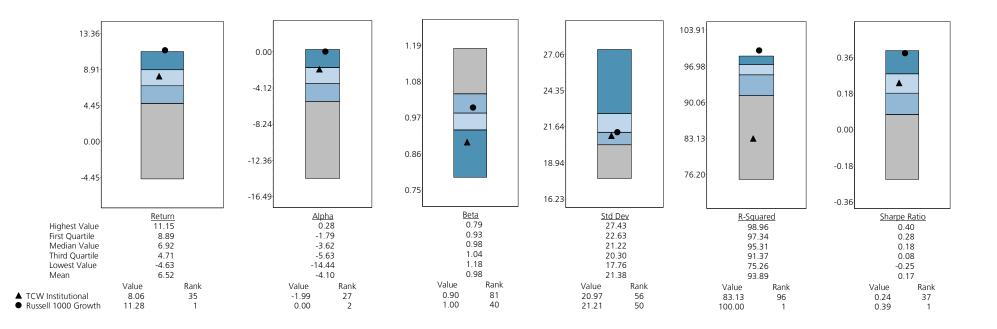


80F 60 Return (%) 40 40 **.** 20 of **.**... Rate ( -20 -40 2023 2022 2019 2018 2017 2016 2014 2021 2020 2015 Highest Value 52.80 -19.24 30.31 75.70 39.24 6.24 37.68 9.70 11.15 16.18 First Quartile 43.08 -27.37 25.16 43.05 35.75 0.92 32.05 6.08 7.29 12.72 5.36 10.55 Median Value 38.97 -30.93 22.11 35.60 33.23 -1.22 29.25 2.73 Third Ouartile 0.64 2.43 8.78 33.10 -33.91 17.82 30.48 30.71 -3.63 26.14 -3.59 Lowest Value 20.30 -45.89 5.72 20.12 25.82 -7.43 20.96 -3.25 4.92 Mean 37.86 -30.81 21.06 37.79 33.15 -1.24 29.18 3.13 4.85 10.65 Return Rank ▲ TCW Institutional 45.33 15 -35.55 79 27.74 9 39.21 34 36.64 15 2.93 8 33.07 18 -7.14 99 12.84 1 8.22 83 27 -29.14 37 36.39 17 -1.51 40 15 5.67 • Russell 1000 Growth 42.68 33 27.60 10 38.49 53 30.21 7.08 46 13.05 20

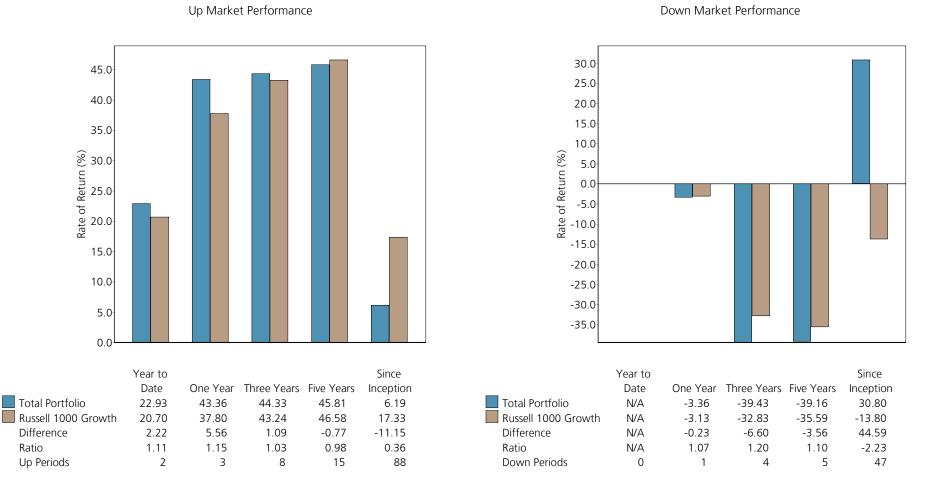
Annual Periods

Total Portfolio vs Large Growth Managers June 30, 2021 Through June 30, 2024

3 Year



#### Performance in Rising and Declining Markets April 2, 2013 Through June 30, 2024

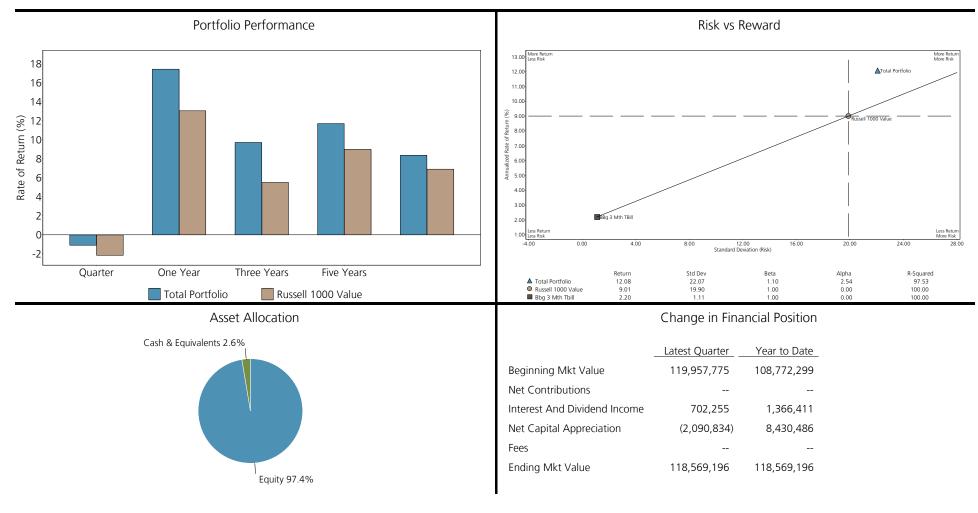


#### Market Timing And Security Selection March 31, 2024 Through June 30, 2024

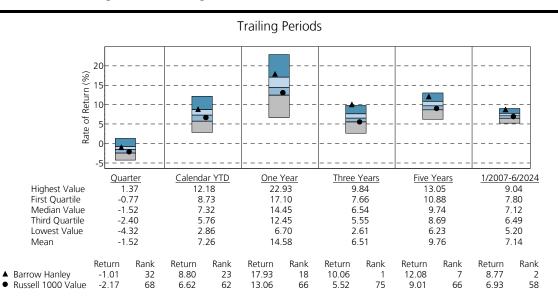
#### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	2.35
Equity	97.65
International Equity	0.00
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 1000 Growth	8.33
Total Portfolio and Benchmark Perforn	nance
Dynamic Index	8.22
Policy Index	8.33
Portfolio Return	7.97
Value Added By Manager	
Market Timing	-0.11
Security Selection	-0.25
Total Value Added	-0.37

#### Executive Summary as of June 30, 2024 Barrow Hanley



#### **Total Portfolio Peer Universe Comparison versus Large Value Managers**



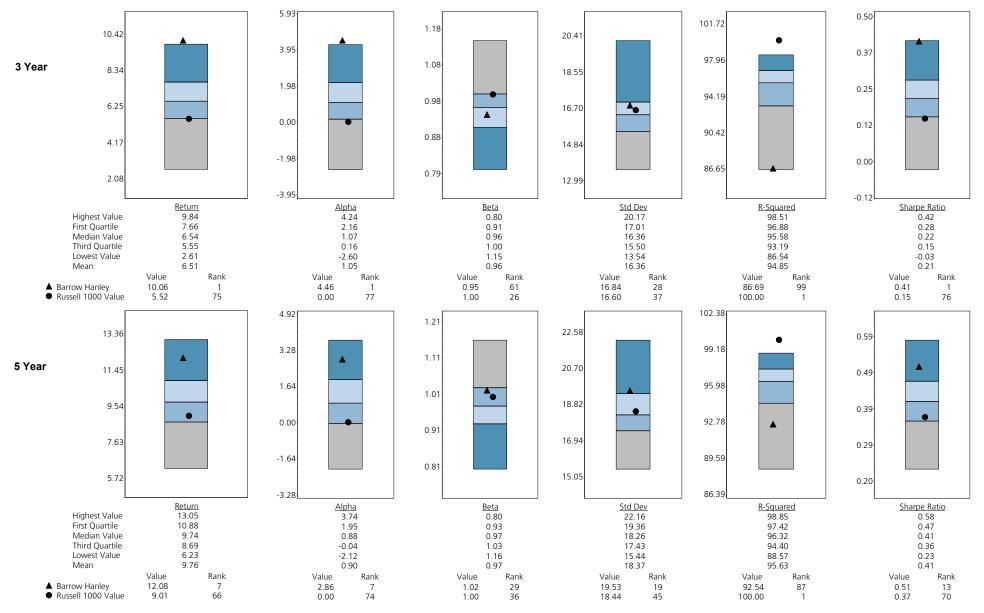
40 - - -**A** (%) 30 **\***• • Return 20 **^ A** • .... 10 of .... Rate ( . 2023 2022 2020 2019 2018 2017 2013 2012 2021 2016 2015 2014 Highest Value 19.78 1.17 33.08 13.01 31.13 -2.82 21.24 21.11 1.38 14.78 38.45 20.01 First Quartile 13.81 -3.20 28.07 5.58 27.42 -6.69 18.11 16.29 -1.76 12.51 34.42 17.02 Median Value 11.05 -5.45 26.02 2.86 25.48 -8.65 16.29 14.44 -3.32 11.22 31.64 15.36 Third Quartile 8.62 -7.94 24.14 0.64 23.57 -10.41 14.30 12.77 -4.66 9.69 29.74 13.33 -13.47 -7.86 Lowest Value 3.64 19.27 -4.44 19.86 -14.70 9.36 9.14 6.77 23.52 9.47 Mean 11.19 -5.67 26.06 3.21 25.47 -8.64 16.20 14.63 -3.24 11.09 31.95 15.12

	Returi R	Rank F	Returi	Rank Returi R	ank	Returi F	Rank Returi F	Rank Returi R	lank Returr R	lank Returi R	Rank Returi F	ank Returi R	ank Returi R	ank Returi F	Rank
Barrow Hanley	11.88	42	1.41	1 27.89	27	1.95	59 25.6C	47 -4.56	7 14.66	71 15.97	27 -0.58	10 13.65	8 34.73	21 15.26	51
<ul> <li>Russell 1000 Value</li> </ul>	11.46	46	-7.54	70 25.16	62	2.80	50 26.54	34 -8.27	43 13.66	82 17.34	18 -3.83	60 13.45	10 32.53	38 17.51	18

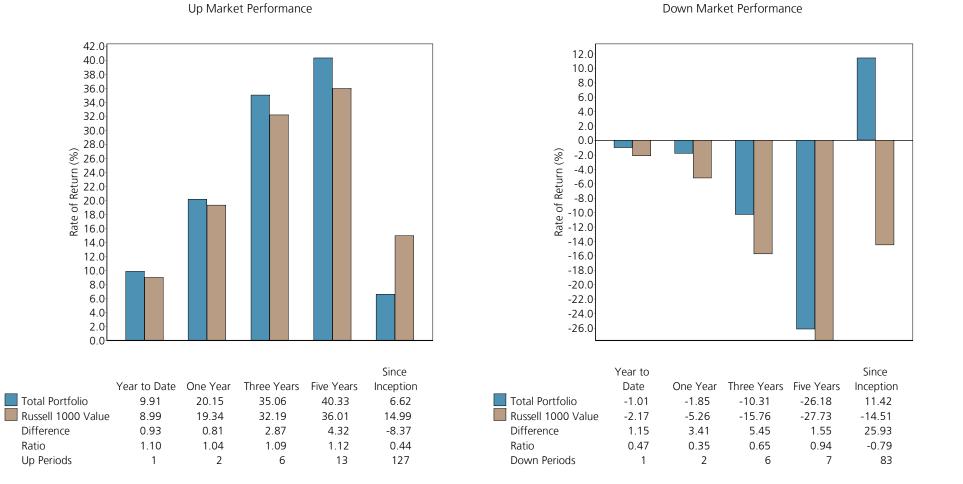
This report is provided for informational purposes only. The information shown was obtained from sources believed to be reliable, the accuracy of which cannot be guaranteed. Account statements provided by UBS or other financial institutions are the official record of your holdings, balances, transactions and security values and are not amended or superseded by any of the information presented in this report. Information is current as of the date shown. Past performance is no guarantee of future returns. See IMPORTANT INFORMATION at end of report for assumptions and limitations of the analysis in this report, risk considerations, valuation, fees and other details regarding this report.

#### Annual Periods

#### Total Portfolio vs Large Value Managers December 31, 2013 Through June 30, 2024



#### Performance in Rising and Declining Markets January 3, 2007 Through June 30, 2024

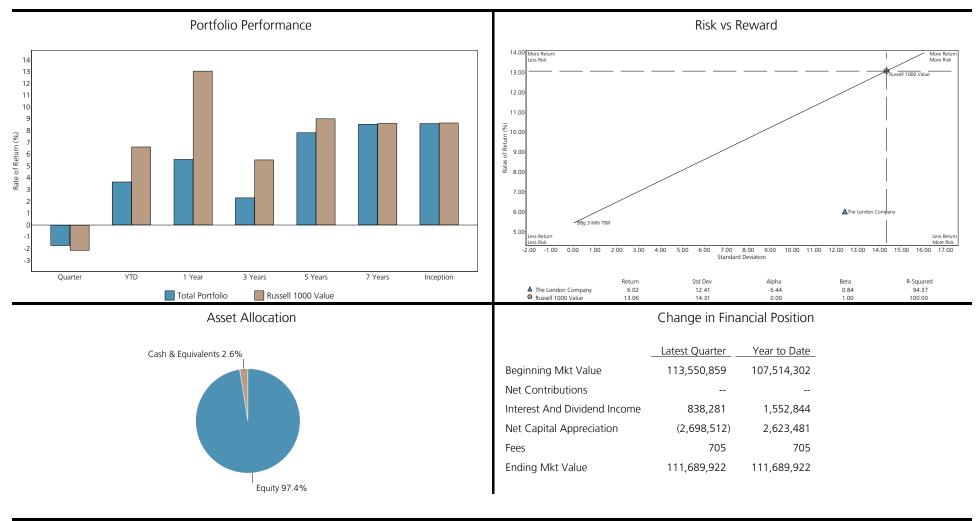


#### Market Timing And Security Selection March 31, 2024 Through June 30, 2024

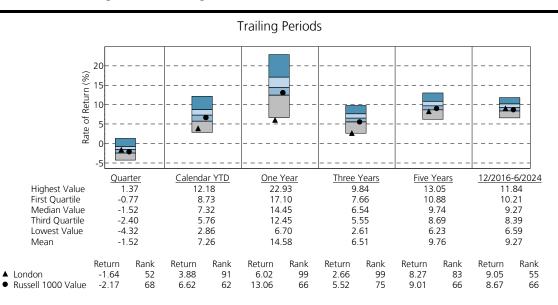
#### Fund's Average Investment Exposure and Market Index Returns

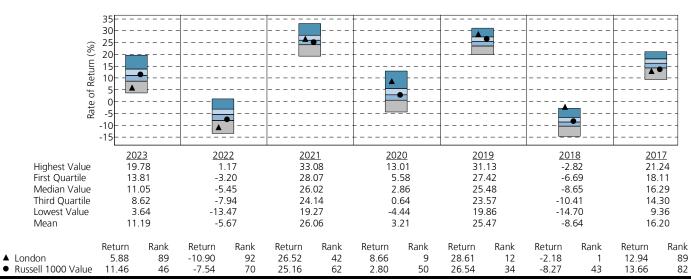
	Quarter
Asset Class	
Cash & Equivalents	2.63
Equity	97.37
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 1000 Value	-2.17
Total Portfolio and Benchmark Perform	nance
Dynamic Index	-2.17
Policy Index	-2.17
Portfolio Return	-1.01
Value Added By Manager	
Market Timing	0.00
Security Selection	1.15
Total Value Added	1.15

#### Executive Summary as of June 30, 2024 The London Company



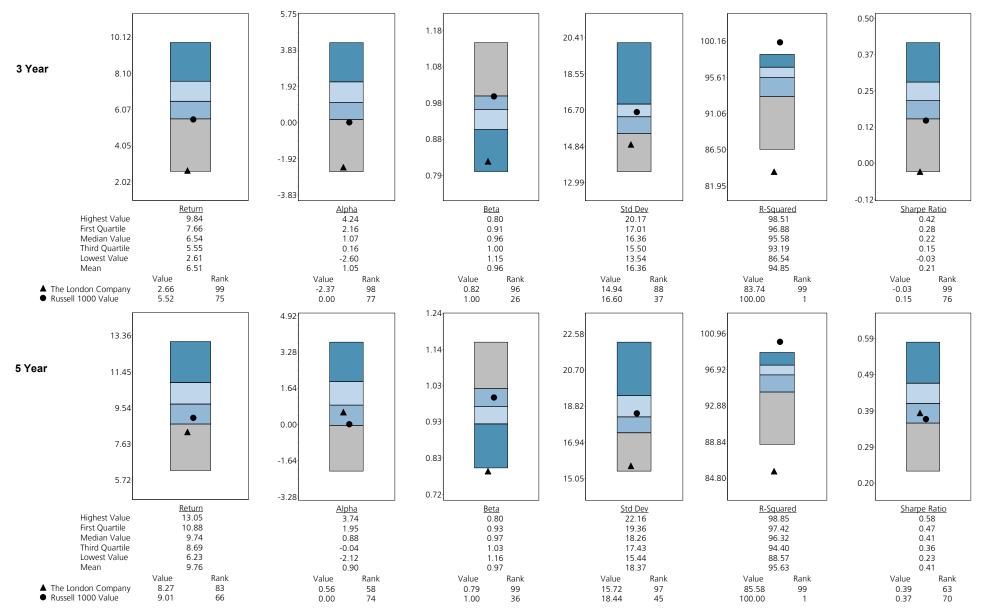
#### Total Portfolio Peer Universe Comparison versus Large Value Managers



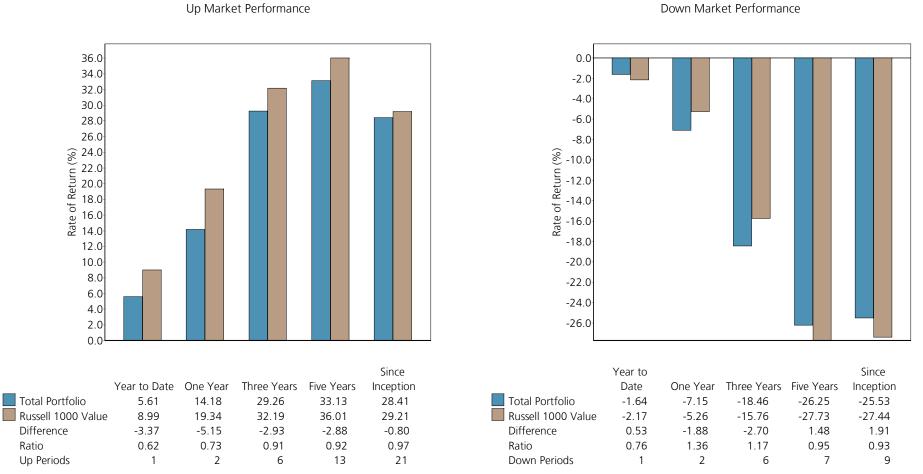


Annual Periods

#### Total Portfolio vs Large Value Managers December 31, 2013 Through June 30, 2024



#### **Performance in Rising and Declining Markets** December 31, 2016 Through June 30, 2024



Down Market Performance

#### Market Timing And Security Selection March 31, 2024 Through June 30, 2024

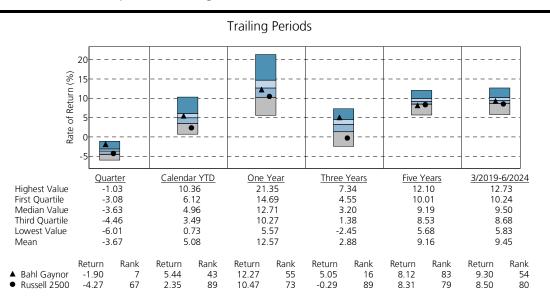
#### Fund's Average Investment Exposure and Market Index Returns

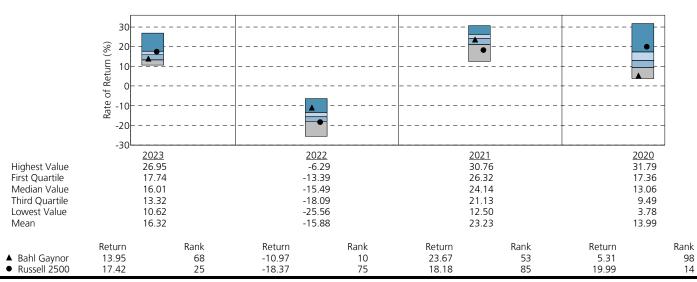
	Quarter
Asset Class	
Cash & Equivalents	2.97
Equity	97.03
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 3000	3.22
Total Portfolio and Benchmark Perform	nance
Dynamic Index	3.17
Policy Index	-2.17
Portfolio Return	-1.64
Value Added By Manager	
Market Timing	5.34
Security Selection	-4.81
Total Value Added	0.53

#### Executive Summary as of June 30, 2024 Bahl Gaynor



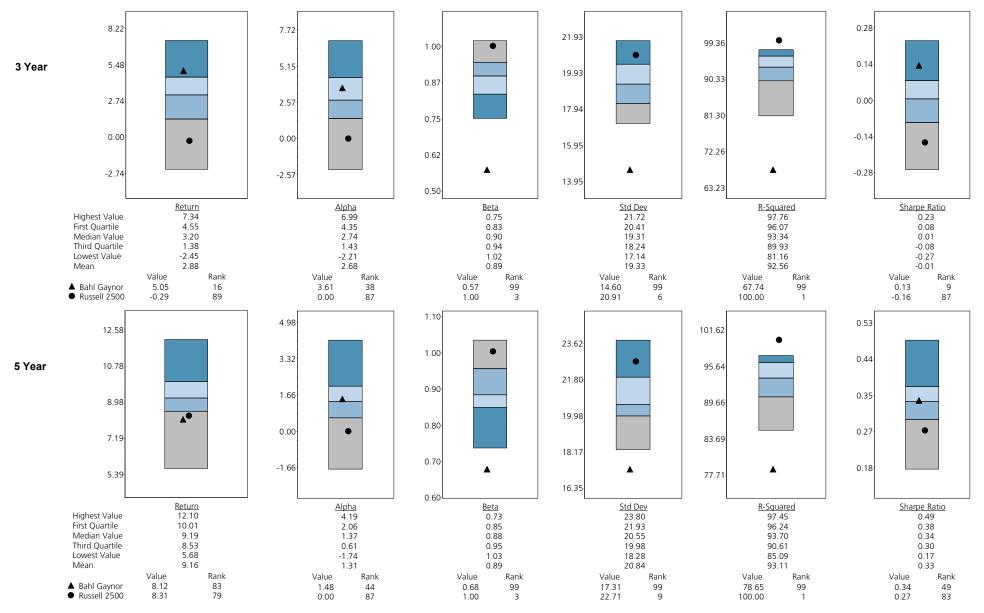
#### Total Portfolio Peer Universe Comparison versus Mid Cap Blend Managers



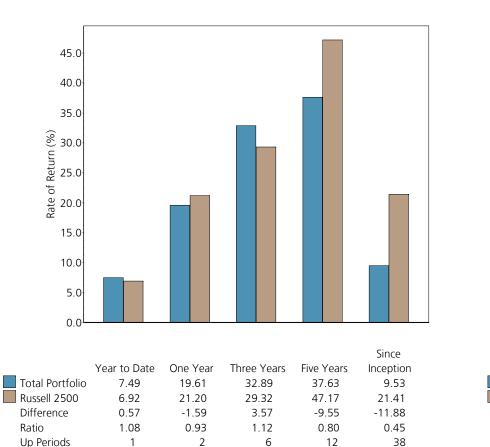


Annual Periods

#### Total Portfolio vs Mid Cap Blend Managers December 31, 2013 Through June 30, 2024

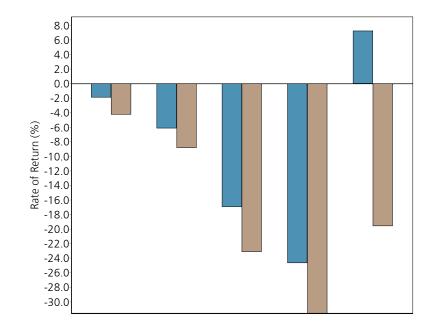


#### Performance in Rising and Declining Markets March 13, 2019 Through June 30, 2024



Up Market Performance





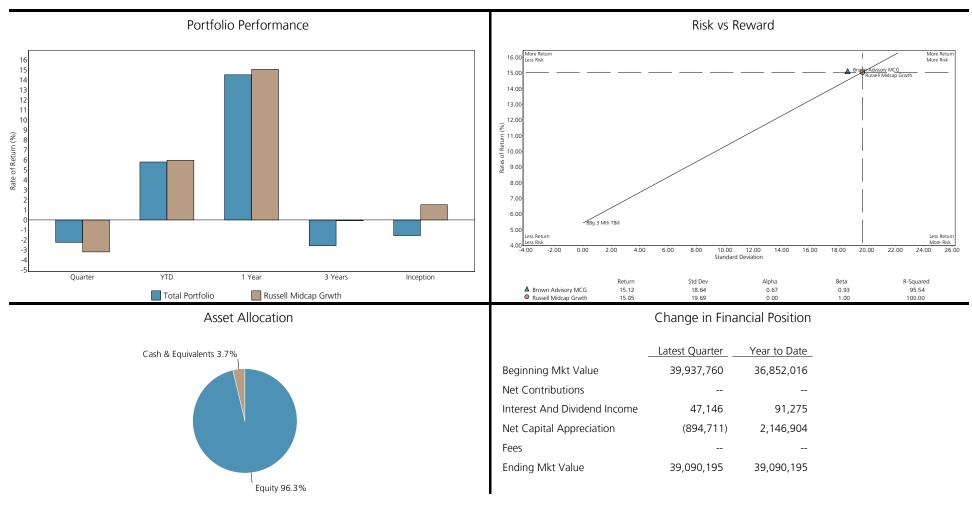
Since						Since	
ception		Year to Date	One Year	Three Years	Five Years	Inception	
9.53	Total Portfolio	-1.90	-6.14	-16.97	-24.71	7.23	
21.41	Russell 2500	-4.27	-8.85	-23.12	-31.62	-19.59	
11.88	Difference	2.37	2.71	6.16	6.91	26.82	
0.45	Ratio	0.44	0.69	0.73	0.78	-0.37	
38	Down Periods	1	2	6	8	26	

#### Market Timing And Security Selection March 31, 2024 Through June 30, 2024

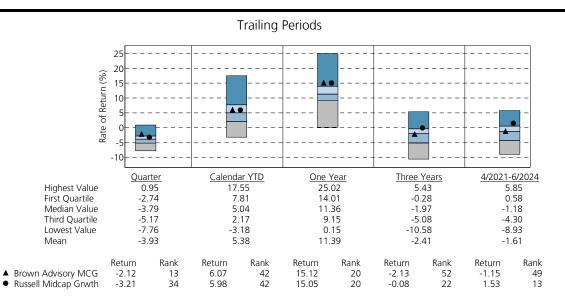
#### Fund's Average Investment Exposure and Market Index Returns

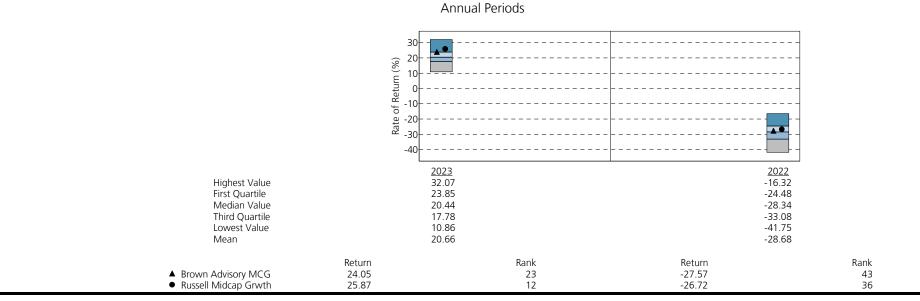
	Quarter				
Asset Class					
Cash & Equivalents	2.05				
Equity	97.95				
Asset Class Index Performance					
BBg 3 Mth TBill	1.33				
Russell 2000	-3.28				
Total Portfolio and Benchmark Performance					
Dynamic Index	-3.28				
Policy Index	-4.27				
Portfolio Return	-1.90				
Value Added By Manager					
Market Timing	1.00				
Security Selection	1.38				
Total Value Added	2.37				

#### Executive Summary as of June 30, 2024 Brown Advisory MCG

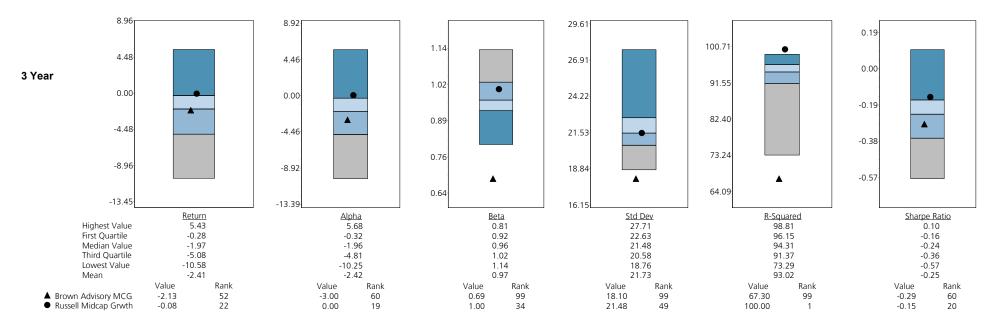


#### Total Portfolio Peer Universe Comparison versus Mid Cap Growth Managers



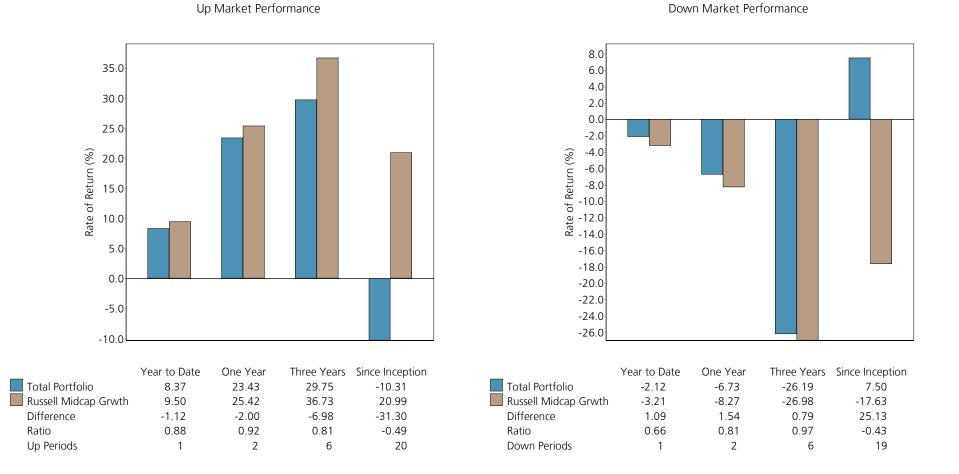


#### Total Portfolio vs Mid Cap Growth Managers December 31, 2013 Through June 30, 2024



5 Year

#### Performance in Rising and Declining Markets April 28, 2021 Through June 30, 2024

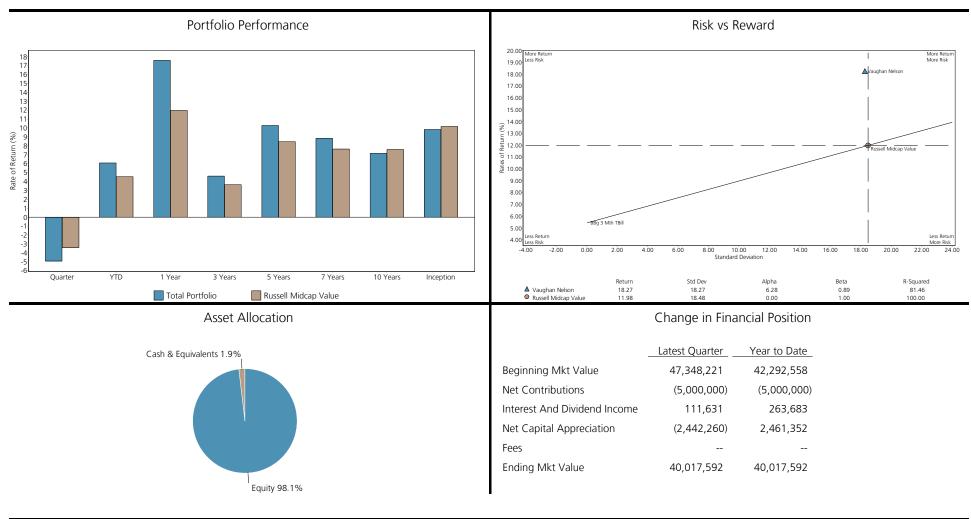


#### Market Timing And Security Selection March 31, 2024 Through June 30, 2024

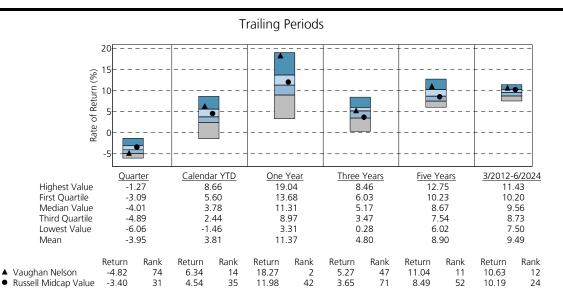
#### Fund's Average Investment Exposure and Market Index Returns

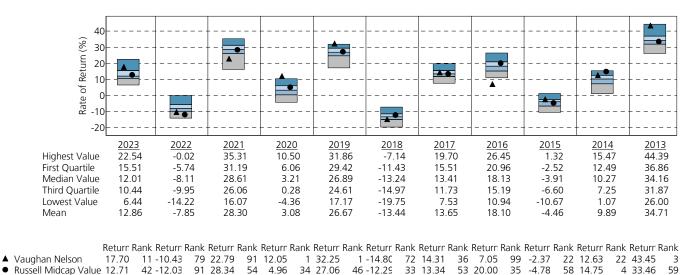
	Quarter				
Asset Class					
Cash & Equivalents	3.26				
Equity	96.74				
Asset Class Index Performance					
BBg 3 Mth TBill	1.33				
Russell 3000	3.22				
Total Portfolio and Benchmark Performance					
Dynamic Index	3.20				
Policy Index	-3.21				
Portfolio Return	-2.12				
Value Added By Manager					
Market Timing	6.41				
Security Selection	-5.32				
Total Value Added	1.09				

# Executive Summary as of June 30, 2024 Vaughan Nelson



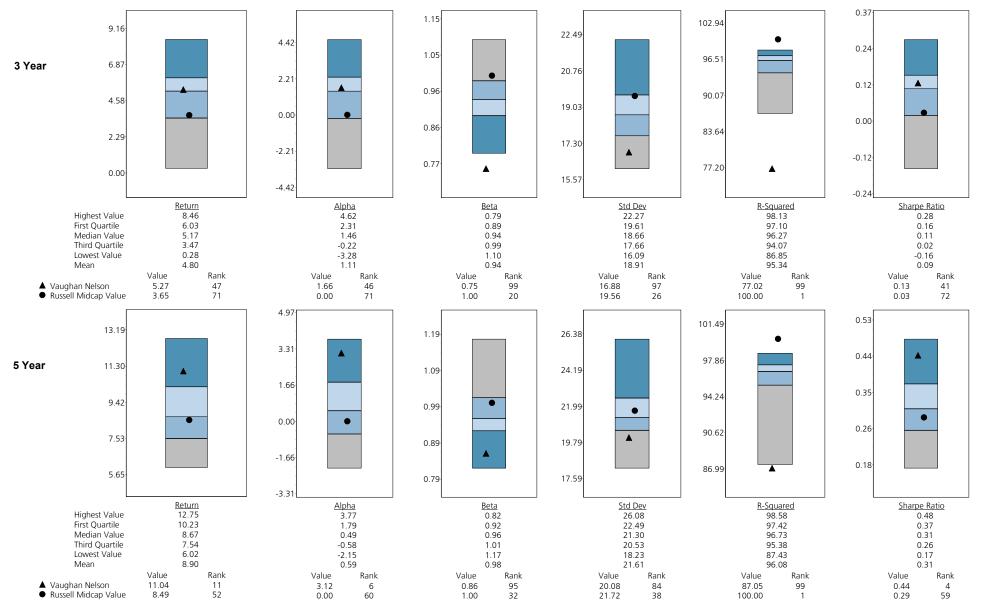
## Total Portfolio Peer Universe Comparison versus Mid Cap Value Managers



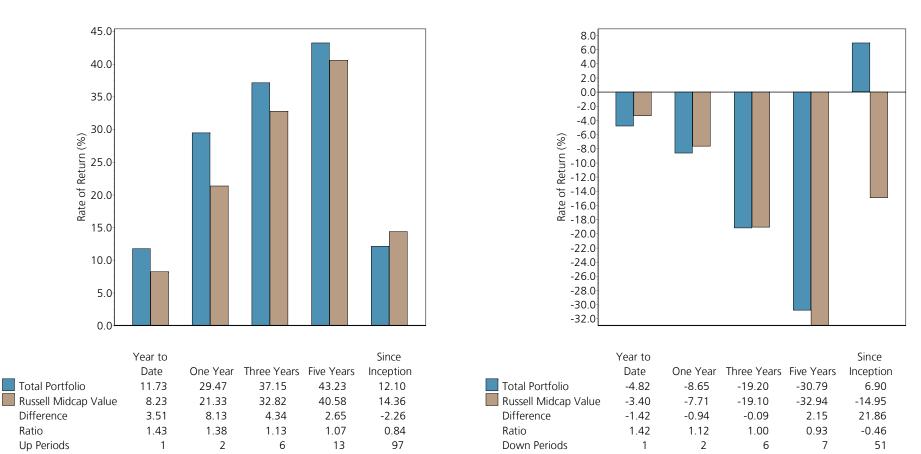


#### Annual Periods

# Total Portfolio vs Mid Cap Value Managers December 31, 2013 Through June 30, 2024



## Performance in Rising and Declining Markets March 30, 2012 Through June 30, 2024



Up Market Performance

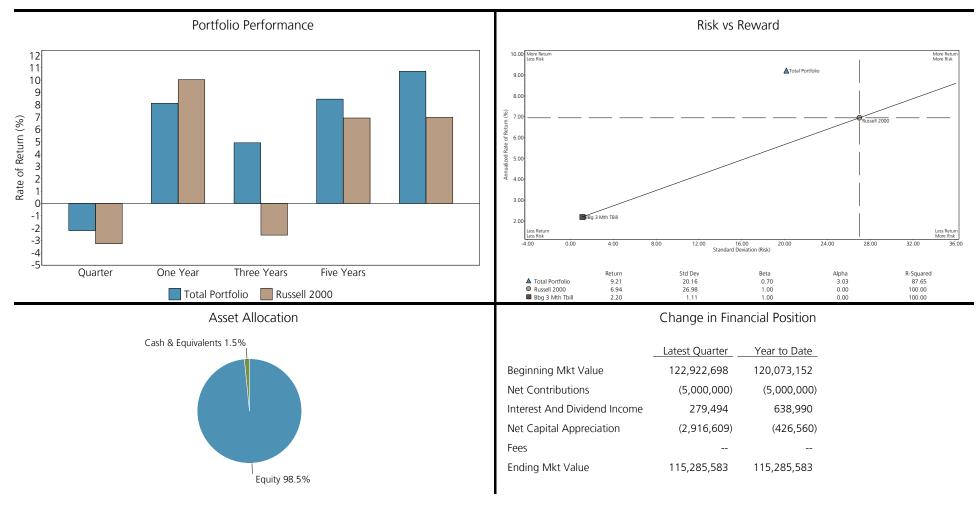
Down Market Performance

# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

#### Fund's Average Investment Exposure and Market Index Returns

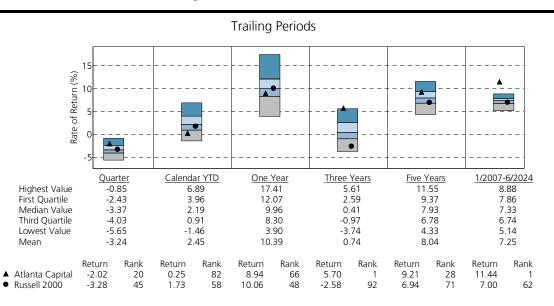
	Quarter
Asset Class	
Cash & Equivalents	1.48
Equity	98.52
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell Midcap Value	-3.40
Total Portfolio and Benchmark Perform	ance
Dynamic Index	-3.40
Policy Index	-3.40
Portfolio Return	-4.82
Value Added By Manager	
Market Timing	0.00
Security Selection	-1.42
Total Value Added	-1.42

# Executive Summary as of June 30, 2024 Atlanta Capital



## **Total Portfolio Peer Universe Comparison versus Small Blend Managers**

▲



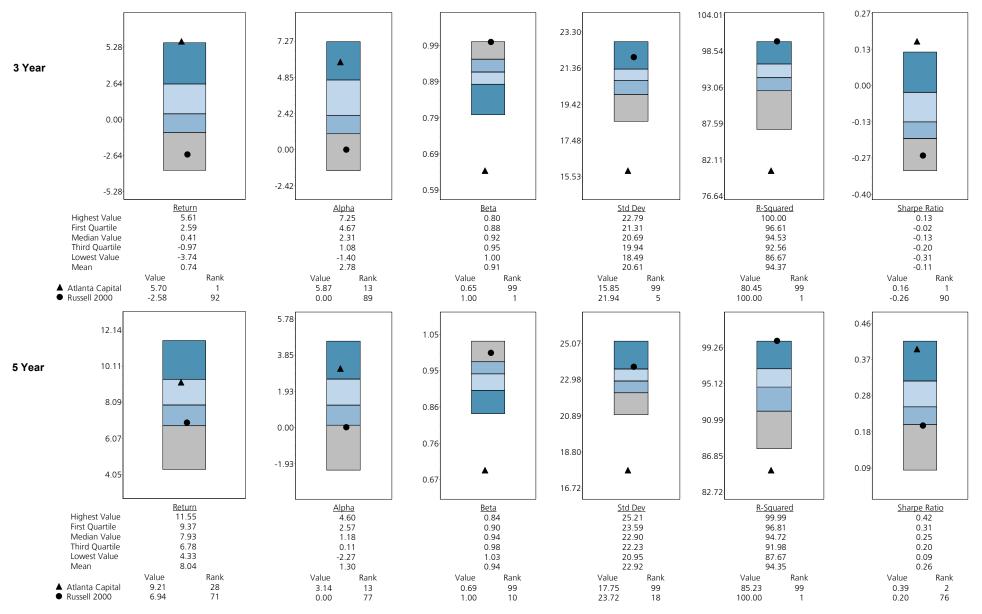
50 Return (%) 30 ... 20 .... -... of Rate -1( -20 • 2023 2021 2019 2018 2017 2015 2013 2012 2022 2020 2016 2014 Highest Value 22.53 -8.66 33.09 25.62 31.13 -6.61 19.80 28.76 -0.29 10.99 47.79 21.40 -15.05 -2.28 First Quartile 17.98 26.48 18.08 26.81 -10.18 14.98 23.78 6.86 40.59 17.85 Median Value 16.29 -16.63 23.27 12.94 25.04 -11.95 13.37 20.72 -3.98 5.27 38.47 15.80 Third Quartile 14.19 -19.21 19.91 8.67 22.61 -14.12 11.35 18.07 -5.51 3.31 35.96 13.65 -9.67 Lowest Value 9.01 -22.97 14.26 0.93 18.19 -18.39 8.39 11.46 -0.97 32.27 8.87 Mean 16.19 -16.73 23.22 12.99 24.98 -12.14 13.35 20.77 -4.03 5.03 38.59 15.62

	Returi R	Rank Returr R	Rank Returr F	Rank Returi R	ank Returr F	Rank Returi R	ank Returr F	Rank Returi F	Rank Returr R	ank Returr	Rank Returi F	Rank Returr R	lank
Atlanta Capital	21.85	1 -11.4 <u>9</u>	7 20.58	69 11.35	59 27.01	23 1.71	1 14.85	26 19.3C	65 4.87	1 3.50	73 42.09	13 12.08	90
Russell 2000	16.93	40 -20.44	87 14.82	93 19.96	12 25.52	42 -11.0 <sup>°</sup>	38 14.65	30 21.31	44 -4.41	56 4.89	56 38.82	41 16.35	38

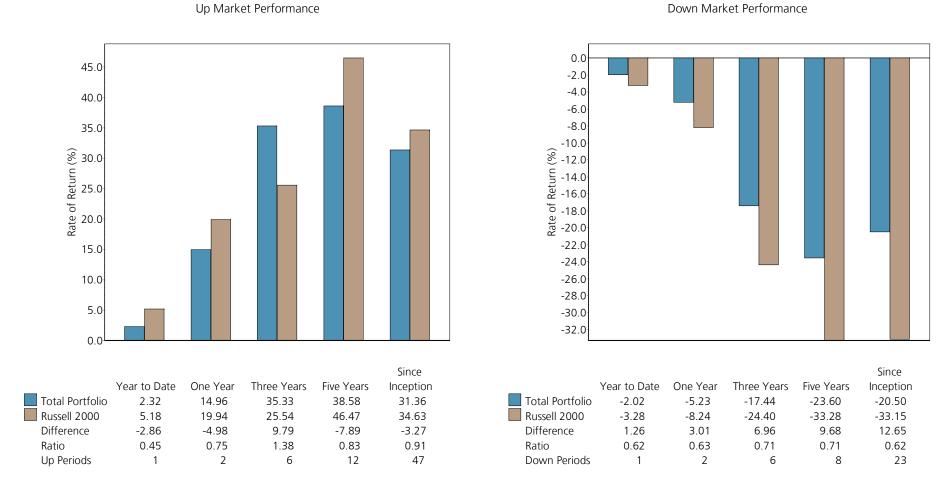
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#### Annual Periods

# Total Portfolio vs Small Blend Managers December 31, 2013 Through June 30, 2024



## Performance in Rising and Declining Markets January 31, 2007 Through June 30, 2024



# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

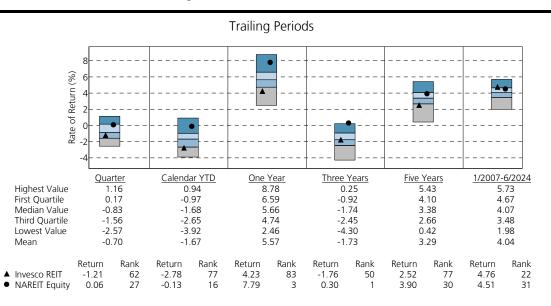
#### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	2.84
Equity	97.16
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 2000	-3.28
Total Portfolio and Benchmark Perform	nance
Dynamic Index	-3.28
Policy Index	-3.28
Portfolio Return	-2.02
Value Added By Manager	
Market Timing	0.00
Security Selection	1.26
Total Value Added	1.26

# Executive Summary as of June 30, 2024 Invesco REIT



### **Total Portfolio Peer Universe Comparison versus Real Estate Managers**

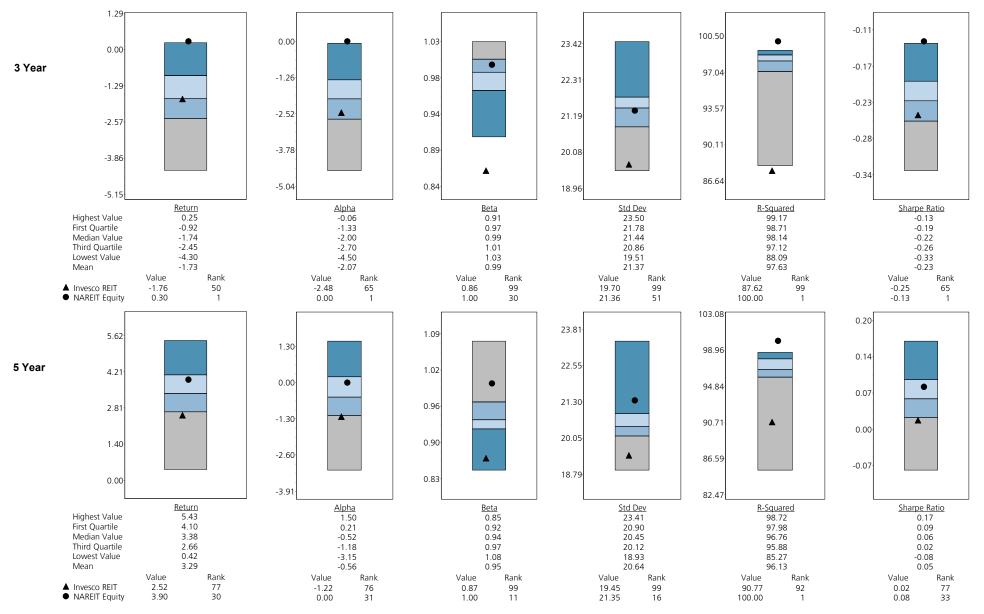


#### 50 Return (%) 40 -30 20 10 of 10 Rate ( **A**• -10 -20 -30 2021 2014 2023 2022 2020 2019 2018 2017 2016 2015 2013 2012 Highest Value 16.26 -24.05 52.02 20.77 35.04 -3.41 12.11 9.68 5.30 32.13 4.44 28.19 First Quartile 13.09 -25.35 43.74 -3.12 30.61 -4.56 7.85 7.24 4.10 30.77 2.54 17.77 Median Value 12.06 -26.34 41.61 -4.63 28.21 -5.62 5.83 5.91 3.12 29.97 16.96 1.77 Third Quartile 11.02 -27.56 39.46 -6.67 25.84 -7.12 4.82 5.26 2.27 29.20 1.03 16.17 -11.38 22.44 -1.88 Lowest Value 9.23 -29.50 21.02 -11.33 2.58 3.87 20.59 -1.16 15.17 Mean 12.22 -26.54 41.43 -4.46 28.22 -6.00 6.35 6.27 3.04 29.62 1.75 17.26 Returi Rank ▲ Invesco REIT 9.92 93 -23.9( 1 42.83 31 -9.53 93 29.20 37 -4.51 21 9.74 7 6.93 31 2.62 63 29.63 59 2.43 24 17.94 19 1 43.24 28 -8.00 84 26.00 73 -5.04 32 5.23 64 8.52 NAREIT Equity 13.73 13 -24.37 8 3.21 46 30.11 44 2.45 24 18.06 18

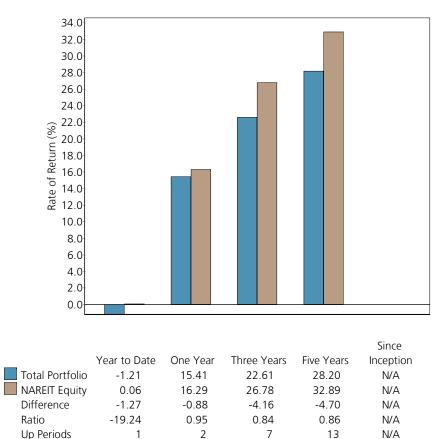
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#### Annual Periods

# Total Portfolio vs Real Estate Managers December 31, 2013 Through June 30, 2024

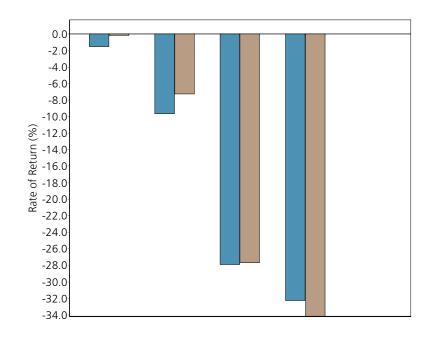


# Performance in Rising and Declining Markets January 5, 2007 Through June 30, 2024



Up Market Performance

#### Down Market Performance



			Since						Since	
One Year	Three Years	Five Years	Inception		Year to Date	One Year	Three Years	Five Years	Inception	
15.41	22.61	28.20	N/A	Total Portfolio	-1.59	-9.69	-27.96	-32.30	N/A	
16.29	26.78	32.89	N/A	NAREIT Equity	-0.20	-7.31	-27.75	-34.21	N/A	
-0.88	-4.16	-4.70	N/A	Difference	-1.39	-2.37	-0.21	1.91	N/A	
0.95	0.84	0.86	N/A	Ratio	8.07	1.32	1.01	0.94	N/A	
2	7	13	N/A	Down Periods	1	2	5	7	N/A	

# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

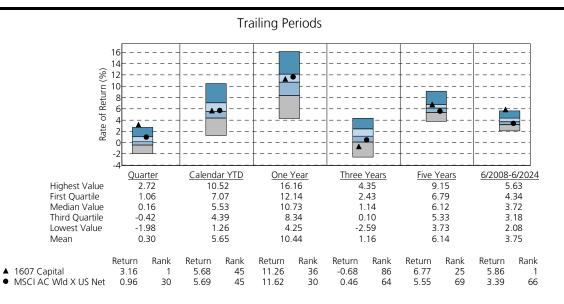
#### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	0.02
Equity	99.98
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 3000	3.22
Total Portfolio and Benchmark Perform	nance
Dynamic Index	1.33
Policy Index	0.06
Portfolio Return	-1.21
Value Added By Manager	
Market Timing	1.27
Security Selection	-2.54
Total Value Added	-1.27

# Executive Summary as of June 30, 2024 1607 Capital Partners



## **Total Portfolio Peer Universe Comparison versus Foreign Large Blend Managers**

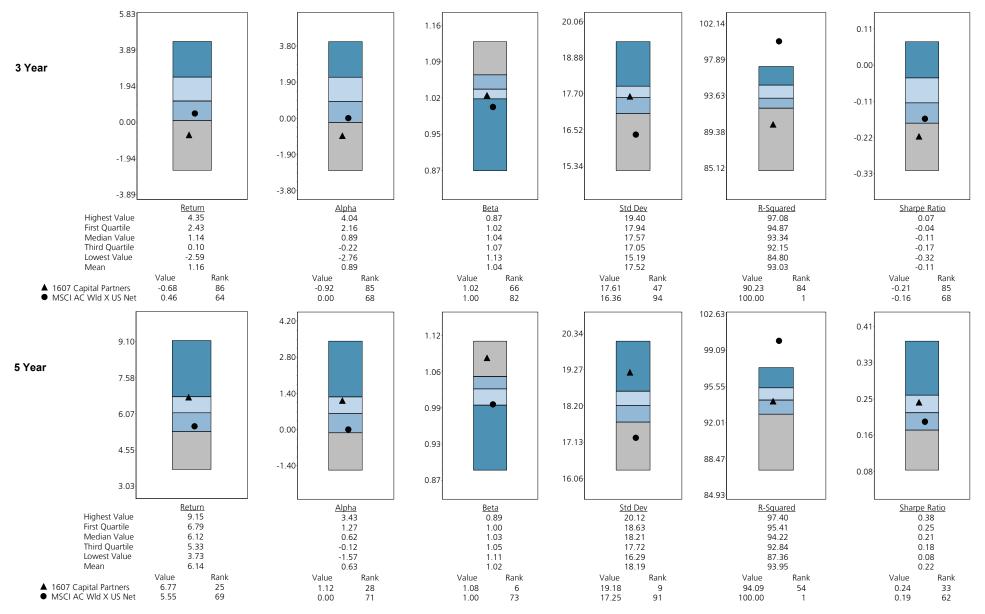


30 **\*** -Rate of Return (%) 20 • -\* • 10 **\*•** ( 10 **A**. -20 2023 2022 2021 2020 2019 2018 2017 2015 2014 2013 2012 2016 Highest Value 20.41 -9.73 15.79 23.60 28.41 -10.35 32.52 5.90 4.48 1.37 28.87 25.49 20.10 First Quartile 17.86 -14.34 11.98 13.98 25.62 -13.74 27.98 2.30 0.70 -3.86 22.21 Median Value -15.87 10.37 10.27 22.45 -15.05 26.22 0.71 -0.68 -5.25 20.55 18.37 16.15 Third Quartile 14.38 -17.92 7.93 7.89 21.02 -16.69 24.71 -0.96 -2.29 -6.29 17.95 17.03 3.42 -21.01 -4.46 -11.15 12.78 Lowest Value 10.91 -22.43 3.47 17.61 19.21 -8.15 13.94 Mean 16.02 -16.05 10.07 11.35 22.98 -15.29 26.31 0.73 -0.92 -4.96 20.36 18.45 nk

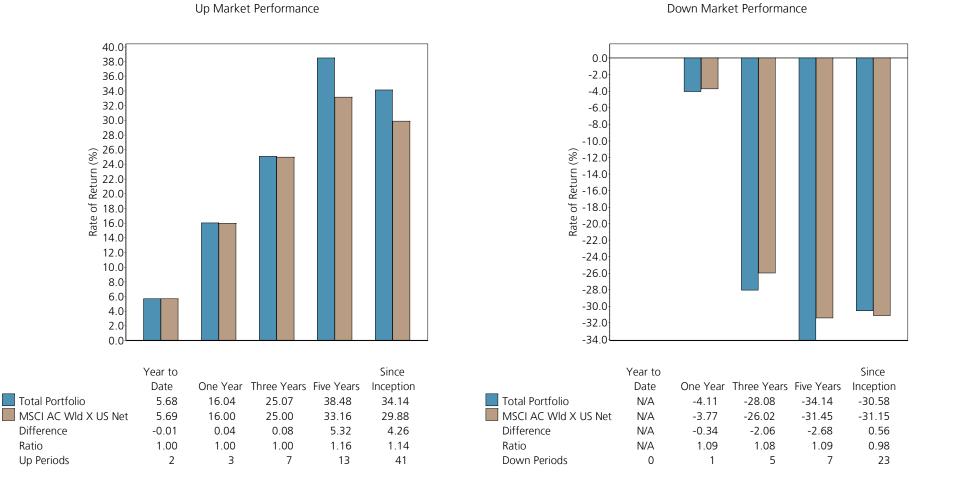
	ReturiF	Rank Returi F	ank Returi R	ank Retur F	Rank Returi F	Rank Retur R	lank Retur F	Rank Returi R	ank Retur F	Rank Retur R	ank Retur R	ank ReturiR	tank
1607 Capital	13.47	83-19.8	91 12.18	22 17.60	10 25.93	22 -13.2	15 33.04	1 6.25	1 -4.48	89 -0.91	5 19.11	59 20.71	20
<ul> <li>MSCI AC WId X US Ne</li> </ul>	t 15.62	58-16.0	52 7.82	75 10.65	47 21.51	65 -14.2	36 27.19	36 4.50	7 -5.66	94 -3.87	24 15.29	91 16.83	75

**Annual Periods** 

# Total Portfolio vs Foreign Large Blend Managers December 31, 2013 Through June 30, 2024



# Performance in Rising and Declining Markets June 30, 2008 Through June 30, 2024

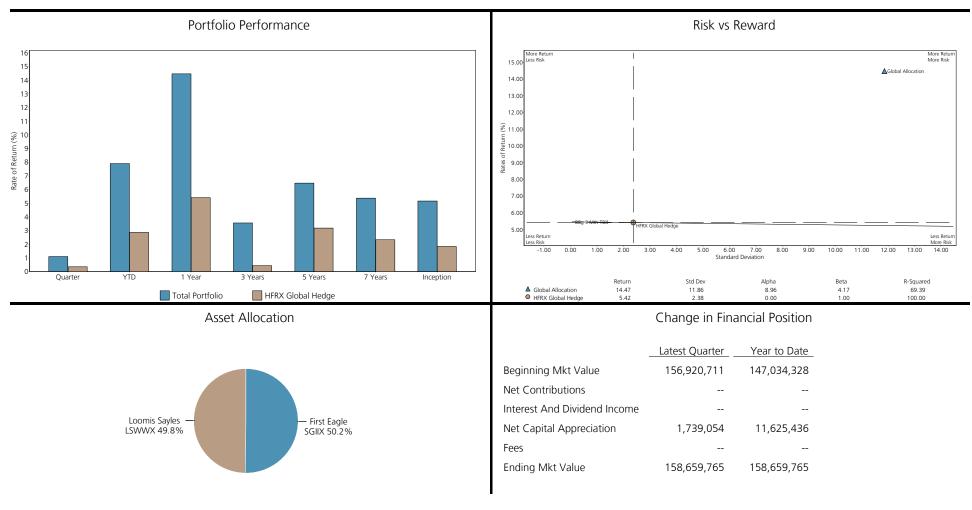


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

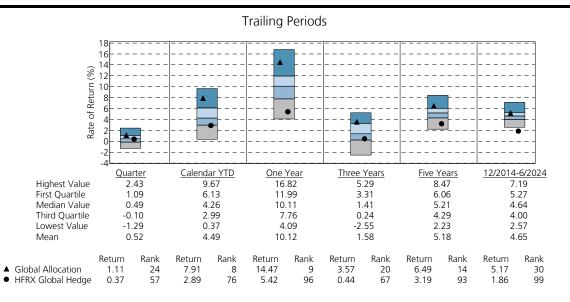
#### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	1.76
Equity	98.24
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
MSCI ACWI ex US Net	0.89
Total Portfolio and Benchmark Perform	ance
Dynamic Index	N/A
Policy Index	0.96
Portfolio Return	3.16
Value Added By Manager	
Market Timing	N/A
Security Selection	N/A
Total Value Added	2.21

# Executive Summary as of June 30, 2024 Global Allocation



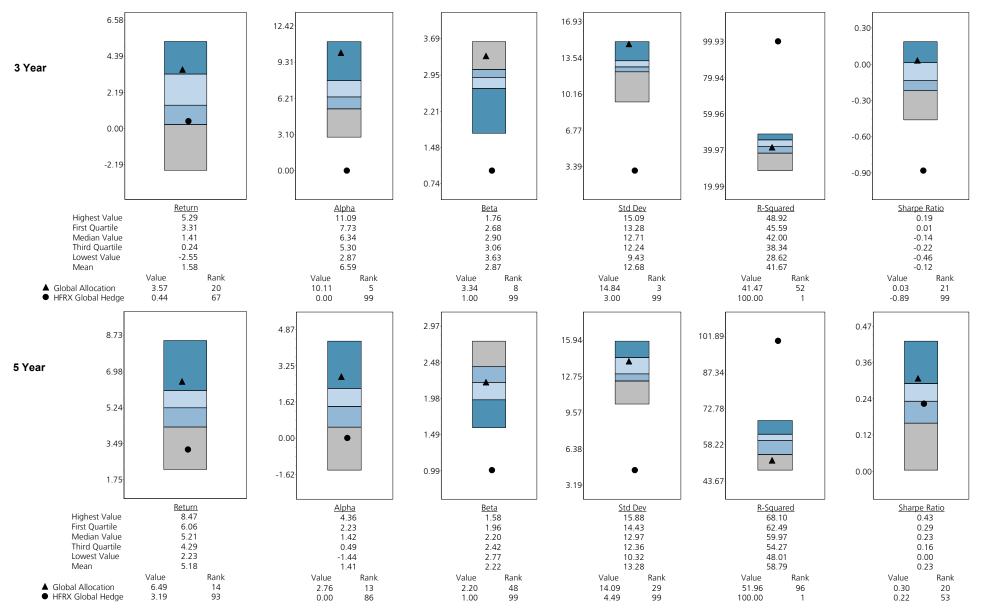
# Total Portfolio Peer Universe Comparison versus Global Allocation Universe Managers



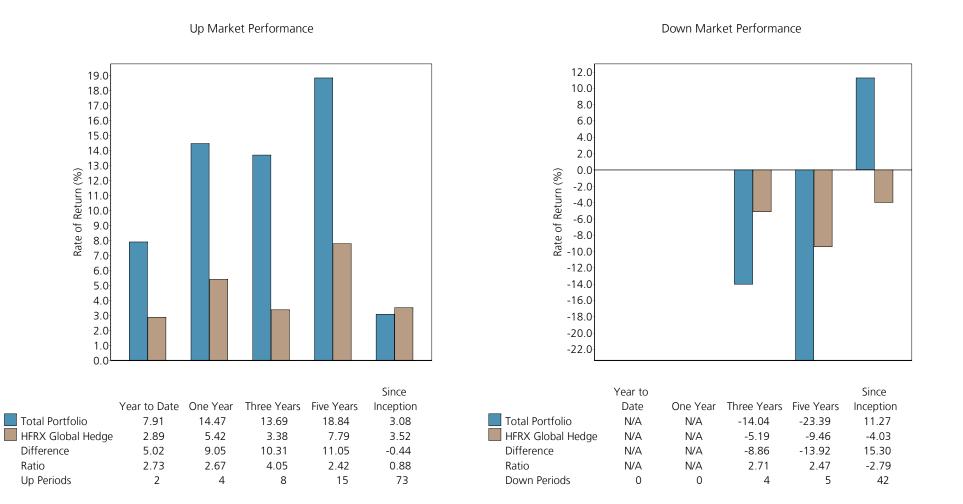
25 20 Return (%) of 10 Rate ( -20 2023 2022 2020 2017 2015 2021 2019 2018 2016 **Highest Value** 17.53 0.12 21.60 15.79 22.72 -4.49 20.34 13.89 0.72 First Quartile 13.72 -7.86 14.45 12.85 18.08 -6.15 16.12 7.14 -1.69 Median Value 11.70 -13.24 10.90 8.07 17.09 -7.26 14.32 5.59 -3.17 Third Ouartile 8.96 -16.77 8.67 15.10 -8.40 12.56 3.95 -4.77 3.02 -10.55 -13.01 Lowest Value 3.24 -20.78 2.99 -2.71 9.43 6.95 1.42 11.21 -12.14 11.67 7.37 16.59 -7.37 14.25 6.07 -3.63 Mean Return Rank ▲ Global Allocation 17.64 -14.76 63 11.24 47 7.65 51 20.38 9 -10.19 96 13.31 66 5.38 54 -3.50 57 1 99 55 32 94 HFRX Global Hedge 3.10 -4.41 10 3.65 99 6.81 8.62 99 -6.72 6.00 99 2.50 -3.64 59

### Annual Periods

# Total Portfolio vs Global Allocation Universe Managers December 31, 2013 Through June 30, 2024



# Performance in Rising and Declining Markets December 16, 2014 Through June 30, 2024

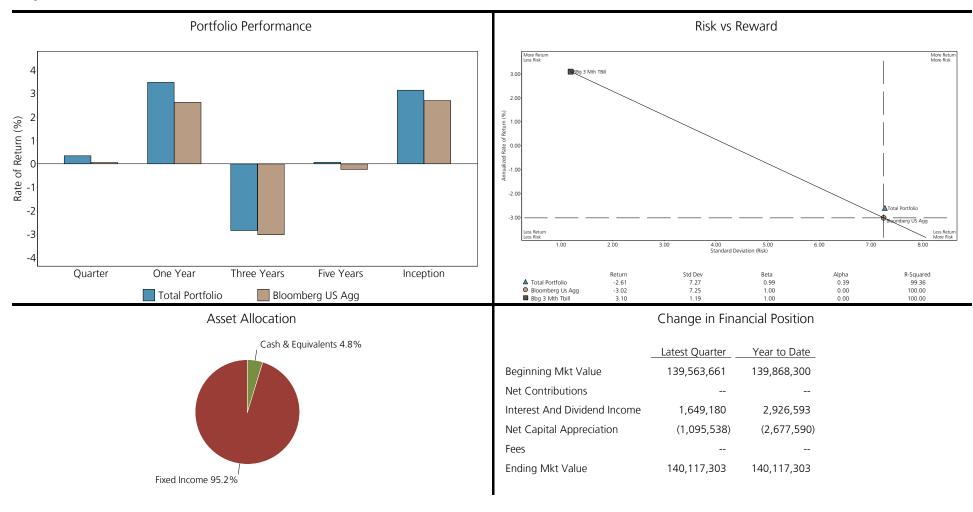


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

#### Fund's Average Investment Exposure and Market Index Returns

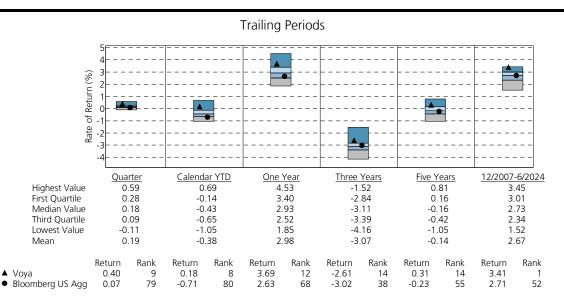
	Quarter
Asset Class	
Cash & Equivalents	0.00
Equity	0.00
First Eagle GI Fd	50.61
Loomis Sayles Global	49.39
Allspring Adv Abs	0.00
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 3000	3.22
HFRX Global Index	0.37
Total Portfolio and Benchmark Perform	mance
Dynamic Index	0.37
Policy Index	0.37
Portfolio Return	1.11
Value Added By Manager	
Market Timing	0.00
Security Selection	0.74
Total Value Added	0.74

# Executive Summary as of June 30, 2024 Voya



## Total Portfolio Peer Universe Comparison versus Intermediate Core Bond Managers

▲ Voya

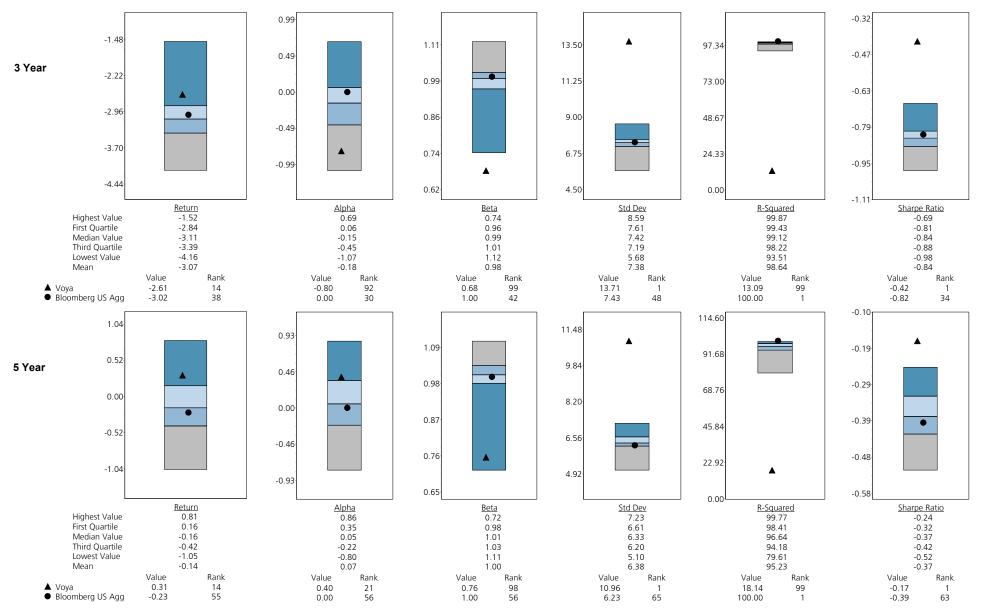


#### 10 •• 4. Return (%) 10 -**A**-0 . **A O** 40 **A**. **A** • of Rate ( ... -15 2023 2020 2019 2018 2017 2016 2014 2013 2012 2022 2021 2015 Highest Value 7.01 -9.18 -0.05 10.73 9.88 0.90 5.23 5.00 1.50 7.63 0.07 10.19 First Quartile 6.00 -12.94 -1.12 8.73 8.97 0.00 3.94 3.10 0.51 6.09 -1.38 6.82 Median Value 5.62 -13.42 7.84 8.49 -0.39 3.46 2.69 0.23 5.66 -2.05 5.86 -1.55 -2.47 Third Quartile 5.26 -13.99 -1.93 7.17 7.95 -0.75 3.09 2.28 -0.24 4.97 4.81 Lowest Value 4.37 -15.53 -2.58 4.77 5.91 -1.53 2.24 1.39 -1.57 2.53 -3.51 3.26 Mean 5.65 -13.30 -1.50 7.90 8.41 -0.38 3.52 2.76 0.14 5.53 -1.93 5.91 Returi Rank 6.23 15-13.3; 43-0.87 14 8.24 37 9.42 12 0.38 7 3.7C 36 3.46 14 0.54 23 6.04 24 -1.59 28 5.29 60 • Bloomberg US Agg 5.53 58-13.0 26 -1.54 49 7.51 60 8.72 34 0.01 24 3.54 45 2.65 48 0.55 23 5.97 26 -2.02 46 4.21 79

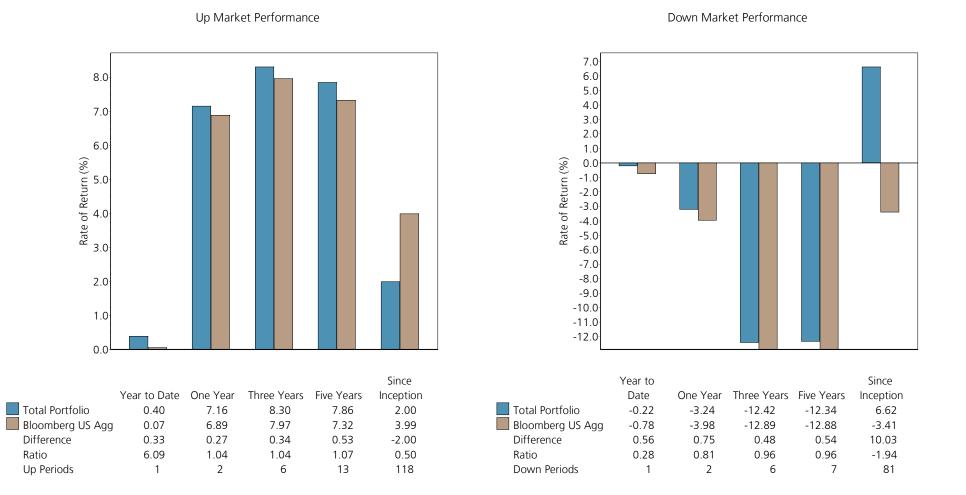
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#### Annual Periods

# Total Portfolio vs Intermediate Core Bond Managers December 31, 2013 Through June 30, 2024



## Performance in Rising and Declining Markets December 10, 2007 Through June 30, 2024

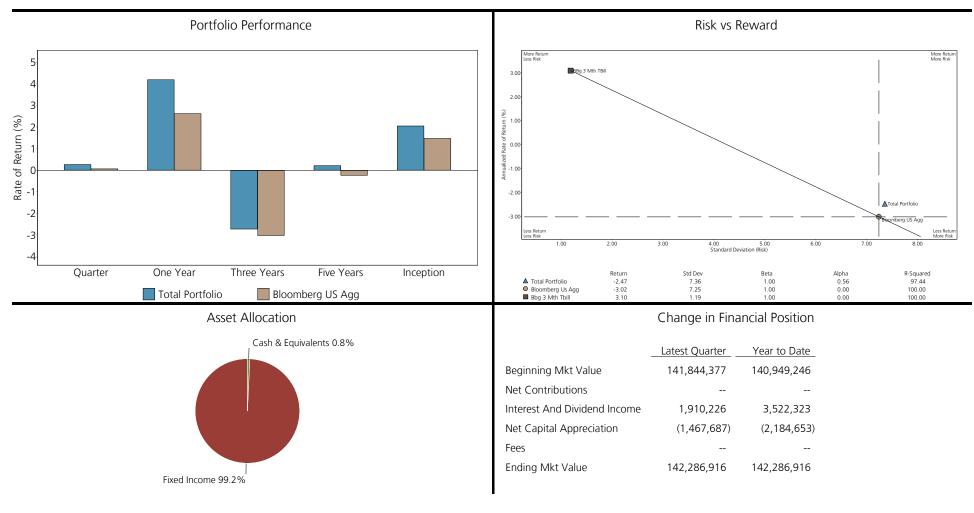


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

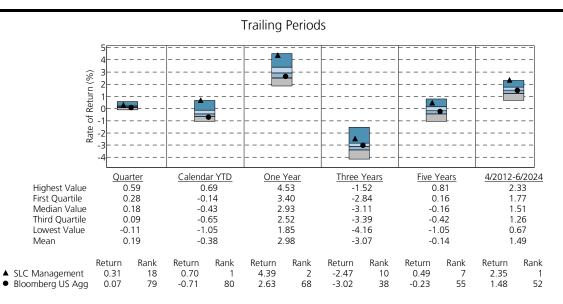
#### Fund's Average Investment Exposure and Market Index Returns

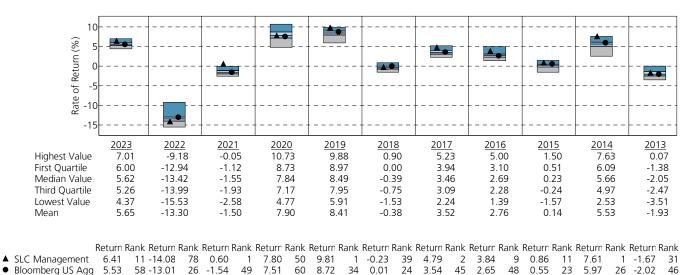
	Quarter
Asset Class	
Cash & Equivalents	1.21
Fixed Income	98.79
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Bloomberg US Agg	0.07
Total Portfolio and Benchmark Perform	nance
Dynamic Index	0.07
Policy Index	0.07
Portfolio Return	0.40
Value Added By Manager	
Market Timing	0.00
Security Selection	0.33
Total Value Added	0.33

# Executive Summary as of June 30, 2024 SLC Management



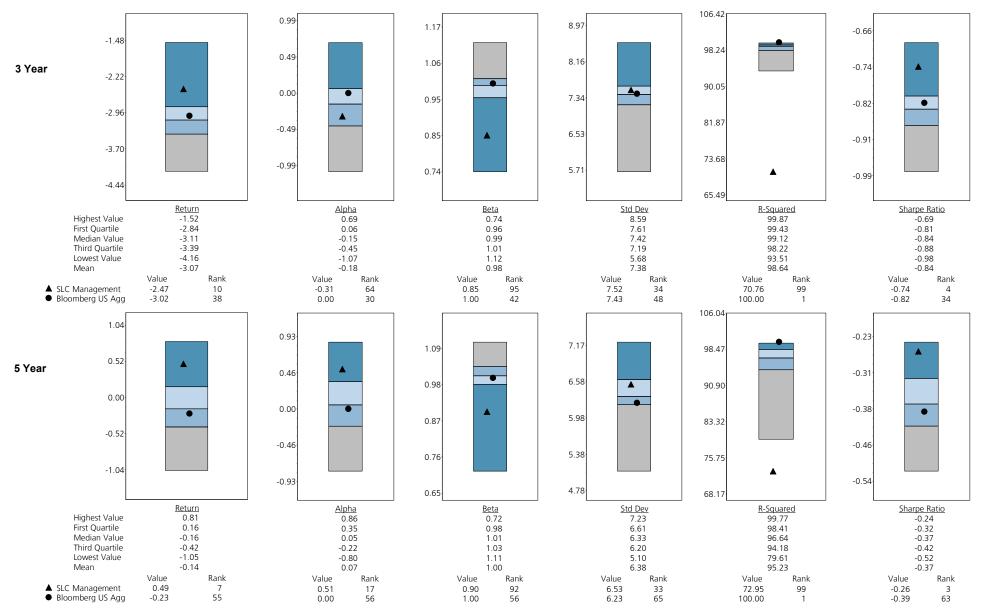
## Total Portfolio Peer Universe Comparison versus Intermediate Core Bond Managers



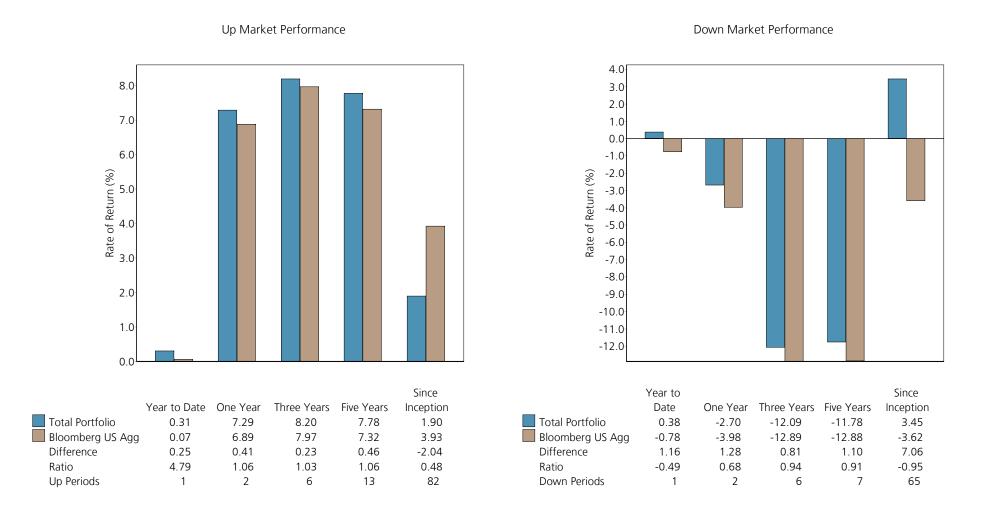


#### Annual Periods

# Total Portfolio vs Intermediate Core Bond Managers December 31, 2013 Through June 30, 2024



## Performance in Rising and Declining Markets April 3, 2012 Through June 30, 2024

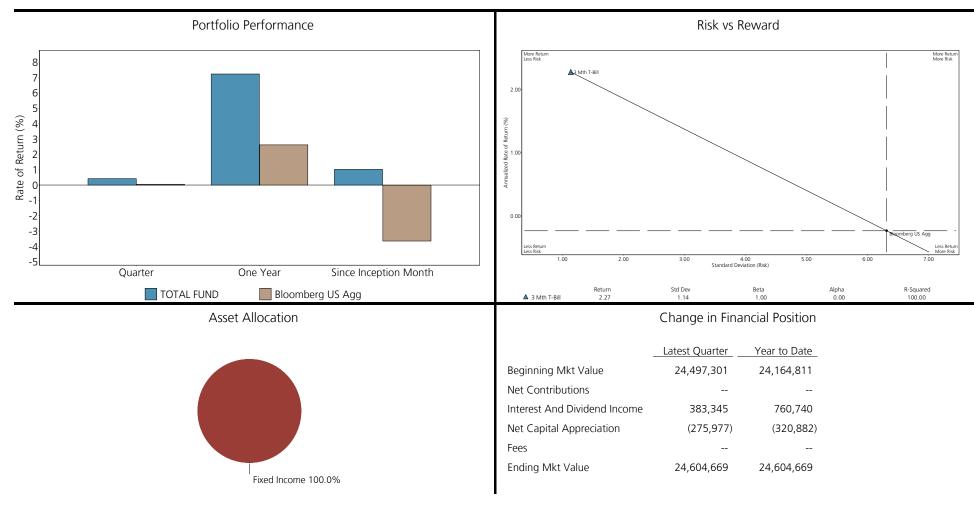


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

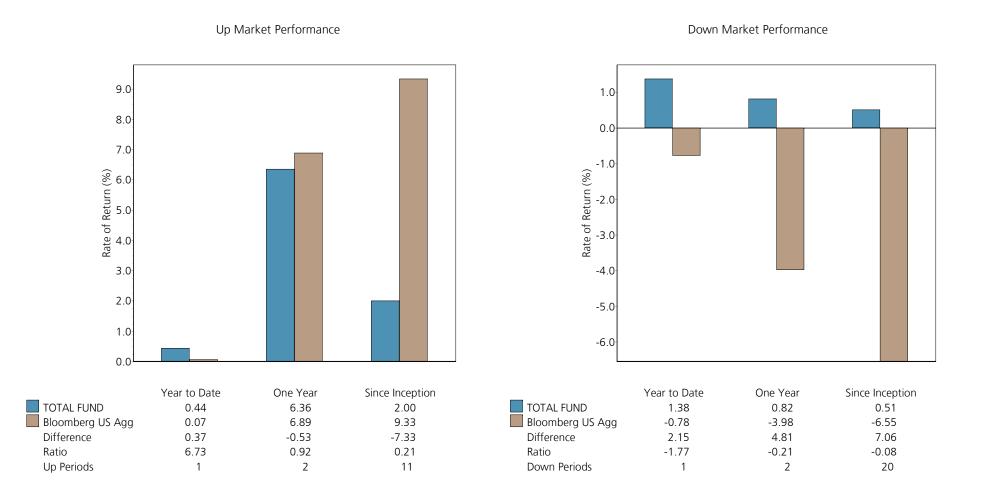
#### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	1.06
Fixed Income	98.94
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Bloomberg US Agg	0.07
Total Portfolio and Benchmark Perform	ance
Dynamic Index	0.08
Policy Index	0.07
Portfolio Return	0.31
Value Added By Manager	
Market Timing	0.02
Security Selection	0.23
Total Value Added	0.25

# Executive Summary as of June 30, 2024 PIMCO Inc Fd



# Performance in Rising and Declining Markets December 22, 2021 Through June 30, 2024

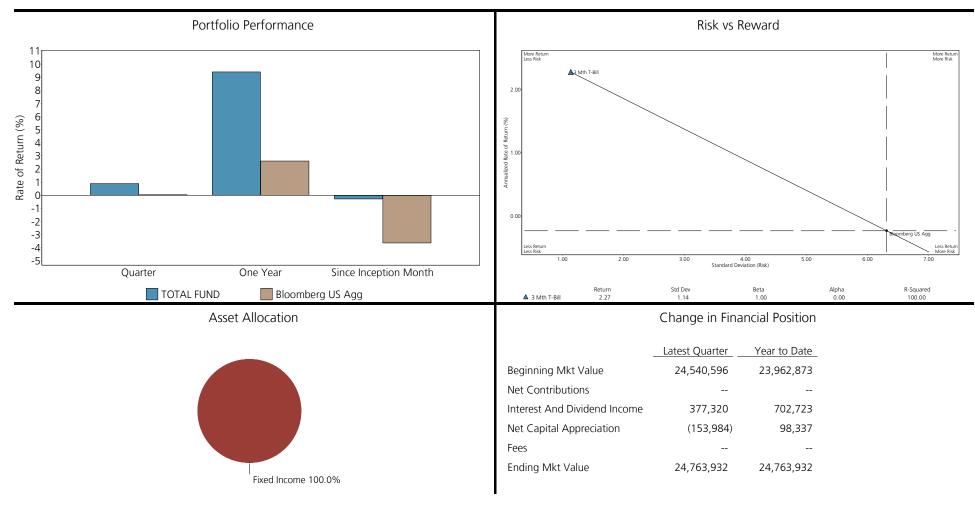


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

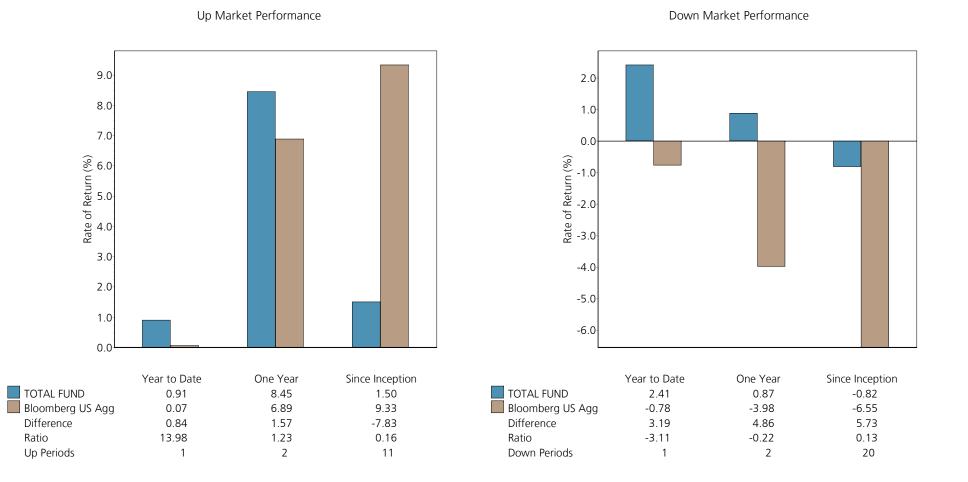
## Fund's Average Investment Exposure and Market Index Returns

	Quarter					
Asset Class						
Cash & Equivalents	0.00					
Fixed Income	100.00					
Asset Class Index Performance						
BBg 3 Mth TBill	1.33					
Bloomberg US Agg	0.07					
Total Portfolio and Benchmark Performance						
Dynamic Index	0.07					
Policy Index	0.07					
Portfolio Return	0.44					
Value Added By Manager						
Market Timing	0.00					
Security Selection	0.37					
Total Value Added	0.37					

# Executive Summary as of June 30, 2024 Hartford Str



# Performance in Rising and Declining Markets December 22, 2021 Through June 30, 2024

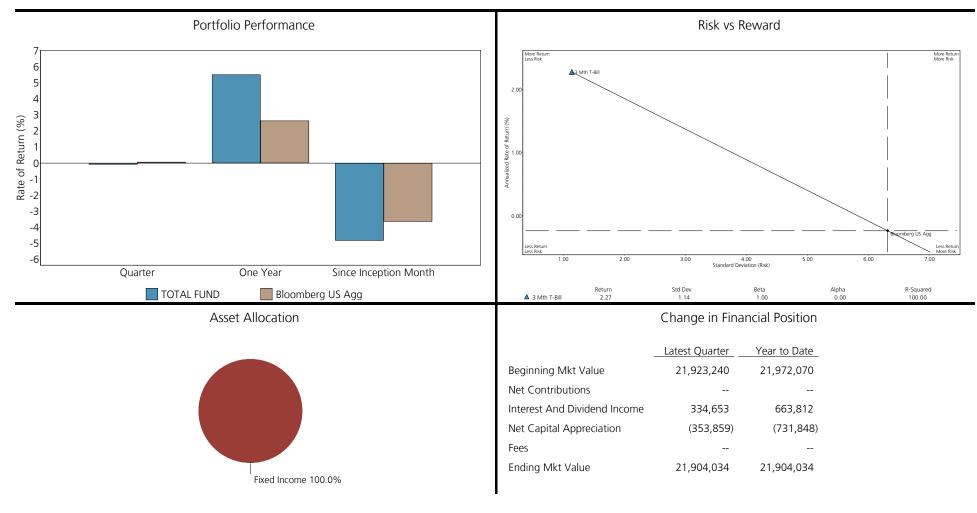


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

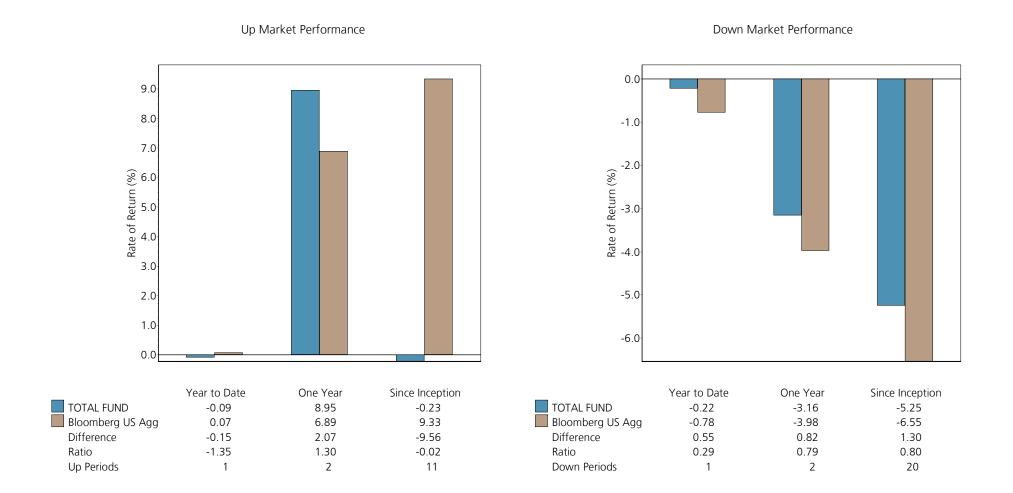
## Fund's Average Investment Exposure and Market Index Returns

	Quarter					
Asset Class						
Cash & Equivalents	-0.15					
Fixed Income	100.15					
Asset Class Index Performance						
BBg 3 Mth TBill	1.33					
Bloomberg US Agg	0.07					
Total Portfolio and Benchmark Performance						
Dynamic Index	0.07					
Policy Index	0.07					
Portfolio Return	0.91					
Value Added By Manager						
Market Timing	0.00					
Security Selection	0.84					
Total Value Added	0.84					

# Executive Summary as of June 30, 2024 Columbia Mort



# Performance in Rising and Declining Markets December 22, 2021 Through June 30, 2024

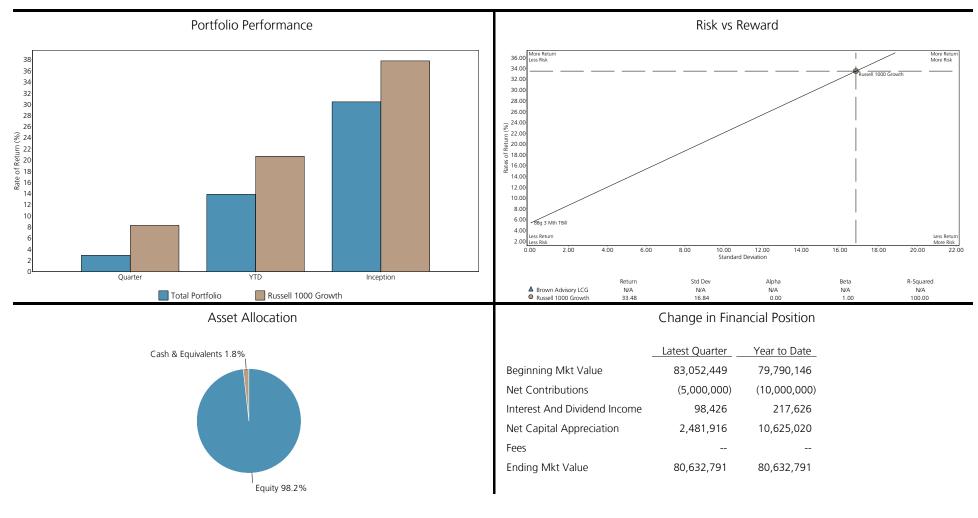


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

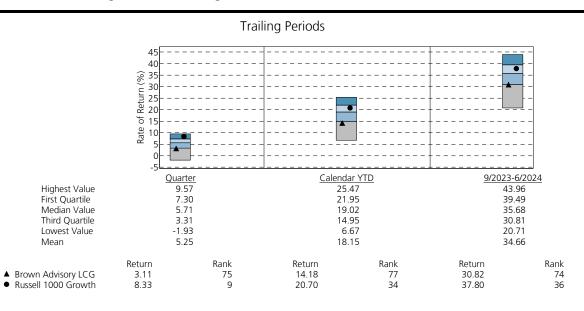
## Fund's Average Investment Exposure and Market Index Returns

	Quarter					
Asset Class						
Cash & Equivalents	0.00					
Fixed Income	100.00					
Asset Class Index Performance						
BBg 3 Mth TBill	1.33					
Bloomberg US Agg	0.07					
Total Portfolio and Benchmark Performance						
Dynamic Index	0.07					
Policy Index	0.07					
Portfolio Return	-0.09					
Value Added By Manager						
Market Timing	0.00					
Security Selection	-0.15					
Total Value Added	-0.15					

# Executive Summary as of June 30, 2024 Brown Advisory LCG

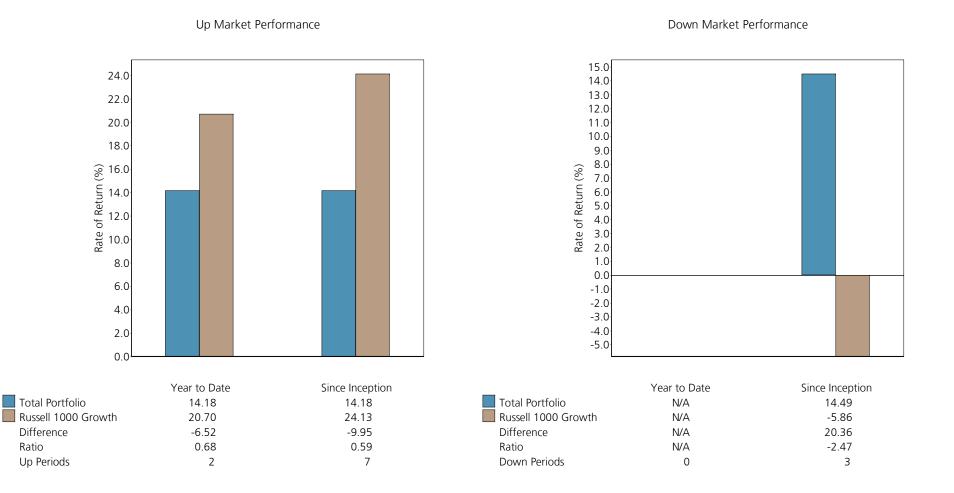


# Total Portfolio Peer Universe Comparison versus Large Growth Managers



Annual Periods

# Performance in Rising and Declining Markets September 22, 2023 Through June 30, 2024

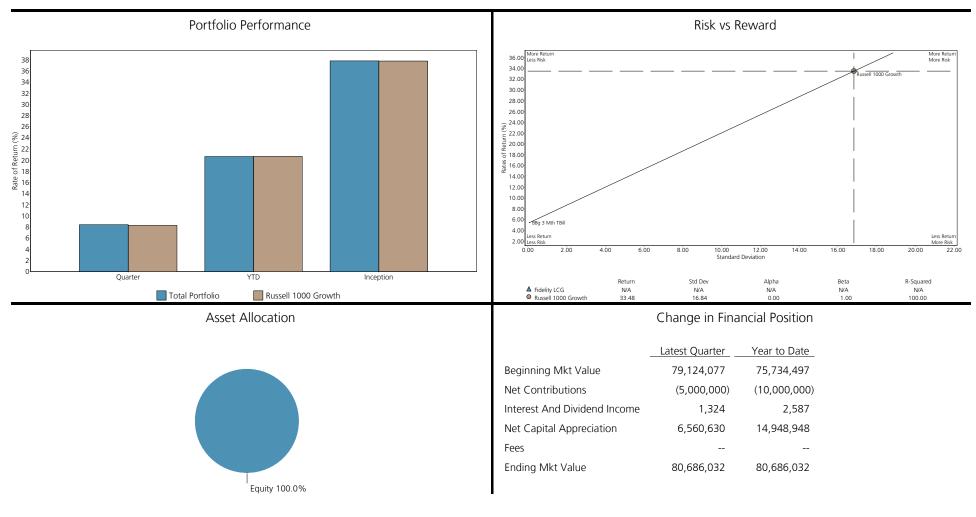


# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

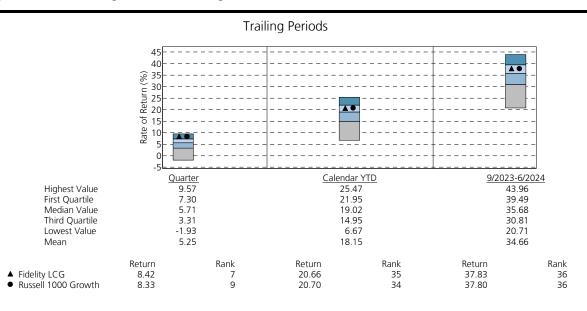
### Fund's Average Investment Exposure and Market Index Returns

	Quarter
Asset Class	
Cash & Equivalents	2.16
Equity	97.84
Asset Class Index Performance	
BBg 3 Mth TBill	1.33
Russell 1000 Growth	8.33
Total Portfolio and Benchmark Perform	nance
Dynamic Index	8.22
Policy Index	8.33
Portfolio Return	3.11
Value Added By Manager	
Market Timing	-0.11
Security Selection	-5.11
Total Value Added	-5.23

# Executive Summary as of June 30, 2024 Fidelity LCG

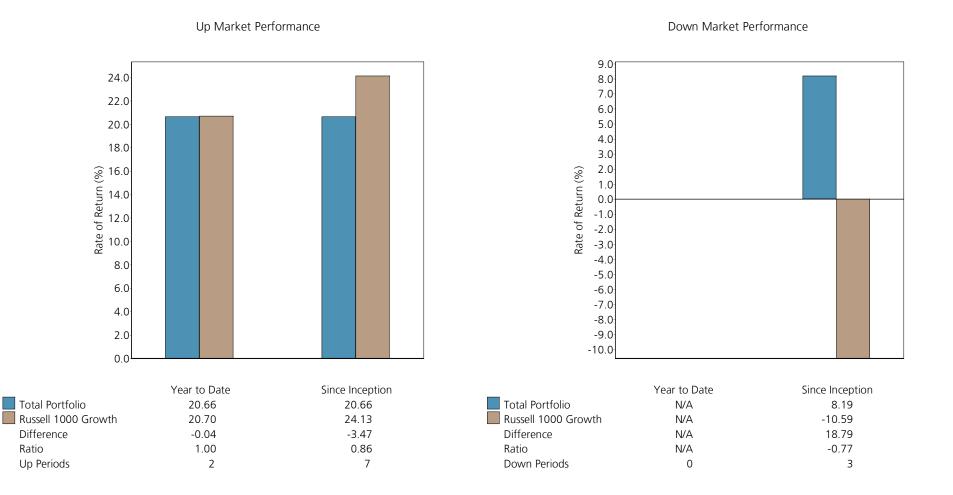


# Total Portfolio Peer Universe Comparison versus Large Growth Managers



Annual Periods

# Performance in Rising and Declining Markets September 11, 2023 Through June 30, 2024



# Market Timing And Security Selection March 31, 2024 Through June 30, 2024

### Fund's Average Investment Exposure and Market Index Returns

	Quarter					
Asset Class						
Cash & Equivalents	0.00					
Equity	100.00					
Asset Class Index Performance						
BBg 3 Mth TBill	1.33					
Russell 1000 Growth	8.33					
Total Portfolio and Benchmark Performance						
Dynamic Index	8.33					
Policy Index	8.33					
Portfolio Return	8.42					
Value Added By Manager						
Market Timing	0.00					
Security Selection	0.09					
Total Value Added	0.09					

Period Ending June 30, 2024

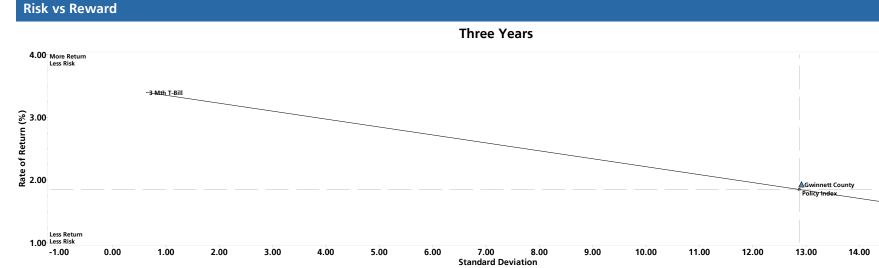
More Return

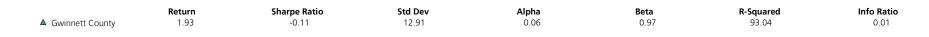
Less Return

More Risk

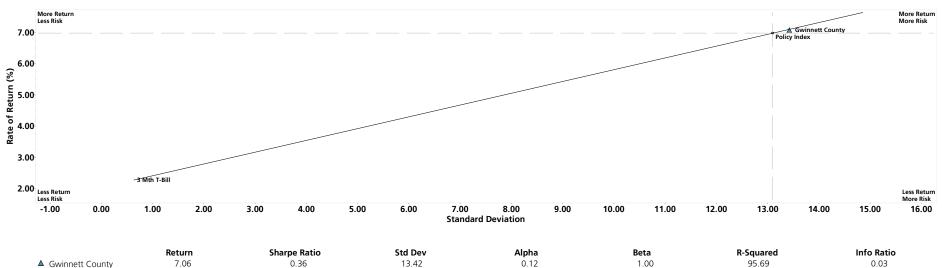
15.00

More Risk



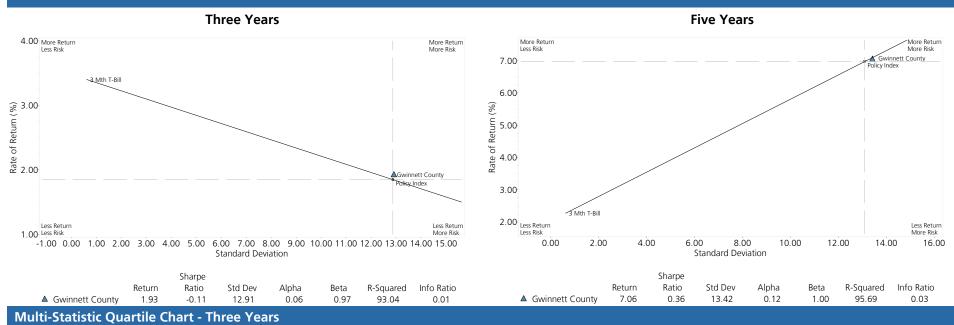


**Five Years** 



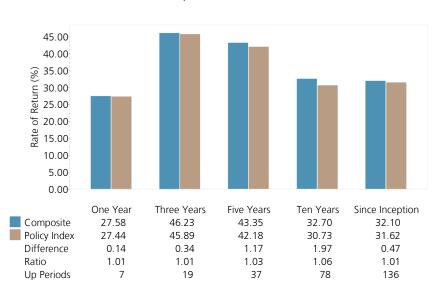
# Period Ending June 30, 2024

**Risk vs Reward** 

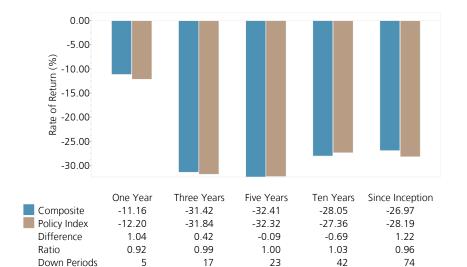


Comparison Universe: Master Trusts - All Plans

# Market Cycle Analysis

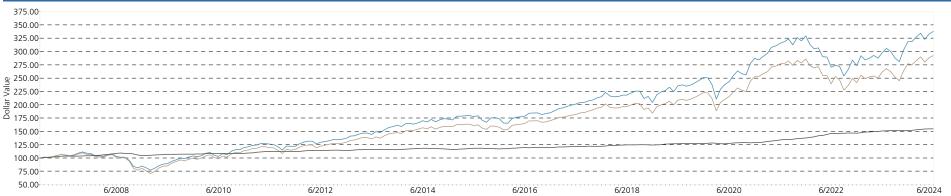


Up Market Performance



Down Market Performance

# **Growth of \$100 Dollars**

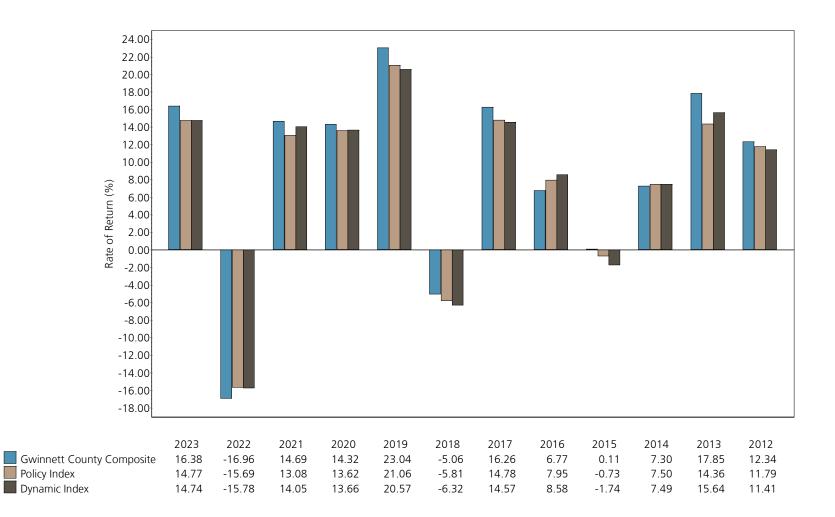


	Latest Month	Latest Quarter	Year To Date	One Year	Three Years	Five Years	Ten Years	Since Inception
<ul> <li>Composite</li> </ul>	\$ 101	\$ 101	\$ 106	\$ 113	\$ 107	\$ 143	\$ 199	\$ 338
— Policy Index	\$ 101	\$ 101	\$ 105	\$ 112	\$ 106	\$ 140	\$ 186	\$ 292
— CPI	\$ 100	\$ 101	\$ 102	\$ 103	\$ 116	\$ 122	\$ 131	\$ 155

\*While the CPI measures changes in the prices for goods and services, movements in the CPI that have occurred in the past are not necessarily indicative of changes that may occur in the future. Policy Index: 25.00% Bloomberg US Aggregate Bond, 15.00% Russell 1000 Growth, 15.00% Russell 1000 Value, 10.00% HFRX Global Index, 10.00% MSCI AC World X US Net, 7.50% Russell 2000, 7.50% Russell Midcap, 5.00% MSCI Net Emerging Markets, 5.00% Improved to be reliable, the accuracy of which is not guaranteed. Account statements provided by UBS or other financial institutions are the official record of your holdings, balances, transactions and security values and are not amended or superseded by the information in this report. Information is current as of the date shown. Past performance is no guarantee of future returns. See IMPORTANT INFORMATION for assumptions and limitations of the analysis in this report, risk considerations, valuation, fees and other details regarding this report. For historical primary index information, see Benchmark Comparisons Used in this Report.

# Period Ending June 30, 2024

Gwinnett County Employees Retirement System Annual Time Weighted Rates of Return December 31, 2011 Through December 31, 2023



# **Asset Allocation**

Name	Incept. Date	Benchmark	Market Value	% Portfolio	\$ Target	\$ Difference	% Allocation Target
Consolidated Portfolio*	12/31/2006	Policy Index	\$1,496,772,202	100.0%	\$1,496,772,202	\$0	100.0%
Large Cap Growth Equities							
TCW Institutional	04/02/2013	Russell 1000 Growth	\$86,242,803	5.8%	\$74,838,610	\$11,404,193	5.0%
Brown Advisory LCG	09/22/2023	Russell 1000 Growth	\$80,632,791	5.4%	\$74,838,610	\$5,794,181	5.0%
Fidelity LCG	09/11/2023	Russell 1000 Growth	\$80,686,032	5.4%	\$74,838,610	\$5,847,422	5.0%
Large Cap Value Equities							
Barrow Hanley	01/03/2007	Russell 1000 Value	\$118,569,196	7.9%	\$112,257,915	\$6,311,281	7.5%
The London Company	12/31/2016	Russell 1000 Value	\$111,689,922	7.5%	\$112,257,915	(\$567,993)	7.5%
Mid Cap Core							
Bahl Gaynor	03/13/2019	Russell 2500	\$39,165,463	2.6%		\$39,165,463	
Mid Cap Growth							
Brown Advisory MCG	04/28/2021	Russell Midcap Grwth	\$39,090,195	2.6%		\$39,090,195	
Mid Cap Value							
Vaughan Nelson	03/30/2012	Russell Midcap Value	\$40,017,592	2.7%	\$56,128,958	(\$16,111,365)	3.8%
Small Cap Blend							
Atlanta Capital	01/31/2007	Russell 2000	\$115,285,583	7.7%	\$112,257,915	\$3,027,668	7.5%
REITs							
Invesco REIT	01/05/2007	NAREIT Equity	\$68,373,521	4.6%	\$74,838,610	(\$6,465,089)	5.0%
Foreign Developed Blend							
1607 Capital Partners	06/30/2008	MSCI AC WId X US Net	\$204,682,485	13.7%	\$149,677,220	\$55,005,265	10.0%
Emerging Markets							

# **Asset Allocation**

Name Global Allocation	Incept. Date	Benchmark	Market Value	% Portfolio	\$ Target	\$ Difference	% Allocation Target
				10.000	<i>* • • • • • • • • • • • • • • • • • • •</i>	to 000 544	10.00/
Global Allocation	12/16/2014	HFRX Global Index	\$158,659,765	10.6%	\$149,677,220	\$8,982,544	10.0%
Global Allocation	12/16/2014	HFRX Global Hedge	\$158,659,765	10.6%	\$149,677,220	\$8,982,544	10.0%
Core Fixed Income							
Voya	12/10/2007	Bloomberg US Agg	\$140,117,303	9.4%	\$149,677,220	(\$9,559,917)	10.0%
SLC Management	04/03/2012	Bloomberg US Agg	\$142,286,916	9.5%	\$149,677,220	(\$7,390,304)	10.0%
Unconstrained							
Unconstrained	12/22/2021	Bloomberg US Agg	\$71,272,635	4.8%	\$74,838,610	(\$3,565,975)	5.0%
PIMCO Inc Fd	12/22/2021	Bloomberg US Agg	\$24,604,669	1.6%	\$24,996,096	(\$391,427)	1.7%
Hartford Str	12/22/2021	Bloomberg US Agg	\$24,763,932	1.7%	\$24,996,096	(\$232,164)	1.7%
Columbia Mort	12/22/2021	Bloomberg US Agg	\$21,904,034	1.5%	\$24,846,419	(\$2,942,384)	1.7%

## Gwinnett County Employees Retirement System Fees And Returns Summary

	Quarter To Date	Year To Date
Net ROR:		
Inclusive of UBS Investment Advisory Fees and Other Fees Paid	0.96%	6.10%
Net ROR:		
Inclusive of Other Fees Paid Only	0.88%	5.87%
Gross ROR:		
Excluding all Fees Paid	0.98%	6.07%

The calculations above are effective as of 1/1/2021. This Fees and Returns Summary is included in UBS Institutional Consulting ("IC") quarterly performance reports starting with first quarter reporting in 2021 and it provides detailed fee information for your review. Data from prior to that time is not included in this new exhibit but is available upon request. If you hold your assets away from UBS, "Other Fees" include all fees your custodian provides to us, except your UBS Investment Advisory Fee, and will typically include investment manager fee and may include, custodian, administrative, trading and execution fees. We can only include fees in this analysis when provided by your custodian, which we have not verified, and are not responsible for the accuracy or completeness of this information. For additional information about what fees are included within "Other Fees" please contact your custodian. If you hold your assets at UBS, "Other Fees" include investment manager fees only, as custody, administrative, trading and execution fees are included in your UBS Investment Advisory Fee. If you have any questions about how fees are depicted throughout the remainder of this report, please discuss with your UBS Consultant.

# **Performance Reconciliation Adjustments**

This section provides a record of differences between information reported by your custodian and information used to create this performance report, whether at your direction or as prescribed by your Institutional Consultant on your behalf.

Scenario Description Net Adjustment (+/-)
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No differences in information were used in the creation of this performance report.

# **Gwinnett County Employees Retirement System - Investments Not Reviewed by UBS**

UBS does not conduct due diligence and has not otherwise reviewed the following investments or strategies, which are included in this report at your request. You have retained this investment or strategy without the assistance of UBS or any of its employees. The inclusion of these investments/strategies in this performance report does not constitute a recommendation by UBS that you continue to invest or add funds to the strategy.

UBS does not make initial or ongoing recommendations on this investment or manager strategy to existing or prospective clients.

The IC program offers a broad spectrum of investments and manager strategies that are researched by UBS and for which clients can receive investment advice and research. Your IC fee will not be offset or reduced as a result of not accessing our researched options.

At the time of report creation, all investments in your portfolio are reviewed.

Cash and Money Market Funds are not included in this analysis. UBS does not research any money market mutual funds, other than those offered by UBS and its affiliates.

#### IMPORTANT INFORMATION

This report is provided for informational purposes only, does not constitute an offer to buy or sell securities or investment products, does not constitute a recommendation that you buy, sell or hold securities or investment products, and is current as of the date shown. It may include information regarding your UBS Institutional Consulting ("IC") or UBS Consolidated Advisory Program ("CAP") accounts held at various UBS entities including UBS Financial Services Inc., UBS Securities LLC and UBS AG (collectively, "UBS" or "UBS entities"), as well as accounts you hold at other financial institutions. Accounts included in this report are identified at the beginning of the report. Information may be shown for individual accounts or as one or more combined portfolios; the accounts included in each portfolio are also identified at the beginning of the report.

If this output is provided as part of a proposal, it is marketing material. It is provided to you for discussion and consideration and is intended to aid (and be used by) your UBS Consultant or Financial Advisor in providing you with actual individualized investment recommendations. Therefore, they should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant or Financial Advisor, our standard account documents, agreements, disclosures, including the ADV Disclosure for applicable advisory programs, and the additional factors that warrant consideration for your particular financial situation, including costs. The options presented are for discussion purposes only and do not constitute a recommendation to buy, hold, or sell any securities or investment products. This material is not intended and should not be construde to constitute investment advice and does not itself create a fiduciary relationship between you and UBS. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

Accounts and Assets Included: UBS account statements are the only official records of holdings, balances, transactions, and security values of assets held in UBS accounts and are not replaced, amended or superseded by any of the information presented in this report. If assets that you hold at other financial institutions are included in this report, they are being provided as part of your IC or CAP Services Agreement or you have asked us to include those assets as an accommodation but they are not included as part of your IC or CAP Services Agreement with us. If assets included solely as an accommodation, these assets are identified as such in this report. In either situation, the inclusion of assets held at another financial institution is based on information, including valuation and transactional information, furnished to UBS by you or your custodian. We have not verified, and are not responsible for, the accuracy or completeness of this information. This report is not intended to provide you with consolidated information or reporting regarding your holdings, balances, transactions, and security values of assets, such as account statements for individual accounts held away from UBS. Those documents contain their record of holdings, balances, transactions, and security values of assets held in those accounts, as well as notices, disclosures and other information important to you, and may also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage would only apply to those assets held at UBS Financial institution where you hold an account to determine the availability of SIPC coverage, if any. We require that you hold and purchase only elligible managed assets in your UBS advisory accounts.

Investment Monitoring: Your IC or CAP Agreement defines the investment monitoring performed as part of your respective investment advisory program. If we have included assets held in UBS brokerage accounts, it is important that you understand that we do not act as an investment adviser or fiduciary on brokerage assets. We do not monitor brokerage account investments through the IC or CAP Programs and we do not monitor investments as a brokerage service unless specifically agreed to in writing. This report is provided solely to help you evaluate your account performance and/or progress toward your financial objectives. By providing this report to you, we are not agreeing to monitor any brokerage account investments contained within the report. If you want ongoing monitoring of your brokerage investments, please speak with your financial advisor about the possibility of including such investments as part of an investment advisory relationship with us. Inclusion of brokerage assets in this report also distorts the actual performance of your advisory assets.

Valuation: Values shown are not inclusive of margin balances. Every reasonable effort has been made to accurately price securities; however, we make no guarantee with respect to any security's price. To determine the value of securities in your account, we generally rely on third party quotation services. If a price is unavailable or believed to be unreliable, we may determine the price in good faith and may use other sources such as the last recorded transaction. We will generally rely on the value provided by you, the custodian or issuer of that security, when (i) securities are held at another custodian; (ii) investments not available through UBS or that our systems do not recognize. To obtain current quotations, when available, contact your Institutional Consultant or Financial Advisor. Such pricing may impact the performance information provided by the other financial institution or you; this will impact the performance information provided in these reports.

Performance Analytics: Unless otherwise noted, performance shown is based on Time Weighted Rate of Return. Periods greater than one year have been annualized, but annual performance may not represent a full calendar year depending on the inception date of the first account included in these reports. Standard deviations are shown only for periods of 12 months or longer. When you hold your assets at UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees, unless you and your UBS Financial Advisor decided to reflect fee information differently. If you hold your assets away from UBS, this report will generally show performance net of manager and UBS Institutional Consulting fees if your custodian provides that level of fee information, unless you and your UBS Financial Advisor decided to reflect fee information, unless you and your UBS Financial Advisor decided to reflect fee information differently. Therefore, this report may reflect performance before the deduction of manager fees and/or UBS Institutional Consulting advisory fees. The payment of fees and expenses will reduce the performance of the account and the reduction in performance will have a cumulative effect over time. The net effect of the payment of fees on the annualized performance, and the compounded or cumulative effect over time, is dependent on the amount of the fee and the account's investment performance. For example, an account that experiences an annual gross performance of 10% but incurs a 2.8% annual fee that is deducted quarterly on a prorated basis, will experience net annual performance of 7.1%, a reduction of 2.9% per year. Compounding will similarly affect the account's performance of 7.1%, a reduction of 2.9% per year.

Performance information incorporates data as of the date your accounts became available for these reports, not as of your initial acquisition of a particular investment unless performance history is imported at client's instruction. For reports that reflect combined account information, the inception date will be the earliest performance start date of any of the individual accounts selected for the consolidation time period. If an individual account's performance information is not available for a full reporting time period (month to date, quarter to date, year to date or performance to date), that account's information will only be included for the period when available. For consolidated accounts that include different account inception dates, the consolidated Additions/Withdrawals, Income Earned and Investment Appreciation/ Depreciation will be reported on from the month end date of when insurance and annuity activity could be obtained from the carrier. To the extent that your historical data contains a mixture of net and gross performance history related to manager or advisory fees, those distinctions will impact your performance reports to the extent that the different methods of reporting are blended. Note that various factors, including unpriced securities and certain holdings, adjustments or activity may cause the results shown in this report to differ from actual performance (see the Performance reports provided to you by UBS. Performance information may be impacted by the different ways each UBS entities nor any of fuer personal true personal is not available. Note that performance information may be impacted by the different ways each UBS entities nor any of the section. Performance reports to this report. Note that these results may differ from other performance reports provided to you by UBS. Performance information may be impacted by the different ways each UBS entities nor any of

You have discussed the receipt of this individually customized report with your Financial Advisor. Your UBS account statements and trade confirmation are the official records of your accounts at UBS. We assign index benchmarks to our asset allocations, strategies in our separately managed accounts and discretionary programs based on our understanding of the allocation, strategy, the investment style and our

research. The benchmarks included in this report can differ from those assigned through our research process. As a result, you may find that the performance comparisons may differ, sometimes significantly, from that presented in performance reports and other materials that are prepared and delivered centrally by the Firm. Depending upon the composition of your portfolio and your investment objectives, the indexes used in this report may not be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your portfolio holdings and performance may vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

Using Margin in your IC or CAP Investment Advisory Accounts. Using margin in an advisory account is a more aggressive, higher risk approach to pursuing your investment objectives. Unless you have selected a strategy that requires the use of margin as part of its implementation, we do not recommend the use of margin in advisory accounts, including IC and CAP accounts. The decision to leverage in an advisory account rests solely with you and is made against our recommendation. Your decision should be made only if you understand: (1) the risks of margin in an advisory account; (2) how margin may affect your ability to achieve investment objectives; (3) that you may lose more than your original investment. You will pay interest to UBS on the outstanding margin loan balance. Using margin to purchase securities in an advisory account intreases the amount of (but not the percentage of) the advisory fee you pay. Positive or negative performance of a margined advisory account will be magnified by virtue of using margin. You will not benefit from using margin in an advisory account if the performance of your account does not exceed the interest expense being charged on the loan plus the additional advisory account fees incurred by your account as a result of the loan proceeds.

Using Advisory Accounts as collateral for a credit line. If you currently have UBS Bank USA Credit Line collateralized by advisory accounts, UBS Bank USA pays UBS Financial Services a servicing fee based on the amount of outstanding loan balances to compensate UBS for referring clients and for administrative and operational support relating to the loan. If you maintain a balance on a non-purpose loan, your Financial Advisor will receive compensation primarily based upon the outstanding balance and the corresponding spread on the loan. This provides an incentive for your Financial Advisor to refer you for a non-purpose loan and to draw down on the loan. As UBS and your Financial Advisor are compensated primarily through advisory fees paid on your account, we (and your Financial Advisor) benefit if you draw down on your loan to meet liquidity needs rather than sell securities or other investments in your UBS account, which would reduce our advisory fee. A draw down would preserve your Financial Advisor's advisory fee revenue and may generate additional loan-related compensation for him. This presents a potential conflict of interest for your Financial Advisor when addressing your needs for liquidity. Please conflicts of interest conflic

UBS Financial Services Inc. is in the business of establishing and maintaining investment accounts and we will receive compensation from you in connection with investments that you make, as well as additional compensation from third parties whose investments we distribute. This presents a conflict of interest when we recommend that you move your assets to UBS from another financial institution, and also when we make investment recommendations for assets you hold at, or purchase through, UBS. For more information on how we are compensated by clients and third parties, conflicts of interest and investments available at UBS please refer to the 'Your relationship with UBS' booklet provided at ubs.com/relationshipwithubs,or ask your UBS Financial Advisor for a copy.Neither UBS, our affiliates nor our Financial Advisors will act as investment adviser to you with respect to the liquidation of securities held in an advisory account to meet a margin call or credit line loan demand

**Benchmark Index Information**: For comparison purposes, these reports may contain a number of general broad market indices, which were selected to demonstrate the performance of broad market indicators that are readily recognized, rather than for direct performance comparisons, and do not reflect the performance of actual investments. The selection and use of benchmarks is not a promise or guarantee that your accounts will meet or exceed the stated benchmarks. Benchmark information is illustrative and relates to historical performance of market indexes and not the performance of actual investments. Indexes are not available for direct investment and reflect an unmanaged universe of securities. Indices assume no management, custody, transaction fees or expenses that would lower the performance results, and assume reinvestment of dividends and capital gains. Information presented. Market index data is subject to review and revision, and UBS reserves the right to substitute indices or display only those indices for which current updated information is available. Information regarding the indexes shown in this report.

**Risk Considerations**: Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and may lose value.

Cash and cash alternatives: Cash and cash alternatives typically include money market securities or three-month T-Bills. These securities have short maturity dates and they typically provide a stable investment value as compared to other investments and current interest income. These investments may be subject to credit risks and inflation risks. Treasuries also carry liquidity risks for sales prior to maturity. Investments in money market funds are neither insured not guaranteed by the Federal Deposit Insurance Corporation ("FDIC"), the U.S. government or any other government agency. There can be no assurance that the funds will be able to maintain a stable net asset value at \$1.00 per share or unit.

Alternative Investments: Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate (collectively, non-traditional or alternative investments). These investments can be subject to substantial risks (including the risks associated with limited liquidity, the use of leverage, short-sales and concentrated positions), may involve complex tax structures and strategies, and may not be easily valued. The risks of alternative investments should be carefully considered in light of your investment objectives, risk tolerance and net worth. Alternative investments are speculative and entail substantial risks, which may place your capital at risk. Alternative investments may not have been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments may be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values may differ substantially from prices, if any, at which a unit may be bought or sold and do not necessarily represent the value you would receive from the issuer upon liquidation. Issuer estimated values, if any, are generally updated on a regular (annual or semi-annual) basis and are supplied to us by the issuer, but may be calculated based on different information from what is used by third parties to derive their estimated values.

U.S. Fixed Income: Fixed income represents exposure (whether direct or indirect) to debt issued by private corporations, governments or federal agencies. Historically, fixed income has higher return than cash investments but their value can fluctuate dramatically as they are subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio may be worth more or less than its original cost when redeemed. In addition, fixed income generally has less volatility and long-term return than equities. U.S. fixed income may be further classified as high yield. These investments are high yielding but may also carry more risk. A bond funds yield and value of its portfolio fluctuate and can be affected by changes in interest rates, general market conditions and other political, social and economic developments.

**U.S. Equity:** Equities represent exposure (whether direct or indirect) to ownership interest in a corporation. Historically, equities are more risky than fixed income or cash investments as they experience greater volatility risk, which is the risk that the value of your investment may fluctuate over time. However, they have had higher returns. Investments in small and medium company stocks can be more volatile over the short term than investments in large company stocks, however, they may offer greater potential for appreciation.

Non-U.S. equity and fixed income: Non-U.S. equity and fixed income represent exposure (whether direct or indirect) to ownership interests and debt, respectively, of foreign governments and corporations that can be sub-divided into those from countries that have developed markets or emerging markets. Further, non-U.S. companies not reporting with the SEC may be subject to accounting, auditing, and financial reporting standards and requirements that differ from companies reporting with the SEC and may have less publicly available information about them than companies reporting with the SEC.

International: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issues "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political =, economic or regulatory changes) that may not be readily known to a U.S investor.

Variable Annuities: A variable deferred annuity is a long-term financial product designed for retirement purposes. It is a contractual agreement in which payment(s) are made to an insurance company, which agrees to pay out an income or a lump sum amount at a later date. There are fees and charges associated with a variable annuity contract, which include, but are not limited to, operations charges, sales and surrender charges, administrative fees, and additional charges for optional benefits. Variable annuities are sold by prospectus and you should carefully consider important information on the sub-accounts' investment objectives, risk, charges and expenses.

Please read the prospectus and offering documents carefully before you invest. Your Financial Advisor can provide a copy of the prospectus. For current month-end returns:

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<htp://advisor.morningstar.com/familyinfo.asp <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> <http://advisor.morningstar.com/familyinfo.asp> withdrawals
from an annuity contract are taxable as ordinary income, not as capital gains and, if made prior to age 59 and 1/2, may be subject to an additional 10% federal income tax penalty. Withdrawals may also be
subject to surrender charges. Withdrawals will reduce the death benefit, living benefits and cash surrender value. For tax purposes, withdrawals will come from any gain in the contract first. Please see the
prospectus for complete details. Amounts in the annuity's variable investment portfolios are subject to fluctuation in value and market risk, including loss of principal. Unregistered group variable annuities and
registered group variable annuities that are solely available for use in qualified plans are rated and ranked based on their position within the bell curve of the open end fund peer group. These ratings and ranks are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category
average or number of funds within the peer group. For variable annuity subaccounts, standardized return is total return based on its inception date within the separate account and is adjusted to reflect
recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E risk charge, administration fees, and actual ongoing
fund-level expenses. The benchmark used for each individual subaccount performance is an index that has been assigned to the particular manager or fund.

Mutual Fund Performance Information: Mutual Funds are sold by prospectus and you should carefully consider important information on the fund's investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Institutional Consultant can provide a copy of the prospectus. For current month-end returns: <<htp://advisor.morningstar.com/familyinfo.asp> <htp://advisor.morningstar.com/familyinfo.asp> This analysis may incorporate mutual fund and exchange traded fund performance results. Analyticsshown are calculated based on the fund's Net Asset Value, which may reflect the reinvestment of dividends and capital gains, as well as the deduction of 12b-1 fees and fund internal expenses (e.g. fund management fees). The analytics do not reflect the deduction of the sales load, where applicable, the UBS Consulting fee(s), where applicable, or the impact of taxes. Had the sales load, fee or taxes been included, the results used in this analysis would have been reduced.

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Ranking Methodology. Universe ranking assigns a whole number rank between 1 and 99 for a set of values. This is the distribution. Ranking is determined by comparing a value to the values in the set, and using the rank assigned to the value that is equal to or 'better' than the value being compared. A 'better' value is based on whether a higher value is better or a lower vale is better. A set of values can be ranked either high to low (as in rates of return, where a higher value is better than a lower value) or low to high (such as Beta)**Policy Index**: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy. The benchmarks that constitute the policy index change over time as your portfolio changes. For historical policy index information, see the Benchmark Dused in this Report exhibit.

Gain/(Loss) Information: When data is available from UBS, estimated unrealized gains/losses are calculated for individual security lots. For assets transferred from another financial institution, gain/loss information will be reflected only for the period of time the assets have been held at UBS entities. For assets held at other financial institutions, information provided by you or that entity, if any, is reflected. Total realized gain/loss information may include calculations based upon non-UBS entities cost basis information. UBS Financial Services Inc. does not independently verify or guarantee the accuracy or validity of any information provided by sources other than UBS Financial Services Inc. When original cost information is unavailable, gain/loss amounts will represent current market value and total gains/losses may be inaccurate. Date information for when a particular security was acquired, when available, appears on these reports. When no acquisition date is provided for a security, these reports reflect "N/A" and omit this information. As a result, these figures may not be accurate and are provided for informational purposes only.

Interest and Dividend Income: When shown on this report, information does not reflect your account's tax status or reporting requirements. You should use only official IRS forms for tax reporting purposes. The classification of private investment distributions can only be determined by referring to the official year-end tax-reporting document provided by the issuer.

**Contributions and Withdrawals**: When shown on a report, information regarding contributions and withdrawals may represent the net value of all cash and securities contributions and withdrawals, and may include program fees (including wrap fees) and other fees added to or subtracted from your accounts from the first day to the last day of the period covered by these reports. Program fees may be separately identified or included in withdrawals except when paid via an invoice or through a separate account billing arrangement.

**Cash Flow**: Cash Flow analysis is based on the historical dividend, coupon and interest payments you have received as of the Record Date in connection with the securities listed and assumes that you will continue to hold the securities for the periods for which cash flows are projected. This may or may not include principal paybacks for the securities listed. These potential cash flows are subject to change due to a variety of reasons, including but not limited to, contractual provisions, changes in corporate policies, changes in the value of the underlying securities and interest rate fluctuations. The effect of a call on any security(s) and the consequential impact on its potential cash flows) is not reflected in this report. Payments that occur in the same month in which the report is generated -- but prior to the report run ("As of") date -- are not reflected in this report. In determining the potential cash flows, UBS relies on information obtained from third party services it believes to be reliable but does not independently verify or guarantee the accuracy or validity of any information provided by third parties. Cash flows for mortgage-backed, asset-backed, factored, and other pass-through securities are based on the assumptions that the current face amount, principal pay-down, interest payment and payment frequency remain constant.

Calculations may include principal payments, are intended to be an estimate of future projected interest cash flows and do not in any way guarantee accuracy.

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#### **Calculation Definitions**

Accrued Interest: In accounting, accrued interest refers to the amount of interest that has been incurred, as of a specific date, on a loan or other financial obligation but has not yet been paid out. Accrued interest can either be in the form of accrued interest revenue, for the lender, or accrued interest expense, for the borrower. The term accrued interest can also refer to the amount of bond interest that has accumulated since the last time a bond interest payment was made.

Alpha: Alpha measures the difference between an investment's actual performance, and its expected performance as indicated by the returns of a selected market index. A positive Alpha indicates the risk-adjusted performance is above that index. In calculating Alpha, Standard Deviation (total risk) is used as risk measure. Alpha is often used to judge the value added or subtracted by a manager. Annual Income is money (or some equivalent value) that an individual or business receives, usually in exchange for providing a good or service or through investing capital. Income is used to fund day-to-day expenditures. Investments, pensions, and Social Security are primary sources of income for retirees. For individuals, income is often received in the form of wages or salary. Business income can refer to a company's remaining revenues after paving all expenses and taxes. In this case, income is referred to as "earnings." Most forms of income are subject to taxation.

Appreciation/Depreciation: Appreciation or Depreciation is the change in market value minus net cash flows. The value indicates by how much the portfolio value has changed due to changes in asset values. Appreciation would be an increase, Depreciation would be a decrease.

Average Exposure: Average Exposure is generally, the average allocation to a segment or an asset. Calculated as the beginning market value plus the weighted net cash flows as a percentage of the total portfolio market value.

Beta: Beta is defined as a Manager's sensitivity to market movements and is used to evaluate market related, or systematic risk. Beta is a measure of the linear relationship, over time, of the Manager's returns and those of the Benchmark. Beta is computed by regressing the Manager's excess returns over the risk free rate (cash proxy) against the excess returns of the Benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. Thus, Betas higher than 1.0 indicate that the fund is more volatile than the market.

**Composite Benchmark:** The Composite Benchmark is a weighted average benchmark based on the allocation of funds within each of the portfolios in the composite and the risk index assigned to each portfolio. **Correlation (R):** The Correlation represents the degree to which investments move in tandem with one another and is a critical component of diversified portfolio construction. The Correlation varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). Lower Correlations enhance diversification and lead to better risk-adjusted returns within diversified portfolios. An R of less than 0.3 is often considered low Correlation.

**Cost:** This is the Cost basis information. Cost basis is the original value of an asset for tax purposes, usually the purchase price, adjusted for stock splits, dividends, and return of capital distributions. This value is used to determine the capital gain, which is equal to the difference between the asset's cost basis and the current market value.

Coupon Rate: A coupon rate is the yield paid by a fixed-income security; a fixed-income security's coupon rate is the annual coupon payments paid by the issuer relative to the bond's face or par value. The coupon rate, or coupon payment, is the yield the bond paid on its issue date. This yield changes as the value of the bond changes, thus giving the bond's face or part value. The weighted average of the assets' coupon rates.

Current Yield: This measure looks at the current price of a bond instead of its face value and represents the return an investor would expect if he or she purchased the bond and held it for a year. This measure is not an accurate reflection of the actual return that an investor will receive in all cases because bond and stock prices are constantly changing due to market factors.

**Distribution of Excess Returns:** Distribution of Excess Returns displays an arrangement of statistical data that exhibits the frequency of occurrence of the investment's returns in excess of the selected Market Index. **Distribution of Assets:** Distribution of Assets displays monthly data related to net contributions, market values, rates of return, and Index Values.

**Down Market (Mkt) Capture Ratio:** Down Market Capture Ratio is a measure of an investment's performance in down markets relative to the market itself. A down market is one in which the market's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while the market declined.

Downside Capture Return: The downside capture return is the cumulative performance of the portfolio in all periods during which the risk benchmark posted a negative return.

**Downside Probability:** The downside probability is the ratio of the number of periods during which the portfolio posted a negative return to the total number of periods under study. If, for example, during a 12 month span, the portfolio realized 5 months of negative returns, the downside probability would be equal to 5/12 or 42 percent. The sum of the downside and upside probabilities must equal 1.0. The downside probability does not consider the extent to which the portfolio will fail to exceed the target index. It merely considers the likelihood that the target will not be exceeded. It is important to bear in mind this point when comparing the downside probabilities of more than one portfolio. It is not necessarily correct, for example, to deem portfolio A riskier than portfolio B simply because A has a higher downside probability.

**Downside Risk (Semi Standard Deviation, Semi Std Dev, or Downside Deviation):**Downside Risk only identifies volatility on the down side. Downside Risk measures the variability of returns below zero, whereas Standard Deviation attributes volatility in either direction to risk. The Downside Risk method calculates the deviations below zero for each observed return. Each time a return falls below zero, the sum is divided by the number of observations and the square root is taken. This result is then shown on an annualized basis.

Dynamic Index: A weighted average blended benchmark of the risk indices assigned to each asset class, based on the asset allocation of the portfolio for a given period. The benchmark index weighting adjusts with changes to the asset allocation. A Dynamic Index should not be used when measuring against the client's/nvestment Policy Statement.

Effective Duration: A duration calculation for bonds with embedded options. Effective duration takes into account that expected cash flows will fluctuate as interest rates change.

Excess: Denotes that a statistic is being measured relative to the Market Index selected. The data set analyzed consists of the periodic differences between the investment's measure and the selected Market Index's definition. Expense Ratio: Often referred to as the Net Expense Ratio, Morningstar pulls the net annual expense ratio from the fund's audited annual report. Annual-report expense ratios reflect the actual fees charged during a particular fiscal year. The annual report expense ratio for a fund of funds is the wrap or sponsor fee only. The expense ratio expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

Gross Dollar Weighted Return: Gross Dollar Weighted Return is the internal rate of return, excluding money manager fees.

Gross Expense Ratio: Represents the total gross expenses (net expenses with waivers added back in) divided by the fund's average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund's expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Gross Time Weighted Return: Gross Time Weighted Return is the Modified Dietz return, excluding money manager fees.

Index Value: Index Value is the unit value series based on the return stream. It can be used to calculate rates of return between any two dates in the report.

Information Ratio: The Information Ratio is a measure of value added by an investment manager. It is the ratio of (annualized) excess return above the selected Market Index to (annualized) Tracking Error.

Excess return is calculated by linking the difference of the manager's return for each period minus the selected Market Index return for each period, then annualizing the result.

Investment Class: Group of financial instruments which have similar financial characteristics and which tend to behave similarly in the marketplace.

Investment Style: Method and philosophy followed by a manager when selecting financial instruments.

Management Firm: Professional organization managing various assets in order to meet specified investment goals for the benefit of its clients.

Manager Capture Ratio: The Manager Capture Ratio is manager return divided by the selected Market Index return. It shows what portion of the market performance was captured by the manager under certain market conditions: up market, down market, or both.

Market Experience: Market Experience is the presumable market value of the portfolio if it and its cash flows had grown at the policy index rate of return. It lets the reader know if active management has aided or hurt the portfolio.

Maturity Date: The maturity date is the date on which the principal amount of a note, draft, acceptance bond or other debt instrument becomes due. On this date, which is generally printed on the certificate of the instrument in question, the principal investment is repaid to the investor, while the interest payments that were regularly paid out during the life of the bond, cease to roll in. The maturity date also refers to the termination date (due date) on which an installment loan must be paid back in full.

Net Cash Flow: For the total portfolio, net cash flow is aggregate contributions minus aggregate withdrawals. At the asset class level, net cash flow is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "New Money" and "Flow".

Net Dollar Weighted Return: Net Dollar Weighted Returns is the internal rate of return, including money manager fees.

Net Time Weighted Return: Net Time Weighted Return is the Modified Dietz return, including money manager fees.

New Money: For the total portfolio, New Money is aggregate contributions minus aggregate withdrawals. At the asset class level, New Money is aggregate purchases minus aggregate sales minus aggregate income. It is used in the numerator of the Modified Dietz return calculation. It is the same as "Net Cash Flow" and "Flow".

**Par value:** Par value is the face value of a bond. The market price of a bond may be above or below par, depending on factors such as the level of interest rates and the bond's credit status. Par value for a bond is typically \$1,000 or \$100 because these are the usual denominations in which they are issued.

**Performance Attribution:** Attribution analysis is a sophisticated method for evaluating the performance of a portfolio or fund manager. Manager Contribution focuses on three factors: the manager's investment style, their specific asset selections, and the market timing of those selections. It attempts to provide a quantitative analysis of the aspects of a fund manager's investment selections and philosophy that lead to that fund's performance. Asset Allocation provides an analysis of the effects on relative performance (i.e., performance vs. an index) that are related to a portfolio's allocation between asset classes. Total Fund Attribution combines the Manager Contribution results with the impacts of Asset Allocation decisions.

Real rate of return is the annual percentage of profit earned on an investment, adjusted for inflation. Therefore, the real rate of return accurately indicates the actual purchasing power of a given amount of money over time. Adjusting the nominal return to compensate for inflation allows the investor to determine how much of a nominal return is real return. In addition to adjusting for inflation, investors also must consider the impact of other factors such as taxes and investing fees in order to calculate real returns on their money or to choose among various investing options.

Tracking error is the divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge fund, mutual fund, or exchange-traded fund (ETF) that did not work as effectively as intended, creating an unexpected profit or loss. Tracking error is reported as a standard deviation percentage difference, which reports the difference between the return an investor receives and that of the benchmark they were attempting to imitate.

Treynor ratio, also known as the reward-to-volatility ratio, is a performance metric for determining how much excess return was generated for each unit of risk taken on by a portfolio. Excess return in this sense refers to the return earned above the return that could have been earned in a risk-free investment. Although there is no true risk-free investment, treasury bills are often used to represent the risk-free return in the Treynor ratio. Risk in the Treynor ratio refers to systematic risk as measured by a portfolio's beta. Beta measures the tendency of a portfolio's return to change in response to changes in return for the overall marketUpside market Capture ratio. The Upside Capture Ratio is the ratio of the Upside Capture Return -of a portfolio against a benchmark index- divided by the Market Benchmark Index's return (from zero or positive returns). Upside Capture Return, which is measured based a related benchmark index's returns, is the portfolio's compound return for returns in periods, in which the respective benchmark index's return is above or equal to zero.

Yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate. Policy Index: A point of reference for evaluating a portfolio's investment performance. A policy Index can be comprised of single or multiple benchmarks (weighted blend). Portfolios with multiple benchmarks will be depicted with a description of benchmarks and weights that comprise the policy.

Rate of Return, ROR, Return %, ROI: All Return terms refer to the Modified Dietz return.

**Relative Risk:** Relative risk is simply the ratio of the standard deviation of the portfolio to the standard deviation of the risk index. The statistic reveals how much of the variation of the risk index is "shared" by the portfolio. A relative risk of 1.0 indicates that the portfolio has the same level of return variability as the risk index. A relative risk of less than 1.0 indicates that the portfolio has shown a lower dispersion of returns than the index. A relative risk in excess of 1.0 indicates that the portfolio returns have been more dispersed than those of the index.

**Riskless Index:** The theoretical rate of return of an investment with zero risk. The risk-free rate represents the interest an investor would expect from an absolutely risk-free investment over a specified period of time. The 3 month T-Bill is the usual index used for riskless.

**R-Squared (R2):** The diversification measure R2 indicates the percentage of volatility in portfolio returns which can be "explained" by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a managed portfolio, can be explained by, or are associated with the values of another variable, such as a Market Index. It is especially helpful in assessing how likely it is that Alpha and Beta are statistically significant. The R2 values generally range from 0.0 to 1.0. An investment with an R2 of 1.0 is perfectly correlated with the market whereas an investment with an R2 of 0.0 will behave independently of the market. An R2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market.

**Sector Allocations:** The percentage a manager has allocated to specific economic sectors.

Sharpe Ratio: The Sharpe Ratio indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

**Sortino Ratio**: The Sortino Ratio is a measure of reward per unit of risk. With Sortino, the numerator (i.e., reward) is defined as the incremental compounded average return over the minimum acceptable return (MAR). The denominator (i.e., risk) is defined as the downside deviation of the returns below the MAR. Since the downside deviation is the standard deviation of those returns which fail to exceed the MAR, the result of the Sortino Ratio is a measure of the average reward per unit of loss. As with Sharpe and Treynor, the Sortino Ratio only has value when it is used as the basis of comparison between portfolios. The higher the Sortino Ratio, the better.

Standard Deviation: A measure of the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset. Target Allocation: The Target Allocation is the allocation goal of the portfolio approaches and long- and short-term holding periods.

HFRI Relative Value: Equally weighted index of investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types. Unit Values: Unit Value links periodic rates of return, beginning with an initial value of 100. It can be used to calculate rates of return between any two dates in the report.

#### Index Definitions

JP Morgan Global Ex-U.S. Bond Index: Consists of regularly traded, fixed-rate domestic government debt instruments from 12 international bond markets. Countries included are Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden and the United Kingdom.

MSCI AC World Index ex USA: Consists of approximately 2,000 securities across 47 markets, with emerging markets representing approximately 18%. MSCI attempts to capture approximately 85% of the market capitalization in each country.

**MSCI EAFE Index (Europe, Australasia, Far East):** A free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. As of June 2007, the MSCI EAFE Index consisted of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Emerging Markets Index: A free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. As of November 2008, the MSCI Emerging Markets Index consisted of the following 24 emerging market country indexes: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

**MSCI Europe Index:** A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indexes: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

MSCI Japan Index: A free float-adjusted market capitalization-weighted index that is designed to measure the equity market performance of Japan.

NAREIT Index: Benchmarks the performance of the REIT industry since its inception in 1972. It was designed to provide a comprehensive assessment of overall industry performance. Some REITs available from over-the-counter markets are not included due to the lack of real-time pricing.

NCREIF Property Index (NPI): A quarterly time series composite total rate of return measure of investment performance of a large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

Russell 1000® Index: Measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000® Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

Russell 1000® Growth Index: Measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000® Value Index: Measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values. Russell 2000® Growth Index: Measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000® Value Index: Measures the performance of the small-cap value segment of the U.S. equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid-Cap® Growth Index: Measures the performance of the mid-cap growth segment of the U.S. equity universe. It includes those Russell mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

Russell Mid-Cap® Value Index: Measures the performance of the mid-cap value segment of the U.S. equity universe. It includes those Russell mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

S&P 500 Index: Covers 500 large cap industrial, utility, transportation, and financial companies of the US markets. The index represents about 75% of NYSE market capitalization and 30% of NYSE issues. It is a capitalization weighted index calculated on a total return basis with dividends reinvested.

TASS Index of CTAs: Is a dollar-weighted index based on historical managed futures performance of CTAs with established track records.

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<b>WBS</b>										Q2 2024
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Downgraded Bonds			VOY	A INVES	TMENT	S				
Position Description	Coupon	Stated Maturity	CUSIP	Date of Downgrade	Moody's Rating	S&P Rating	Fitch Rating	Current Face	Market Price	Market Value
NO NEW DOWNGRADE	S				1		<u> </u>			
Watch List Commentary										
<b>WBS</b>										Q2 2024
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NO NEW DOWNGRADE	S	I		 	- 		I			
See attached email commentary from manager on holding										
Ve have gathered the information contained in this report from sources we believe to be reliable; but we do not guarantee the accuracy or										

# **Templin**, Kim

From:	Woods, Hiedi <hiedi.woods@voya.com></hiedi.woods@voya.com>
Sent:	Tuesday, July 9, 2024 11:06 AM
То:	Templin, Kim
Cc:	Rouff, Lindsay; Irvine, Paul
Subject:	[External] RE: Gwinnett County Q2 Bond Downgrades

Hi Kim. We hope you are enjoying the summer. There were no downgrades for Gwinnett in 2Q24.

Kind regards, Hiedi

Hiedi Woods Assistant Vice President, Client Account Manager Voya Investment Management 600 West Broadway, 29th floor San Diego, CA 92101 Tel: 619-687-2730 hiedi.woods@voya.com

From: Templin, Kim <kim.templin@ubs.com>
Sent: Tuesday, July 9, 2024 7:45 AM
To: Irvine, Paul <Paul.Irvine@voya.com>
Cc: Rouff, Lindsay <Lindsay.Rouff@voya.com>; Woods, Hiedi <Hiedi.Woods@voya.com>
Subject: RE: Gwinnett County Q2 Bond Downgrades

Dear Voya Team,

I hope you are well. Can you please let us know if there were any bond downgrades below investment grade for Gwinnett in Q2 of 2024?

Thank you for your time.

Take Care,

Kim Tel. 404-848-8549 **Fax (855) 391-5552** Toll Free 800-233-0141 Ext. 8549

UBS Financial Services Two Alliance Center 3560 Lenox Road, Suite 2800 Atlanta, GA 30326

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# **Templin**, Kim

From:	Madeline Ciocci < Madeline.Ciocci@slcmanagement.com>
Sent:	Wednesday, July 10, 2024 12:03 PM
То:	Templin, Kim; Melissa Spadafora
Cc:	Billy Fairweather
Subject:	[External] RE: Gwinnett Bond Downgrades Q2 2024

Hi Kim,

We can confirm that there were no downgrades to below investment grade in Q2 2024 in accordance with the investment guidelines.

Let us know any questions or if you need anything else.

Best,

Madeline Ciocci Associate, Client Relationships Cell: 347-274-1345

From: Madeline Ciocci
Sent: Tuesday, July 9, 2024 12:32 PM
To: Templin, Kim <kim.templin@ubs.com>; Melissa Spadafora <Melissa.Spadafora@slcmanagement.com>
Cc: Billy Fairweather <Billy.Fairweather@slcmanagement.com>
Subject: RE: Gwinnett Bond Downgrades Q2 2024

Hi Kim,

Hope all is well with you. Confirming receipt, we will review and confirm back as soon as possible. Let us know any questions at all in the meantime.

Best,

Madeline Ciocci Associate, Client Relationships Cell: 347-274-1345

From: Templin, Kim <<u>kim.templin@ubs.com</u>>
Sent: Tuesday, July 9, 2024 10:45 AM
To: Madeline Ciocci <<u>Madeline.Ciocci@slcmanagement.com</u>>; Melissa Spadafora
<<u>Melissa.Spadafora@slcmanagement.com</u>>
Cc: Billy Fairweather <<u>Billy.Fairweather@slcmanagement.com</u>>
Subject: RE: Gwinnett Bond Downgrades Q2 2024

CAUTION This email originated from outside the organization. Please proceed only if you trust the sender.

Dear SLC Team,

## Manager Status and Watch List 2Q24

		Com						
	1 Y	'ear	3/5	Year	Cumm	ulative	Wa	tch
Manager	Crit	eria		eria		eria		st
	YES	NO	YES	NO	YES	NO	YES	NO
U.S. Equity								
TCW LCG	$\checkmark$							
Fidelity LCG Index	NA		NA		NA		NA	
Barrow Hanley LCV	$\checkmark$				$\checkmark$			
The London Company LCV								
Brown Advisors LCG	NA		NA		NA		NA	
Atlanta Capital	$\checkmark$							$\checkmark$
Invesco REIT						$\checkmark$	Repl	aced
Bahl & Gaynor								
Vaughan Nelson								
Brown Advisors MCG			NA		NA		NA	
International Equity								
1607 Capital Partners								
Global Allocation								
First Eagle								$\checkmark$
Loomis Sayles								
Fixed Income								
Voya								
SLC (Ryan Labs)								
Unconstrained Fixed Income								
РІМСО			NA		NA			NA
Hartford			NA		NA			NA
Columbia			NA		NA			NA

### Watch List

The Watch List is a mechanism used by the Investment Committee and the RPMC to express its general discomfort with or loss of confidence in an Investment Manager. Discomfort may be caused by deficiency in performance, departure of key personnel, material changes in managed assets and clients, financial instability, change in organizational or ownership structure, consultant downgrade, investment strategy or style deviation, contravention of any term or condition of the Investment Managerment Agreement or any other issue believed to undermine the RPMC's confidence in the Investment Manager.

Based on criteria that are indicators of legitimate relationship and investment performance problems, both qualitative and quantitative criteria of the Investment Manager shall be monitored on an ongoing basis.

Qualitative criteria include the Investment Manager's business, people, investment process and consultant downgrade in research rating. Non-compliance with qualitative criteria will trigger a due diligence review and may lead to a recommendation to place the Investment Manager on the Watch List or terminate the Investment Manager. Quantitative analysis of performance will focus on the following:

- One (1) year peer universe ranking in the ninetieth (90<sup>th</sup>) percentile or lower will trigger a due diligence review.
- Three (3) year and five (5) year peer universe ranking in the fiftieth (50<sup>th</sup>) percentile or lower will trigger a due diligence review and recommendation to the RPMC, which may lead to a Watch List or termination recommendation.
- Three (3) year annualized return less than ninety (90) percent of benchmark return will trigger a due diligence review.

Violations of any quantitative and qualitative criteria will trigger an automatic due diligence review, which may lead to placement on the Watch List or termination. A firm placed on the Watch List will remain on the Watch List for at least two (2) consecutive quarters. A firm may be removed from the Watch List at the discretion of the RPMC. The Watch List Policy does not limit the RPMC's ability to retain or terminate the Investment Manager. Any Investment Manager on the Watch List may be restricted from receiving additional funding by the RPMC. If the RPMC determines (with advice from the consultant) the Investment Manager is unlikely (without style drift) to meet the Investment Manager requirements, the Investment Manager may be terminated.

Gwinnett Co	ounty Public Employees Retirement System
Inves	stment Management Fee Schedule Q2 2024
	Large Cap Growth
Brown Advisory Large Cap Sustainable Growth	0.60% on the first \$25.0M 0.50% on the next \$25.0M 0.40% on any amount greater than \$50.0M
Fidelity Large Cap Growth Index (FSPGX)	0.04% Expense Ratio
TCW Institutional	0.55% on 25mm and >
	Large Cap Value
Barrow Hanley	0.75% of First \$10.0M 0.50% of Next \$15.0M 0.25% of Next \$175.0M
The London Company	0.60% of First \$20.0 M 0.50% of Next \$20.0 M 0.45% of Next \$20.0 M 0.40% Thereafter
	Mid Cap Core
Bahl Gaynor	0.43% Flat
	Mid Cap Growth
Brown Advisory Mid-Cap Growth	0.55% of First \$20.0 M 0.45% on all > \$20.0 M
	Mid Cap Value
Vaughan Nelson	0.65% of First \$50.0 M 0.50% of Next \$50.0 M
	Small Cap Blend
Atlanta Capital	0.80% of First \$50.0 M 0.50% of Next \$50.0 M
	REITS
Invesco Real Estate (Voted to terminate 5/8/24) Cohen & Steers (Hired)	0.55% of First \$100.0 M 0.50% on all > \$100.0 M
	Continued

Fee Schedule       Q2 2024         end       of         of First \$100.0 M       of Next \$150.0 M         on 250.0 M or >       on 250.0 M or >         Expense Ratio       Expense Ratio         Expense Ratio       Expense Ratio
of Next \$150.0 M on 250.0 M or > Expense Ratio Expense Ratio ed Managers Expense Ratio Expense Ratio Expense Ratio
Expense Ratio Expense Ratio ed Managers Expense Ratio Expense Ratio
Expense Ratio ed Managers Expense Ratio Expense Ratio
Expense Ratio Expense Ratio
Expense Ratio
rmediate
of First \$50.0 M of Next \$50.0 M of Next \$400.0 M
of First \$10.0 M of Next \$10,0 M of Next \$15.0 M of Next \$15.0 M % of Next \$50.0 M of Next \$200.0 M



# Quarterly Investment Review Gwinnett County Retirement Plans Combine

07/15/2024

Data as of 06/30/2024



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### **Active Evaluation Criteria**

- 1 Manager Tenure (MGR) > 3 years
- 2 Total Net Assets (ASSETS) > \$500 Mil
- **3** 3 year Excess Performance (3 YR EXCESS) > 0%
- **4** 5 year Excess Performance (5 YR EXCESS) > 0%
- **5** 3 year Annualized Return vs. peers (3 YR PEER) in top 50%
- **6** 5 year Annualized Return vs. peers (5 YR PEER) in top 50%
- 7 Net Expense Ratio vs. peers (NET EXP PEER) in top 50%

### **Passive Evaluation Criteria**

- **1** Manager Tenure (MGR) > 3 years
- 2 Total Net Assets (ASSETS) > \$500 Mil
- **3** 3 year Tracking Error vs. peers (3 YR TRACK ERR PEER) in top 25%
- 4 Net Expense Ratio vs. peers (NET EXP PEER) in top 25%

(1) Fund was re-categorized following UBS assessment of investment style.

(2) This investment or strategy is not available through UBS. Please see "Investment Eligibility" and "Non-Program Investments Displayed in this Report" sections of the "Important Information About this Report" section for details.

(3) Since your last Report, this investment option has been removed from the UBS fund eligibility list and is no longer available through UBS Criteria and Weighting Factors were defined by the plan sponsor. Refer to the Definitions section for definitions. Scoring Methodologies can be found in the "Important Information About This Report" section.



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ACTIVE FUNDS CATEGORY	INVESTMENT	SC	ORE	FUND QTRS			CI	RITERIA (1 -	7)		
		Q1	Q2	ACTION ON				·	,		
		24	24	WATCH	MGR	ASSETS	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP Peer
Large Value	Columbia Dividend Income Inst3 - CDDYX	7	7		Σ	¥ ●		<u>ت</u> م	m	in 🔴	
Large Growth	American Funds Growth Fund of Amer R6 - RGAGX	3	3		٠	٠	0	0	0	0	٠
Large Growth	Fidelity Contrafund - FCNTX	6	5		٠	٠	0	0	٠	٠	٠
Mid-Cap Value	American Century Mid Cap Value R6 - AMDVX	3	4		۲	٠	٠	0	0	0	٠
Mid-Cap Growth	Carillon Eagle Mid Cap Growth R6 - HRAUX	6	5		۲	۲	0	0	٠	٠	•
Small Value	Columbia Small Cap Value II Inst3 - CRRYX	5	5		0	۲	٠	۲	0	٠	٠
Small Growth	Franklin Small Cap Growth R6 - FSMLX	6	5		۲	۲	0	۲	0	٠	٠
Foreign Large Growth	American Funds Europacific Growth R6 - RERGX	6	7		۲	٠	٠	۲	٠	٠	•
Diversified Emerging Mkts	DFA Emerging Markets Core Equity I - DFCEX	7	7		٠	٠	٠	۲	٠	٠	٠
Intermediate Core-Plus Bond	Victory Income R6 - URIFX	7	7		٠	٠	٠	٠	٠	٠	٠
High Yield Bond	Fidelity Advisor High Income Advtg I - FAHCX	6	6		۲	۲	٠	۲	٠	٠	0
Target Date 2015	American Funds 2015 Trgt Date Retire R6 - RFJTX	7	7		٠	۲	٠	۲	٠	٠	٠
Target Date 2020	American Funds 2020 Trgt Date Retire R6 - RRCTX	7	7		۲	٠	٠	۲	٠	٠	٠
Target Date 2025	American Funds 2025 Trgt Date Retire R6 - RFDTX	7	7		۲	۲	٠	۲	٠	٠	٠
Target Date 2030	American Funds 2030 Trgt Date Retire R6 - RFETX	7	7		٠	٠	٠	٠	٠	٠	٠
Target Date 2035	American Funds 2035 Trgt Date Retire R6 - RFFTX	7	7		٠	٠	٠	٠	٠	٠	٠
Target Date 2040	American Funds 2040 Trgt Date Retire R6 - RFGTX	7	7		۲	۲	٠	۲	٠	٠	٠

Score and Criteria Legend: Meets Does Not Meet O

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ACTIVE FUNDS CATEGORY	INVESTMENT	SCORE		FUND QTRS							
		Q1 24	Q2 24	ACTION ON WATCH	MGR	ASSETS	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER
Target Date 2045	American Funds 2045 Trgt Date Retire R6 - RFHTX	6	6		٠	٠	0	٠	۲	٠	٠
Target Date 2050	American Funds 2050 Trgt Date Retire R6 - RFITX	6	6		٠	٠	0	٠	٠	٠	•
Target Date 2055	American Funds 2055 Trgt Date Retire R6 - RFKTX	6	6		٠	٠	0	٠	۲	٠	•
Target-Date 2060	American Funds 2060 Trgt Date Retire R6 - RFUTX	6	6		٠	٠	0	٠	۲	٠	•
Target-Date 2065+	American Funds 2065 Trgt Date Retire R6 - RFVTX	4	4		٠	٠	0	-	٠	-	٠

Score and Criteria Legend: Meets O Does Not Meet

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PASSIVE FUNDS CATEGORY	INVESTMENT	SCORE		FUND QTRS		CRITERIA (1 - 4)			
		Q1 24	Q2 24	ACTION ON WATCH	MGR	ASSETS	3 YR TRACK ERR PEER	NET EXP PEER	
Large Blend	BlackRock Equity Index Fund CL R - F00000XDJK	-	-		-	-	-	-	
Foreign Large Blend	Vanguard Total Intl Stock Index Admiral - VTIAX	4	4		•	•	٠	٠	
Intermediate Core Bond	Vanguard Total Bond Market Index Adm - VBTLX	4	4		•	٠	•	۲	

Score and Criteria Legend: Meets Does Not Meet O

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IVESTMENT	MGR	ASSETS (000,000)	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 7
ge Value								
Columbia Dividend Income Inst3 - CDDYX	13.26	\$39,982	2.03	2.24	7.56	11.25	0.55	7
Peer Rank Percentile	-	-	-	-	31	24	21	-
Russell 1000 Value TR USD	-	-	0.00	0.00	5.52	9.01	-	-
Peer Group Median (50th Percentile)	9.35	\$755	1.03	0.74	6.55	9.75	0.80	-
ge Growth								
American Funds Growth Fund of Amer R6 - RGAGX	30.68	\$281,238	-4.86	-4.25	6.42	15.09	0.30	3
Peer Rank Percentile	-	-	-	-	56	55	7	-
Fidelity Contrafund - FCNTX	33.81	\$143,289	-0.37	-1.96	10.92	17.38	0.39	5
Peer Rank Percentile	-	-	-	-	8	22	9	-
Russell 1000 Growth TR USD	-	-	0.00	0.00	11.28	19.34	-	-
Peer Group Median (50th Percentile)	10.34	\$1,391	-4.33	-3.98	6.95	15.36	0.85	-
-Cap Value								
American Century Mid Cap Value R6 - AMDVX	20.26	\$8,270	0.63	-0.39	4.29	8.11	0.63	4
Peer Rank Percentile	-	-	-	-	63	61	17	-
Russell Mid Cap Value TR USD	-	-	0.00	0.00	3.65	8.49	-	-
Peer Group Median (50th Percentile)	11.17	\$749	1.56	0.21	5.22	8.71	0.90	-
-Cap Growth								
Carillon Eagle Mid Cap Growth R6 - HRAUX	18.50	\$6,288	-1.18	-0.74	-1.26	9.18	0.64	5
Peer Rank Percentile	-	-	-	-	41	42	10	-
Russell Mid Cap Growth TR USD	-	-	0.00	0.00	-0.08	9.93	-	-
Peer Group Median (50th Percentile)	11.67	\$1,074	-1.88	-1.20	-1.96	8.73	1.00	-
all Value								
Columbia Small Cap Value II Inst3 - CRRYX	0.64	\$1,118	2.79	2.26	2.26	9.34	0.80	5
Peer Rank Percentile	-	-	-	-	58	33	17	-
Russell 2000 Value TR USD	-	-	0.00	0.00	-0.53	7.07	-	-
Peer Group Median (50th Percentile)	10.50	\$391	3.08	1.51	2.55	8.58	1.05	-

Criteria Legend:

Meets Criteria **Does Not Meet Criteria** 

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VESTMENT	MGR	ASSETS (000,000)	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 7
ll Growth								
Franklin Small Cap Growth R6 - FSMLX	24.18	\$2,747	-0.35	1.16	-5.21	7.33	0.67	5
Peer Rank Percentile	-	-	-	-	62	40	7	-
Russell 2000 Growth TR USD	-	-	0.00	0.00	-4.86	6.17	-	-
Peer Group Median (50th Percentile)	12.46	\$554	1.08	0.62	-3.78	6.79	1.10	-
ign Large Growth								
American Funds Europacific Growth R6 - RERGX	23.10	\$136,340	0.16	0.57	-2.46	6.05	0.47	7
Peer Rank Percentile	-	-	-	-	50	48	7	-
MSCI ACWI Ex USA Growth NR USD	-	-	0.00	0.00	-2.62	5.49	-	-
Peer Group Median (50th Percentile)	11.12	\$1,168	0.16	0.39	-2.46	5.87	0.92	-
rsified Emerging Mkts								
DFA Emerging Markets Core Equity I - DFCEX	14.35	\$27,767	4.61	2.80	-0.46	5.90	0.39	7
Peer Rank Percentile	-	-	-	-	14	21	9	-
MSCI EM NR USD	-	-	0.00	0.00	-5.07	3.10	-	-
Peer Group Median (50th Percentile)	8.50	\$387	-0.48	0.16	-5.55	3.25	1.09	-
rmediate Core-Plus Bond								
Victory Income R6 - URIFX	10.59	\$4,477	0.96	1.29	-2.06	1.06	0.49	7
Peer Rank Percentile	-	-	-	-	13	9	31	-
Bloomberg US Agg Bond TR USD	-	-	0.00	0.00	-3.02	-0.23	-	-
Peer Group Median (50th Percentile)	9.68	\$1,223	-0.02	0.32	-3.04	0.09	0.64	-
n Yield Bond								
Fidelity Advisor High Income Advtg I - FAHCX	4.75	\$2,283	1.56	2.56	3.20	6.29	0.94	6
Peer Rank Percentile	-	-	-	-	10	1	64	-
ICE BofA US High Yield TR USD	-	-	0.00	0.00	1.65	3.73	-	-
Peer Group Median (50th Percentile)	9.66	\$517	-0.17	-0.34	1.48	3.39	0.77	-

Criteria Legend:

Meets Criteria **Does Not Meet Criteria** 

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NVESTMENT	MGR	ASSETS (000,000)	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 7
rget Date 2015								
American Funds 2015 Trgt Date Retire R6 - RFJTX	12.50	\$4,966	0.50	0.50	2.02	5.43	0.30	7
Peer Rank Percentile	-	-	-	-	1	8	17	-
S&P Target Date 2015 TR USD	-	-	0.00	0.00	1.52	4.93	-	-
Peer Group Median (50th Percentile)	10.65	\$217	-0.77	-0.33	0.75	4.60	0.51	-
rget Date 2020								
American Funds 2020 Trgt Date Retire R6 - RRCTX	12.50	\$15,763	0.35	0.53	2.19	5.81	0.31	7
Peer Rank Percentile	-	-	-	-	1	8	17	-
S&P Target Date 2020 TR USD	-	-	0.00	0.00	1.83	5.28	-	-
Peer Group Median (50th Percentile)	11.01	\$523	-1.09	-0.24	0.74	5.04	0.54	-
rget Date 2025								
American Funds 2025 Trgt Date Retire R6 - RFDTX	12.50	\$33,152	0.13	0.53	2.24	6.60	0.32	7
Peer Rank Percentile	-	-	-	-	5	4	14	-
S&P Target Date 2025 TR USD	-	-	0.00	0.00	2.11	6.07	-	-
Peer Group Median (50th Percentile)	10.65	\$520	-1.15	-0.57	0.96	5.50	0.59	-
rget Date 2030								
American Funds 2030 Trgt Date Retire R6 - RFETX	12.50	\$47,673	0.08	0.60	2.86	7.64	0.33	7
Peer Rank Percentile	-	-	-	-	7	4	15	-
S&P Target Date 2030 TR USD	-	-	0.00	0.00	2.78	7.04	-	-
Peer Group Median (50th Percentile)	9.76	\$830	-1.20	-0.53	1.59	6.50	0.60	-
rget Date 2035								
American Funds 2035 Trgt Date Retire R6 - RFFTX	12.50	\$45,930	0.04	0.98	3.52	9.07	0.35	7
Peer Rank Percentile	-	-	-	-	10	1	17	-
S&P Target Date 2035 TR USD	-	-	0.00	0.00	3.49	8.09	-	-
Peer Group Median (50th Percentile)	10.17	\$696	-1.11	-0.46	2.38	7.63	0.60	-

Criteria Legend:

Meets Criteria **Does Not Meet Criteria** 

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NVESTMENT	MGR	ASSETS (000,000)	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 7
rget Date 2040								
American Funds 2040 Trgt Date Retire R6 - RFGTX	12.50	\$42,081	0.07	1.11	4.24	10.03	0.37	7
Peer Rank Percentile	-	-	-	-	10	3	18	-
S&P Target Date 2040 TR USD	-	-	0.00	0.00	4.17	8.93	-	-
Peer Group Median (50th Percentile)	10.65	\$793	-0.99	-0.37	3.18	8.55	0.63	-
irget Date 2045								
American Funds 2045 Trgt Date Retire R6 - RFHTX	12.50	\$35,150	-0.28	0.80	4.33	10.24	0.37	6
Peer Rank Percentile	-	-	-	-	15	5	18	-
S&P Target Date 2045 TR USD	-	-	0.00	0.00	4.62	9.44	-	-
Peer Group Median (50th Percentile)	10.41	\$620	-0.95	-0.21	3.67	9.23	0.63	-
irget Date 2050								
American Funds 2050 Trgt Date Retire R6 - RFITX	12.50	\$31,536	-0.59	0.58	4.27	10.30	0.38	6
Peer Rank Percentile	-	-	-	-	27	4	18	-
S&P Target Date 2050 TR USD	-	-	0.00	0.00	4.86	9.72	-	-
Peer Group Median (50th Percentile)	10.65	\$573	-1.09	-0.29	3.77	9.43	0.63	-
irget Date 2055								
American Funds 2055 Trgt Date Retire R6 - RFKTX	12.50	\$21,982	-0.65	0.52	4.23	10.30	0.38	6
Peer Rank Percentile	-	-	-	-	33	9	18	-
S&P Target Date 2055 TR USD	-	-	0.00	0.00	4.88	9.78	-	-
Peer Group Median (50th Percentile)	9.76	\$401	-1.06	-0.29	3.81	9.49	0.65	-
rget-Date 2060								
American Funds 2060 Trgt Date Retire R6 - RFUTX	9.27	\$12,985	-0.69	0.46	4.20	10.27	0.39	6
Peer Rank Percentile	-	-	-	-	35	15	18	-
S&P Target Date 2060+ TR USD	-	-	0.00	0.00	4.89	9.81	-	-
Peer Group Median (50th Percentile)	7.63	\$226	-1.06	-0.32	3.83	9.49	0.64	-

Criteria Legend:

Meets Criteria **Does Not Meet Criteria** 

"\*" = data is missing for one or more criteria (see Executive Summary for detailed criteria). Refer to the Definitions section for definitions of all criteria.

Refer to the Executive Summary section for a list of criteria and criteria abbreviations utilized for this plan.



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	MGR	ASSETS (000,000)	3 YR EXCESS	5 YR EXCESS	3 YR PEER	5 YR PEER	NET EXP PEER	SCORE OF 7
Target-Date 2065+ American Funds 2065 Trgt Date Retire R6 - RFVTX	4.50	\$3,043	-0.68	-	4.21	-	0.39	4
Peer Rank Percentile	-	-	-	-	37	-	18	-
S&P Target Date 2060+ TR USD	-	-	0.00	0.00	4.89	9.81	-	-
Peer Group Median (50th Percentile)	3.75	\$30	-1.05	-0.15	3.84	9.66	0.64	-

Criteria Legend:

Meets Criteria Does Not Meet Criteria

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#### PASSIVE

INVESTMENT	MGR	ASSETS (000,000)	3 YR TRACK ERR PEER	NET EXP PEER	SCORE OF 4
Large Blend					
BlackRock Equity Index Fund CL R - F00000XDJK	-	-	-	-	-
Peer Rank Percentile	-	-	-	-	-
No Benchmark	-	-	-	-	-
Peer Group Median (50th Percentile)	8.55	\$1,112	2.98	0.71	-
Foreign Large Blend					
Vanguard Total Intl Stock Index Admiral - VTIAX	15.91	\$429,040	2.47	0.12	4
Peer Rank Percentile	-	-	9	7	-
FTSE Global All Cap ex US (USA) NR USD	-	-	-	-	-
Peer Group Median (50th Percentile)	8.16	\$737	3.85	0.89	-
Intermediate Core Bond					
Vanguard Total Bond Market Index Adm - VBTLX	11.36	\$320,057	0.20	0.05	4
Peer Rank Percentile	-	-	3	8	-
Bloomberg US Agg Float Adj TR USD	-	-	-	-	-
Peer Group Median (50th Percentile)	10.50	\$1,068	0.72	0.49	-

Criteria Legend:

Meets Criteria Does Not Meet Criteria

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### **Related to the subsequent Performance Summary pages in this report:**

Performance data for periods greater than one year are annualized returns. The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate thus an investor's shares, when redeemed, will be worth more or less than their original cost. Current performance can be lower or higher than return data quoted herein.

Standardized Returns assume reinvestment of dividends and capital gains. It depicts performance without adjusting for the effects of taxation or any applicable maximum sales charges but are adjusted to reflect ongoing fund expenses. If adjusted for taxation or maximum sales charges, the performance quoted would be significantly reduced. For variable annuities (if applicable), additional expenses will be taken in account, including M&E risk charges, fund-level expenses such as management fees and operating fees, and contract level administration fees charges as surrender, contract and sales charges.

In some cases multiple benchmarks may be displayed in order to assist you in reviewing the results of the fund. Secondary benchmarks will be italicized if included.

For performance data current to the most recent month-end please visit http://advisor.morningstar.com/familyinfo.asp

Performance is presented after deduction of fund management fees and certain other expenses associated with the Funds. However, performance is shown gross of the deduction of Investment Advisory fees. The payment of these fees will reduce the plan's overall performance and will have a cumulative effect over time. The net effect of the deduction of advisory fees on annualized performance, and the compounded or cumulative effect over time, is determined by the amount of the fee and the plan's investment performance. For example, for a plan in the RPCS Program that experiences an annual gross performance of 10% but incurs a 2% annual fee that is deducted guarterly on a prorated basis, the plan will experience net annual performance of approximately 7.98% per year, a reduction of 2.02% per year. Compounding will similarly affect the plan's overall performance on a cumulative basis. Actual performance will be lower or higher than the results shown.

Please see the fund prospectus which includes investment objectives, risks, fees, expense, and other information that you should read and consider carefully before investing. To obtain a prospectus and most recent performance, contact your financial advisor or the fund company at the website shown in the "Fund Fact Sheets" section of this report.

(1) Fund was re-categorized following UBS assessment of investment style. (2) Results shown for periods of time prior to INCEPTION DATE include pre-Inception Returns. Note however that SI ("Since Inception Returns") always reflect results for the actual share class and thus do not include pre-Inception Returns. Please see the Important Information About This Report section for details. See the Important Information About This Report section for definitions of Fund Score and the Scoring Process. Values in () following performance represent Peer Group Percentile Rank.



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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
.arge Value												
Columbia Dividend Income Inst3 - CDDYX <sup>2</sup>	\$10,378,833	-0.51 (26)	7.87 (43)	14.69 (49)	7.56 (31)	11.25 (24)	10.84 (4)	12.49	08-Nov-2012	0.55	0.55	7
Russell 1000 Value TR USD		-2.17	6.62	13.06	5.52	9.01	8.23	-	-	-	-	-
Peer Group Median (50th Percentile)		-1.50	7.31	14.56	6.55	9.75	8.36	-	-	0.91	0.80	-
Number of Funds in Peer Group		1212	1207	1181	1121	1081	973	-	-	-	-	-
arge Growth												
American Funds Growth Fund of Amer R6 - RGAGX <sup>2</sup>	\$48,349,341	3.86 (68)	16.98 (61)	30.66 (51)	6.42 (56)	15.09 (55)	13.30 (60)	14.92	01-May-2009	0.30	0.30	3
Fidelity Contrafund - FCNTX	\$85,422,295	6.48 (43)	25.63 (5)	39.83 (5)	10.92 (8)	17.38 (22)	14.93 (25)	12.96	17-May-1967	0.39	0.39	5
Russell 1000 Growth TR USD		8.33	20.70	33.48	11.28	19.34	16.33	-	-	-	-	-
Peer Group Median (50th Percentile)		5.74	18.91	30.70	6.95	15.36	13.75	-	-	0.95	0.85	-
Number of Funds in Peer Group		1185	1183	1171	1118	1075	970	-	-	-	-	-
/id-Cap Value												
American Century Mid Cap Value R6 - AMDVX <sup>2</sup>	\$10,979,843	-3.68 (42)	0.99 (81)	4.50 (93)	4.29 (63)	8.11 (61)	8.12 (23)	9.11	26-Jul-2013	0.63	0.63	4
Russell Mid Cap Value TR USD		-3.40	4.54	11.98	3.65	8.49	7.60	-	-	-	-	-
Peer Group Median (50th Percentile)		-3.95	3.79	11.50	5.22	8.71	7.30	-	-	0.99	0.90	-
Number of Funds in Peer Group		399	399	395	385	379	341	-	-	-	-	-
/id-Cap Growth												
Carillon Eagle Mid Cap Growth R6 - HRAUX <sup>2</sup>	\$25,870,355	-4.99 (70)	4.08 (59)	10.39 (59)	-1.26 (41)	9.18 (42)	10.66 (22)	12.64	15-Aug-2011	0.64	0.64	5
Russell Mid Cap Growth TR USD		-3.21	5.98	15.05	-0.08	9.93	10.51	-	-	-	-	-
Peer Group Median (50th Percentile)		-3.74	5.25	11.48	-1.96	8.73	9.60	-	-	1.06	1.00	-
Number of Funds in Peer Group		536	534	533	524	496	457	-	-	-	-	-

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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
mall Value												
Columbia Small Cap Value II Inst3 - CRRYX <sup>2</sup>	\$5,302,321	-2.37 (21)	2.32 (26)	11.11 (47)	2.26 (58)	9.34 (33)	7.18 (33)	10.47	08-Nov-2012	0.88	0.80	5
Russell 2000 Value TR USD		-3.64	-0.85	10.90	-0.53	7.07	6.23	-	-	-	-	-
Peer Group Median (50th Percentile)		-3.74	0.89	10.93	2.55	8.58	6.61	-	-	1.20	1.05	-
Number of Funds in Peer Group		492	491	486	465	445	402	-	-	-	-	-
mall Growth												
Franklin Small Cap Growth R6 - FSMLX <sup>2</sup>	\$10,317,381	-3.78 (69)	3.22 (66)	14.75 (17)	-5.21 (62)	7.33 (40)	8.00 (56)	10.90	01-May-2013	0.69	0.67	5
Russell 2000 Growth TR USD		-2.92	4.44	9.14	-4.86	6.17	7.39	-	-	-	-	-
Peer Group Median (50th Percentile)		-2.52	4.84	9.18	-3.78	6.79	8.19	-	-	1.20	1.10	-
Number of Funds in Peer Group		582	581	581	563	544	517	-	-	-	-	-
oreign Large Growth												
American Funds Europacific Growth R6 - RERGX <sup>2</sup>	\$5,219,811	-0.23 (49)	7.19 (34)	10.82 (36)	-2.46 (50)	6.05 (48)	5.25 (44)	8.06	01-May-2009	0.47	0.47	7
MSCI ACWI Ex USA Growth NR USD		0.72	6.68	9.88	-2.62	5.49	4.74	-	-	-	-	-
Peer Group Median (50th Percentile)		-0.26	6.03	8.94	-2.46	5.87	5.07	-	-	1.02	0.92	-
Number of Funds in Peer Group		407	405	403	393	368	306	-	-	-	-	-
iversified Emerging Mkts												
DFA Emerging Markets Core Equity I - DFCEX	\$2,906,642	5.57 (24)	8.09 (42)	14.82 (29)	-0.46 (14)	5.90 (21)	4.07 (23)	7.03	05-Apr-2005	0.39	0.39	7
MSCI EM NR USD		5.00	7.49	12.55	-5.07	3.10	2.79	-	-	-	-	-
Peer Group Median (50th Percentile)		4.15	7.28	11.75	-5.55	3.25	2.69	-	-	1.32	1.09	-
Number of Funds in Peer Group		815	813	806	728	673	525	-	-	-	-	-

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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Intermediate Core-Plus Bond												
Victory Income R6 - URIFX <sup>2</sup>	\$1,231,648	0.37 (35)	0.84 (13)	5.32 (11)	-2.06 (13)	1.06 (9)	2.30 (7)	2.41	01-Dec-2016	0.74	0.49	7
Bloomberg US Agg Bond TR USD		0.07	-0.71	2.63	-3.02	-0.23	1.35	-	-	-	-	-
Peer Group Median (50th Percentile)		0.28	-0.01	3.66	-3.04	0.09	1.47	-	-	0.76	0.64	-
Number of Funds in Peer Group		645	642	627	573	550	463	-	-	-	-	-
High Yield Bond												
Fidelity Advisor High Income Advtg I - FAHCX <sup>2</sup>	\$3,524,275	1.32 (36)	5.56 (1)	12.48 (5)	3.20 (10)	6.29 (1)	5.80 (1)	7.39	03-Jul-1995	0.94	0.94	6
ICE BofA US High Yield TR USD		1.09	2.62	10.45	1.65	3.73	4.21	-	-	-	-	-
Peer Group Median (50th Percentile)		1.19	2.76	9.80	1.48	3.39	3.54	-	-	0.92	0.77	-
Number of Funds in Peer Group		668	668	663	613	590	523	-	-	-	-	-
Target Date 2015												
American Funds 2015 Trgt Date Retire R6 - RFJTX <sup>2</sup>	\$4,961,349	0.90 (53)	3.94 (30)	9.44 (17)	2.02 (1)	5.43 (8)	5.24 (5)	7.71	13-Jul-2009	0.30	0.30	7
S&P Target Date 2015 TR USD		1.19	3.93	8.93	1.52	4.93	4.85	-	-	-	-	-
Peer Group Median (50th Percentile)		0.90	3.62	8.48	0.75	4.60	4.71	-	-	0.63	0.51	-
Number of Funds in Peer Group		113	113	113	103	98	69	-	-	-	-	-
Target Date 2020												
American Funds 2020 Trgt Date Retire R6 - RRCTX <sup>2</sup>	\$10,212,147	0.97 (56)	4.37 (43)	10.16 (14)	2.19 (1)	5.81 (8)	5.66 (5)	8.35	13-Jul-2009	0.31	0.31	7
S&P Target Date 2020 TR USD		1.28	4.52	9.84	1.83	5.28	5.22	-	-	-	-	-
Peer Group Median (50th Percentile)		0.98	4.27	9.28	0.74	5.04	4.92	-	-	0.67	0.54	-
Number of Funds in Peer Group		146	146	146	136	131	93	-	-	-	-	-

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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target Date 2025												
American Funds 2025 Trgt Date Retire R6 - RFDTX <sup>2</sup>	\$35,884,828	0.99 (58)	4.85 (48)	10.82 (24)	2.24 (5)	6.60 (4)	6.33 (3)	9.33	13-Jul-2009	0.32	0.32	7
S&P Target Date 2025 TR USD		1.31	4.79	10.29	2.11	6.07	5.80	-	-	-	-	-
Peer Group Median (50th Percentile)		1.04	4.80	10.18	0.96	5.50	5.28	-	-	0.72	0.59	-
Number of Funds in Peer Group		210	208	207	197	180	145	-	-	-	-	-
Target Date 2030												
American Funds 2030 Trgt Date Retire R6 - RFETX <sup>2</sup>	\$55,312,864	1.18 (48)	6.04 (37)	12.71 (15)	2.86 (7)	7.64 (4)	7.27 (1)	10.20	13-Jul-2009	0.33	0.33	7
S&P Target Date 2030 TR USD		1.43	5.75	11.85	2.78	7.04	6.46	-	-	-	-	-
Peer Group Median (50th Percentile)		1.15	5.84	11.68	1.59	6.50	6.10	-	-	0.79	0.60	-
Number of Funds in Peer Group		211	211	210	199	176	138	-	-	-	-	-
Target Date 2035												
American Funds 2035 Trgt Date Retire R6 - RFFTX <sup>2</sup>	\$70,082,074	1.39 (49)	7.48 (28)	14.85 (15)	3.52 (10)	9.07 (1)	8.30 (1)	10.93	13-Jul-2009	0.35	0.35	7
S&P Target Date 2035 TR USD		1.58	6.89	13.55	3.49	8.09	7.16	-	-	-	-	-
Peer Group Median (50th Percentile)		1.38	7.07	13.48	2.38	7.63	6.84	-	-	0.78	0.60	-
Number of Funds in Peer Group		207	207	206	191	175	140	-	-	-	-	-
Target Date 2040												
American Funds 2040 Trgt Date Retire R6 - RFGTX <sup>2</sup>	\$74,210,850	1.66 (45)	8.99 (23)	17.04 (11)	4.24 (10)	10.03 (3)	8.88 (1)	10.82	27-Jul-2009	0.37	0.37	7
S&P Target Date 2040 TR USD		1.77	7.90	15.05	4.17	8.93	7.69	-	-	-	-	-
Peer Group Median (50th Percentile)		1.58	8.41	15.24	3.18	8.55	7.44	-	-	0.84	0.63	-
Number of Funds in Peer Group		205	205	204	194	176	138	-	-	-	-	-

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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target Date 2045												
American Funds 2045 Trgt Date Retire R6 - RFHTX <sup>2</sup>	\$73,414,937	1.71 (50)	9.33 (41)	17.60 (16)	4.33 (15)	10.24 (5)	9.06 (1)	11.50	13-Jul-2009	0.37	0.37	6
S&P Target Date 2045 TR USD		1.83	8.51	15.94	4.62	9.44	8.02	-	-	-	-	-
Peer Group Median (50th Percentile)		1.70	9.19	16.38	3.67	9.23	7.82	-	-	0.86	0.63	-
Number of Funds in Peer Group		202	202	201	191	175	140	-	-	-	-	-
Target Date 2050												
American Funds 2050 Trgt Date Retire R6 - RFITX <sup>2</sup>	\$76,322,708	1.73 (51)	9.55 (44)	18.00 (17)	4.27 (27)	10.30 (4)	9.13 (1)	11.55	13-Jul-2009	0.38	0.38	6
S&P Target Date 2050 TR USD		1.95	8.90	16.50	4.86	9.72	8.22	-	-	-	-	-
Peer Group Median (50th Percentile)		1.74	9.44	16.84	3.77	9.43	7.95	-	-	0.87	0.63	-
Number of Funds in Peer Group		203	203	202	192	176	138	-	-	-	-	-
Target Date 2055												
American Funds 2055 Trgt Date Retire R6 - RFKTX	\$54,540,506	1.80 (48)	9.81 (34)	18.32 (14)	4.23 (33)	10.30 (9)	9.11 (1)	10.56	01-Feb-2010	0.38	0.38	6
S&P Target Date 2055 TR USD		1.95	8.92	16.53	4.88	9.78	8.28	-	-	-	-	-
Peer Group Median (50th Percentile)		1.79	9.60	17.09	3.81	9.49	7.96	-	-	0.90	0.65	-
Number of Funds in Peer Group		202	202	201	191	175	134	-	-	-	-	-
Target-Date 2060												
American Funds 2060 Trgt Date Retire R6 - RFUTX <sup>2</sup>	\$35,410,476	1.79 (49)	9.80 (38)	18.43 (14)	4.20 (35)	10.27 (15)	- (-)	9.49	27-Mar-2015	0.39	0.39	6
S&P Target Date 2060+ TR USD		1.95	8.93	16.55	4.89	9.81	8.33	-	-	-	-	-
Peer Group Median (50th Percentile)		1.75	9.61	17.11	3.83	9.49	8.12	-	-	0.93	0.64	-
Number of Funds in Peer Group		201	201	200	190	167	15	-	-	-	-	-

(1) Fund was re-categorized following UBS assessment of investment style.
 (2) Results shown for periods of time prior to INCEPTION DATE include pre-Inception Returns. Note however that SI ("Since Inception Returns") always reflect results for the actual share class and thus do not include pre-Inception Returns. Please see the Important Information About This Report section for details.
 See the Important Information About This Report section of Process.
 Values in () following performance represent Peer Group Percentile Rank.



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INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Target-Date 2065+												
American Funds 2065 Trgt Date Retire R6 - RFVTX <sup>2</sup>	\$10,780,694	1.85 (45)	9.85 (35)	18.44 (12)	4.21 (37)	- (-)	- (-)	15.57	27-Mar-2020	0.39	0.39	4
S&P Target Date 2060+ TR USD		1.95	8.93	16.55	4.89	9.81	8.33	-	-	-	-	-
Peer Group Median (50th Percentile)		1.80	9.63	17.08	3.84	9.66	-	-	-	1.18	0.64	-
Number of Funds in Peer Group		196	196	195	139	31	0	-	-	-	-	-

(1) Fund was re-categorized following UBS assessment of investment style.
 (2) Results shown for periods of time prior to INCEPTION DATE include pre-Inception Returns. Note however that SI ("Since Inception Returns") always reflect results for the actual share class and thus do not include pre-Inception Returns. Please see the Important Information About This Report section for details.
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### PASSIVE FUND ASSETS - \$58,660,380

INVESTMENT	ASSETS	LAST QTR	YTD	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	SI	INCEPTION DATE	GROSS EXP	NET EXP	SCORE
Large Blend												
BlackRock Equity Index Fund CL R - F00000XDJK	\$46,722,438	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	-	-	-	-	-
No Benchmark		-	-	-	-	-	-	-	-	-	-	-
Russell 1000 TR USD		3.57	14.24	23.88	8.74	14.61	12.51	-	-	-	-	-
Peer Group Median (50th Percentile)		3.17	14.15	23.21	8.54	13.84	11.47	-	-	0.79	0.71	-
Number of Funds in Peer Group		1476	1462	1427	1322	1236	1056	-	-	-	-	-
Foreign Large Blend												
Vanguard Total Intl Stock Index Admiral - VTIAX <sup>2</sup>	\$5,962,163	0.80 (36)	5.13 (61)	10.96 (47)	0.34 (67)	5.75 (62)	4.02 (55)	5.07	29-Nov-2010	0.12	0.12	4
<i>FTSE Global All Cap ex US (USA) NR USD</i>		0.86	5.24	11.68	0.48	5.87	4.12	7.54	-	-	-	-
MSCI ACWI EX USA NR USD		0.96	5.69	11.62	0.46	5.55	3.84	-	-	-	-	-
Peer Group Median (50th Percentile)		0.13	5.48	10.79	1.18	6.13	4.09	-	-	1.01	0.89	-
Number of Funds in Peer Group		746	744	738	693	662	519	-	-	-	-	-
Intermediate Core Bond												
Vanguard Total Bond Market Index Adm - VBTLX <sup>2</sup>	\$5,975,779	0.18 (53)	-0.62 (68)	2.76 (60)	-3.01 (40)	-0.20 (53)	1.33 (46)	3.20	12-Nov-2001	0.05	0.05	4
Bloomberg US Agg Float Adj TR USD		0.08	-0.64	2.73	-2.99	-0.18	1.38	2.54	-	-	-	-
Bloomberg US Agg Bond TR USD		0.07	-0.71	2.63	-3.02	-0.23	1.35	-	-	-	-	-
Peer Group Median (50th Percentile)		0.18	-0.43	2.93	-3.10	-0.17	1.29	-	-	0.59	0.49	-
Number of Funds in Peer Group		471	469	459	433	406	347	-	-	-	-	-

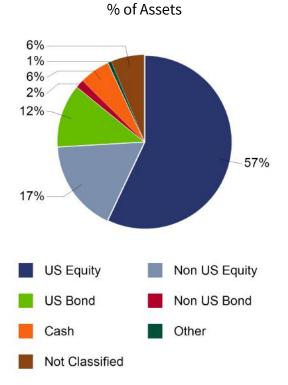
(1) Fund was re-categorized following UBS assessment of investment style.
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INVESTMENT	ASSETS	% OF ASSETS
Total Plan Assets	\$769,296,558	100.00%
Large Value	\$10,378,833	1.35%
Columbia Dividend Income Inst3 - CDDYX	\$10,378,833	1.35%
Large Blend	\$46,722,438	6.07%
BlackRock Equity Index Fund CL R - F00000XDJK	\$46,722,438	6.07%
Large Growth	\$133,771,636	17.39%
American Funds Growth Fund of Amer R6 - RGAGX	\$48,349,341	6.28%
Fidelity Contrafund - FCNTX	\$85,422,295	11.10%
Mid-Cap Value	\$10,979,843	1.43%
American Century Mid Cap Value R6 - AMDVX	\$10,979,843	1.43%
Mid-Cap Growth	\$25,870,355	3.36%
Carillon Eagle Mid Cap Growth R6 - HRAUX	\$25,870,355	3.36%
Small Value	\$5,302,321	0.69%
Columbia Small Cap Value II Inst3 - CRRYX	\$5,302,321	0.69%
Small Growth	\$10,317,381	1.34%
Franklin Small Cap Growth R6 - FSMLX	\$10,317,381	1.34%
Foreign Large Blend	\$5,962,163	0.78%
Vanguard Total Intl Stock Index Admiral - VTIAX	\$5,962,163	0.78%
Foreign Large Growth	\$5,219,811	0.68%
American Funds Europacific Growth R6 - RERGX	\$5,219,811	0.68%



% Allocation Pie Chart represents composite underlying holdings of all funds in the plan. See the Important Information About this Report section for definitions of each holdings category.



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### Gwinnett County Retirement Plans Combine Asset Allocation

INVESTMENT	ASSETS	% OF ASSETS
Diversified Emerging Mkts	\$2,906,642	0.38%
DFA Emerging Markets Core Equity I - DFCEX	\$2,906,642	0.38%
Intermediate Core Bond	\$5,975,779	0.78%
Vanguard Total Bond Market Index Adm - VBTLX	\$5,975,779	0.78%
Intermediate Core-Plus Bond	\$1,231,648	0.16%
Victory Income R6 - URIFX	\$1,231,648	0.16%
High Yield Bond	\$3,524,275	0.46%
Fidelity Advisor High Income Advtg I - FAHCX	\$3,524,275	0.46%
Target Date	\$501,133,433	65.14%
American Funds 2015 Trgt Date Retire R6 - RFJTX	\$4,961,349	0.64%
American Funds 2020 Trgt Date Retire R6 - RRCTX	\$10,212,147	1.33%
American Funds 2025 Trgt Date Retire R6 - RFDTX	\$35,884,828	4.66%
American Funds 2030 Trgt Date Retire R6 - RFETX	\$55,312,864	7.19%
American Funds 2035 Trgt Date Retire R6 - RFFTX	\$70,082,074	9.11%
American Funds 2040 Trgt Date Retire R6 - RFGTX	\$74,210,850	9.65%
American Funds 2045 Trgt Date Retire R6 - RFHTX	\$73,414,937	9.54%
American Funds 2050 Trgt Date Retire R6 - RFITX	\$76,322,708	9.92%
American Funds 2055 Trgt Date Retire R6 - RFKTX	\$54,540,506	7.09%
American Funds 2060 Trgt Date Retire R6 - RFUTX	\$35,410,476	4.60%
American Funds 2065 Trgt Date Retire R6 - RFVTX	\$10,780,694	1.40%

% Allocation Pie Chart represents composite underlying holdings of all funds in the plan. See the Important Information About this Report section for definitions of each holdings category.



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as of 06/30/2024 22 of 96 U.S. Equity Style

	VALUE			BLEND		GROWTH		
LARGE	Columbia Dividend Income Inst3	\$10,378,833	7	BlackRock Equity Index Fund CL R	\$46,722,438 -	American Funds Growth Fund of Amer R6 Fidelity Contrafund	\$48,349,341 \$85,422,295	3 5
MEDIUM	American Century Mid Cap Value R6	\$10,979,843	4			Carillon Eagle Mid Cap Growth R6	\$25,870,355	5
SMALL	Columbia Small Cap Value II Inst3	\$5,302,321	5			Franklin Small Cap Growth R6	\$10,317,381	5

The vertical axis of equity funds shows the market capitalization of the stocks owned and the horizontal axis shows the investment style. Style box content includes: Fund Name, Assets, and Current Score.

### Foreign/World Equity Style

	VALUE	BLEND	GROWTH
LARGE		DFA Emerging Markets Core Equity I \$2,906,642 7 Vanguard Total Intl Stock Index \$5,962,163 4 Admiral	American Funds Europacific Growth \$5,219,811 7 R6
MEDIUM			
SMALL			

The vertical axis of equity funds shows the market capitalization of the stocks owned and the horizontal axis shows the investment style. Style box content includes: Fund Name, Assets, and Current Score.

Refer to the Important Information About this Report section for Portfolio Style box definitions.



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	LIMITED	MODERATE	EXTENSIVE
HIGH			
MEDIUM		Vanguard Total Bond Market Index\$5,975,7794AdmVictory Income R6\$1,231,6487	
LOW	Fidelity Advisor High Income Advtg I \$3,524,275 6		

The vertical axis of fixed income funds shows the average credit quality of the bonds owned, and the horizontal axis shows interest rate sensitivity as measured by a bond's duration. Style box content includes: Fund Name, Assets, and Current Score.

### **Other Styles**

TARGET DATE FUNDS		ASSET ALLOCATION	SPECIALTY
Target Date Series	\$501,133,433 -		

Target Date, Asset Allocation, and Specialty Asset Category boxes have been segregated from the traditional Equity Style box to distinguish funds assigned to them. Multisector funds are typically not categorized within the Morningstar StyleBox.

Style box content includes: Fund Name, Assets, and Current Score.

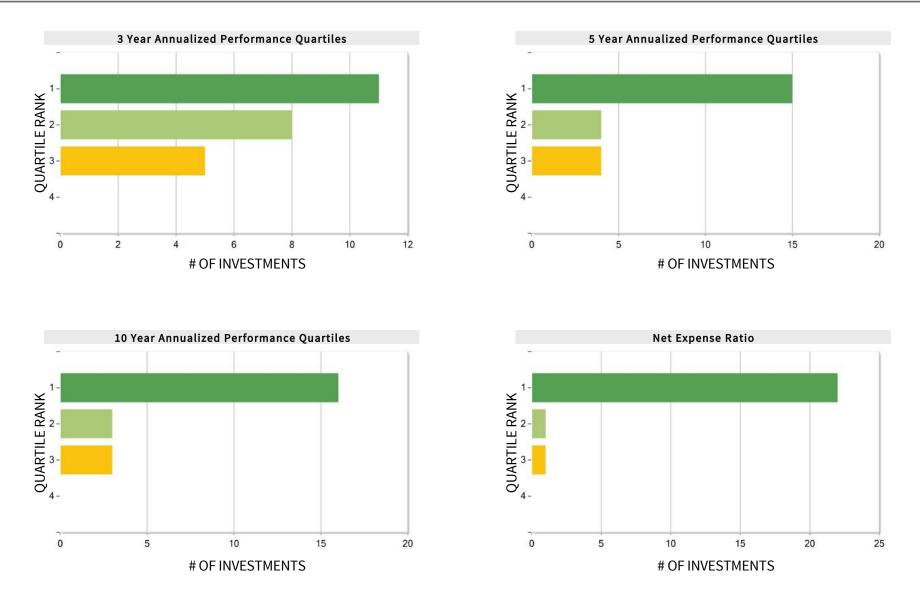
Refer to the Important Information About this Report section for Portfolio Style box definitions.



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### Gwinnett County Retirement Plans Combine Performance and Net Expense Ratio Quartiles



Please note: The performance quartile charts represent the number of funds in each peer group quartile for each respective metric and include all funds displayed in the report, including all current funds, proposed funds, funds on watch, and funds to be removed, provided performance history is available.



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### **Gwinnett County Retirement Plans Combine Investment Fee Analysis**

CATEGORY	INVESTMENT	ASSETS (\$)	ASSETS (%)	NET EXP (%)	NET EXP (\$)	PEER MEDIAN NET EXP (%)
Large Value	Columbia Dividend Income Inst3 - CDDYX	\$10,378,833	1.3%	0.55%	\$57,084	0.80%
Large Blend	BlackRock Equity Index Fund CL R - F00000XDJK	\$46,722,438	6.1%	0.00%	\$0	0.71%
Large Growth	American Funds Growth Fund of Amer R6 - RGAGX	\$48,349,341	6.3%	0.30%	\$145,048	0.85%
Large Growth	Fidelity Contrafund - FCNTX	\$85,422,295	11.1%	0.39%	\$333,147	0.85%
Mid-Cap Value	American Century Mid Cap Value R6 - AMDVX	\$10,979,843	1.4%	0.63%	\$69,173	0.90%
Mid-Cap Growth	Carillon Eagle Mid Cap Growth R6 - HRAUX	\$25,870,355	3.4%	0.64%	\$165,570	1.00%
Small Value	Columbia Small Cap Value II Inst3 - CRRYX	\$5,302,321	0.7%	0.80%	\$42,419	1.05%
Small Growth	Franklin Small Cap Growth R6 - FSMLX	\$10,317,381	1.3%	0.67%	\$69,126	1.10%
Foreign Large Blend	Vanguard Total Intl Stock Index Admiral - VTIAX	\$5,962,163	0.8%	0.12%	\$7,155	0.89%
Foreign Large Growth	American Funds Europacific Growth R6 - RERGX	\$5,219,811	0.7%	0.47%	\$24,533	0.92%
Diversified Emerging Mkts	DFA Emerging Markets Core Equity I - DFCEX	\$2,906,642	0.4%	0.39%	\$11,336	1.09%
Intermediate Core Bond	Vanguard Total Bond Market Index Adm - VBTLX	\$5,975,779	0.8%	0.05%	\$2,988	0.49%
Intermediate Core-Plus Bond	Victory Income R6 - URIFX	\$1,231,648	0.2%	0.49%	\$6,035	0.64%
High Yield Bond	Fidelity Advisor High Income Advtg I - FAHCX	\$3,524,275	0.5%	0.94%	\$33,128	0.77%
Target Date 2015	American Funds 2015 Trgt Date Retire R6 - RFJTX	\$4,961,349	0.6%	0.30%	\$14,884	0.51%
Target Date 2020	American Funds 2020 Trgt Date Retire R6 - RRCTX	\$10,212,147	1.3%	0.31%	\$31,658	0.54%
Target Date 2025	American Funds 2025 Trgt Date Retire R6 - RFDTX	\$35,884,828	4.7%	0.32%	\$114,831	0.59%
Target Date 2030	American Funds 2030 Trgt Date Retire R6 - RFETX	\$55,312,864	7.2%	0.33%	\$182,532	0.60%
Target Date 2035	American Funds 2035 Trgt Date Retire R6 - RFFTX	\$70,082,074	9.1%	0.35%	\$245,287	0.60%
Target Date 2040	American Funds 2040 Trgt Date Retire R6 - RFGTX	\$74,210,850	9.6%	0.37%	\$274,580	0.63%
Target Date 2045	American Funds 2045 Trgt Date Retire R6 - RFHTX	\$73,414,937	9.5%	0.37%	\$271,635	0.63%
Target Date 2050	American Funds 2050 Trgt Date Retire R6 - RFITX	\$76,322,708	9.9%	0.38%	\$290,026	0.63%
Target Date 2055	American Funds 2055 Trgt Date Retire R6 - RFKTX	\$54,540,506	7.1%	0.38%	\$207,254	0.65%
Target-Date 2060	American Funds 2060 Trgt Date Retire R6 - RFUTX	\$35,410,476	4.6%	0.39%	\$138,101	0.64%
Target-Date 2065+	American Funds 2065 Trgt Date Retire R6 - RFVTX	\$10,780,694	1.4%	0.39%	\$42,045	0.64%

(1) The net expense ratio for Core Assets is the weighted average of each Core Asset investment's individual expense ratio (excluding custom fund assets).

 (2) Fund was re-categorized following UBS assessment of investment style.
 (3) This investment or strategy is not available through UBS. Please see "Investment Eligibility" and "Non-Program Investments Displayed in this Report" sections of the "Important Information About this Report" section for details.

(4) Since your last Report, this investment option has been removed from the UBS fund eligibility list and is no longer available through UBS.



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CATEGORY	INVESTMENT	ASSETS (\$)			NET EXP (%)	NET EXP (\$)	PEER MEDIAN NET EXP (%)
		TOTAL CORE ASSETS	\$769,296,558	100.0%	<b>0.36%</b> <sup>1</sup>	\$2,779,576	

(1) The net expense ratio for Core Assets is the weighted average of each Core Asset investment's individual expense ratio (excluding custom fund assets).

 (2) Fund was re-categorized following UBS assessment of investment style.
 (3) This investment or strategy is not available through UBS. Please see "Investment Eligibility" and "Non-Program Investments Displayed in this Report" sections of the "Important Information About this Report" section for details.

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### **Columbia Dividend Income Inst3 - CDDYX**

Family: Columbia Threadneedle Fund Manager: Michael S. Barclay Fund Inception Date: 08-Nov-2012

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-0.51	0.99	1.66	26/1212
YTD	7.87	0.56	1.25	43 / 1207
1 Year	14.69	0.13	1.63	49/1181
3 Year	7.56	1.01	2.04	31/1121
5 Year	11.25	1.50	2.24	24/1081
10 Year	10.84	2.48	2.61	4 / 973
5 Year Up/Down	89.81 / 79.66	-9.97 / -16.23		
Since Inception	12.49	-	0.89	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns									
	2023	2022	2021	2020	2019	2018	2017		
Fund	10.60	-4.86	26.45	7.91	28.31	-4.28	20.95		
Peer Group	11.07	-5.48	26.09	2.83	25.57	-8.55	16.32		

Category: Large Value Benchmark: Russell 1000 Value TR USD Prospectus Objective: Equity-Income Home Page: www.columbiathreadneedleus.com Phone: 800-345-6611

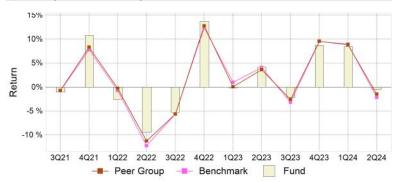
Fund Basics 31-May-2024	Fund	Peers
Manager Tenure (Yrs)	13.26	9.35
Track Record (Yrs)	33.50	23.08
Turnover Ratio %	17.00	37.00
Total Net Assets (\$Millions)	39,982.00	755.00
Price/Earnings	20.60	18.78
Assets in top 10 holdings %	26.51	27.77
Number of holdings	80.00	78.00

Fund	Peers
-	5.50
-	1.00
Fund	Peers
0.00	0.25
0.55	0.91
0.55	0.80
	- - - 0.00

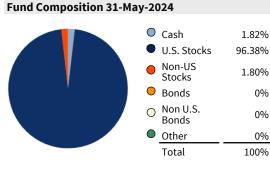
Morningstar Overall Rating: 5.00

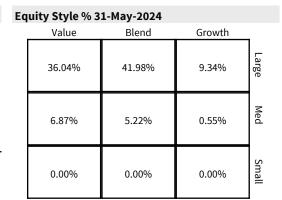
Overall Morningstar Rating for CDDYX as of 6/30/2024 rated against 1121 funds in its category.

Top 10 Holdings	5
JPMorgan Chase & Co	4.27%
Microsoft Corp	3.64%
Exxon Mobil Corp	2.55%
Broadcom Inc	2.40%
Chevron Corp	2.35%
Johnson & Johnson	2.35%
Walmart Inc	2.32%
Procter & Gamble Co	2.27%
The Home Depot Inc	2.19%
Merck & Co Inc	2.18%



### **Quarterly Returns History**







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### Columbia Dividend Income Inst3 - CDDYX

Family: Columbia Threadneedle Fund Manager: Michael S. Barclay Fund Inception Date: 08-Nov-2012 Category: Large Value Benchmark: Russell 1000 Value TR USD Prospectus Objective: Equity-Income Home Page: www.columbiathreadneedleus.com Phone: 800-345-6611

Morningstar Overall Rating: 5.00

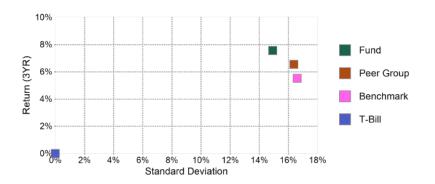
Overall Morningstar Rating for CDDYX as of 6/30/2024 rated against 1121 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-
Sharpe Ratio - 1 Year		0.80	0.11	0.24
Sharpe Ratio - 3 Year		0.36	0.07	0.13
Sharpe Ratio - 5 Year		0.62	0.14	0.18
Sharpe Ratio - 10 Year		0.73	0.23	0.24
Std. Deviation - 3 Year		14.93	-1.45	-1.67
Std. Deviation - 5 Year		15.54	-2.72	-2.90
Std. Deviation - 10 Year		13.32	-2.10	-2.15
Mean - 3 Year		7.56	1.01	2.04
Mean - 5 Year		11.25	1.50	2.24
Mean - 10 Year		10.84	2.48	2.61
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		2.13	1.03	2.13
Alpha (Standard) - 5 Year		3.01	2.09	3.01
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		0.88	-0.09	-0.12
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		94.65	-0.86	-5.35
Sector Weightings (%)				
Basic Materials	2.16			
Consumer Cyclical	7.01			
Financial Services	18.86			
Real Estate	1.44			
Consumer Defensive	8.65			
Healthcare	12.77			
Utilities	5.30			
Communication Services	3.98			
Energy	8.29			
Industrials	13.43			

18.10

Calendar Year Quartile Rankings									
(shades indicate fund quartile	(shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Тор									
2nd									
3rd									
Bottom									
	2017	2018	2019	2020	2021	2022	2023		
Fund	20.95%	-4.28%	28.31%	7.91%	26.45%	-4.86%	10.60%		
Peer Group 25 Percentile	18.45%	-6.18%	27.77%	6.04%	28.49%	-2.90%	14.15%		
Peer Group 50 Percentile	16.32%	-8.55%	25.57%	2.83%	26.09%	-5.48%	11.07%		
Peer Group 75 Percentile	14.08%	-10.60%	23.37%	0.28%	23.99%	-8.38%	8.23%		
Benchmark	13.66%	-8.27%	26.54%	2.80%	25.16%	-7.54%	11.46%		

### Fund Risk/Return (3 Year)





Technology

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### BlackRock Equity Index Fund CL R - F00000XDJK

Family: Fund Manager: Fund Inception Date:

Total Net Assets: \$0

Performance	Fund	Benchmark	Difference	Peers
Last Cal. QTR	-	3.57	-3.57	3.17
YTD	-	14.24	-	14.15
1 Year	-	23.88	-	23.21
3 Year	-	8.74	-	8.54
5 Year	-	14.61	-	13.84
10 Year	-	12.51	-	11.47
Since Inception	-	12.16	-	-

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year	Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	-	-	-	-	-	-	-
Peer Group	24.33	-18.10	26.83	17.46	30.19	-5.48	21.21

Category: Large Blend Benchmark: Russell 1000 TR USD Prospectus Objective: -Home Page: -Phone: Morningstar Overall Rating: -

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Overall Morningstar Rating for F00000XDJK as of 6/30/2024 rated against 1322 funds in its category.

Fund Basics	Fund	Peers	Top 10 Holdings
5 Year Up:	-	96.28	
5 Year Down:	-	97.73	
3 Year Up:	-	96.45	
3 Year Down:	-	96.74	
3 Year Sharpe Ratio:	-	0.39	
1 Year Sharpe Ratio:	-	1.15	
3 Year R-Squared:	-	97.11	
3 Year Beta:	-	0.97	
3 Year Std Deviation:	-	17.74	
1 Year Std Deviation:	-	14.59	
3 Year Tracking Error:	-	3.20	
1 Year Tracking Error:	-	2.56	
Net Expense Ratio:	-	0.71	
Gross Expense Ratio:	-	0.79	

#### **Rolling Quarter Return Analysis Fund Composition Equity Style %** Value Blend Growth Cash % 10% Large U.S. Stocks % -% -% -% 5% Non-US % Stocks Return 09 Bonds % Med -5 % O Non U.S. -% -% -% % Bonds -10 % Other % -15 % Total 100% Small -% -% -% 3Q21 4021 1Q22 2Q22 3Q22 4Q22 1Q23 2Q23 3Q23 4Q23 1Q24 2Q24 Fund --- Peer Group --- Benchmark



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### American Funds Growth Fund of Amer R6 - RGAGX

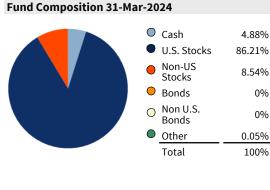
Family: American Funds Fund Manager: Donald D. O'Neal Fund Inception Date: 01-May-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	3.86	-1.88	-4.47	68 / 1185
YTD	16.98	-1.93	-3.72	61/1183
1 Year	30.66	-0.04	-2.82	51/1171
3 Year	6.42	-0.53	-4.86	56 / 1118
5 Year	15.09	-0.27	-4.25	55 / 1075
10 Year	13.30	-0.45	-3.03	60 / 970
5 Year Up/Down	86.07 / 95.83	-4.42 / -4.79		
Since Inception	14.92	-	2.63	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns							
	2023	2022	2021	2020	2019	2018	2017
Fund	37.65	-30.49	19.69	38.28	28.54	-2.60	26.53
Peer Group	38.82	-30.88	22.17	35.64	33.18	-1.25	29.21

15% 0% -5% -10% -20% 3021 4021 1022 2022 3022 4022 1023 2023 3023 4023 1024 2024 Peer Group Benchmark Fund





Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RGAGX as of 6/30/2024 rated against 1118 funds in its category.

Top 10 Holdings	
Microsoft Corp	6.19%
Meta Platforms Inc Class A	5.39%
Capital Group Central Cash Fund	4.36%
Amazon.com Inc	3.64%
Broadcom Inc	3.63%
NVIDIA Corp	2.63%
Eli Lilly and Co	2.22%
Alphabet Inc Class C	1.93%
GE Aerospace	1.91%
Netflix Inc	1.89%

## **Quarterly Returns History**

# **UBS**

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Category: Large Growth

Phone: 800-421-4225

**Fund Basics** 

31-Mar-2024

Manager Tenure (Yrs)

Total Net Assets (\$Millions)

Assets in top 10 holdings %

Number of holdings

**Sales Charges** 

Front End Load %

Deferred Load %

Gross Expense Ratio %

Net Expense Ratio %

Expenses 12b1 Expense %

Track Record (Yrs)

Turnover Ratio %

Price/Earnings

Prospectus Objective: Growth

Benchmark: Russell 1000 Growth TR USD

Home Page: www.americanfunds.com

Peers

10.34

24.00

32.00

1,391.00

34.40

52.26

60.00

Peers

5.50

1.00

Peers

0.25

0.95

0.85

Fund

30.68

50.58

31.00

281,238.00

28.34

33.78

336.00

Fund

Fund

-

0.30

0.30

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### American Funds Growth Fund of Amer R6 - RGAGX

Family: American Funds Fund Manager: Donald D. O'Neal Fund Inception Date: 01-May-2009 Category: Large Growth Benchmark: Russell 1000 Growth TR USD Prospectus Objective: Growth Home Page: www.americanfunds.com Phone: 800-421-4225

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Fund

Benchmark

Morningstar Overall Rating: 3.00

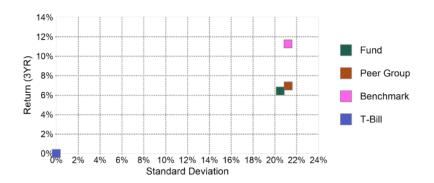
Overall Morningstar Rating for RGAGX as of 6/30/2024 rated against 1118 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-
Sharpe Ratio - 1 Year		1.36	0.03	-0.14
Sharpe Ratio - 3 Year		0.26	-0.03	-0.21
Sharpe Ratio - 5 Year		0.70	0.00	-0.16
Sharpe Ratio - 10 Year		0.74	-0.01	-0.14
Std. Deviation - 3 Year		20.50	-0.72	-0.71
Std. Deviation - 5 Year		20.00	-0.51	-0.57
Std. Deviation - 10 Year		16.71	-0.57	-0.46
Mean - 3 Year		6.42	-0.53	-4.86
Mean - 5 Year		15.09	-0.27	-4.25
Mean - 10 Year		13.30	-0.45	-3.03
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		-4.03	-0.49	-4.03
Alpha (Standard) - 5 Year		-2.83	-0.14	-2.83
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		0.94	-0.04	-0.06
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		94.47	-0.71	-5.53
Sector Weightings (%)				
Basic Materials	2.33			
Consumer Cyclical	15.53			
Financial Services	8.77			
Real Estate	0.06			
Consumer Defensive	2.12			
Healthcare	13.19			
Utilities	0.64			
Communication Services	13.58			
Energy	3.03			
Industrials	12.11			

28.63

#### **Calendar Year Quartile Rankings** (shades indicate fund quartile ranking; numbers indicate performance at NAV) 2018 2020 2021 2022 2023 2017 2019 26.53% -2.60% 28.54% 38.28% 19.69% -30.49% 37.65% 44.09% 25.82% -26.56% 43.52% Peer Group 25 Percentile 32.29% 1.16% 36.06% Peer Group 50 Percentile 29.21% -1.25% 33.18% 35.64% 22.17% -30.88% 38.82% 30.38% 17.23% -34.45% Peer Group 75 Percentile 25.68% -3.85% 29.67% 31.42% 30.21% -1.51% 36.39% 38.49% 27.60% -29.14% 42.68%

### Fund Risk/Return (3 Year)





Technology

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# **Fidelity Contrafund - FCNTX**

Family: Fidelity Investments Fund Manager: William Danoff Fund Inception Date: 17-May-1967

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	6.48	0.74	-1.85	43 / 1185
YTD	25.63	6.72	4.93	5/1183
1 Year	39.83	9.13	6.35	5/1171
3 Year	10.92	3.97	-0.36	8/1118
5 Year	17.38	2.02	-1.96	22 / 1075
10 Year	14.93	1.18	-1.40	25 / 970
5 Year Up/Down	89.72 / 92.71	-0.77 / -7.91		
Since Inception	12.96	-	0.67	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns									
	2023	2022	2021	2020	2019	2018	2017		
Fund	39.33	-28.26	24.36	32.58	29.98	-2.13	32.21		
Peer Group	38.82	-30.88	22.17	35.64	33.18	-1.25	29.21		

Category: Large Growth Benchmark: Russell 1000 Growth TR USD Prospectus Objective: Growth Home Page: www.institutional.fidelity.com Phone: 800-544-8544

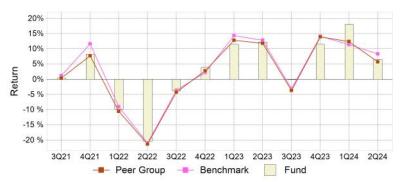
Fund Basics 31-May-2024	Fund	Peers
Manager Tenure (Yrs)	33.81	10.34
Track Record (Yrs)	57.08	24.00
Turnover Ratio %	16.00	32.00
Total Net Assets (\$Millions)	143,289.00	1,391.00
Price/Earnings	26.06	34.40
Assets in top 10 holdings %	55.96	52.26
Number of holdings	383.00	60.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
12b1 Expense %	-	0.25
•		0.20
Gross Expense Ratio %	0.39	0.95

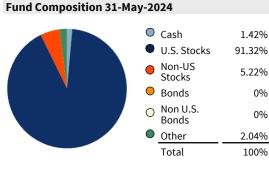
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for FCNTX as of 6/30/2024 rated against 1118 funds in its category.

Top 10 Holdings	
Meta Platforms Inc Class A	13.97%
Berkshire Hathaway Inc Class A	8.55%
NVIDIA Corp	7.97%
Microsoft Corp	6.45%
Amazon.com Inc	6.17%
Eli Lilly and Co	3.13%
Apple Inc	3.07%
Alphabet Inc Class A	2.57%
Alphabet Inc Class C	2.14%
Amphenol Corp Class A	1.94%



# **Quarterly Returns History**







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# Fidelity Contrafund - FCNTX

Family: Fidelity Investments Fund Manager: William Danoff Fund Inception Date: 17-May-1967 Category: Large Growth Benchmark: Russell 1000 Growth TR USD Prospectus Objective: Growth Home Page: www.institutional.fidelity.com Phone: 800-544-8544

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Fund

Benchmark

**Calendar Year Quartile Rankings** 

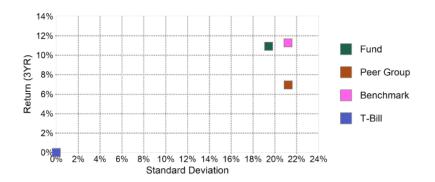
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for FCNTX as of 6/30/2024 rated against 1118 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-
Sharpe Ratio - 1 Year		1.93	•/- 0.60	0.43
Sharpe Ratio - 3 Year		0.48	0.19	0.01
Sharpe Ratio - 5 Year		0.83	0.13	-0.03
Sharpe Ratio - 10 Year		0.85	0.10	-0.03
Std. Deviation - 3 Year		19.43	-1.79	-1.78
Std. Deviation - 5 Year		19.08	-1.43	-1.49
Std. Deviation - 10 Year		16.20	-1.08	-0.97
Mean - 3 Year		10.92	3.97	-0.36
Mean - 5 Year		17.38	2.02	-1.96
Mean - 10 Year		14.93	1.18	-1.40
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		0.43	3.97	0.43
Alpha (Standard) - 5 Year		-0.31	2.38	-0.31
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		0.89	-0.09	-0.11
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		94.87	-0.31	-5.13
Sector Weightings (%)				
Basic Materials	1.87			
Consumer Cyclical	11.00			
Financial Services	16.67			
Real Estate	0.00			
Consumer Defensive	1.98			
Healthcare	11.43			
Utilities	0.97			
Communication Services	21.89			
Energy	2.40			
Industrials	5.22			
Technology	26.57			

#### (shades indicate fund quartile ranking; numbers indicate performance at NAV) 2018 2020 2021 2022 2023 2017 2019 32.21% -2.13% 29.98% 32.58% 24.36% -28.26% 39.33% 44.09% 25.82% -26.56% 43.52% Peer Group 25 Percentile 32.29% 1.16% 36.06% Peer Group 50 Percentile 29.21% -1.25% 33.18% 35.64% 22.17% -30.88% 38.82% 30.38% 17.23% Peer Group 75 Percentile 25.68% -3.85% 29.67% -34.45% 31.42% 30.21% -1.51% 36.39% 38.49% 27.60% -29.14% 42.68%

# Fund Risk/Return (3 Year)





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# American Century Mid Cap Value R6 - AMDVX

Family: American Century Investments Fund Manager: Michael Liss Fund Inception Date: 26-Jul-2013

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-3.68	0.27	-0.28	42 / 399
YTD	0.99	-2.80	-3.55	81/399
1 Year	4.50	-7.00	-7.48	93 / 395
3 Year	4.29	-0.93	0.64	63 / 385
5 Year	8.11	-0.60	-0.38	61/379
10 Year	8.12	0.82	0.52	23/341
5 Year Up/Down	81.96 / 82.56	-14.43 / -12.50		
Since Inception	9.11	-	-2.11	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns									
	2023	2022	2021	2020	2019	2018	2017		
Fund	6.52	-1.13	23.56	1.97	29.31	-12.66	11.96		
Peer Group	12.18	-8.04	28.82	3.05	26.78	-13.15	13.54		

Category: Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Prospectus Objective: Growth Home Page: www.americancentury.com Phone: 800-345-2021

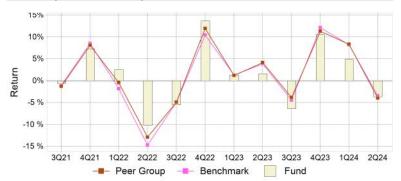
Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	20.26	11.17
Track Record (Yrs)	20.25	22.08
Turnover Ratio %	54.00	42.00
Total Net Assets (\$Millions)	8,270.00	749.00
Price/Earnings	18.56	16.78
Assets in top 10 holdings %	21.37	21.37
Number of holdings	106.00	76.00

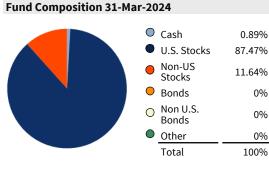
Fund	Peers
-	5.50
-	1.00
Fund	Peers
-	0.25
0.63	0.99
	-

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for AMDVX as of 6/30/2024 rated against 385 funds in its category.

Top 10 Holdings	
Zimmer Biomet Holdings Inc	3.06%
Conagra Brands Inc	2.41%
Northern Trust Corp	2.17%
Bank of New York Mellon Corp	2.13%
Enterprise Products Partners LP	2.04%
Kimberly-Clark Corp	2.00%
Henry Schein Inc	1.99%
Quest Diagnostics Inc	1.98%
Koninklijke Ahold Delhaize NV	1.87%
Allstate Corp	1.74%









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Quarterly Returns History

# American Century Mid Cap Value R6 - AMDVX

Family: American Century Investments Fund Manager: Michael Liss Fund Inception Date: 26-Jul-2013

Category: Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Prospectus Objective: Growth Home Page: www.americancentury.com Phone: 800-345-2021

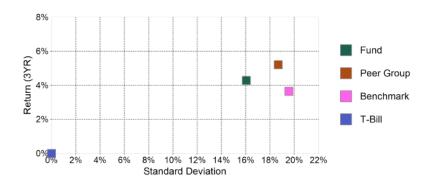
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for AMDVX as of 6/30/2024 rated against 385 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quarti	-
Sharpe Ratio - 1 Year		0.00	-0.40	-0.41	Top	
Sharpe Ratio - 3 Year		0.15	-0.05	0.02	2nd	
Sharpe Ratio - 5 Year		0.40	0.00	0.01	3rd	
Sharpe Ratio - 10 Year		0.48	0.07	0.06	Bottom	
Std. Deviation - 3 Year		16.06	-2.63	-3.50		201
Std. Deviation - 5 Year		18.22	-3.12	-3.50	Fund	11.9
Std. Deviation - 10 Year		15.57	-2.36	-2.17	Peer Group 25 Percentile	15.7
Mean - 3 Year		4.29	-0.93	0.64	Peer Group 50 Percentile	13.5
Mean - 5 Year		8.11	-0.60	-0.38	Peer Group 75 Percentile	11.6
Mean - 10 Year		8.12	0.82	0.52	Benchmark	13.3
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.51	-0.97	0.51		
Alpha (Standard) - 5 Year		0.42	-0.12	0.42		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.80	-0.14	-0.20		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		93.16	-2.84	-6.84		
Sector Weightings (%)					Fund Risk/Return (3 Year)	)
Basic Materials	1.11					
Consumer Cyclical	5.85				8%	
Financial Services	17.02					
Real Estate	6.69				6%	
Consumer Defensive	13.17					
Healthcare	15.36				<u>ک</u> د 4%	
Utilities	11.64				Return (3Y.R)	
Communication Services	3.17				Re	
Energy	5.72				2%	
Industrials	13.79					
Technology	6.48				0% 2% 49	% 6% 8

nd quartile	ranking; nu	mbers indio	ate perfor	mance at N	IAV)		
	2017	2018	2019	2020	2021	2022	2023
	11.96%	-12.66%	29.31%	1.97%	23.56%	-1.13%	6.52%
ntile	15.78%	-11.10%	29.53%	6.32%	31.86%	-5.50%	15.87%
ntile	13.54%	-13.15%	26.78%	3.05%	28.82%	-8.04%	12.18%
ntile	11.64%	-15.05%	24.07%	-0.05%	25.92%	-10.27%	10.20%
	13.34%	-12.29%	27.06%	4.96%	28.34%	-12.03%	12.71%

# und Risk/Return (3 Year)





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# Carillon Eagle Mid Cap Growth R6 - HRAUX

Family: Carillon Family of Funds Fund Manager: Christopher Sassouni Fund Inception Date: 15-Aug-2011

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-4.99	-1.25	-1.78	70 / 536
YTD	4.08	-1.17	-1.90	59 / 534
1 Year	10.39	-1.09	-4.66	59 / 533
3 Year	-1.26	0.70	-1.18	41/524
5 Year	9.18	0.45	-0.75	42 / 496
10 Year	10.66	1.06	0.15	22 / 457
5 Year Up/Down	97.26 / 99.62	0.06 / -1.53		
Since Inception	12.64	-	1.69	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	20.12	-25.55	11.81	40.34	35.02	-6.01	30.44	
Peer Group	20.44	-28.28	12.20	38.98	33.81	-5.16	25.01	

15% 0% -5% -10% -10% -20% 3Q21 4Q21 1Q22 2Q22 3Q22 4Q22 1Q23 2Q23 3Q23 4Q23 1Q24 2Q24 Peer Group Benchmark Fund

Category: Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Prospectus Objective: Growth Home Page: www.eagleasset.com Phone: 800-421-4184

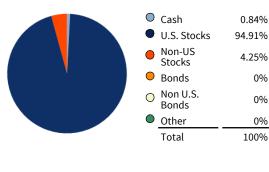
Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	18.50	11.67
Track Record (Yrs)	25.83	24.08
Turnover Ratio %	49.00	47.00
Total Net Assets (\$Millions)	6,288.00	1,074.00
Price/Earnings	38.01	31.15
Assets in top 10 holdings %	22.44	26.25
Number of holdings	89.00	75.00

Fund	Peers
4.75	5.50
-	1.00
Fund	Peers
0.00	0.25
0.64	1.06
0101	2.00
	4.75 - <b>Fund</b> 0.00

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for HRAUX as of 6/30/2024 rated against 524 funds in its category.

Top 10 Holdings	
Synopsys Inc	2.69%
DexCom Inc	2.54%
CrowdStrike Holdings Inc Class A	2.50%
Waste Connections Inc	2.26%
Baker Hughes Co Class A	2.20%
Entegris Inc	2.12%
Ross Stores Inc	2.11%
Westinghouse Air Brake Technologies Corp	2.10%
RB Global Inc	1.99%
Celsius Holdings Inc	1.93%



Fund Composition 31-Mar-2024





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**Quarterly Returns History** 

# Carillon Eagle Mid Cap Growth R6 - HRAUX

Family: Carillon Family of Funds Fund Manager: Christopher Sassouni Fund Inception Date: 15-Aug-2011

Category: Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Prospectus Objective: Growth Home Page: www.eagleasset.com Phone: 800-421-4184

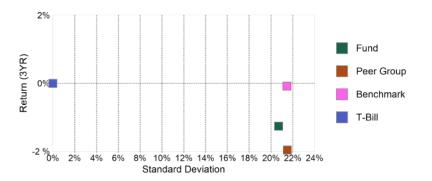
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for HRAUX as of 6/30/2024 rated against 524 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-
Sharpe Ratio - 1 Year		0.33	-0.04	-0.21
Sharpe Ratio - 3 Year		-0.11	0.02	-0.07
Sharpe Ratio - 5 Year		0.41	0.02	-0.04
Sharpe Ratio - 10 Year		0.56	0.06	0.00
Std. Deviation - 3 Year		20.71	-0.79	-0.77
Std. Deviation - 5 Year		21.66	-0.18	-0.04
Std. Deviation - 10 Year		18.72	0.37	0.59
Mean - 3 Year		-1.26	0.70	-1.18
Mean - 5 Year		9.18	0.45	-0.75
Mean - 10 Year		10.66	1.06	0.15
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		-1.39	0.53	-1.39
Alpha (Standard) - 5 Year		-0.57	0.21	-0.57
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		0.95	-0.01	-0.05
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		97.53	3.39	-2.47
Sector Weightings (%)				
Basic Materials	2.65			
Consumer Cyclical	12.86			
Financial Services	7.73			
Real Estate	1.79			
Consumer Defensive	3.46			
Healthcare	18.70			
Utilities	0.04			
Communication Services	3.07			
Energy	4.27			
Industrials	19.86			
Technology	25.57			

Quartile Rank	ings							
fund quartile ranking; numbers indicate performance at NAV)								
	2017	2018	2019	2020	2021	2022	2023	
	30.44%	-6.01%	35.02%	40.34%	11.81%	-25.55%	20.12%	
ercentile	28.37%	-2.29%	37.70%	48.51%	16.96%	-24.23%	24.24%	
ercentile	25.01%	-5.16%	33.81%	38.98%	12.20%	-28.28%	20.44%	
ercentile	22.87%	-7.37%	30.54%	29.84%	7.82%	-33.25%	17.34%	
	25.27%	-4.75%	35.47%	35.59%	12.73%	-26.72%	25.87%	

# Fund Risk/Return (3 Year)





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# Columbia Small Cap Value II Inst3 - CRRYX

Family: Columbia Threadneedle Fund Manager: Jeremy H. Javidi Fund Inception Date: 08-Nov-2012

**Quarterly Returns History** 

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-2.37	1.37	1.27	21/492
YTD	2.32	1.43	3.17	26/491
1 Year	11.11	0.18	0.21	47 / 486
3 Year	2.26	-0.29	2.79	58 / 465
5 Year	9.34	0.76	2.27	33 / 445
10 Year	7.18	0.57	0.95	33 / 402
5 Year Up/Down	99.33 / 93.51	0.56 / -1.29		
Since Inception	10.47	-	-1.51	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	14.26	-13.48	34.33	10.33	20.83	-17.29	11.19	
Peer Group	16.00	-11.30	30.78	3.57	22.18	-15.01	9.81	

Category: Small Value Benchmark: Russell 2000 Value TR USD Prospectus Objective: Growth Home Page: www.columbiamanagement.com Phone: 800-345-6611

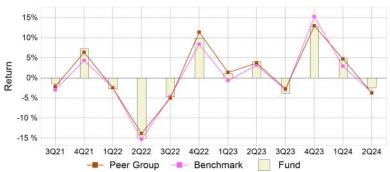
Fund Basics 31-May-2024	Fund	Peers
Manager Tenure (Yrs)	0.64	10.50
Track Record (Yrs)	22.08	22.08
Turnover Ratio %	88.00	46.00
Total Net Assets (\$Millions)	1,118.00	391.00
Price/Earnings	14.32	13.98
Assets in top 10 holdings %	15.60	18.52
Number of holdings	103.00	103.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
12b1 Expense %	0.00	0.25
Gross Expense Ratio %	0.88	1.20
Net Expense Ratio %	0.80	1.05

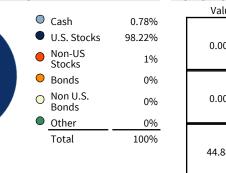
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for CRRYX as of 6/30/2024 rated against 465 funds in its category.

Top 10 Holdings	
Carpenter Technology Corp	1.63%
Signet Jewelers Ltd	1.63%
Radian Group Inc	1.61%
LivaNova PLC	1.61%
Group 1 Automotive Inc	1.57%
Matson Inc	1.57%
Spire Inc	1.52%
Vishay Intertechnology Inc	1.51%
Minerals Technologies Inc	1.50%
Hancock Whitney Corp	1.45%



# Fund Composition 31-May-2024







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# Columbia Small Cap Value II Inst3 - CRRYX

Family: Columbia Threadneedle Fund Manager: Jeremy H. Javidi Fund Inception Date: 08-Nov-2012 Category: Small Value Benchmark: Russell 2000 Value TR USD Prospectus Objective: Growth Home Page: www.columbiamanagement.com Phone: 800-345-6611

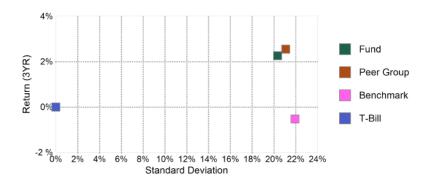
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for CRRYX as of 6/30/2024 rated against 465 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Qu (shades indicate fu
Sharpe Ratio - 1 Year		0.35	0.00	0.02	Тор
Sharpe Ratio - 3 Year		0.06	-0.02	0.12	2nd
Sharpe Ratio - 5 Year		0.40	0.03	0.09	3rd
Sharpe Ratio - 10 Year		0.37	0.03	0.05	Bottom
Std. Deviation - 3 Year		20.34	-0.75	-1.59	
Std. Deviation - 5 Year		24.44	-0.04	-0.28	Fund
Std. Deviation - 10 Year		20.65	-0.11	-0.25	Peer Group 25 Perce
Mean - 3 Year		2.26	-0.29	2.79	Peer Group 50 Perce
Mean - 5 Year		9.34	0.76	2.27	Peer Group 75 Perce
Mean - 10 Year		7.18	0.57	0.95	Benchmark
Alpha (Best Fit) - 3 Year		-	-	-	
Alpha (Standard) - 3 Year		2.35	-0.32	2.35	
Alpha (Standard) - 5 Year		2.24	0.59	2.24	
Beta (Best Fit) - 3 Year		-	-	-	
Beta (Standard) - 3 Year		0.91	-0.03	-0.09	
R-Squared (Best Fit) - 3 Year		-	-	-	
R-Squared (Standard) - 3 Year		96.50	1.40	-3.50	
Sector Weightings (%)					Fund Risk/Return
Basic Materials	5.44				
Consumer Cyclical	13.97				4%
Financial Services	19.94				
Real Estate	7.51				
Consumer Defensive	2.37				<u>2%</u>
Healthcare	7.45				~ %0 %0 %0
Utilities	5.11				En la
Communication Services	1.13				%o Ket
Energy	8.21				
Industrials	17.36				
Technology	11.49				-2 %

Calendar Year Quartile Rankings (shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Тор								
2nd								
3rd								
Bottom								
	2017	2018	2019	2020	2021	2022	2023	
Fund	11.19%	-17.29%	20.83%	10.33%	34.33%	-13.48%	14.26%	
Peer Group 25 Percentile	12.14%	-12.35%	25.44%	8.55%	35.01%	-8.18%	19.32%	
Peer Group 50 Percentile	9.81%	-15.01%	22.18%	3.57%	30.78%	-11.30%	16.00%	
Peer Group 75 Percentile	7.33%	-17.52%	20.20%	-0.08%	26.32%	-13.66%	12.63%	
Benchmark	7.84%	-12.86%	22.39%	4.63%	28.27%	-14.48%	14.65%	

# und Risk/Return (3 Year)





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# Franklin Small Cap Growth R6 - FSMLX

Family: Franklin Templeton Investments Fund Manager: Michael McCarthy Fund Inception Date: 01-May-2013

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-3.78	-1.26	-0.86	69 / 582
YTD	3.22	-1.62	-1.22	66 / 581
1 Year	14.75	5.57	5.61	17 / 581
3 Year	-5.21	-1.43	-0.35	62 / 563
5 Year	7.33	0.54	1.16	40 / 544
10 Year	8.00	-0.19	0.61	56 / 517
5 Year Up/Down	99.12 / 95.97	2.70 / 2.38		
Since Inception	10.90	-	1.51	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns									
	2023	2022	2021	2020	2019	2018	2017		
Fund	31.24	-30.16	-0.35	41.75	33.54	-2.33	21.51		
Peer Group	16.43	-28.28	9.77	38.85	29.09	-4.62	24.15		

Category: Small Growth Benchmark: Russell 2000 Growth TR USD Prospectus Objective: Small Company Home Page: www.franklintempleton.com Phone: 800-632-2301

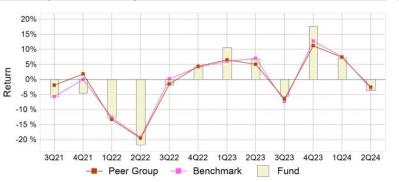
Fund Basics 31-May-2024	Fund	Peers
Manager Tenure (Yrs)	24.18	12.46
Track Record (Yrs)	24.08	24.50
Turnover Ratio %	16.86	52.50
Total Net Assets (\$Millions)	2,747.00	553.50
Price/Earnings	26.38	25.23
Assets in top 10 holdings %	21.21	22.96
Number of holdings	125.00	98.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses	i unu	L CCI 2
12b1 Expense %	-	0.25
•	- 0.69	
12b1 Expense %	-	0.25

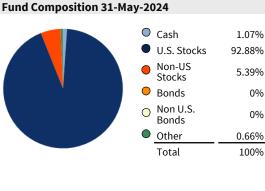
Morningstar Overall Rating: 3.00

Overall Morningstar Rating for FSMLX as of 6/30/2024 rated against 563 funds in its category.

Top 10 Holdings	
Onto Innovation Inc	2.76%
BWX Technologies Inc	2.44%
BellRing Brands Inc Class A	2.22%
Arcosa Inc	2.18%
AAR Corp	1.99%
Monday.Com Ltd Ordinary Shares	1.94%
Freshpet Inc	1.94%
Wingstop Inc	1.93%
Liberty Energy Inc Class A	1.91%
Integer Holdings Corp	1.90%



#### **Quarterly Returns History**



#### Equity Style % 31-May-2024 Blend Growth Value Large 0.00% 0.00% 0.00% Med 0.00% 5.60% 9.12% Small 13.79% 37.12% 34.36%



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# Franklin Small Cap Growth R6 - FSMLX

Family: Franklin Templeton Investments Fund Manager: Michael McCarthy Fund Inception Date: 01-May-2013

Category: Small Growth Benchmark: Russell 2000 Growth TR USD Prospectus Objective: Small Company Home Page: www.franklintempleton.com Phone: 800-632-2301

Morningstar Overall Rating: 3.00

Overall Morningstar Rating for FSMLX as of 6/30/2024 rated against 563 funds in its category.

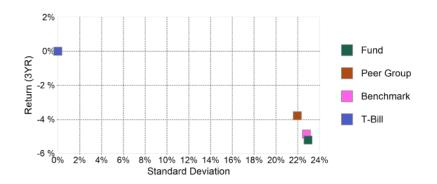
Risk Measures		Fund	Peers	Bench
Sharpe Ratio - 1 Year		0.47	<b>+/-</b> 0.21	+/- 0.22
Sharpe Ratio - 3 Year		-0.25	-0.03	-0.01
Sharpe Ratio - 5 Year		0.23	0.01	0.01
Sharpe Ratio - 10 Year		0.32	-0.03	0.04
Std. Deviation - 3 Year		22.96	0.99	0.16
Std. Deviation - 5 Year		24.58	1.52	0.61
Std. Deviation - 10 Year		21.70	1.59	0.85
Mean - 3 Year		-5.21	-1.43	-0.35
Mean - 5 Year		7.33	0.54	1.16
Mean - 10 Year		8.00	-0.19	0.61
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		-0.53	-0.76	-0.53
Alpha (Standard) - 5 Year		1.30	0.42	1.30
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		0.97	0.05	-0.03
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		93.37	0.57	-6.63
Sector Weightings (%)				
Basic Materials	0.00			
Consumer Cyclical	12.67			
Financial Services	4.49			
Real Estate	1.59			
Consumer Defensive	7.28			
Healthcare	21.78			
Utilities	0.48			
Communication Services	1.60			
Energy	3.68			
Industrials	17.16			
Technology	29.26			

# **Calendar Year Quartile Rankings**

(shades indicate fund quartile ranking; numbers indicate performance at NAV)

Top 2nd 3rd							
Bottom							
	2017	2018	2019	2020	2021	2022	2023
Fund	21.51%	-2.33%	33.54%	41.75%	-0.35%	-30.16%	31.24%
Peer Group 25 Percentile	27.25%	-0.91%	35.01%	53.69%	15.60%	-24.26%	19.40%
Peer Group 50 Percentile	24.15%	-4.62%	29.09%	38.85%	9.77%	-28.28%	16.43%
Peer Group 75 Percentile	19.44%	-7.63%	25.02%	28.58%	3.74%	-31.58%	13.01%
Benchmark	22.17%	-9.31%	28.48%	34.63%	2.83%	-26.36%	18.66%

# Fund Risk/Return (3 Year)





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# Vanguard Total Intl Stock Index Admiral - VTIAX

Family: Vanguard Fund Manager: Michael Perre Fund Inception Date: 29-Nov-2010 Total Net Assets: \$429,040,000,000

Performance	Fund	Benchmark	Difference	Peers
Last Cal. QTR	0.80	0.96	-0.16	0.13
YTD	5.13	5.69	-0.56	5.48
1 Year	10.96	11.62	-0.66	10.79
3 Year	0.34	0.46	-0.12	1.18
5 Year	5.75	5.55	0.20	6.13
10 Year	4.02	3.84	0.18	4.09
Since Inception	5.07	4.91	0.16	-

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns									
	2023	2022	2021	2020	2019	2018	2017		
Fund	15.52	-16.01	8.62	11.28	21.51	-14.43	27.55		
Peer Group	16.31	-15.74	10.49	10.12	22.41	-14.86	26.15		

Category: Foreign Large Blend Benchmark: MSCI ACWI Ex USA NR USD **Prospectus Objective: Foreign Stock** Home Page: www.vanguard.com Phone: 800-662-7447

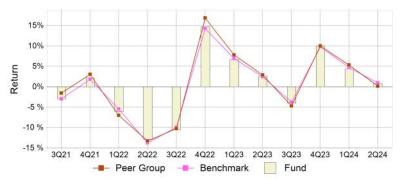
5 Year Up:       104.74         5 Year Down:       103.85         3 Year Up:       105.82         3 Year Down:       105.14	
3 Year Up: 105.82	107.15
	104.24
3 Year Down: 105.14	109.50
	105.22
3 Year Sharpe Ratio: -0.08	-0.02
1 Year Sharpe Ratio: 0.43	0.42
3 Year R-Squared: 98.55	93.42
3 Year Beta: 1.03	1.04
3 Year Std Deviation: 16.98	17.54
1 Year Std Deviation: 14.37	14.35
3 Year Tracking Error: 2.09	4.48
1 Year Tracking Error: 2.02	4.40
Net Expense Ratio: 0.12	0.89
Gross Expense Ratio: 0.12	1.01

Morningstar Overall Rating: 3.00

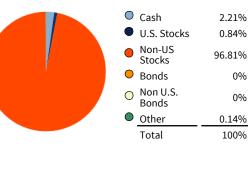
Overall Morningstar Rating for VTIAX as of 6/30/2024 rated against 693 funds in its category.

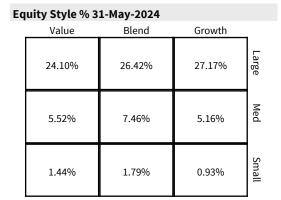
eers	Top 10 Holdings	
	Taiwan Semiconductor Manufacturing Co Ltd	1.95%
07.15		
04.24	Novo Nordisk A/S Class B	1.33%
09.50	ASML Holding NV	1.20%
05.22	Tencent Holdings Ltd	0.91%
0.02	Nestle SA	0.90%
0.42	Toyota Motor Corp	0.82%
3.42	Samsung Electronics Co Ltd	0.80%
1.04	Shell PLC	0.74%
7.54	AstraZeneca PLC	0.73%
4.35	Novartis AG Registered Shares	0.68%
4.48		

# **Rolling Quarter Return Analysis**



# Fund Composition 31-May-2024







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# American Funds Europacific Growth R6 - RERGX

Family: American Funds Fund Manager: Carl M. Kawaja Fund Inception Date: 01-May-2009

**Quarterly Returns History** 

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	-0.23	0.03	-0.95	49 / 407
YTD	7.19	1.16	0.51	34 / 405
1 Year	10.82	1.88	0.94	36 / 403
3 Year	-2.46	0.00	0.16	50 / 393
5 Year	6.05	0.18	0.56	48 / 368
10 Year	5.25	0.18	0.51	44 / 306
5 Year Up/Down	106.76 / 104.32	-0.04 / 0.00		
Since Inception	8.06	-	3.65	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

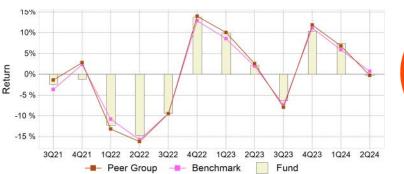
Calendar Year	Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	16.05	-22.72	2.84	25.27	27.40	-14.91	31.17
Peer Group	16.08	-24.73	8.81	22.54	28.16	-14.16	31.05

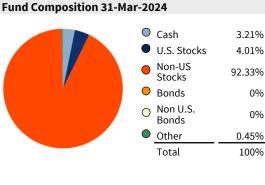
Category: Foreign Large Growth Benchmark: MSCI ACWI Ex USA Growth NR USD Prospectus Objective: Foreign Stock Home Page: www.americanfunds.com Phone: 800-421-4225

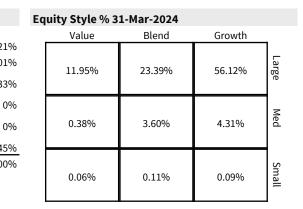
Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	23.10	11.12
Track Record (Yrs)	40.17	16.75
Turnover Ratio %	34.00	32.00
Total Net Assets (\$Millions)	136,340.00	1,168.00
Price/Earnings	21.56	23.76
Assets in top 10 holdings %	24.14	32.70
Number of holdings	341.00	69.00

Fund	Peers
-	5.50
-	1.00
Fund	Peers
-	0.25
0.47	1.02
	Fund

**Top 10 Holdings** Novo Nordisk A/S Class B 4.94% Taiwan Semiconductor Manufacturing 3.15% Co Ltd Airbus SE 2.68% Safran SA 2.48% ASML Holding NV 2.14% **Reliance Industries Ltd** 2.06% Canadian Natural Resources Ltd 1.86% SAP SE 1.68% Daiichi Sankyo Co Ltd 1.64% Flutter Entertainment PLC 1.50%









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Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RERGX as of 6/30/2024 rated against 393 funds in its category.

# American Funds Europacific Growth R6 - RERGX

Family: American Funds Fund Manager: Carl M. Kawaja Fund Inception Date: 01-May-2009 Category: Foreign Large Growth Benchmark: MSCI ACWI Ex USA Growth NR USD Prospectus Objective: Foreign Stock Home Page: www.americanfunds.com Phone: 800-421-4225

Morningstar Overall Rating: 3.00

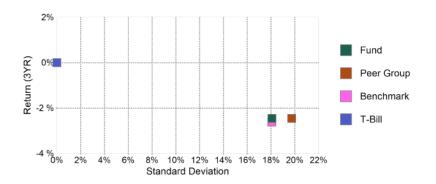
Overall Morningstar Rating for RERGX as of 6/30/2024 rated against 393 funds in its category.

isk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quartile	-	mhore indi	rato norfa-	mancoat	NA
arpe Ratio - 1 Year		0.41	0.14	0.08	Top	e ranking; nu		Late perior		
arpe Ratio - 3 Year		-0.22	-0.04	0.01	2nd					
arpe Ratio - 5 Year		0.29	0.00	0.02	3rd					3 C
rpe Ratio - 10 Year		0.31	0.02	0.03	Bottom					וב
. Deviation - 3 Year		18.08	-1.67	0.01		2017	2018	2019	2020	
Deviation - 5 Year		18.70	-0.13	1.34	Fund	31.17%	-14.91%	27.40%	25.27%	
. Deviation - 10 Year		15.72	-0.21	0.66	Peer Group 25 Percentile	34.92%	-11.01%	31.42%	30.32%	
an - 3 Year		-2.46	0.00	0.16	Peer Group 50 Percentile	31.05%	-14.16%	28.16%	22.54%	
n - 5 Year		6.05	0.18	0.56	Peer Group 75 Percentile	28.46%	-16.43%	26.95%	17.93%	
n - 10 Year		5.25	0.18	0.51	Benchmark	32.01%	-14.43%	27.34%	22.20%	
a (Best Fit) - 3 Year		-	-	-						
na (Standard) - 3 Year		0.08	-0.66	0.08						
na (Standard) - 5 Year		0.55	0.02	0.55						
a (Best Fit) - 3 Year		-	-	-						
(Standard) - 3 Year		0.98	-0.07	-0.02						
quared (Best Fit) - 3 Year		-	-	-						
quared (Standard) - 3 Year		95.81	4.39	-4.19						
tor Weightings (%)					Fund Risk/Return (3 Year)					
c Materials	8.65									
sumer Cyclical	11.48				2%					
ncial Services	12.75									
Estate	0.66									
sumer Defensive	6.91				€ 0% <b></b>					
lthcare	11.95				(3)					
ties	0.95				%0 %					
nmunication Services	4.65				-2 %					
rgy	6.52								-	
Istrials	16.47									
hnology	19.01				-4 %	% 6% 8%	10% 12% 1	4% 16% 1	8% 20% 2	5

# Calendar Year Quartile Rankings

	2017	2018	2019	2020	2021	2022	2023
	31.17%	-14.91%	27.40%	25.27%	2.84%	-22.72%	16.05%
ntile	34.92%	-11.01%	31.42%	30.32%	11.19%	-20.85%	18.62%
ntile	31.05%	-14.16%	28.16%	22.54%	8.81%	-24.73%	16.08%
ntile	28.46%	-16.43%	26.95%	17.93%	3.53%	-28.59%	14.40%
	32.01%	-14.43%	27.34%	22.20%	5.09%	-23.05%	14.03%

# Fund Risk/Return (3 Year)





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# **DFA Emerging Markets Core Equity I - DFCEX**

Family: Dimensional Fund Advisors Fund Manager: Jed S. Fogdall Fund Inception Date: 05-Apr-2005

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	5.57	1.42	0.57	24 / 815
YTD	8.09	0.81	0.60	42 / 813
1 Year	14.82	3.07	2.27	29 / 806
3 Year	-0.46	5.09	4.61	14 / 728
5 Year	5.90	2.65	2.80	21/673
10 Year	4.07	1.38	1.28	23 / 525
5 Year Up/Down	102.79 / 92.11	2.68 / -7.04		
Since Inception	7.03	-	-0.66	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Yea	r Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	15.45	-16.40	5.83	13.86	16.04	-15.25	36.55
Peer Group	11.17	-22.47	-0.90	17.85	21.32	-16.23	36.58

Category: Diversified Emerging Mkts Benchmark: MSCI EM NR USD Prospectus Objective: Diversified Emerging Market... Home Page: www.dimensional.com Phone: 888-576-1167

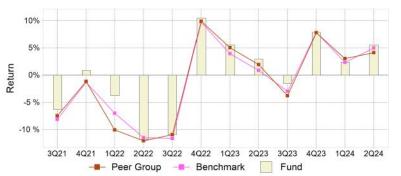
Fund Basics 31-May-2024	Fund	Peers
Manager Tenure (Yrs)	14.35	8.50
Track Record (Yrs)	19.17	12.67
Turnover Ratio %	11.00	38.00
Total Net Assets (\$Millions)	27,767.00	387.00
Price/Earnings	12.88	14.95
Assets in top 10 holdings %	14.22	34.53
Number of holdings	7,509.00	107.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.39	

Morningstar Overall Rating: 4.00

Overall Morningstar Rating for DFCEX as of 6/30/2024 rated against 728 funds in its category.

Top 10 Holdings	
Taiwan Semiconductor Manufacturing Co Ltd	3.92%
Tencent Holdings Ltd	2.80%
Samsung Electronics Co Ltd	2.07%
Taiwan Semiconductor Manufacturing Co Ltd ADR	1.49%
Alibaba Group Holding Ltd Ordinary Shares	0.96%
China Construction Bank Corp Class H	0.72%
Reliance Industries Ltd	0.65%
Petroleo Brasileiro SA Petrobras Participating Preferred	0.59%
PDD Holdings Inc ADR	0.53%
Infosys Ltd	0.49%



# Fund Composition 31-May-2024 Cash U.S. Stocks Non-US Stocks Bonds Non U.S.

Bonds Other

Total



. \_ \_ \_ \_ \_

**Quarterly Returns History** 

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# DFA Emerging Markets Core Equity I - DFCEX

Family: Dimensional Fund Advisors Fund Manager: Jed S. Fogdall Fund Inception Date: 05-Apr-2005

Category: Diversified Emerging Mkts Benchmark: MSCI EM NR USD Prospectus Objective: Diversified Emerging Market... Home Page: www.dimensional.com Phone: 888-576-1167

Morningstar Overall Rating: 4.00

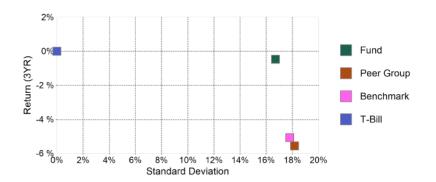
Overall Morningstar Rating for DFCEX as of 6/30/2024 rated against 728 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calenda
Sharpe Ratio - 1 Year		0.69	0.24	0.20	(shades Top
Sharpe Ratio - 3 Year		-0.13	0.26	0.25	2nd
Sharpe Ratio - 5 Year		0.28	0.13	0.14	3rd
Sharpe Ratio - 10 Year		0.23	0.08	0.07	Bottom
Std. Deviation - 3 Year		16.72	-1.45	-1.08	
Std. Deviation - 5 Year		19.05	-0.23	0.45	Fund
Std. Deviation - 10 Year		17.14	-0.08	-0.03	Peer Gro
Mean - 3 Year		-0.46	5.09	4.61	Peer Gro
Mean - 5 Year		5.90	2.65	2.80	Peer Gro
Mean - 10 Year		4.07	1.38	1.28	Benchma
Alpha (Best Fit) - 3 Year		-	-	-	
Alpha (Standard) - 3 Year		4.05	4.52	4.05	
Alpha (Standard) - 5 Year		2.79	2.50	2.79	
Beta (Best Fit) - 3 Year		-	-	-	
Beta (Standard) - 3 Year		0.93	-0.05	-0.07	
R-Squared (Best Fit) - 3 Year		-	-	-	
R-Squared (Standard) - 3 Year		97.11	5.44	-2.89	
Sector Weightings (%)					Fund Ri
Basic Materials	10.24				
Consumer Cyclical	11.78				
Financial Services	17.67				
Real Estate	2.64				
Consumer Defensive	5.37				
Healthcare	4.71				
Utilities	2.88				
<b>Communication Services</b>	7.21				
Energy	5.27				
Industrials	11.88				
Technology	20.35				

#### **Calendar Year Quartile Rankings** (shades indicate fund quartile ranking; numbers indicate performance at NAV) 2018 2020 2022 2023 2017 2019 2021 36.55% -15.25% 16.04% 13.86% 5.83% -16.40% 15.45% 25.65% 26.56% 4.29% -19.22% Peer Group 25 Percentile 41.27% -14.51% 15.43% Peer Group 50 Percentile 36.58% -16.23% 21.32% 17.85% -0.90% -22.47% 11.17% 17.78% 12.73% -5.03% -25.92% 8.38% Peer Group 75 Percentile 31.20% -18.53% 37.28% -14.58% 18.44% 18.31% -2.54% -20.09% 9.83%

# Fund Risk/Return (3 Year)

Benchmark





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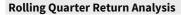
# Vanguard Total Bond Market Index Adm - VBTLX

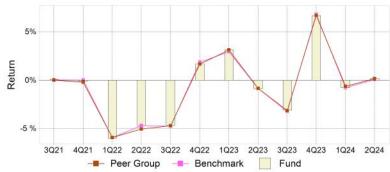
Family: Vanguard Fund Manager: Joshua C. Barrickman Fund Inception Date: 12-Nov-2001 Total Net Assets: \$320,057,000,000

Performance	Fund	Benchmark	Difference	Peers
Last Cal. QTR	0.18	0.07	0.11	0.18
YTD	-0.62	-0.71	0.09	-0.43
1 Year	2.76	2.63	0.13	2.93
3 Year	-3.01	-3.02	0.01	-3.10
5 Year	-0.20	-0.23	0.03	-0.17
10 Year	1.33	1.35	-0.02	1.29
Since Inception	3.20	6.53	-3.33	-

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

<b>Calendar Year</b>	Returns	5						
	2023	2022	2021	2020	2019	2018	2017	
Fund	5.70	-13.16	-1.67	7.72	8.71	-0.03	3.56	
Peer Group	5.62	-13.41	-1.57	7.81	8.51	-0.37	3.47	





Category: Intermediate Core Bond Benchmark: Bloomberg US Agg Bond TR USD Prospectus Objective: Income Home Page: www.vanguard.com Phone: 800-662-7447

Fund Basics 31-May-2024	Fund	
5 Year Up:	101.48	
5 Year Down:	100.96	
3 Year Up:	99.43	
3 Year Down:	99.51	
3 Year Sharpe Ratio:	-0.80	
1 Year Sharpe Ratio:	-0.30	
3 Year R-Squared:	99.89	
3 Year Beta:	0.99	
3 Year Std Deviation:	7.37	
1 Year Std Deviation:	7.72	
3 Year Tracking Error:	0.25	
1 Year Tracking Error:	0.22	
Net Expense Ratio:	0.05	
Gross Expense Ratio:	0.05	

Peers 102.39 101.55 98.21 99.76 -0.81 -0.27 99.13

> 1.00 7.42

> 7.86 0.75

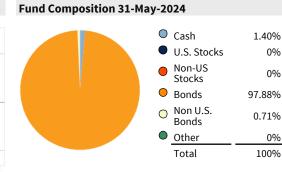
> 0.51 0.49 0.59

> > 0%

0%

0%

100%



Morningstar Overall Rating: 3.00

Overall Morningstar Rating for VBTLX as of 6/30/2024 rated against 433 funds in its category.

Fixed Income Basics 31-May- 2024	Fund
Avg. Effective Duration (Yrs)	6.09
Avg. Effective Maturity (Yrs)	8.50
Avg. Weighted Price \$	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit	Quality	Fund	Peers
AAA %		70.76	57.32
AA %		3.08	5.57
Α%		12.64	12.84
BBB %		13.44	15.85
BB %		0.00	0.20
В%		0.00	0.00
Below B	%	0.00	0.00
Not Rat	ed %	0.08	0.07

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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#### Victory Income R6 - URIFX

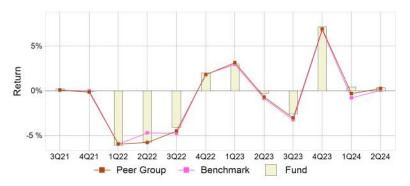
Family: Victory Capital Fund Manager: Brian W. Smith Fund Inception Date: 01-Dec-2016

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	0.37	0.09	0.30	35 / 645
YTD	0.84	0.85	1.55	13 / 642
1 Year	5.32	1.66	2.69	11/627
3 Year	-2.06	0.98	0.96	13 / 573
5 Year	1.06	0.97	1.29	9 / 550
10 Year	2.30	0.83	0.95	7 / 463
5 Year Up/Down	117.27 / 100.41	7.99 / -3.53		
Since Inception	2.41	-	-4.12	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Yea	r Return	S					
	2023	2022	2021	2020	2019	2018	2017
Fund	7.27	-13.30	0.54	8.32	11.31	-1.21	5.73
Peer Group	6.18	-13.86	-0.82	8.39	9.27	-0.77	4.25

# **Quarterly Returns History**

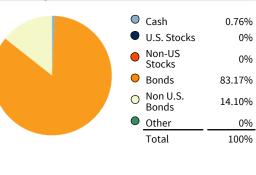


Category: Intermediate Core-Plus Bond Benchmark: Bloomberg US Agg Bond TR USD Prospectus Objective: Corporate Bond - General Home Page: www.usaa.com Phone: 800-235-8396

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	10.59	9.68
Track Record (Yrs)	50.25	23.50
Turnover Ratio %	-	150.00
Total Net Assets (\$Millions)	4,477.00	1,223.00
Price/Earnings	-	12.59
Assets in top 10 holdings %	9.22	27.82
Number of holdings	958.00	674.00

Sales Charges	Fund	Peers
Front End Load %	-	3.75
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	<b>Fund</b> 0.00	<b>Peers</b> 0.25

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 4.00

Overall Morningstar Rating for URIFX as of 6/30/2024 rated against 573 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	6.06	6.13
Avg. Effective Maturity (Yrs)	8.74	8.78
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	34.66	47.63
AA %	4.88	5.35
A %	14.56	11.15
BBB %	38.27	19.13
BB %	5.71	5.50
В%	1.00	1.65
Below B %	0.05	0.58
Not Rated %	0.87	2.20

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# Victory Income R6 - URIFX

Family: Victory Capital Fund Manager: Brian W. Smith Fund Inception Date: 01-Dec-2016 Category: Intermediate Core-Plus Bond Benchmark: Bloomberg US Agg Bond TR USD Prospectus Objective: Corporate Bond - General Home Page: www.usaa.com Phone: 800-235-8396

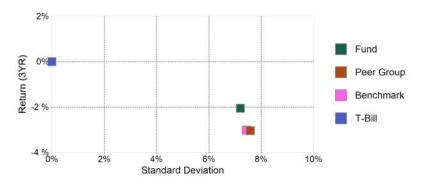
Morningstar Overall Rating: 4.00

Overall Morningstar Rating for URIFX as of 6/30/2024 rated against 573 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quarti	-
Sharpe Ratio - 1 Year		0.02	0.19	0.32	Тор	
Sharpe Ratio - 3 Year		-0.69	0.08	0.10	2nd	
Sharpe Ratio - 5 Year		-0.12	0.15	0.23	3rd	
Sharpe Ratio - 10 Year		0.17	0.15	0.18	Bottom	
Std. Deviation - 3 Year		7.21	-0.38	-0.22		201
Std. Deviation - 5 Year		7.08	0.24	0.85	Fund	5.73
Std. Deviation - 10 Year		5.45	0.22	0.58	Peer Group 25 Percentile	4.98
Mean - 3 Year		-2.06	0.98	0.96	Peer Group 50 Percentile	4.25
Mean - 5 Year		1.06	0.97	1.29	Peer Group 75 Percentile	3.51
Mean - 10 Year		2.30	0.83	0.95	Benchmark	3.54
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.70	0.63	0.70		
Alpha (Standard) - 5 Year		1.38	0.95	1.38		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.95	-0.06	-0.05		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		97.70	0.20	-2.30		
Sector Weightings (%)					Fund Risk/Return (3 Year)	
Basic Materials	-					
Consumer Cyclical	-				2%	
Financial Services	-					
Real Estate	-					
Consumer Defensive	-				Ê 0%	
Healthcare	-				(3,K) 8,C 8,C 8,C 8,C 8,C 8,C 8,C 8,C 8,C 8,C	
Utilities	-				Ę	
Communication Services	-				₩ -2 %	
Energy	-					
Industrials	-					
					1 %	

-	•							
ades indicate fund quartile r	anking; nu	mbers indi	cate perfor	mance at N	AV)			
)								
l								
tom								
	2017	2018	2019	2020	2021	2022	2023	
d	5.73%	-1.21%	11.31%	8.32%	0.54%	-13.30%	7.27%	
r Group 25 Percentile	4.98%	-0.16%	10.07%	9.33%	-0.12%	-12.97%	6.89%	
r Group 50 Percentile	4.25%	-0.77%	9.27%	8.39%	-0.82%	-13.86%	6.18%	
r Group 75 Percentile	3.51%	-1.42%	8.28%	7.17%	-1.33%	-14.70%	5.41%	
ichmark	3.54%	0.01%	8.72%	7.51%	-1.54%	-13.01%	5.53%	

# d Risk/Return (3 Year)





Technology

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# Fidelity Advisor High Income Advtg I - FAHCX

Family: Fidelity Investments Fund Manager: Brian Chang Fund Inception Date: 03-Jul-1995

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.32	0.13	0.23	36 / 668
YTD	5.56	2.80	2.94	1/668
1 Year	12.48	2.68	2.03	5 / 663
3 Year	3.20	1.72	1.55	10/613
5 Year	6.29	2.90	2.56	1 / 590
10 Year	5.80	2.26	1.59	1/523
5 Year Up/Down	131.14 / 112.52	36.24 / 15.40		
Since Inception	7.39	-	-0.27	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns							
	2023	2022	2021	2020	2019	2018	2017
Fund	12.62	-10.20	11.50	8.93	17.80	-5.31	11.74
Peer Group	12.11	-10.68	4.85	5.23	13.69	-2.84	6.70

# **Quarterly Returns History**

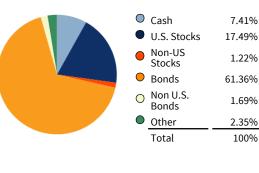


Category: High Yield Bond Benchmark: ICE BofA US High Yield TR USD Prospectus Objective: Income Home Page: www.institutional.fidelity.com Phone: 877-208-0098

Fund Basics		
30-Apr-2024	Fund	Peers
Manager Tenure (Yrs)	4.75	9.66
Track Record (Yrs)	37.42	21.75
Turnover Ratio %	29.00	38.00
Total Net Assets (\$Millions)	2,283.00	517.00
Price/Earnings	21.95	16.00
Assets in top 10 holdings %	16.62	11.46
Number of holdings	739.00	356.00

Sales Charges	Fund	Peers
Front End Load %	-	4.00
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.94	

# Fund Composition 30-Apr-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for FAHCX as of 6/30/2024 rated against 613 funds in its category.

Fixed Income Basics 30- Apr-2024	Fund	Peers
Avg. Effective Duration (Yrs)	-	3.06
Avg. Effective Maturity (Yrs)	-	4.39
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	0.00	0.01
AA %	0.00	0.00
Α%	0.00	0.00
BBB %	9.24	4.24
BB %	35.08	40.35
В %	45.67	39.30
Below B %	8.26	11.06
Not Rated %	1.75	2.11

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# Fidelity Advisor High Income Advtg I - FAHCX

Family: Fidelity Investments Fund Manager: Brian Chang Fund Inception Date: 03-Jul-1995 Category: High Yield Bond Benchmark: ICE BofA US High Yield TR USD **Prospectus Objective: Income** Home Page: www.institutional.fidelity.com Phone: 877-208-0098

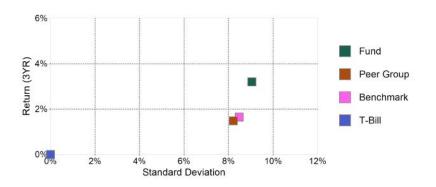
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for FAHCX as of 6/30/2024 rated against 613 funds in its category.

			_	
Risk Measures		Fund	Peers +/-	Bench +/-
Sharpe Ratio - 1 Year		1.02	0.28	0.23
Sharpe Ratio - 3 Year		0.06	0.21	0.18
Sharpe Ratio - 5 Year		0.41	0.23	0.20
Sharpe Ratio - 10 Year		0.48	0.17	0.10
Std. Deviation - 3 Year		9.05	0.83	0.57
Std. Deviation - 5 Year		11.37	2.17	1.97
Std. Deviation - 10 Year		9.51	2.00	1.81
Mean - 3 Year		3.20	1.72	1.55
Mean - 5 Year		6.29	2.90	2.56
Mean - 10 Year		5.80	2.26	1.59
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		1.62	1.86	1.62
Alpha (Standard) - 5 Year		2.31	2.56	2.31
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		1.05	0.10	0.05
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		96.25	-1.84	-3.75
Sector Weightings (%)				
Basic Materials	3.96			
Consumer Cyclical	12.74			
Financial Services	11.43			
Real Estate	0.00			
Consumer Defensive	2.09			
Healthcare	0.43			
Utilities	5.65			
Communication Services	6.62			
Energy	4.89			
Industrials	17.81			
Technology	34.37			

ndar Year Quartile Rankings									
es indicate fund quartile ranking; numbers indicate performance at NAV)									
om									
	2017	2018	2019	2020	2021	2022	2023		
	11.74%	-5.31%	17.80%	8.93%	11.50%	-10.20%	12.62%		
Group 25 Percentile	7.52%	-1.84%	14.78%	6.39%	5.92%	-9.04%	12.85%		
Group 50 Percentile	6.70%	-2.84%	13.69%	5.23%	4.85%	-10.68%	12.11%		
Group 75 Percentile	5.98%	-3.61%	12.10%	3.87%	3.89%	-11.70%	11.13%		
hmark	7.48%	-2.26%	14.41%	6.17%	5.36%	-11.22%	13.46%		

# **Risk/Return (3 Year)**





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# American Funds 2015 Trgt Date Retire R6 - RFJTX

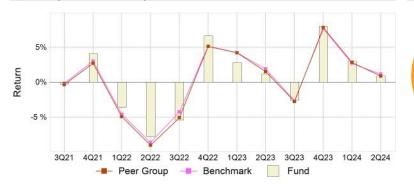
Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	0.90	0.00	-0.29	53 / 113
YTD	3.94	0.32	0.01	30 / 113
1 Year	9.44	0.96	0.51	17 / 113
3 Year	2.02	1.27	0.50	1/103
5 Year	5.43	0.83	0.50	8 / 98
10 Year	5.24	0.53	0.39	5 / 69
5 Year Up/Down	103.72 / 100.37	0.14 / -7.53		
Since Inception	7.71	-	2.33	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns							
	2023	2022	2021	2020	2019	2018	2017
Fund	9.57	-10.25	10.27	9.96	14.94	-2.72	11.19
Peer Group	10.90	-13.61	7.95	11.55	16.07	-3.98	11.78

# **Quarterly Returns History**

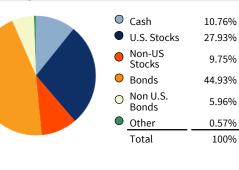


Category: Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD **Prospectus Objective: Asset Allocation** Home Page: www.americanfunds.com Phone: 800-421-4225

	nd Basics Mar-2024	Fund	Peers
Ма	nager Tenure (Yrs)	12.50	10.65
Tra	ck Record (Yrs)	17.33	14.75
Tur	nover Ratio %	7.00	17.00
Tot	al Net Assets (\$Millions)	4,966.00	217.00
Prio	ce/Earnings	21.52	20.08
Ass	ets in top 10 holdings %	72.33	73.92
Nu	mber of holdings	22.00	22.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00
_		
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	- 0.30	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFJTX as of 6/30/2024 rated against 103 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	4.65	5.21
Avg. Effective Maturity (Yrs)	-	7.79
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	66.30	66.30
AA %	3.56	3.56
A %	9.32	8.87
BBB %	8.65	11.34
BB %	6.38	3.31
В%	2.98	2.40
Below B %	1.11	0.45
Not Rated %	1.70	0.62

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2015 Trgt Date Retire R6 - RFJTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

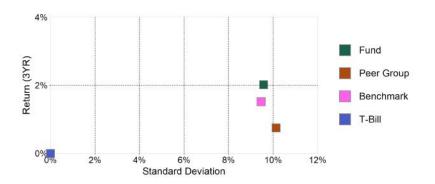
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFJTX as of 6/30/2024 rated against 103 funds in its category.

Risk Measures		Fund	Peers	Bench
			+/-	+/-
Sharpe Ratio - 1 Year		0.48	0.12	0.07
Sharpe Ratio - 3 Year		-0.06	0.12	0.05
Sharpe Ratio - 5 Year		0.39	0.10	0.05
Sharpe Ratio - 10 Year		0.52	0.10	0.05
Std. Deviation - 3 Year		9.58	-0.56	0.11
Std. Deviation - 5 Year		9.11	-0.52	0.01
Std. Deviation - 10 Year		7.46	-0.54	-0.08
Mean - 3 Year		2.02	1.27	0.50
Mean - 5 Year		5.43	0.83	0.50
Mean - 10 Year		5.24	0.53	0.39
Alpha (Best Fit) - 3 Year		-	-	-
Alpha (Standard) - 3 Year		0.50	1.15	0.50
Alpha (Standard) - 5 Year		0.51	0.90	0.51
Beta (Best Fit) - 3 Year		-	-	-
Beta (Standard) - 3 Year		1.00	-0.07	0.00
R-Squared (Best Fit) - 3 Year		-	-	-
R-Squared (Standard) - 3 Year		97.41	-1.11	-2.59
Sector Weightings (%)				
Basic Materials	3.66			
Consumer Cyclical	7.22			
Financial Services	14.50			
Real Estate	2.79			
Consumer Defensive	9.02			
Healthcare	14.41			
Utilities	4.52			
Communication Services	6.07			
Energy	6.35			
Industrials	12.42			

Calendar Year Quartile Rankings								
(shades indicate fund quartile ranking; numbers indicate performance at NAV)								
Тор								
2nd								
3rd								
Bottom								
	2017	2018	2019	2020	2021	2022	2023	
Fund	11.19%	-2.72%	14.94%	9.96%	10.27%	-10.25%	9.57%	
Peer Group 25 Percentile	12.63%	-3.50%	16.59%	12.08%	9.12%	-12.83%	11.39%	
Peer Group 50 Percentile	11.78%	-3.98%	16.07%	11.55%	7.95%	-13.61%	10.90%	
Peer Group 75 Percentile	10.89%	-4.52%	14.92%	9.96%	7.03%	-14.53%	9.99%	
Benchmark	11.39%	-3.67%	15.40%	10.28%	8.01%	-12.16%	11.38%	

# Fund Risk/Return (3 Year)





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# American Funds 2020 Trgt Date Retire R6 - RRCTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	0.97	-0.01	-0.31	56 / 146
YTD	4.37	0.10	-0.15	43 / 146
1 Year	10.16	0.88	0.32	14 / 146
3 Year	2.19	1.45	0.36	1/136
5 Year	5.81	0.77	0.53	8/131
10 Year	5.66	0.74	0.44	5 / 93
5 Year Up/Down	100.60 / 96.53	-3.48 / -8.91		
Since Inception	8.35	-	2.61	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year	Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	10.46	-11.01	10.64	10.99	15.59	-2.69	12.87
Peer Group	11.66	-14.45	8.84	12.02	17.21	-4.69	13.34

# **Quarterly Returns History**

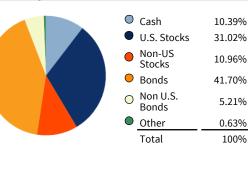


Category: Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	11.01
Track Record (Yrs)	17.33	14.67
Turnover Ratio %	6.00	19.00
Total Net Assets (\$Millions)	15,763.00	523.00
Price/Earnings	22.01	20.21
Assets in top 10 holdings %	69.34	76.28
Number of holdings	22.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Evnoncoc	Fund	Deeve
Expenses	Fund	Peers
12b1 Expense %	Funa -	0.25
	- 0.31	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RRCTX as of 6/30/2024 rated against 136 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	4.98	5.50
Avg. Effective Maturity (Yrs)	-	7.91
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	67.76	60.02
AA %	3.04	4.59
Α%	8.51	8.51
BBB %	8.54	12.25
BB %	6.50	4.19
В%	3.06	3.06
Below B %	1.14	0.87
Not Rated %	1.45	0.72

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2020 Trgt Date Retire R6 - RRCTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

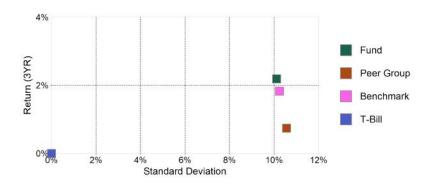
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RRCTX as of 6/30/2024 rated against 136 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra	-
Sharpe Ratio - 1 Year		0.53	0.11	0.05	(shades indicate fund quarti Top	le ranking
Sharpe Ratio - 3 Year		-0.03	0.13	0.04	2nd	
Sharpe Ratio - 5 Year		0.41	0.10	0.06	3rd	
Sharpe Ratio - 10 Year		0.54	0.12	0.07	Bottom	
Std. Deviation - 3 Year		10.12	-0.45	-0.13		201
Std. Deviation - 5 Year		9.58	-0.76	-0.34	Fund	12.8
Std. Deviation - 10 Year		7.96	-0.76	-0.35	Peer Group 25 Percentile	13.9
Mean - 3 Year		2.19	1.45	0.36	Peer Group 50 Percentile	13.3
Mean - 5 Year		5.81	0.77	0.53	Peer Group 75 Percentile	12.5
Mean - 10 Year		5.66	0.74	0.44	Benchmark	12.8
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.32	1.37	0.32		
Alpha (Standard) - 5 Year		0.61	1.04	0.61		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.98	-0.05	-0.02		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.08	-0.83	-1.92		
Sector Weightings (%)					Fund Risk/Return (3 Year)	)
Basic Materials	3.61					
Consumer Cyclical	7.49				4%	
Financial Services	14.00				470	
Real Estate	2.52					
Consumer Defensive	8.72				R)	
Healthcare	14.52				Return (3YR)	
Utilities	4.17				Ę <sup>2%</sup>	
Communication Services	6.24				Ret	
Energy	5.94					
Industrials	12.74					
Technology	20.05				0% 2%	4%

	0						
ind quartile	ranking; nu	mbers indi	cate perfor	mance at N	IAV)		
	2017	2018	2019	2020	2021	2022	2023
	12.87%	-2.69%	15.59%	10.99%	10.64%	-11.01%	10.46%
entile	13.95%	-3.96%	18.12%	12.94%	9.72%	-13.54%	12.68%
entile	13.34%	-4.69%	17.21%	12.02%	8.84%	-14.45%	11.66%
entile	12.53%	-5.34%	15.65%	10.09%	8.10%	-14.95%	10.91%
	12.80%	-4.16%	16.52%	10.24%	8.76%	-12.81%	12.32%

# und Risk/Return (3 Year)





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# American Funds 2025 Trgt Date Retire R6 - RFDTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	0.99	-0.05	-0.32	58/210
YTD	4.85	0.05	0.06	48 / 208
1 Year	10.82	0.64	0.53	24 / 207
3 Year	2.24	1.28	0.13	5 / 197
5 Year	6.60	1.10	0.53	4 / 180
10 Year	6.33	1.05	0.53	3/145
5 Year Up/Down	100.78 / 97.16	-0.11 / -8.30		
Since Inception	9.33	-	3.15	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Yea	r Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	11.94	-12.74	11.44	13.67	17.85	-3.47	15.32
Peer Group	12.64	-15.54	9.87	12.72	18.51	-5.38	15.04

# **Quarterly Returns History**

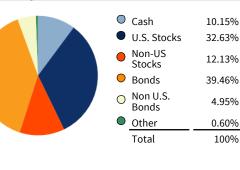


Category: Target-Date 2025 Benchmark: S&P Target Date 2025 TR USD **Prospectus Objective: Asset Allocation** Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	10.65
Track Record (Yrs)	17.33	14.17
Turnover Ratio %	5.00	20.00
Total Net Assets (\$Millions)	33,152.00	519.50
Price/Earnings	22.60	20.36
Assets in top 10 holdings %	64.77	82.66
Number of holdings	25.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.32	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFDTX as of 6/30/2024 rated against 197 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.01	5.44
Avg. Effective Maturity (Yrs)	-	8.07
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	68.89	49.56
AA %	3.08	4.66
A %	8.55	9.14
BBB %	8.43	13.06
BB %	5.87	4.48
В%	2.73	2.73
Below B %	1.02	0.79
Not Rated %	1.43	0.73

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2025 Trgt Date Retire R6 - RFDTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2025 Benchmark: S&P Target Date 2025 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

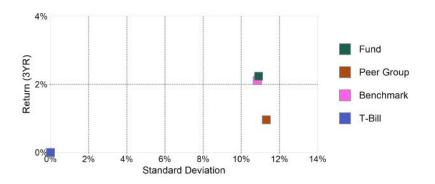
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFDTX as of 6/30/2024 rated against 197 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quartil	-
Sharpe Ratio - 1 Year		0.57	0.10	0.06	Top	
Sharpe Ratio - 3 Year		-0.02	0.10	0.01	2nd	
Sharpe Ratio - 5 Year		0.45	0.12	0.05	3rd	
Sharpe Ratio - 10 Year		0.56	0.13	0.07	Bottom	
Std. Deviation - 3 Year		10.91	-0.41	0.07		201
Std. Deviation - 5 Year		10.62	-0.92	-0.37	Fund	15.32
Std. Deviation - 10 Year		8.97	-0.75	-0.34	Peer Group 25 Percentile	15.74
Mean - 3 Year		2.24	1.28	0.13	Peer Group 50 Percentile	15.04
Mean - 5 Year		6.60	1.10	0.53	Peer Group 75 Percentile	14.0
Mean - 10 Year		6.33	1.05	0.53	Benchmark	14.5
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.14	1.17	0.14		
Alpha (Standard) - 5 Year		0.64	1.34	0.64		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		1.00	-0.04	0.00		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.81	-0.13	-1.19		
Sector Weightings (%)					Fund Risk/Return (3 Year)	
Basic Materials	3.63					
Consumer Cyclical	8.16				4%	1
Financial Services	13.28					
Real Estate	2.13					
Consumer Defensive	8.13				(R)	
Healthcare	14.64				(E) 2%	
Utilities	3.61				Return (3YR) %2	
Communication Services	6.57				Re	
Energy	5.33					
Industrials	13.30					
Technology	21.22				0% 2%	4%

•	0						
te fund quartile ranking; numbers indicate performance at NAV)							
	2017	2018	2019	2020	2021	2022	2023
	15.32%	-3.47%	17.85%	13.67%	11.44%	-12.74%	11.94%
Percentile	15.74%	-4.77%	19.56%	13.67%	10.90%	-13.73%	13.58%
Percentile	15.04%	-5.38%	18.51%	12.72%	9.87%	-15.54%	12.64%
Percentile	14.07%	-6.01%	17.58%	10.83%	8.68%	-16.10%	11.64%
	14.55%	-5.02%	18.38%	11.22%	10.67%	-13.13%	12.99%

# und Risk/Return (3 Year)





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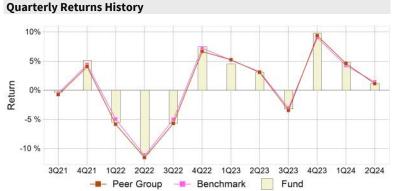
# American Funds 2030 Trgt Date Retire R6 - RFETX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.18	0.03	-0.25	48/211
YTD	6.04	0.20	0.29	37/211
1 Year	12.71	1.03	0.86	15/210
3 Year	2.86	1.27	0.08	7 / 199
5 Year	7.64	1.14	0.60	4 / 176
10 Year	7.27	1.17	0.81	1/138
5 Year Up/Down	100.75 / 97.21	-0.87 / -8.07		
Since Inception	10.20	-	3.59	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns							
	2023	2022	2021	2020	2019	2018	2017
Fund	14.52	-14.50	13.16	15.16	20.06	-4.16	18.40
Peer Group	14.46	-16.41	11.69	13.72	20.85	-6.48	17.19

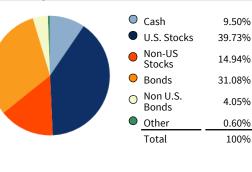


Category: Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	9.76
Track Record (Yrs)	17.33	13.08
Turnover Ratio %	2.00	18.00
Total Net Assets (\$Millions)	47,673.00	830.00
Price/Earnings	23.45	20.50
Assets in top 10 holdings %	59.76	80.08
Number of holdings	24.00	23.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
12b1 Expense %	-	0.25
12b1 Expense % Gross Expense Ratio %	- 0.33	0.25 0.79

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFETX as of 6/30/2024 rated against 199 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.18	5.53
Avg. Effective Maturity (Yrs)	-	8.24
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	73.26	49.54
AA %	3.22	5.07
A %	8.81	9.06
BBB %	8.15	13.09
BB %	3.43	3.61
В%	1.39	3.20
Below B %	0.45	0.64
Not Rated %	1.29	0.71

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2030 Trgt Date Retire R6 - RFETX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFETX as of 6/30/2024 rated against 199 funds in its category.

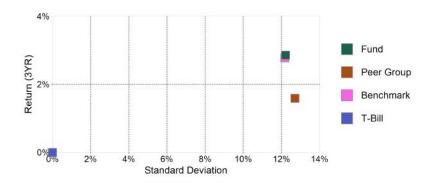
Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quart
Sharpe Ratio - 1 Year		0.68	0.13	0.08	(shades indicate fund q Top
Sharpe Ratio - 3 Year		0.05	0.10	0.01	2nd
Sharpe Ratio - 5 Year		0.49	0.11	0.06	3rd
Sharpe Ratio - 10 Year		0.58	0.12	0.08	Bottom
Std. Deviation - 3 Year		12.22	-0.50	0.04	Dottom
Std. Deviation - 5 Year		12.11	-0.83	-0.41	Fund
Std. Deviation - 10 Year		10.38	-0.58	-0.20	Peer Group 25 Percentile
Mean - 3 Year		2.86	1.27	0.08	Peer Group 50 Percentile
Mean - 5 Year		7.64	1.14	0.60	Peer Group 75 Percentile
Mean - 10 Year		7.27	1.17	0.81	Benchmark
Alpha (Best Fit) - 3 Year		-	-	-	Denominant
Alpha (Standard) - 3 Year		0.08	1.22	0.08	
Alpha (Standard) - 5 Year		0.72	1.29	0.72	
Beta (Best Fit) - 3 Year		-	-	-	
Beta (Standard) - 3 Year		1.00	-0.04	0.00	
R-Squared (Best Fit) - 3 Year		-	-	-	
R-Squared (Standard) - 3 Year		99.22	0.05	-0.78	
Sector Weightings (%)					Fund Risk/Return (3
Basic Materials	3.60				
Consumer Cyclical	9.38				4%
Financial Services	12.39				470
Real Estate	1.70				
Consumer Defensive	7.17				Ŕ
Healthcare	14.68				(34
Utilities	2.90				Return (3YR)
Communication Services	7.17				Ret
Energy	4.54				
Industrials	14.03				
Technology	22.44				0%

# alendar Year Quartile Rankings

shades indicate fund quartile ranking; numbers indicate performance at NAV)

	2017	2018	2019	2020	2021	2022	2023
	18.40%	-4.16%	20.06%	15.16%	13.16%	-14.50%	14.52%
ile	18.07%	-5.74%	21.87%	14.65%	12.66%	-14.75%	15.17%
ile	17.19%	-6.48%	20.85%	13.72%	11.69%	-16.41%	14.46%
ile	16.21%	-7.12%	19.92%	11.87%	10.99%	-17.05%	13.35%
	16.19%	-5.99%	20.38%	11.91%	12.61%	-13.96%	14.80%

# und Risk/Return (3 Year)





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# American Funds 2035 Trgt Date Retire R6 - RFFTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.39	0.01	-0.19	49 / 207
YTD	7.48	0.41	0.59	28 / 207
1 Year	14.85	1.37	1.30	15 / 206
3 Year	3.52	1.14	0.03	10/191
5 Year	9.07	1.44	0.98	1/175
10 Year	8.30	1.46	1.14	1/140
5 Year Up/Down	102.99 / 98.41	2.11/-5.23		
Since Inception	10.93	-	3.91	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	16.90	-16.24	15.54	17.55	23.29	-5.14	21.04	
Peer Group	16.39	-17.09	14.03	14.30	22.70	-7.39	18.80	

#### **Quarterly Returns History**

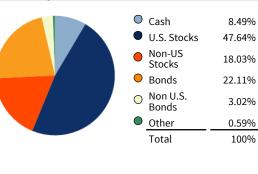


Category: Target-Date 2035 Benchmark: S&P Target Date 2035 TR USD **Prospectus Objective: Asset Allocation** Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	10.17
Track Record (Yrs)	17.33	14.17
Turnover Ratio %	1.00	20.00
Total Net Assets (\$Millions)	45,930.00	696.00
Price/Earnings	23.94	20.51
Assets in top 10 holdings %	60.17	86.04
Number of holdings	25.00	24.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.35	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFFTX as of 6/30/2024 rated against 191 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.16	5.76
Avg. Effective Maturity (Yrs)	-	8.78
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	74.59	50.08
AA %	3.02	4.77
A %	7.76	8.74
BBB %	7.19	12.85
BB %	3.85	4.78
В%	1.72	3.84
Below B %	0.56	1.01
Not Rated %	1.31	0.75

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2035 Trgt Date Retire R6 - RFFTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2035 Benchmark: S&P Target Date 2035 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

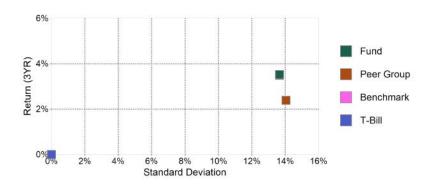
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFFTX as of 6/30/2024 rated against 191 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quarti	-
Sharpe Ratio - 1 Year		0.79	0.14	0.10	Top	te ranking
Sharpe Ratio - 3 Year		0.10	0.08	0.00	2nd	
Sharpe Ratio - 5 Year		0.54	0.11	0.07	3rd	
Sharpe Ratio - 10 Year		0.60	0.12	0.08	Bottom	
Std. Deviation - 3 Year		13.67	-0.39	0.00		201
Std. Deviation - 5 Year		13.99	-0.55	-0.16	Fund	21.04
Std. Deviation - 10 Year		11.91	-0.35	0.03	Peer Group 25 Percentile	19.8
Mean - 3 Year		3.52	1.14	0.03	Peer Group 50 Percentile	18.8
Mean - 5 Year		9.07	1.44	0.98	Peer Group 75 Percentile	17.9
Mean - 10 Year		8.30	1.46	1.14	Benchmark	17.7
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.04	1.09	0.04		
Alpha (Standard) - 5 Year		0.99	1.42	0.99		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.99	-0.03	-0.01		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		99.17	0.01	-0.83		
Sector Weightings (%)					Fund Risk/Return (3 Year	)
Basic Materials	3.57					
Consumer Cyclical	9.95				6%	
Financial Services	12.00					
Real Estate	1.50					
Consumer Defensive	6.70				<u>6</u> 4%	
Healthcare	14.61				(3)	
Utilities	2.52				(B 4%	
Communication Services	7.50				B 2%	1
Energy	4.17					
Industrials	14.17					
Technology	23.32				0% 2%	4%

anking; nui	mbers indic	cate perfor	mance at N	IAV)		
2017	2018	2019	2020	2021	2022	2023
21.04%	-5.14%	23.29%	17.55%	15.54%	-16.24%	16.90%
19.88%	-6.63%	23.46%	16.15%	14.69%	-16.10%	17.22%
18.80%	-7.39%	22.70%	14.30%	14.03%	-17.09%	16.39%
17.99%	-7.96%	21.92%	12.91%	13.37%	-17.89%	15.49%
17.78%	-6.88%	22.18%	12.79%	14.93%	-14.99%	16.63%
	<b>2017</b> 21.04% 19.88% 18.80% 17.99%	2017         2018           21.04%         -5.14%           19.88%         -6.63%           18.80%         -7.39%           17.99%         -7.96%	2017         2018         2019           21.04%         -5.14%         23.29%           19.88%         -6.63%         23.46%           18.80%         -7.39%         22.70%           17.99%         -7.96%         21.92%	2017         2018         2019         2020           21.04%         -5.14%         23.29%         17.55%           19.88%         -6.63%         23.46%         16.15%           18.80%         -7.39%         22.70%         14.30%           17.99%         -7.96%         21.92%         12.91%	21.04%         -5.14%         23.29%         17.55%         15.54%           19.88%         -6.63%         23.46%         16.15%         14.69%           18.80%         -7.39%         22.70%         14.30%         14.03%           17.99%         -7.96%         21.92%         12.91%         13.37%	2017         2018         2019         2020         2021         2022           21.04%         -5.14%         23.29%         17.55%         15.54%         -16.24%           19.88%         -6.63%         23.46%         16.15%         14.69%         -16.10%           18.80%         -7.39%         22.70%         14.30%         14.03%         -17.09%           17.99%         -7.96%         21.92%         12.91%         13.37%         -17.89%

# und Risk/Return (3 Year)





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# American Funds 2040 Trgt Date Retire R6 - RFGTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 27-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.66	0.08	-0.11	45 / 205
YTD	8.99	0.58	1.09	23 / 205
1 Year	17.04	1.80	1.99	11/204
3 Year	4.24	1.06	0.07	10/194
5 Year	10.03	1.48	1.10	3/176
10 Year	8.88	1.44	1.19	1/138
5 Year Up/Down	103.69 / 99.07	2.38 / -4.75		
Since Inception	10.82	-	3.46	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Yea	r Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	19.33	-17.55	16.83	18.77	24.40	-5.52	21.97
Peer Group	18.11	-17.80	15.86	15.34	24.09	-7.98	20.18

# **Quarterly Returns History**

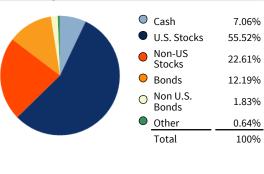


Category: Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	10.65
Track Record (Yrs)	17.33	14.67
Turnover Ratio %	1.00	18.00
Total Net Assets (\$Millions)	42,081.00	793.00
Price/Earnings	24.11	20.47
Assets in top 10 holdings %	67.77	84.67
Number of holdings	23.00	21.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.37	

# Fund Composition 31-Mar-2024



#### Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFGTX as of 6/30/2024 rated against 194 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.38	5.81
Avg. Effective Maturity (Yrs)	-	8.61
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	75.08	43.25
AA %	2.64	4.77
A %	7.50	8.38
BBB %	7.24	12.27
BB %	4.13	4.56
В%	1.85	3.74
Below B %	0.61	1.29
Not Rated %	0.95	0.76

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2040 Trgt Date Retire R6 - RFGTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 27-Jul-2009 Category: Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Morningstar Overall Rating: 5.00

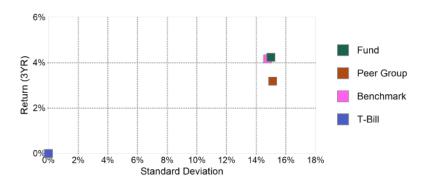
Overall Morningstar Rating for RFGTX as of 6/30/2024 rated against 194 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quarti	-
Sharpe Ratio - 1 Year		0.87	0.13	0.12	Top	
Sharpe Ratio - 3 Year		0.15	0.07	0.00	2nd	
Sharpe Ratio - 5 Year		0.56	0.09	0.06	3rd	
Sharpe Ratio - 10 Year		0.61	0.11	0.08	Bottom	
Std. Deviation - 3 Year		14.99	-0.12	0.21		201
Std. Deviation - 5 Year		15.25	-0.51	-0.05	Fund	21.9
Std. Deviation - 10 Year		12.81	-0.41	0.03	Peer Group 25 Percentile	21.0
Mean - 3 Year		4.24	1.06	0.07	Peer Group 50 Percentile	20.1
Mean - 5 Year		10.03	1.48	1.10	Peer Group 75 Percentile	19.0
Mean - 10 Year		8.88	1.44	1.19	Benchmark	18.8
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		0.08	1.02	0.08		
Alpha (Standard) - 5 Year		1.08	1.45	1.08		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		1.01	-0.01	0.01		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.97	-0.14	-1.03		
Sector Weightings (%)					Fund Risk/Return (3 Year)	)
Basic Materials	3.60					
Consumer Cyclical	10.23				6%	
Financial Services	11.96				0,0	
Real Estate	1.41					
Consumer Defensive	6.45				£ 4%	
Healthcare	14.70				(B) 4% (3,4) (3,4) (3,4) (3,4) (3,4) (3,4) (4) (4) (4) (4) (4) (4) (4) (4) (4) (	
Utilities	2.30				un	
Communication Services	7.51				₩ 2%	
Energy	4.00					
Industrials	14.15					
Technology	23.70				0% 2%	4% 6%

# s indicate fund quartile ranking; numbers indicate performance at NAV)

I							
I	2017	2018	2019	2020	2021	2022	2023
	21.97%	-5.52%	24.40%	18.77%	16.83%	-17.55%	19.33%
e	21.01%	-7.30%	24.66%	17.15%	16.42%	-16.64%	18.98%
e	20.18%	-7.98%	24.09%	15.34%	15.86%	-17.80%	18.11%
e	19.06%	-8.67%	23.14%	13.45%	14.99%	-18.41%	17.17%
	18.87%	-7.41%	23.37%	13.37%	16.55%	-15.56%	18.16%

# Risk/Return (3 Year)





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# American Funds 2045 Trgt Date Retire R6 - RFHTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.71	0.01	-0.12	50 / 202
YTD	9.33	0.14	0.82	41/202
1 Year	17.60	1.22	1.66	16/201
3 Year	4.33	0.66	-0.29	15 / 191
5 Year	10.24	1.01	0.80	5 / 175
10 Year	9.06	1.24	1.04	1/140
5 Year Up/Down	100.92 / 97.43	-1.49 / -6.38		
Since Inception	11.50	-	3.96	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year	Returns	5					
	2023	2022	2021	2020	2019	2018	2017
Fund	20.15	-18.18	17.18	19.21	24.68	-5.58	22.44
Peer Group	19.28	-18.17	16.81	15.77	24.78	-8.42	20.76

#### **Quarterly Returns History**

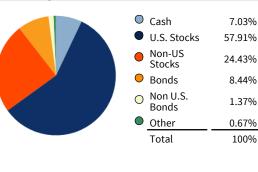


Category: Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	10.41
Track Record (Yrs)	17.33	14.17
Turnover Ratio %	2.00	19.00
Total Net Assets (\$Millions)	35,150.00	620.00
Price/Earnings	24.22	20.48
Assets in top 10 holdings %	71.28	86.96
Number of holdings	20.00	20.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00
_		
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
•	<b>Fund</b> - 0.37	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFHTX as of 6/30/2024 rated against 191 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.77	5.77
Avg. Effective Maturity (Yrs)	-	8.47
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	80.35	43.03
AA %	2.18	4.79
A %	6.70	8.84
BBB %	6.16	12.60
BB %	2.81	6.11
В%	0.98	5.27
Below B %	0.33	1.87
Not Rated %	0.49	0.77

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2045 Trgt Date Retire R6 - RFHTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

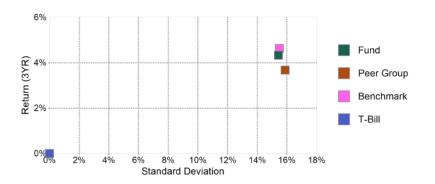
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFHTX as of 6/30/2024 rated against 191 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quartile	-
Sharpe Ratio - 1 Year		0.89	0.11	0.11	Top	
Sharpe Ratio - 3 Year		0.16	0.04	-0.02	2nd	
Sharpe Ratio - 5 Year		0.57	0.08	0.06	3rd	
Sharpe Ratio - 10 Year		0.61	0.10	0.08	Bottom	
Std. Deviation - 3 Year		15.43	-0.46	-0.07		201
Std. Deviation - 5 Year		15.64	-0.98	-0.37	Fund	22.4
Std. Deviation - 10 Year		13.11	-0.80	-0.24	Peer Group 25 Percentile	21.4
Mean - 3 Year		4.33	0.66	-0.29	Peer Group 50 Percentile	20.7
Mean - 5 Year		10.24	1.01	0.80	Peer Group 75 Percentile	19.8
Mean - 10 Year		9.06	1.24	1.04	Benchmark	19.5
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		-0.25	0.67	-0.25		
Alpha (Standard) - 5 Year		0.92	1.22	0.92		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.99	-0.03	-0.01		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.76	-0.34	-1.24		
Sector Weightings (%)					Fund Risk/Return (3 Year)	
Basic Materials	3.72					
Consumer Cyclical	10.33				6%	
Financial Services	11.93				0,0	
Real Estate	1.38					
Consumer Defensive	6.37				Ê 4%	
Healthcare	14.71				84 (37R) 5%	
Utilities	2.24				Ľn	
Communication Services	7.40				2%	
Energy	3.97					
Industrials	14.25					
Technology	23.69				0% 2%	4% 6%

l quartile r	ranking; nui	mbers india	ate perfor	mance at N	IAV)		
	2017	2018	2019	2020	2021	2022	2023
	22.44%	-5.58%	24.68%	19.21%	17.18%	-18.18%	20.15%
ile	21.44%	-7.57%	25.57%	17.49%	17.59%	-17.15%	19.96%
ile	20.76%	-8.42%	24.78%	15.77%	16.81%	-18.17%	19.28%
ile	19.86%	-9.06%	24.06%	13.77%	15.94%	-18.78%	18.35%
	19.56%	-7.74%	24.02%	13.66%	17.51%	-15.84%	19.14%

# Risk/Return (3 Year)





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# American Funds 2050 Trgt Date Retire R6 - RFITX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.73	-0.01	-0.22	51/203
YTD	9.55	0.11	0.65	44 / 203
1 Year	18.00	1.16	1.50	17 / 202
3 Year	4.27	0.50	-0.59	27 / 192
5 Year	10.30	0.87	0.58	4/176
10 Year	9.13	1.18	0.91	1/138
5 Year Up/Down	99.98 / 97.36	-1.44 / -5.83		
Since Inception	11.55	-	2.51	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	20.83	-18.89	17.27	19.42	25.04	-5.61	22.61	
Peer Group	19.89	-18.30	17.10	15.93	24.99	-8.54	21.02	

#### **Quarterly Returns History**

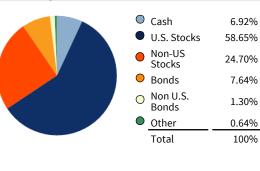


Category: Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	10.65
Track Record (Yrs)	17.33	13.08
Turnover Ratio %	1.00	17.00
Total Net Assets (\$Millions)	31,536.00	573.00
Price/Earnings	24.43	20.45
Assets in top 10 holdings %	74.16	89.10
Number of holdings	20.00	20.00

Sales Charges	Fund	Peers
Front End Load %	-	5.50
Deferred Load %	-	1.00
_		_
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	0.25
•	- 0.38	

# Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFITX as of 6/30/2024 rated against 192 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.80	5.80
Avg. Effective Maturity (Yrs)	-	8.29
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	82.46	50.02
AA %	2.14	4.79
A %	6.32	9.72
BBB %	5.68	12.60
BB %	2.10	4.08
В%	0.63	1.61
Below B %	0.22	0.57
Not Rated %	0.45	0.70

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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# American Funds 2050 Trgt Date Retire R6 - RFITX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 13-Jul-2009 Category: Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

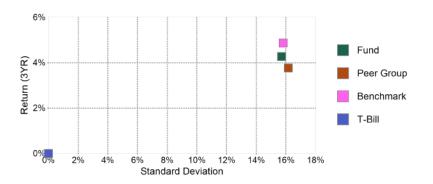
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFITX as of 6/30/2024 rated against 192 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Rankings (shades indicate fund quartile ranking		
Sharpe Ratio - 1 Year		0.90	0.11	0.10	Top		
Sharpe Ratio - 3 Year		0.15	0.03	-0.04	2nd		
Sharpe Ratio - 5 Year		0.56	0.07	0.04	3rd		
Sharpe Ratio - 10 Year		0.61	0.10	0.07	Bottom		
Std. Deviation - 3 Year		15.71	-0.46	-0.11		201	
Std. Deviation - 5 Year		15.91	-0.89	-0.44	Fund	22.6	
Std. Deviation - 10 Year		13.30	-0.69	-0.37	Peer Group 25 Percentile	21.64	
Mean - 3 Year		4.27	0.50	-0.59	Peer Group 50 Percentile	21.02	
Mean - 5 Year		10.30	0.87	0.58	Peer Group 75 Percentile	20.19	
Mean - 10 Year		9.13	1.18	0.91	Benchmark	20.18	
Alpha (Best Fit) - 3 Year		-	-	-			
Alpha (Standard) - 3 Year		-0.53	0.52	-0.53			
Alpha (Standard) - 5 Year		0.76	1.15	0.76			
Beta (Best Fit) - 3 Year		-	-	-			
Beta (Standard) - 3 Year		0.98	-0.04	-0.02			
R-Squared (Best Fit) - 3 Year		-	-	-			
R-Squared (Standard) - 3 Year		98.56	-0.51	-1.44			
Sector Weightings (%)					Fund Risk/Return (3 Year	)	
Basic Materials	3.76						
Consumer Cyclical	10.55				6%		
Financial Services	11.79						
Real Estate	1.28						
Consumer Defensive	6.14				<u>c</u> 4%		
Healthcare	14.77				(3)		
Utilities	2.07				(B) 4% (3,4%) (3,4\%) (3		
Communication Services	7.49				P 2%		
Energy	3.77						
Industrials	14.43						
Technology	23.94				0% 2%	4% 6%	

quartile ranking; numbers indicate performance at NAV)												
	2017	2018	2019	2020	2021	2022	2023					
	22.61%	-5.61%	25.04%	19.42%	17.27%	-18.89%	20.83%					
ile	21.64%	-7.74%	25.85%	17.67%	18.04%	-17.32%	20.54%					
ile	21.02%	-8.54%	24.99%	15.93%	17.10%	-18.30%	19.89%					
ile	20.19%	-9.24%	24.36%	13.78%	16.34%	-19.06%	18.80%					
	20.18%	-7.94%	24.35%	13.86%	17.99%	-15.97%	19.58%					

# d Risk/Return (3 Year)





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#### American Funds 2055 Trgt Date Retire R6 - RFKTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 01-Feb-2010

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.80	0.01	-0.15	48 / 202
YTD	9.81	0.21	0.89	34 / 202
1 Year	18.32	1.23	1.79	14 / 201
3 Year	4.23	0.42	-0.65	33 / 191
5 Year	10.30	0.81	0.52	9/175
10 Year	9.11	1.15	0.83	1/134
5 Year Up/Down	99.95 / 97.62	-1.16 / -5.41		
Since Inception	10.56	-	0.42	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	21.40	-19.50	17.28	19.39	25.09	-5.65	22.63	
Peer Group	20.01	-18.33	17.27	16.02	25.05	-8.62	21.24	

#### **Quarterly Returns History**

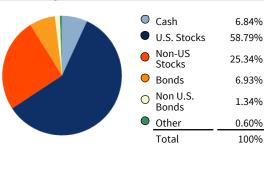


Category: Target-Date 2055 Benchmark: S&P Target Date 2055 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	12.50	9.76
Track Record (Yrs)	14.33	11.58
Turnover Ratio %	1.00	19.00
Total Net Assets (\$Millions	) 21,982.00	401.00
Price/Earnings	24.63	20.48
Assets in top 10 holdings 9	6 76.16	90.08
Number of holdings	18.00	18.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00
_		
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.38	

#### Fund Composition 31-Mar-2024



Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFKTX as of 6/30/2024 rated against 191 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.85	5.85
Avg. Effective Maturity (Yrs)	-	8.29
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	83.89	50.56
AA %	2.19	4.83
Α%	6.18	9.72
BBB %	5.40	12.60
BB %	1.50	3.00
В%	0.30	0.92
Below B %	0.12	0.34
Not Rated %	0.42	0.67

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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#### American Funds 2055 Trgt Date Retire R6 - RFKTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 01-Feb-2010 Category: Target-Date 2055 Benchmark: S&P Target Date 2055 TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

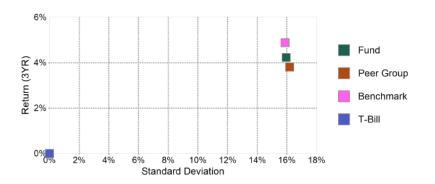
Morningstar Overall Rating: 5.00

Overall Morningstar Rating for RFKTX as of 6/30/2024 rated against 191 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ranking (shades indicate fund quartile ranki	
Sharpe Ratio - 1 Year		0.91	0.11	0.11		Πğ
Sharpe Ratio - 3 Year		0.15	0.02	-0.04	2nd	_
Sharpe Ratio - 5 Year		0.56	0.06	0.04	3rd	_
Sharpe Ratio - 10 Year		0.61	0.10	0.07	Bottom	_
Std. Deviation - 3 Year		15.96	-0.23	0.08		201
Std. Deviation - 5 Year		16.05	-0.79	-0.42		.63
Std. Deviation - 10 Year		13.39	-0.62	-0.41	Peer Group 25 Percentile 21	
Mean - 3 Year		4.23	0.42	-0.65	Peer Group 50 Percentile 21	
Mean - 5 Year		10.30	0.81	0.52	1	.41
Mean - 10 Year		9.11	1.15	0.83	•	.48
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		-0.59	0.44	-0.59		
Alpha (Standard) - 5 Year		0.70	1.07	0.70		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.99	-0.02	-0.01		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.37	-0.69	-1.63		
Sector Weightings (%)					Fund Risk/Return (3 Year)	
Basic Materials	3.85					
Consumer Cyclical	10.85				6%	
Financial Services	11.62					
Real Estate	1.14					
Consumer Defensive	5.90				<u>6</u> 4%	
Healthcare	14.77				(3)	
Utilities	1.86				(3XR) 2%	
Communication Services	7.61				2%	÷
Energy	3.56					
Industrials	14.53					
Technology	24.30				0% 2% 4% 6	5%

quartile ranking; numbers indicate performance at NAV)								
	2017	2018	2019	2020	2021	2022	2023	
	22.63%	-5.65%	25.09%	19.39%	17.28%	-19.50%	21.40%	
ile	21.83%	-7.78%	26.00%	17.81%	18.23%	-17.53%	20.80%	
ile	21.24%	-8.62%	25.05%	16.02%	17.27%	-18.33%	20.01%	
ile	20.41%	-9.41%	24.50%	14.17%	16.48%	-19.11%	18.88%	
	20.48%	-7.97%	24.48%	13.86%	18.19%	-15.97%	19.62%	

#### Fund Risk/Return (3 Year)





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#### American Funds 2060 Trgt Date Retire R6 - RFUTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 27-Mar-2015

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.79	0.04	-0.16	49/201
YTD	9.80	0.19	0.87	38/201
1 Year	18.43	1.32	1.88	14 / 200
3 Year	4.20	0.37	-0.69	35 / 190
5 Year	10.27	0.78	0.46	15 / 167
10 Year	-	-	-	- / 15
5 Year Up/Down	99.70 / 97.58	-1.80 / -5.39		
Since Inception	9.49	-	-0.67	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns								
	2023	2022	2021	2020	2019	2018	2017	
Fund	21.61	-19.66	17.19	19.44	25.01	-5.64	22.49	
Peer Group	20.07	-18.37	17.41	16.14	25.15	-8.68	21.27	

#### **Quarterly Returns History**

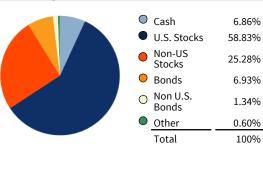


Category: Target-Date 2060 Benchmark: S&P Target Date 2060+ TR USD **Prospectus Objective: Asset Allocation** Home Page: www.americanfunds.com Phone: 800-421-4225

Fund Basics 31-Mar-2024	Fund	Peers
Manager Tenure (Yrs)	9.27	7.63
Track Record (Yrs)	9.25	8.25
Turnover Ratio %	1.00	18.00
Total Net Assets (\$Millions)	12,985.00	226.00
Price/Earnings	24.62	20.48
Assets in top 10 holdings %	77.83	89.88
Number of holdings	17.00	18.00

Sales Charges	Fund	Peers
Front End Load %	-	5.63
Deferred Load %	-	1.00
Expenses	Fund	Peers
12b1 Expense %	-	0.25
Gross Expense Ratio %	0.39	0.93

#### Fund Composition 31-Mar-2024



Morningstar Overall Rating: 4.00

Overall Morningstar Rating for RFUTX as of 6/30/2024 rated against 190 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.85	5.85
Avg. Effective Maturity (Yrs)	-	8.03
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Cr	edit Quality	Fund	Peers
AA	A %	83.84	50.55
AA	%	2.20	4.79
Α %	б	6.19	9.73
BB	В%	5.42	12.60
BB	%	1.51	3.00
ВŶ	6	0.30	0.97
Be	low B %	0.12	0.39
No	t Rated %	0.42	0.67

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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#### American Funds 2060 Trgt Date Retire R6 - RFUTX

Family: American Funds Fund Manager: Wesley K.-S. Phoa Fund Inception Date: 27-Mar-2015 Category: Target-Date 2060 Benchmark: S&P Target Date 2060+ TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

Morningstar Overall Rating: 4.00

-19.16%

-16.01%

2023 21.61%

20.88%

20.07%

18.83%

19.74%

Overall Morningstar Rating for RFUTX as of 6/30/2024 rated against 190 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calendar Year Quartile Ra (shades indicate fund quartil	-
Sharpe Ratio - 1 Year		0.91	0.11	0.11	Top	
Sharpe Ratio - 3 Year		0.15	0.02	-0.04	2nd	
Sharpe Ratio - 5 Year		0.56	0.07	0.04	3rd	
Sharpe Ratio - 10 Year		-	-	-	Bottom	
Std. Deviation - 3 Year		15.99	-0.39	0.07		201
Std. Deviation - 5 Year		16.05	-0.84	-0.45	Fund	22.49
Std. Deviation - 10 Year		-	-	-	Peer Group 25 Percentile	21.80
Mean - 3 Year		4.20	0.37	-0.69	Peer Group 50 Percentile	21.27
Mean - 5 Year		10.27	0.78	0.46	Peer Group 75 Percentile	20.57
Mean - 10 Year		-	-	-	Benchmark	20.75
Alpha (Best Fit) - 3 Year		-	-	-		
Alpha (Standard) - 3 Year		-0.63	0.39	-0.63		
Alpha (Standard) - 5 Year		0.66	1.09	0.66		
Beta (Best Fit) - 3 Year		-	-	-		
Beta (Standard) - 3 Year		0.99	-0.03	-0.01		
R-Squared (Best Fit) - 3 Year		-	-	-		
R-Squared (Standard) - 3 Year		98.32	-0.72	-1.68		
Sector Weightings (%)					Fund Risk/Return (3 Year)	
Basic Materials	3.88					
Consumer Cyclical	11.02				6%	
Financial Services	11.60					
Real Estate	1.14					
Consumer Defensive	5.82				<u>2</u> 4%	
Healthcare	14.71				(37	
Utilities	1.80				(2) 4% (3) 4% 2%	
Communication Services	7.70				%%2 Get	
Energy	3.50					
Industrials	14.56					
Technology	24.28				0% 0% 2%	4% 6%

(shades indicate fund quartile r	anking; nu	mbers indi	cate perfor	mance at N	IAV)		
Тор							
2nd							
3rd							
Bottom							
	2017	2018	2019	2020	2021	2022	
Fund	22.49%	-5.64%	25.01%	19.44%	17.19%	-19.66%	2
Peer Group 25 Percentile	21.80%	-7.88%	26.17%	17.83%	18.44%	-17.56%	2
Peer Group 50 Percentile	21.27%	-8.68%	25.15%	16.14%	17.41%	-18.37%	2

24.61%

24.73%

14.18%

13.99%

16.57%

18.05%

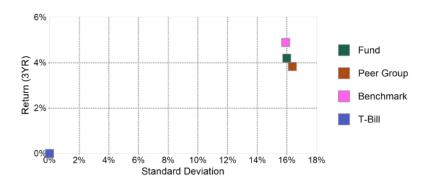
-9.55%

-7.95%

20.57%

20.75%

#### Fund Risk/Return (3 Year)





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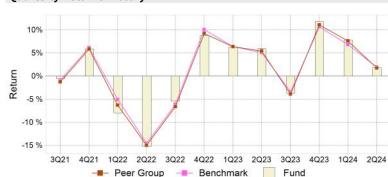
#### American Funds 2065 Trgt Date Retire R6 - RFVTX

Family: American Funds Fund Manager: Michelle J. Black Fund Inception Date: 27-Mar-2020

Performance	Fund	Peers +/-	Bench +/-	Rank % / # Funds
Last Cal. QTR	1.85	0.05	-0.10	45 / 196
YTD	9.85	0.22	0.92	35 / 196
1 Year	18.44	1.36	1.89	12 / 195
3 Year	4.21	0.37	-0.68	37 / 139
5 Year	-	-	-	-/31
10 Year	-	-	-	- / 0
5 Year Up/Down	- / -	- / -		
Since Inception	15.57	-	5.41	

Performance Disclosure: The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five- and 10-year (if applicable) Morningstar metrics. Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate so you may have a gain or loss when shares are sold. Current performance may be lower or higher than quoted. For most recent performance, visit www.morningstar.com.

Calendar Year Returns							
	2023	2022	2021	2020	2019	2018	2017
Fund	21.55	-19.64	17.32	-	-	-	-
Peer Group	20.28	-18.55	17.32	16.50	26.91	-9.80	-



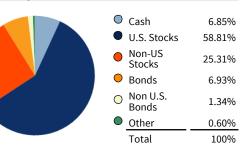
#### **Quarterly Returns History**

Category: Target-Date 2065+ Benchmark: S&P Target Date 2060+ TR USD Prospectus Objective: Asset Allocation Home Page: www.americanfunds.com Phone: 800-421-4225

	Basics ar-2024	Fund	Peers
Manag	ger Tenure (Yrs)	4.50	3.75
Track	Record (Yrs)	4.25	3.75
Turno	ver Ratio %	1.00	21.00
Total I	Vet Assets (\$Millions)	3,043.00	30.00
Price/	Earnings	24.62	20.60
Assets	in top 10 holdings %	77.81	89.88
Numb	er of holdings	17.00	17.00

Sales Charges	Fund	Peers
Front End Load %	-	5.75
Deferred Load %	-	1.00
Expenses	Fund	Peers
Expenses 12b1 Expense %	Fund	<b>Peers</b> 0.25
	<b>Fund</b> - 0.39	

#### Fund Composition 31-Mar-2024



#### Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RFVTX as of 6/30/2024 rated against 139 funds in its category.

Fixed Income Basics 31- Mar-2024	Fund	Peers
Avg. Effective Duration (Yrs)	5.85	5.85
Avg. Effective Maturity (Yrs)	-	8.06
Avg. Weighted Price \$	-	-

Yields	Fund	Peers
30 Day SEC %	-	-
30 Day SEC % (Unsubsidized)	-	-

Credit Quality	Fund	Peers
AAA %	83.76	50.48
AA %	2.21	4.79
A %	6.21	9.74
BBB %	5.44	12.13
BB %	1.52	4.21
В%	0.31	1.58
Below B %	0.13	0.32
Not Rated %	0.42	0.65

The rating agencies that provided the ratings are Standard & Poor's and Moody's. When the ratings vary, the highest rating is used.



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#### American Funds 2065 Trgt Date Retire R6 - RFVTX

Family: American Funds Fund Manager: Michelle J. Black Fund Inception Date: 27-Mar-2020 Category: Target-Date 2065+ Benchmark: S&P Target Date 2060+ TR USD **Prospectus Objective: Asset Allocation** Home Page: www.americanfunds.com Phone: 800-421-4225

Benchmark

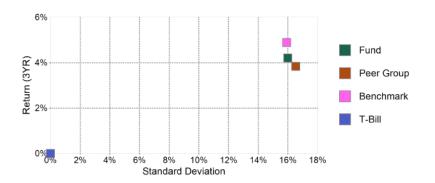
Morningstar Overall Rating: 3.00

Overall Morningstar Rating for RFVTX as of 6/30/2024 rated against 139 funds in its category.

Risk Measures		Fund	Peers +/-	Bench +/-	Calenda (shades
Sharpe Ratio - 1 Year		0.91	0.11	0.11	Тор
Sharpe Ratio - 3 Year		0.15	0.02	-0.04	2nd
Sharpe Ratio - 5 Year		-	-	-	3rd
Sharpe Ratio - 10 Year		-	-	-	Bottom
Std. Deviation - 3 Year		15.99	-0.54	0.07	
Std. Deviation - 5 Year		-	-	-	Fund
Std. Deviation - 10 Year		-	-	-	Peer Gro
Mean - 3 Year		4.21	0.37	-0.68	Peer Gro
Mean - 5 Year		-	-	-	Peer Gro
Mean - 10 Year		-	-	-	Benchma
Alpha (Best Fit) - 3 Year		-	-	-	
Alpha (Standard) - 3 Year		-0.62	0.36	-0.62	
Alpha (Standard) - 5 Year		-	-	-	
Beta (Best Fit) - 3 Year		-	-	-	
Beta (Standard) - 3 Year		0.99	-0.04	-0.01	
R-Squared (Best Fit) - 3 Year		-	-	-	
R-Squared (Standard) - 3 Year		98.34	-0.67	-1.66	
Sector Weightings (%)					Fund R
Basic Materials	3.88				
Consumer Cyclical	11.03				
Financial Services	11.60				
Real Estate	1.13				
Consumer Defensive	5.82				
Healthcare	14.71				
Utilities	1.80				
Communication Services	7.70				
Energy	3.50				
Industrials	14.56				
Technology	24.27				

#### **Calendar Year Quartile Rankings** (shades indicate fund quartile ranking; numbers indicate performance at NAV) 2018 2021 2022 2023 2017 2019 2020 -% -% -% -% 17.32% -19.64% 21.55% -% -9.39% 27.08% 17.49% 18.52% -17.87% Peer Group 25 Percentile 21.07% Peer Group 50 Percentile -% -9.80% 26.91% 16.50% 17.32% -18.55% 20.28% -% 15.13% 16.23% -19.26% Peer Group 75 Percentile -10.20% 26.63% 18.79% 20.75% -7.95% 24.73% 13.99% 18.05% -16.01% 19.74%

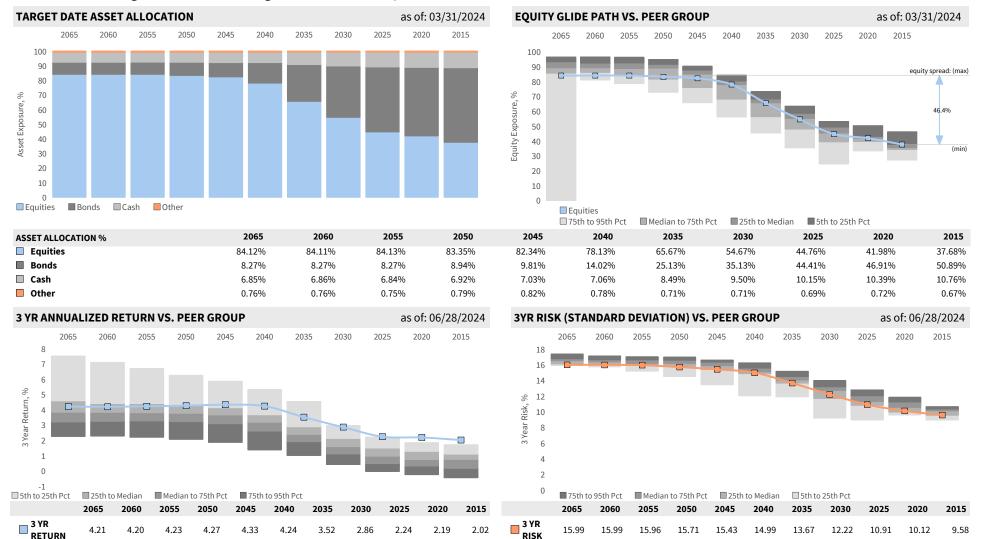
#### Fund Risk/Return (3 Year)





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American Funds Trgt Date Retire R6 Target Date Fund Family

Target Date Funds - Target date funds with the target date being the approximate date when investors plan to start withdrawing their money. Generally, the asset allocation of each fund will change on an annual basis with the asset allocation becoming more conservative as the fund nears the target retirement date. The principal value of the fund(s) is not guaranteed at any time, including at the target date. Each date used above corresponds with the fund families target date option of the same name. Please see the Definitions and Disclosures section for more information about *Peer Rank*.



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#### Insights for fiduciaries

#### Government spending bill makes extensive changes to 401(k) plan rules

The government spending bill signed into law on Friday, December 20, 2019, includes a set of provisions referred to as the SECURE Act, that make a number of changes to the rules governing 401(k) plans. The goal of these provisions is to help increase retirement savings and ease compliance with certain retirement plan rules.

Parts of the legislation will be implemented over time, while others take effect immediately. Most notably for businesses considering starting a retirement plan, the small business tax credit was dramatically expanded which will help offset the start-up costs for new retirement plans, and it is effective for plans beginning in January 2020.

The SECURE Act includes nearly thirty changes to retirement savings law. We highlight the key changes impacting employer-sponsored retirement plans below.

- Requires plans to cover certain longer-service, part-time employees who can currently be excluded from coverage (generally effective in 2021)
- Requires benefit statements to include estimates of the monthly income an employee could receive in retirement if the account balance were converted into an annuity (effective after the Department of Labor issues rules, model disclosures and specified assumptions)
- Provides a fiduciary safe harbor for selecting a lifetime income investment provider, such as an annuity provider, as (or as part of) a plan investment option (effective immediately)
- Requires portability of lifetime income investments held in plans, such as annuities, to other plans, to IRAs, or as a plan distribution (generally effective in 2020)
- Increases starting date for minimum required distributions from plans from age 70<sup>1</sup>/<sub>2</sub> to age 72 (generally effective in 2020 for individuals who had not already reached age 70<sup>1</sup>/<sub>2</sub>)
- Caps the amount of time over which beneficiaries may take plan distributions (5 years or 10 years, depending on the beneficiary; exceptions for certain beneficiaries such as spouses and minor children) (generally effective in 2020)
- For safe harbor 401(k) plans, provides greater flexibility to elect into the minimum non-elective contribution safe harbor (generally effective 2020)
- Increases the small business plan startup tax credit that will now be capped at \$250 times the number of non-highly compensated employees eligible to participate in the plan up to a \$5,000 annual maximum (the credit is still limited to 50% of the start-up costs); it also adds a small business automatic enrollment tax credit of \$500 per year (generally effective 2020)
- Creates a new form of plan—"Pooled Employer Plan"—that would permit greater flexibility to combine unrelated businesses into a single retirement plan for purposes of achieving economies of scale and other efficiencies. The development of Pooled Employer Plans will depend in part on the issuance of guidance on specific aspects of the new rules from both the Treasury and the DOL, and in part on whether firms decide to sponsor these types of plans. (effective 2021)

As with any significant legislation, it will take some time for the retirement industry to implement certain changes, so you should expect additional information in the coming weeks and months.

For additional information about the SECURE ACT or any other questions, please contact your UBS Financial Advisor.



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Summ	er 2024	Best practices for handling small plan balances
		Workforce reductions and employees leaving for other opportunities have left some employers with numerous low-balance retirement plan accounts owned by their former employees. These small account balances can be expensive to maintain and can be time-consuming to administer.
In this		The presence of numerous low-balance retirement plan accounts raises several questions for plan sponsors as to the best way to handle these accounts. What options are available to plan sponsors and what, if any, are the compliance risks involved in exercising some of these options? What follows is a brief overview of the options that may be available to plan sponsors.
01	Best practices for handling small plan balances	Option 1: The small account cashout
		Under federal law, plans can provide that, if a former employee has not made an affirmative election to receive a distribution of his or her
02	Gen Z and Millennials engagement in retirement savings	account assets or to roll those assets over to an individual retirement account (IRA) or to another employer's plan, the plan can distribute the account—as long as its balance does not exceed \$7,000. <sup>1</sup> For accounts that are valued at \$1,000 or less, the plan can send the former employee a check for the balance, less any income tax (and penalties if the employee is under age 59½) owed. Distributions of more than \$1,000 must be directly transferred to an IRA established for the former employee. Accounts valued at less than \$1,000 may be distributed directly to the participant or may also be rolled over for administrative convenience.
)3	ERISA and DOL Require Plan Sponsors to Retain Broad Categories of Plan Records	Plans sponsors only have to include the value of the ex-employee's non-forfeitable accrued benefit. In other words, plan sponsors do not have to count the non-vested portion if the departed employee was not fully vested in any portion of the account at the time he or she ended employment.
		Plan sponsors need to pay particular attention to the issue of rollovers. A plan may provide that any amounts that a former employee rolled over from another employer's plan (plus earnings on those rolled-over assets) are to be disregarded when it comes to determining the former employee's non-forfeitable accrued benefit for small account distributions.
		Fiduciary duties involved in rolling over a small account Plan sponsors must meet the following requirements in order to fulfill their fiduciary duties: _ The rollover must be a direct transfer to an IRA established in the name of the former employee

- The rollover must be a direct transfer to an IRA established in the name of the former employee.
   The IRA provider must be a state, or federally regulated financial institution, a mutual fund company or an insura
- The IRA provider must be a state- or federally regulated financial institution, a mutual fund company or an insurance company whose products are protected by a state guaranty association.
- The plan sponsor must have a written agreement with the IRA provider that outlines appropriate account investments and fees.
- The IRA provider cannot charge higher fees than typically charged for a comparable rollover IRA.
- The investments selected by the plan sponsor for the IRA must be intended to preserve principal and provide a reasonable rate of return and liquidity. Money market mutual funds, certificates of deposit, stable-value products- and interest-bearing savings accounts are examples of appropriate investments.

#### Pre-Cash-Out disclosures

Prior to cashing out a small balance account, plan sponsors must notify the former employee in writing, either separately or as part of the rollover notice, that unless the employee makes an affirmative election to receive a distribution of the account's assets, or roll them over to another account, the distribution will be paid to an IRA. The notice requirement will generally be considered satisfied once the plan sponsor sends the notice to the employee's last known mailing address. In addition, plan sponsors must include a description of the plan's automatic rollover provisions for mandatory distributions in the plan's summary plan description (SPD) or summary of material modifications (SMM).

#### **Option 2: Retaining small balances**

Some plans may consider retaining small balances indefinitely. Others may consider retaining the small plan balances and allowing the balance to be eroded over time by administrative fees. However, these approaches present a legal risk. Under ERISA, a plan administrator is obligated to operate the plan and make discretionary decisions in a prudent manner and in exclusive benefit of the plan participants. Plan sponsors that do not place the interest of the participants first run the risk of breaching their fiduciary duties under ERISA.

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#### Plan sponsor best practices

When an employee gives (or is given) notice to leave a company, the employer should immediately provide the employee with the paperwork and forms necessary to request a withdrawal. Participants need to be notified of their rollover rights and tax implications of withdrawals. The plan sponsor should put procedures in place that make processing withdrawals easy. If, for whatever reason, a departing employee does not request a withdrawal, the sponsor should send distribution reminders to this employee every year. Plan sponsors should be aware that while they want to encourage departing employees to move their money as soon as they terminate employment, they cannot force employees to withdraw the money until retirement age if the account is greater than \$7,000.

In addition, plan sponsors should be diligent about maintaining current addresses for terminated/former employees who opt to leave their money in the plan.

Your UBS Advisor can be a valuable resource when it comes to explaining your options as a plan sponsor when it comes to handling low balance retirement plan accounts owned by former employees. Make sure to also contact your tax and/or legal advisor as UBS does not provide legal and tax advice.

#### Gen Z and Millennials engagement in retirement savings

Recent research from the Investment Company Institute (ICI)<sup>2</sup> finds that the long-term financial outlook for younger generations is more promising than had been previously assumed. Despite managing what is for many substantial student loan debt while attempting to get a head start on careers and families, researchers at ICI say that this demographic have made "more progress in retirement savings than prior generations had at the same stage of life."

The research specifically noted that both retirement account ownership and asset accumulation among younger US households have trended higher in recent decades.

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### Figure 1. Percentage of Households

Ageu	10	10 4	 a Rethement Account	
			1989	

	1989	2022	
DB Plan, DC Plan or IRA	15%	34%	
DC Plan or IRA	10%	30%	
DC Plan	7%	24%	

## Figure 2. Median DC Plan Assets, in 2022 Dollars, for Households with DC Plans

	1989	2022	
Households Aged 18 to 25	\$1,729	\$5,000	
Households Aged 18 to 25	\$11,528	\$26,000	_

Source: ICI tabulations of Federal Reserve Board Survey of Consumer Finances

ICI's researchers attribute the high rates of account ownership and asset accumulation of Gen Z individuals to the prevalence of defined contribution (DC) plans, which usually offer employer contributions, and have overtaken defined benefit plans as the primary type of private-sector workplace retirement plan. The data shows that the percentage of Gen Z households with DC plan accounts is more than three times that of similar-age Gen X households in 1989.

The researchers also cite automatic enrollment as playing a role in boosting DC retirement account ownership. In fact, tabulations from the *ICI Annual Mutual Fund Shareholder Tracking Survey* cited by the study's authors found that more than half of DC-owning households younger than 35 in 2023 reported they had been automatically enrolled.

In addition, the ICI researchers noted that Gen Z households prioritize retirement saving more often than similar-age Gen Z households in 1989. Based on ICI tabulations of the Federal Reserve Board's Survey of Consumer Finances, nine percent of households aged 18 to 25 in 2022 cited retirement as the primary reason for family saving compared to two percent of similar-age households in 1989.

#### The critical role of DC plans

Other research conducted by ICl<sup>3</sup> underscores how critically important DC plans are to young Americans' financial future. The research found that more than half of DC account owners younger than 35 say that they probably would not save for retirement were it not for their workplace plan. More than 75% of the same cohort said that the tax treatment of their retirement plans is a big incentive to contribute. And 84% of DC account owners under age 35 agreed that their plan helps them think about the long term, not just their current needs.

Plan sponsors who find that their employee participation and/or contribution rates are lower than they would like (not just for Gen Z employees but for all other employee demographic groups) may want to revisit and reevaluate elements of their retirement plans. It may require broader investment choices, a bigger employee match, automatic features and an enhanced financial wellness education program to help move the needle.

## ERISA and DOL Require Plan Sponsors to Retain Broad Categories of Plan Records

Plan sponsors have significant reporting and disclosure requirements under ERISA. Additionally, ERISA and Department of Labor regulations require plan sponsors to retain broad categories of records related to meeting those responsibilities. This means that plan sponsors should understand the applicable rules and put into place a record retention policy governing how they periodically review, update, preserve and discard documents related to plan administration.

#### Why retaining plan records is important

A workable, comprehensive record retention process improves plan efficiency and allows plan sponsors to quickly respond to employee documentation requests or changes. An effective policy also ensures that all documents will be easily available in case of a plan audit. During an audit, plan sponsors must generally provide voluminous amounts of documentation that can help make the case that the plan has been managed in a responsible and prudent manner and is in compliance with all applicable regulations.

#### Who is responsible?

It is the responsibility of the plan administrator (the employer) to retain records of plan documents and participant notifications, as well as contribution, benefit and testing information. While plan sponsors typically employ outside service providers to provide various reports and prepare the plan's Form 5500 filing, it is the plan administrator that bears ultimate responsibility for retaining the records required to support the reports, filings and benefit determinations. Best practices should encourage plan sponsors to maintain easy and quick access to all plan-related documents and ensure that backup copies are maintained in a secure site.



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#### The Six-Year requirement

Under ERISA Section 107,<sup>4</sup> any individual required to file any report must maintain, generally, for a period of "not less than six years" after the document is filed, a copy of such report. It also requires that all records supporting information detailed in a plan's Form 5500 and other reports and disclosures must also be retained.

Such supporting documents include any financial reports, trustees' reports, journals, ledgers, certified audits, investment analyses, balance sheets, income and expense statements, corporate and partnership income tax returns, and documentation supporting the trust's ownership of the plan's assets. Also included is evidence of the plan's fidelity bond as well as copies of nondiscrimination and coverage test results.

In addition, any documents that support any decisions made by the plan administrator must be retained for this six-year period, including all copies of all corporate/partnership actions and administrative committee actions relating to the plan.

#### **Record Retention—Indefinite period**

A plan administrator is required under ERISA Section 209<sup>5</sup> to "maintain records with respect to each of [its] employees sufficient to determine the benefits due or which may become due to such employees." Since the statute does not specify a time limit, plan administrators must retain such records indefinitely. Records necessary to determine benefits and eligibility for plan participation would include any related to dates of service, eligibility, vesting, contributions and more.

Records that plan administrators must retain include the following:

- The original signed and dated plan document
- All original signed and dated amendments to the plan
- Communications and plan documents that are distributed to plan participants, including summary plan descriptions (SPDs), summaries of material modifications (SMMs) and any other descriptions of the plan
- The determination, advisory or opinion letter for the plan
- Copies of Form 5500
- Payroll records that were used to determine eligibility and contributions, including information that can support any exclusions from participation

- Proof of the plan's fidelity bond
- Documents that show the trust's ownership of the plan's assets
- Documents that relate to plan loans, withdrawals and distributions
- Results from nondiscrimination and coverage tests
- Personal employee information—Social Security number, date of birth, marital/family status
- Information related to participant's employment history, including hire, termination, and rehire dates (if applicable) and details on termination
- Election forms for deferral amount, investment directions, beneficiary designations and distribution requests
- List of contribution and distribution transactions
- Owner and officer history and familial relationships
- Spousal consents and waivers (notarized)

#### **Electronic documentation**

Records can generally be maintained electronically as long as the retention system meets ERISA requirements. The retention process must generally:

- Permit easy conversion to legible and readable paper copies to satisfy ERISA's reporting and disclosure requirements.
- Keep records in reasonable order and in a safe and accessible space that permits indexing, retaining, retrieving and reproducing.
- Have reasonable controls that can ensure the accuracy, reliability and authenticity of the records.
- Create and implement adequate records management practices,<sup>6</sup> including, but not limited to, following procedures for labeling of electronic records and saving backup copies.

Paper records may generally be disposed of any time after being transferred to a compliant electronic record system. However, the retention of an original paper record is required if the electronic record would not constitute a duplicate or substitute record under the terms of the plan and applicable federal or state law.<sup>7</sup>

Plan sponsors may wish to review their plan's administrative procedures regarding their record retention policies to ensure they meet ERISA's requirements.



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<sup>1</sup> SEC. 304, the SECURE 2.0 Act of 2022.

- <sup>2</sup> ICI Viewpoints, February 5, 2024, Ok, Boomer: Retirement Prospects for Younger Americans Actually Look Bright, Michael Bogdan, Sarah Holden, Daniel Schrass, and Jason Seligman. ici.org.
- <sup>3</sup> ICI Research Report, February 2024, American Views on Defined Contribution Plan Saving, 2023, ici.org/system/files/2024-02/24-ppr-dc-plan-saving, pdf.
- <sup>4</sup> 29 U.S.C. Sec. 1027.
- <sup>5</sup> 29 U.S.C. Sec. 1059.
- <sup>6</sup> Labor Reg. Sec. 2520.107-1.
- <sup>7</sup> Labor Reg. Sec. 2520.107-1(d).

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#### CALCULATION DEFINITIONS

Assets in top 10 holdings % - aggregate assets, expressed as a percentage, of the fund's top 10 portfolio holdings. This figure is meant to be a measure of portfolio risk. The higher the percentage, the more concentrated the fund is in a few companies or issues, and the more the fund is susceptible to the market fluctuations in these few holdings. This figure is calculated by MPI, using the most recent portfolio available for the fund and it currently counts cash as a holding.

**12b-1 Fee -** is a fee used to pay for a mutual fund's annual distribution costs. It is often used as a commission to brokers for selling the fund. The amount, which can be as high as 75 basis points for commissions and 25 basis points for service fees, is taken from a fund's returns.

Alpha - measures the difference between an investment's actual performance, and its expected performance as indicated by the returns of a selected market index. A positive Alpha indicates the risk-adjusted performance is above that index. In calculating Alpha, Standard Deviation (total risk) is used as risk measure. Alpha is often used to judge the value added or subtracted by a manager.

Asset Composition - reflects funds composition or weighting in various asset classes. "Other" includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks.

Average Style - reflects the average style exposure over the period specified. See Returns-Based Style Analysis/Exposure Chart definition for additional information.

Batting Average - measures the frequency with which a manager outperforms a selected Market Index. It is computed by dividing the number of positive excess returns by the total number of excess returns during the period.

**Benchmark R-Squared (R<sup>2</sup>)/PEER -** indicates the percentage of volatility in portfolio returns which can be "explained" by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a fund, can be explained by, or are associated with the values of another variable, such as the fund's asset category benchmark. It is helpful in assessing how likely it is that Alpha and Beta are statistically significant. The R<sup>2</sup> values range from 0.0 to 1.0. An investment with an R<sup>2</sup> of 1.0 is perfectly correlated with its asset category benchmark whereas an investment with an R<sup>2</sup> of 0.0 will behave independently of its benchmark. An R<sup>2</sup> of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market, as represented by the fund's asset category benchmark. Within the report, a fund's Benchmark R-squared is also compared to the Benchmark R-squared of all funds in the same peer group and assigned a percentile rank. The value for the Median Peer's Benchmark R-squared is also provided for comparison purposes.

**Beta –** measures an investment's sensitivity to market movements and is used to evaluate market-related, or systematic risk. Beta is a measure of the linear relationship, over time, of the investment's returns and those of its asset category benchmark. Beta is computed by regressing the investment's excess returns over the risk-free rate (cash proxy) against the excess returns of the fund's asset category benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. A Beta higher than 1.0 indicates that the fund is more volatile than the market.

**Correlation (R)** - represents the degree to which investments move in tandem with one another and is a critical component of diversified portfolio construction. The Correlation varies between a minimum of -1 (move in opposite direction) and a maximum of 1 (completely correlated). Lower Correlations enhance diversification. An R of less than 0.3 is often considered low Correlation.

Deferred Load - is a back-end sales charge that is imposed when an investor sells an investment. This is most often charged as a percentage of assets as a commission to brokers for selling the fund.

Distribution of Excess Returns - displays an arrangement of statistical data that exhibits the frequency of occurrence of the investment's returns in excess of the fund's benchmark.

**Down Market (Mkt) Capture Ratio** - measures an investment's performance in down markets relative to its asset category benchmark. A down market is one in which the benchmark's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while its assigned benchmark declined.

Down Market Average Return - represents average monthly returns over a stated time period in which the market(benchmark) earned a negative return.

**Downside Risk (Semi Standard Deviation, Semi StdDev, or Downside Deviation)** - identifies volatility solely on the down side. Downside Risk measures the variability of returns below zero, whereas Standard Deviation attributes volatility in either direction to risk. The Downside Risk method calculates the deviations below zero for each observed return. Each time a return falls below zero, the sum is divided by the number of observations and the square root is taken. This result is then shown on an annualized basis.

Excess - denotes that a statistic is being measured relative to the fund's asset category benchmark. The data set analyzed consists of the periodic differences between the investment's measure and that of its asset category benchmark.

**Expense Ratio** – is often referred to as the **Net Expense Ratio** and is obtained from a fund's prospectus. Prospectus-report expense ratios reflect the actual fees charged during a particular fiscal year. For Variable Annuity (Sub-Accounts) and the Group Annuity (IGSA) funds, the Net Expense field on the report will reflect Total Net Expense, as these products also include an insurance expense. The prospectus expense ratio for a fund-of-funds consists of only a wrap or sponsor fee. The expense ratio is the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by a fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not



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as of 06/30/2024 **82 of 96**  included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds can also opt to waive all or a portion of the expenses that make up their overall expense ratio, referred to as **Exp Waiver** in this report. If you have any questions about the expense waiver type, amount, or expiration date, contact your UBS Consultant. The **Gross Expense Ratio** represents the total gross expenses (net expenses with waivers added back in) divided by the fund's average net assets. If it is not equal to the net expense ratio, the gross expense ratio portrays the fund's expenses had the fund not waived a portion, or all, of its fees. Thus, to some degree, it is an indication of fee contracts. Some fee waivers have an expiration date; other waivers are in place indefinitely.

Front Load - is an initial, or front-end, sales charge and a one-time deduction from an investment made into the fund. The sales charge serves as a commission for the broker who sells the fund.

**Fund Composition-** is a breakdown of a fund's portfolio holdings, as of the date listed, into general investment classes. Cash encompasses both actual cash and cash equivalents (fixed-income securities with a maturity of one year or less) held by the portfolio plus receivables minus payables. Stocks include only the portfolio's common stocks. Bonds include everything from government notes to high-yield corporate bonds. "Other" includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferreds, which are corporate securities that are exchangeable for a set amount of another form of security (usually common shares) at a pre-stated price. "Other" also denotes all those not-so-neatly categorized securities, such as warrants and options. When listed, U.S. stocks reflects the portfolio invested in domestic companies, while Non-U.S. Stocks reflects the portfolio invested in Non-U.S. companies.

Fund Inception Date - is the date on which the fund began its operations.

GIC Sectors – jointly developed by Standard & Poor's and MSCI/Barra, the Global Industry Classification Standard (GICS®) was established as a global standard for categorizing companies into sectors and industries. The GICS methodology has been commonly accepted as an industry analysis framework for investment research, portfolio management and asset allocation. GICS was designed to classify a company according to its principal business activity. To make this determination, Standard & Poor's and MSCI/Barra use revenues as a key measure of a company's business activity. Earnings and market perception; however, are also important factors in the classification process and are taken into account during the review process.

Information Ratio - a measure of value added by an investment manager. It is the ratio of (annualized) excess return above its asset category benchmark to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus its asset category benchmark's return for each period, then annualizing the result.

Manager Tenure - the number of years that the current manager has been the portfolio manager of the fund. For funds with more than one manager, average tenure is shown. If there is only one manager and he/she has been at the fund for less than six months (and there is biographical information available), a dash will appear.

Max Drawdown - is the maximum loss incurred by a portfolio during a specified time period. It is used to measure the 'worst case scenario' of investing in a portfolio at the worst possible time.

**Morningstar Rating**<sup>TM</sup> - is calculated for funds with at least a three year history. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. The Overall Morningstar Ratings for funds in each category are derived from a weighted average of the performance figures associated with three-, and if available, five- and 10-year Morningstar Rating metrics. Unregistered group variable annuities and registered group variable annuities that are solely available for use in qualified plans are rated and ranked based on their position within the bell curve of the open-end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings and ranks are calculated by using an overlay of the open-end fund peer group break points and therefore do not contribute to the category average or number of funds within the peer group.

Morningstar Sector Weighting - illustrates the percentage of a fund's equity assets invested in each of the 11 major industry sub-classifications, grouped by three "super sectors": Cyclical, Sensitive and Defensive. The broad sectors are broken down further as follows: Cyclical includes Basic Materials, Consumer Cyclical, Financial Services, and Real Estate; Sensitive includes Communication Services, Energy, Industrials, and Technology; and Defensive includes Healthcare, Consumer Defensive, and Utilities.

Morningstar Style Box- is a nine-square grid that provides a graphical representation of the "investment style" of stocks and mutual funds. For stocks and stock funds, it classifies securities according to market capitalization (the vertical axis) and growth and value factors (the horizontal axis). Fixed income funds are classified according to credit quality (the vertical axis) and sensitivity to changes in interest rates (the horizontal axis).

**MPT Statistics (Modern Portfolio Theory) –** measures a fund's relative risk, based on a least-squares regression of a fund's excess returns on the excess returns of a market index. Alpha, Beta, and R-squared are examples of modern-portfolio-theory measures; standard deviation is not considered an MPT statistic because it is not generated through the same formula or mathematical analysis as are the other three statistics.

Net Assets - is recorded in millions of dollars and represents a fund's total asset base, net of fees and expenses.

Peer Group – a universe of funds similar in portfolio characteristics and capitalizations as defined by Morningstar Inc. Throughout the report the funds are grouped into peer groups based on their respective asset class category as assigned by Morningstar or UBS.



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as of 06/30/2024 83 of 96 **Peer Group Ranks:** Each fund is ranked within a universe of funds similar in portfolio characteristics and capitalizations as defined by Morningstar Inc., with 1 being the highest percentile and 100 being the lowest, relative to peers. The funds are grouped into quartile "bands": the first band represents the 5<sup>th</sup>-25<sup>th</sup> percentile; the second, the 25<sup>th</sup>-50<sup>th</sup>; the 3<sup>rd</sup>, the 50<sup>th</sup> -75<sup>th</sup>; and the final, the 75<sup>th</sup>-95<sup>th</sup>. The top and bottom 5% of funds are removed from the peer bands for reporting purposes only (but not for calculation purposes) as they are considered outliers. When ranked based on performance, the best performing funds appear in the top quartile. When ranked based on expense ratio and risk, the funds with the lowest relative (fees and risk) values would appear in the top quartile. If a fund has a rank of 95, it can be seen as if there are 95% other funds that are superior to it for the specified analytic.

Peer Expense Rank, Expense Rank, or Expense Ratio Rank – is assigned to each fund by MPI based on the fund's net prospectus expense ratio. Funds with the lowest expenses appear in the top quartile.

Peer Median Net Expense Ratio - is the median expense ratio of the peer group category (See Expense Ratio and Peer Group).

**Peer Group Median** - is intended to depict the midpoint value within a peer group. The 50<sup>th</sup> percentile indicates the middle number in a sorted list of peer results. The median is sometimes used as opposed to the mean when there are outliers in the sequence that might skew the average of the values as the median of a sequence can be less affected by outliers than the mean.

Peer Return Rank – is owned and calculated by MPI. The peer return rank is designed to provide a rank of performance returns for each fund among its peer group universe and is based on 3-month, year-to-date, one, three, five, seven, and ten year annualized periods. MPI ranks each fund based on average annual total returns assuming reinvestment of dividends and capital gains, distributions, at net asset value and the deduction of all fund expenses. Peer return ranks do not include the effect of fund sales charges. Ranking results would have been different and can have been less favorable had sales charges been included. A high rank does not necessarily imply that a fund achieved positive results for the period. Excess returns do not necessarily imply positive results. Past performance is no guarantee of future results. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). The best performing funds are found in the top quartile.

MPI uses a fund's Morningstar categories (or an alternate category established by UBS) to calculate the ranks. The number of funds in each category is provided with the associated funds.

Peer Risk Rank or Risk Rank or Standard Deviation Rank - The Risk Rank calculation is based on three, five, and ten year annualized periods. With 1 being the highest percentile and 100 being the lowest, compared to peers. The risk rank uses standard deviation for each fund for the share class identified among its peer group universe. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). Funds with the lowest risk appear in the top quartile.

Peer Risk Adj (Sharpe Ratio) Rank - Is based on a 3 month, year-to-date, one, three, five, seven, and ten year annualized periods. The peer return rank is designed to provide a rank of Sharpe Ratio for each fund among its peer group universe (see Peer Group Rank). The Sharpe Ratio is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance.

Peer Target Date Asset Allocation Rank or Target Date Allocation Rank (Equity Glide Path versus Peer Group) – The target date asset allocation table ranks the asset breakdown of the Target Date Fund family relative to its peers. The asset breakdown is based on a "look through" of the underlying holdings which are classified by Morningstar and grouped into four general investment groups: Cash, Equities (US and Non-US Equities), Bonds (US and Non-US Bonds) and Other. Each column in the table ranks a specified target date fund in the series against its corresponding Morningstar Target Date peer group . For example, the "2040" column compares the Target Date 2040 fund against the Morningstar Target Date 2040 peer group. The quartile rank graphs illustrate which quartile the fund is in relative to the assigned peer group (see Peer Group Ranks). The fund with the highest holdings-based exposure to equities will be in the top quartile.

**Performance -** expressed in percentage terms, Morningstar's calculation of total return is determined each month by taking the change in monthly net asset value (NAV), reinvesting all income and capital-gains distributions earned over that month, and then dividing this total by the starting NAV. Reinvestments are made using the actual reinvestment NAV, and daily payoffs are reinvested monthly. Unless otherwise noted, Morningstar does not adjust total returns for sales charges (such as front-end loads, deferred loads and redemption fees), preferring to give a clearer picture of a fund's performance. The total returns do account for management, administrative, 12b-1 fees and other costs taken out of fund assets. Total returns for periods longer than one year are expressed in terms of compounded average annual returns (also known as geometric total returns), affording a more meaningful picture of fund performance than non-annualized figures.

Price/Earnings Ratio (P/E Ratio) - is a stock's current price divided by the company's trailing 12-month earnings per share from continuous operations. A fund's price/earnings ratio can act as a gauge of the fund's investment strategy in the current market climate, and whether it has a value or growth orientation. A high P/E usually indicates that the market will pay more to obtain the company's earnings because it believes in the firm's ability to increase its earnings. Companies in industries enjoying a surge of popularity (e.g.: telecommunications, biotechnology) tend to have high P/E ratios, reflecting a growth orientation. (P/Es can also be artificially inflated if a company has very weak trailing earnings, and thus a very small number in this equation's denominator.) A low P/E indicates the market has less confidence that the company's earnings will increase; however, a fund manager or an individual with a 'value investing' approach could believe such stocks have an overlooked or undervalued potential for appreciation. More staid industries, such as utilities and mining, tend to have low P/E ratios, reflecting a value orientation.

Prospectus Benchmark - an investment's primary benchmark as stated in the prospectus. If a primary benchmark is not given by a fund, this field will be blank.

Prospectus Objective - indicates a particular fund's investment goals, based on the wording in a fund's prospectus.



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as of 06/30/2024 **84 of 96**  Returns-Based Style Analysis/Exposure - was developed by Nobel Laureate William F. Sharpe as an alternative method for determining a fund's style without requiring any information about the individual securities held in the investment's portfolio. The underlying principle behind this analysis is that the style of a fund can be determined by analyzing the total return pattern of the fund's portfolio. For example, if a fund's return pattern were identical to the return pattern of a Small Cap Growth benchmark, the fund could be viewed as a Small Cap Growth fund. Based on a mathematical formula which considers the performance benchmarks that are most highly correlated with the total returns of the portfolio, returns-based style analysis will be used to assess a fund's true investment style. Returns-based style analysis compares an investment's returns of certain indices. These comparisons imply which investment is most similar to, and which characteristics that investment is most likely to exhibit. The "Manager Style (36-Month Moving Windows, Computed Monthly)" chart includes points of varying sizes, where a smaller point represents an earlier moving window. The Russell Goneric Corners include the following indices: Russell 1000 Value, the Russell 1000 Growth, Russell 2000 Value, and Russell 2000 Value. The style analysis included in this report can assist in evaluating the actual style and performance of various fund choices in the plan.

**Rolling time periods** - Rolling time periods are typically used to measure consistency of data for a given criterion; the start date and end date both move forward together. The length of time periods are set and sometimes referred to as the window (for example – trailing 3 months, 12 months, or 5 years) and the increment of measurement is also set (for example – monthly, quarterly, or annually). Each datapoint can be plotted on a graph or all data points can be averaged to create a final average value. A fund's final average value can also be ranked relative to it's respective category's final average value.

As an illustration, for a 5-year rolling performance average, a rolling period is calculated each month. Each data point then calculates an Annualized return (Geometric Average) for the previous 60 months. There is a current maximum of 96 data points which are averaged at the end to create an end value. The funds are then ranked based on this final average value.

Sectors - are depicted using one of two methodologies: the Morningstar methodology or the GICS methodology. "Sectors" generally refer to Morningstar Sectors, unless otherwise indicated

Sharpe Ratio - indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

Since Inception (SI) - reflects the fund's performance from the inception date for the share class (see fund inception date). See Pre-Inception Returns for additional information.

**Sortino Ratio** - a variation of the Sharpe ratio that differentiates harmful volatility from general volatility by replacing standard deviation with downside deviation. The Sortino ratio is the excess return over the risk-free rate divided by downside semi-variance, and so it measures the return of an investment per unit of "bad" risk. (Volatility caused by negative returns is considered bad or undesirable by an investor, while volatility caused by positive returns is good or acceptable.) In this way, the Sortino ratio can help an investor assess risk.

Standard Deviation (StdDev) - measures the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset.

#### Standard Deviation Rank - See Peer Risk Rank

Style Exposures - are the output from Returns Based Style Analysis. Expressed in percentage terms, they show a fund's exposure (weight) to a specific set of factors.

Style Drift - measures the variability of style over time. A Style Drift of 0 indicates perfect style consistency and is equivalent to buying and rebalancing the indices that constitute the style basis each period. Style drift is designed to measure style inconsistency. A style drift of 100 indicates very little if any consistency in style.

Style Map - plots the historical exposures of a fund's style across appropriate dimensions, such as growth vs. value for equity funds and credit quality for fixed income funds.

Style R-Squared - resembles the Benchmark R-Squared Calculation except that market volatility is defined by the style portfolio and not the benchmark. The style portfolio is a custom benchmark created by weighting a set of indices through returns-based style analysis that reflect the style of the fund.

Target Date Asset Allocation – shows the asset breakdown of the Target Date Fund family based on a "look through" of the underlying holdings which are classified by Morningstar and groups them into four general investment groups: Cash, Equities (US and Non-US Equities), Bonds (US and Non-US Bonds) and Other. Other includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferred, which are corporate securities that are exchangeable for a set amount of another form of security (usually common shares) at a pre-stated price. Other also denotes all those not-so-neatly categorized securities, such as warrants and options. The Target Asset Allocation breakdown is calculated using rescaled long-only holdings.

Top Ten Holdings - a fund's ten largest individual security holdings and their percentage share of the total fund's market value.

Tracking Error (Excess Standard Deviation)/PEER - a measure of how closely an investment's returns track the returns of the Market Index. It is the annualized Standard Deviation of the differences between the investment's and the associated index's returns. If an investment tracks its index closely, then Tracking Error will be low. If an investment tracks its index perfectly, then Tracking Error will be zero. Within the report, a fund's Tracking Error to the benchmark is also compared to the Tracking Error of all funds in the same peer group and assigned a percentile rank. The value for the Median Peer's Tracking Error is also provided for comparison purposes.



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as of 06/30/2024 **85 of 96**  **Turnover Ratio** - a measure of the fund's trading activity, which is computed by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. A turnover ratio of 100% or more does not necessarily suggest that all securities in the portfolio have been traded. In practical terms, the resulting percentage loosely represents the percentage of the portfolio's holdings that have changed over the past year. A low turnover figure (20% to 30%) would indicate a buy-and-hold strategy. High turnover (more than 100%) would indicate an investment strategy involving considerable buying and selling of securities. The figure is culled directly from the financial highlights of the fund's annual report.

**Up-Down Capture Ratio** – compares an investment's performance when its asset category benchmark returns are positive relative to an investment's performance when the asset category benchmark returns are negative by measuring the difference between the Up Market Capture Ratio and the Down Market Capture Ratio via the subtraction method. The greater the Up-Down Capture Ratio, the more the investment participated in up markets and protected in down markets.

Up Market (Mkt) Capture Ratio - is a measure of a product's performance in up markets relative to the performance of the product's asset category benchmark. An up market is one in which the market's (benchmark) return is greater than or equal to zero. The higher the investment's Up Market Capture Ratio, the better the investment performed in a rising market environment.

Up Market Average Return- represents average monthly returns over a stated time period in which the market (benchmark earned a positive return).

YTD - Year to Date.

#### **BENCHMARK DEFINITIONS**

Barclays Govt/Corp 1 Yr Duration TR USD - measures the performance of investment grade, U.S. denominated, fixed-rate securities excluding STRIPS, TIPS and floaters. Its minimum index rating is A3 and the max maturity is 5 years.

BBgBarc EM Local Currency Government Index, which is designed to provide a broad measure of the performance of local currency Emerging Markets (EM) debt.

BBgBarc Municipal TR USD - measures the performance of the Bloomberg Barclays U.S. Municipal bond, which covers the USD-denominated Long-Term tax exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and prerefunded bonds.

BBgBarc US Agg Bond TR USD - measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.

BBgBarc US Corp Bond TR USD - measures the performance of the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers that meet specified maturity, liquidity, and quality requirements.

BBgBarc US Government Long TR USD - measures the performance of the U.S. Treasury and U.S. Agency Indices with maturities of 10 years and greater, including Treasuries and U.S. agency debentures. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt 1-3 Yr TR USD - measures the performance of the U.S. Treasury and U.S. Agency Indices with maturities of 1-3 years, including Treasuries and U.S. agency debentures. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt Interm TR USD - measures the performance of the U.S. Treasury and U.S. Agency debentures with maturities of 1-10 years. It is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

BBgBarc US Govt/Credit 1-3 Yr TR USD - index measures the performance of non-securitized component of the U.S. Aggregate Index with maturities of 1-3 years, including Treasuries, governmentrelated issues and corporates. It is a subset of the U.S. Aggregate Index.

BBgBarc US Treasury US TIPS TR USD - measures the performance of rules-based, market value-weighted, inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).

Bloomberg Commodity TR USD - measures the performance of future contracts on physical commodities which traded on US exchanges and London Metal Exchange. The commodity weightings are based on production and liquidity, subject to weighting restrictions applied annually.

**CBOE S&P 500 BuyWrite BXM** - measures the performance of a portfolio that engages in a buy-write strategy using S&P 500 index call options. It is a passive total return index based on selling the near-term, near-the-money S&P 500 Index (SPX) call option against the S&P 500 stock index portfolio each month. The SPX call that is sold (or written) will have approximately one month remaining to expiration, with an exercise price just above the prevailing index level (i.e., slightly out of the money). The premium collected from the sale of the call is added to the portfolio's total value. The SPX call is held until its expiration, at which time a new one-month, near-the-money call is written. The expired option, if exercised, is settled in cash.



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as of 06/30/2024 **86 of 96**  Credit Suisse Mgd Futures Liquid TR USD - seeks to gain broad exposure to the Managed Futures strategy using a pre-defined quantitative methodology to invest in a range of asset classes including: equities, fixed income, commodities and currencies.

DJ Brookfld Global Infra TR USD - measures the stock performance of pure-infrastructure companies domiciled globally. The index covers all sectors of the infrastructure market. It is weighted by float-adjusted market capitalization.

DJ US Moderate TR USD - measures the performance of returns on its total portfolios with a target risk level of a Moderate-investor willing to take 60% of all stock portfolio risk. It is made up of composite indices representing the three major asset classes: stocks, bonds and cash. The weightings are rebalanced monthly to maintain the target level. The index is a subset of US series of Dow Jones Relative Risk Indices.

DJ US Technology TR USD - measures the performance of all US stocks in the Dow Jones US Index classified into technology sector. The sector classifications is defined by the proprietary classification system which used by S&P Dow Jones. It is a free-float weighted index.

FTSE EPRA/NAREIT Global NR USD - measures the performance of listed real estate companies and REITS in both developed and emerging markets. It includes a range of regional and country indices, capped indices, Dividend+ indices, Global Sectors, Investment Focused and REITs and Non-REITs series.

FTSE NAREIT Equity REITs TR USD- measures the performance of REIT performance indexes that spans the commercial real estate space across the US economy. It contains all Equity REITs not designated as Timber REITs or Infrastructure REITs. The index is market-capitalization weighted.

FTSE WGBI NonUSD Hdg USD- measures the performance of fixed-rate, local currency, investment-grade sovereign bonds of all WGBI countries except the United States and is stated in US dollar terms. It is a subset of FTSE World Government Bond Index (WGBI).

FTSE WGBI NonUSD USD - measures the performance of fixed-rate, local currency, investment-grade sovereign bonds of all WGBI countries except the United States and is stated in US dollar terms. It is a subset of FTSE World Government Bond Index (WGBI).

ICE BofAML Fxd Rate Pref TR USD - measures the performance of fixed rate US dollar denominated preferred securities issued in the US domestic market. Qualifying securities must have an investment grade rating and must have an investment grade rated country of risk.

ICE BofAML US 3M Trsy Bill TR USD- measures the performance of a single issue of outstanding treasury bill which matures closest to, but not beyond, three months from the rebalancing date. The issue is purchased at the beginning of the month and held for a full month; at the end of the month that issue is sold and rolled into a newly selected issue.

ICE BofAML US Convt Bonds TR USD - measures the performance of USD-denominated convertibles that are sold in the US market and publicly traded in the US including coupon bonds, OIDs, and zeros. Qualifying securities must have at least \$50mn in market value. Qualifying companies must have a significant revenue footprint in the US. It is capitalization-weighted.

ICE BofAML US High Yield TR USD - measures the performance of short-term US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of \$100 million. It is capitalization-weighted.

ICE BofAML USD 3M Dep OR CM TR USD - measures the performance of a synthetic asset paying Libor to a stated maturity. It is based on the assumed purchase at par of a synthetic instrument having exactly its stated maturity and with a coupon equal to that days fixing rate. That issue is assumed to be sold the following business day (priced at a yield equal to the current day fixing rate) and rolled into a new instrument.

JPM EMBI Global TR USD - measures the performance of fix-rate for external-currency denominated debt instruments including brady bonds, loans, Eurobonds in emerging markets. Countries covered are Argentina, Brazil, Bulgaria, Mexico, Morocco, Nigeria, the Philippines, Poland, Russia, and South Africa. It covers more of the eligible instruments than the EMBI+ by relaxing somewhat the strict EMBI+ limits on secondary market trading liquidity.

Morningstar Gbl Lng/Shrt Curr TR USD - measures the performance of global highly liquid exchange listed futures contracts in currencies. It has the ability to go both long and short, providing greater flexibility and the potential to capture both upward and downward movements in price.

Morningstar MLP Composite TR USD - measures the performance of US publicly trading energy master limited partnerships. It is a diversified, distribution-dollar weighted index that targets the top 97% of investable universe by float market capitalization.

Morningstar Mod Tgt Risk TR USD - The Morningstar Target Risk Index family is designed to meet the needs of investors who would like to maintain a target level of equity exposure through a portfolio diversified across equities, bonds and inflation-hedged instruments. The Morningstar Moderate Target Risk Index seeks approximately 60% exposure to global equity markets.

Morningstar US Market TR USD - measures the performance of US securities and targets 97% market capitalization coverage of the investable universe. It is a diversified broad market index.



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as of 06/30/2024 87 of 96 MSCI AC Far East ex Japan NR USD - measures the performance of the large and mid-cap segments of the Far East region, excluding Japan equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA Growth NR USD - measures the performance of the growth large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA NR USD - measures the performance of the large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI ACWI ex USA Value NR USD - measures the performance of the value large and mid-cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.

MSCI AC World Large Cap Growth Index – measures the performance of large cap securities exhibiting overall growth style characteristics across particular developed and emerging markets countries. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate, long-term historical EPS growth trend and long-term historical sales per share growth trend. It is free float-adjusted market capitalization weighted.

MSCI AC World Large Cap Index - measures the performance of large cap representation across particular developed and emerging markets countries. It is free float-adjusted market capitalization weighted.

MSCI AC World Large Cap Value Index – measures the performance of large cap securities exhibiting overall value style characteristics across particular developed and emerging markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. It is free float-adjusted market capitalization weighted.

MSCI AC World SMID Cap Index - measures mid and small cap representation across particular developed and emerging markets countries. It is free float-adjusted market capitalization weighted.

MSCI China NR USD - measures the performance of the large and mid-cap segments of emerging China equity securities. It is free float-adjusted market-capitalization weighted.

MSCI EM (Emerging Markets) NR USD - measures the performance of the large and mid-cap segments of emerging market equity securities. It is free float-adjusted market-capitalization weighted.

MSCI EM Latin America NR USD - measures the performance of the large and mid-cap segments of emerging Latin America equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Europe NR USD - measures the performance of the large and mid-cap segments of developed Europe equity securities. It is free float-adjusted market-capitalization weighted.

MSCI India NR USD - measures the performance of the large and mid-cap segments of India equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Japan NR USD - measures the performance of the large and mid-cap segments of Japan equity securities. It is free float-adjusted market-capitalization weighted.

MSCI Pacific NR USD - measures the performance of the large and mid-cap segments of the developed Pacific region equity securities. It is free float-adjusted market-capitalization weighted.

MSCI World ex USA SMID Cap NR USD - measures the performance of small and mid-segment of World excluding USA equity securities. It captures mid and small representation across 22 of 23 developed market countries and 21 emerging markets countries and it covers approximately 28% of the free float-adjusted market capitalization in each country. The index is free float-adjusted market capitalization weighted.

MSCI World/Metals & Mining NR USD - measures the performance of the large and mid-cap metals and mining (industry) segments of world equity securities. It is constructed using GICS-Global Industry Classification Standard. The index is free float-adjusted market-capitalization weighted.

Russell 1000 Growth TR USD - measures the performance of the large-cap growth segment of the US equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.

Russell 1000 TR USD - measures the performance of the large-cap segment of the US equity securities. It is a subset of the Russell 3000 index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership.

Russell 1000 Value TR USD - measures the performance of the large-cap value segment of the US equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted.

Russell 2000 Growth TR USD - measures the performance of small-cap growth segment of the US equity universe. It includes those Russell 2000 companies with higher price-to-value ratios and higher forecasted growth values. It is market-capitalization weighted.



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as of 06/30/2024 88 of 96 Russell 2000 TR USD - measures the performance of the small-cap segment of the US equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

Russell 2000 Value TR USD - measures the performance of small-cap value segment of the US equity universe. It includes those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted.

Russell Mid Cap Growth TR USD - measures the performance of the mid-cap growth segment of the US equity universe. It includes Russell midcap index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.

**Russell Mid Cap TR USD-** measures the performance of the mid-cap segment of the US equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.

Russell Mid Cap Value TR USD- measures the performance of the mid-cap value segment of the US equity universe. It includes Russell midcap index companies with lower price-to-book ratios and lower forecasted growth values. It is market-capitalization weighted.

**S&P 1500 Cons Discretionary TR** - measures the performance of consumer discretionary (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Consumer Discretionary (sector).

S&P 1500 Cons Staples TR - measures the performance of consumer staples (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Consumer Staples (sector).

S&P 1500 Energy TR - measures the performance of energy (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard(GICS) Energy (sector).

S&P 1500 Financials TR - measures the performance of Financials (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Financials (sector).

S&P 1500 Health Care TR - measures the performance of health care (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Health Care (sector).

S&P 1500 Industrials TR - measures the performance of industrials (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Industrials (sector).

S&P 1500 Telecom Services TR - measures the performance of Telecom Services (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard (GICS) Telecom Services (sector).

S&P 1500 Utilities TR - measures the performance of Utilities (sector) segment of US equity securities. It comprises those companies included in the S&P Composite 1500 that are classified as members of the Global Industry Classification Standard(GICS) Utilities (sector).

**S&P 500 TR USD -** measures the performance of 500 widely held stocks in US equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. It is market capitalization-weighted.

S&P 500 VIX Short Term Futures TR USD - measures the performance of return from a daily rolling long position in the first and second month VIX futures contracts. It is S&P 500 VIX Futures Index Series which seeks to model the outcome of holding long and/or short positions in VIX futures contracts or other VIX indices.

**S&P North American Natural Resources TR -** measures the performance of US traded securities that are classified under the Global Industry Classification Standard (GICS) energy and materials (sector) excluding the chemicals (industry) and steel (sub-industry).

S&P/LSTA Leveraged Loan TR - measures the performance of 100 loan facilities drawn from the S&P/LSTA (Loan Syndications and Trading Association) Leveraged Loan Index (LLI). Standard & Poor's chooses these based on market weightings, spreads, and interest payments of the largest facilities in the leveraged loan market.

S&P Target Date Series TR USD - Comprises twelve multi-asset class indices, each corresponding to a particular target retirement date. The asset allocation for each index in the series is determined once a year through survey of large fund management companies that offer target date products. Each index is fully investable, with varying levels of exposure to equities, fixed income and commodities.



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This report is for general information and plan sponsor use only within the UBS Retirement Plan Consulting Services program and is not for distribution to plan participants. This report is intended to provide information to assist plan sponsors in monitoring the investments on their plan investment menus. Nothing contained in this document is intended to or should be considered or construed to be legal, tax, security, or investment advice, nor an opinion regarding the appropriateness of any investment, nor an offer or solicitation for the purchase or sale of any investment or security. This report should only be considered in conjunction with the actual recommendations and advice of your UBS Consultant; our standard account documents, agreements and disclosures; and the additional factors that warrant consideration for your particular Plan. UBS specifically prohibits the redistribution or reproduction of this material in whole or in part without the prior written permission of UBS. UBS accepts no liability for any redistribution of this document or its contents by third parties.

Performance data quoted in this report represents past performance that does not guarantee future results. Current performance is likely to be lower or higher than the performance data quoted. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, could be worth more or less than their original cost. Unless explicitly stated otherwise, the performance data shown is for the plan's specific fund share class. Information in this report is not for use in brokerage accounts. Product and performance data, provided by Morningstar and MPI, is as of the date stated, unless otherwise specifically noted. You can obtain the most current performance data by contacting your financial advisor or the fund company at the website shown in the "Fund Facts Sheets" section of this document or by visiting <a href="http://advisor.morningstar.com/familyinfo.asp">http://advisor.morningstar.com/familyinfo.asp</a>.

**UBS Retirement Plan Consulting Services** ("RPCS Program") is an investment advisory program. Details regarding the program including fees, services, features and suitability are provided in the Form ADV Disclosure, which can be obtained from your Financial Advisor or accessed at ubs.com/accountdisclosures.

Fund Information: The fund information contained in this report has been obtained from a variety of sources that are believed to be reliable, but have not been independently verified by UBS.

Mutual Funds are sold by prospectus. You should consider the fund's investment objectives, risk, charges and expenses carefully before you invest. This and other information about the fund can be found in the prospectus. Please read it carefully before investing. The fund's prospectus can be obtained by contacting your financial advisor or the fund company at the website found in the "Fund Fact Sheets" section of this report. If there is any discrepancy between the fund prospectus and the information in this document, you should rely upon the prospectus. There is no guarantee that the fund will be able to successfully implement its investment strategy or realize its investment objective.

Investment Eligibility: UBS only provides advisory services on investments (other than the investments mentioned below) within the RPCS Program. However, it will only recommend investments that have been reviewed by UBS and which are available on your plan's recordkeeper platform ("Program Investments").

Please contact your UBS Consultant for information on Program Investments.

If a plan sponsor elects to include investment options within the plan investment menu that are., individual securities (unmanaged investments), employer securities, self-directed brokerage windows, certain insurance accounts, or similar investments., UBS's services will not include a review of their investment performance or recommendations regarding whether a plan should offer or continue to offer any such investments. UBS does not include any such investment performance information in this report or include the value of any such investments when calculating its fees. Neither UBS nor your UBS Consultant will act as your investment adviser with respect to assets that are not Eligible Investments.

Non-Program Investments Displayed Within the Plan Report: Investment options that are not Program Investments, as well as investment options recently removed from the UBS list of Program Investments are specifically noted in the "Executive Summary" section. These investments are included at your request and such inclusion does not constitute an endorsement that the Plan continue to hold those funds.

**Investment Performance Results:** performance displayed in this report assumes the reinvestment of dividends and capital gains and the deduction of manager fees and other internal expenses associated with the investment. The performance does not reflect the deduction of the sales load that is typically applicable when mutual fund shares are purchased or other transaction fees or the impact of taxes, where applicable. Had the sales load, transaction fees or taxes been included, the results used in this document would have been reduced. Information shown is current as of the most recent quarter-end.

Impact of UBS Consulting Fees over time: The performance displayed in this report does not account for the deduction of investment advisory or consulting fees for the UBS Retirement Plan Consulting Services Program. The payment of these fees will reduce your performance and will have a cumulative effect over time. The net effect of the deduction of advisory fees on annualized performance, and the compounded or cumulative effect over time, is determined by the amount of the fee and the plan's investment performance. For example, for a plan in the RPCS Program that experiences an annual gross performance of 10% but incurs a 2% annual fee that is deducted quarterly on a prorated basis, the plan will experience net annual performance of 7.98%, a reduction of 2.02% per year. Compounding will similarly affect the plan's overall performance on a cumulative basis. Actual performance will likely be lower or higher than the results shown.



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**Pre-inception Returns:** The analysis in this report, if necessary, will be based, in part, on adjusted historical returns for periods prior to the actual inception of a specific fund share class. In such instances, the fund's performance will include pre-inception returns based on historical returns for other fund share classes. While all of the share classes of a particular fund invest in the same securities, the fees and expenses of each share class differ. This causes each share class to reflect different performance.

Pre-inception performance is calculated in one of two ways:

- I. Where the new share class has higher fees: the historical monthly returns of the oldest share class are adjusted to reflect the increase in fees and expenses of the new share class.
- II. Where the new share class has lower fees: the historical monthly returns of the older share class reflect that class' higher fees and expenses. As of the inception date of the new share class, that class' lower fees and expenses are reflected.

While the inclusion of pre-inception data can provide valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior For example, the fee structure and corresponding performance of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges which reduce overall performance. The operating expenses and sales charges of a fund, broken down by share class, are detailed in the fund's prospectus. Investors should understand that the adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar and MPI Stylus software could differ from those applied by other entities, including the fund itself.

Investment Monitoring: UBS or any of its employees will track or monitor specific investments the Plan makes to determine whether they complement the Plan's Investment Policy. Until such time as an IPS or other investment guideline document is developed and/or provided to the Firm, the Firm will use the initial UBS performance report provided to you as the Plan's review criteria. For all eligible investments within the RPCS Program, UBS monitors the investments to determine whether they are performing at a satisfactory level. As part of its ongoing monitoring, UBS could identify a potential aspect or development with a fund that merits further evaluation which could result in a fund being described as "On Watch". Funds "On Watch" will be monitored for a period of time depending on the length of time needed for UBS to conduct its evaluation and for the fund to address any concerns. The "On Watch" status will not affect the fund's standing on the plan investment menu. If any concerns associated with a fund rise to a level that UBS believes that the fund is scheduled to be removed from the investment menu, UBS will recommend removal or replaced" only when the fund is scheduled to be removed from the investment menu. The views expressed by your Consultant or in this report can differ or be contrary to the opinions and views expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. At any time, the advice you receive could differ from or be contrary to the opinions expressed in other UBS research publications.

**Custody of Investments Within this Plan Report:** The investments in this report are held at other financial institutions. UBS does not custody the plan's assets and will not execute transactions for the Plan. Information in this report regarding the Plan's holdings and values are based on data provided by your Plan's custodian. UBS has not verified, and is not responsible for, the accuracy or completeness of information regarding assets held at other financial institutions. You should review the account statements and other documentation provided by other financial institutions for their record of holdings, balances, transactions, and security values of assets held in those accounts, as well as notices, disclosures and other information important to you. Those documents also serve as a reference should questions arise regarding the accuracy of the information in this report. UBS Financial Services Inc. SIPC coverage does not apply to assets held at other institutions. You should contact your financial representative at any other financial institution where you hold an account to determine the availability of SIPC coverage, if any.

Benchmarks and Benchmark Selection: Benchmark information is illustrative and relates to historical performance of market indexes and not the performance of actual investments. Indexes are not available for direct investment and reflect an unmanaged universe of securities. Index results reflect the reinvestment of income but do not take into account advisory or transaction fees, the deduction of which would reduce the results shown. Past performance does not guarantee or indicate future results.

A description of the indices included in this document is available in the Definitions section. Morningstar assigns each fund to a particular asset category and assigns a benchmark index for each of those asset categories. Funds are benchmarked to the index that corresponds to the asset category that they belong to. Funds will be benchmarked based on their assigned Morningstar asset category unless UBS determines that it is appropriate to re-categorize a fund after an assessment of the fund's investment style. In such instances, funds will be benchmarked to the index that corresponds with the asset category selected by UBS. Secondary benchmarks can be displayed in addition to the default benchmarks based on your individual circumstances and preferences. UBS assigns category classifications based on our understanding of the investment's allocation, strategy, investment style and our research. Unless passive scoring is turned on (see *Fund Scoring Process*, below), alpha, beta, R-squared and all other risk and return metrics will be calculated based on the fund's prospectus benchmark rather than the asset category benchmark. Depending upon your investment objectives and other factors, the indexs used in this report could be an appropriate measure for comparison purposes, and as such, are represented for illustration only. Your Plan holdings and performance can vary significantly from the index. Your financial advisor can provide additional information about how benchmarks within this report were selected.

UBS considers a variety of fund benchmarks when evaluating a fund's performance, which will include benchmarks identified by the fund, benchmarks identified by Morningstar for the fund's asset category or peer group, or benchmarks identified by UBS Financial Services for various asset categories and could consider benchmarks in addition to or in place of the benchmarks displayed within this report.

Fund Score and Fund Scoring – This report does not present the UBS Fund Score, which has been retired. The Fund Scores illustrated in this report are based on investment monitoring criteria selected by the Plan Sponsor. The Plan Sponsor can also select the weighting for each of the criteria used in the fund score. If specific weightings are not selected, all criteria will be weighted equally. In addition, the Plan Sponsor can, but is not required to, set the number of criteria needed for an investment to "pass" for the quarter. If the Plan Sponsor does not set a "passing" score, the report will still



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identify criteria that were met within the report, as a score for the quarter. All references to a "score" within the report refer to this scoring process, which is set by the Plan Sponsor. Lack of data for a criteria will cause it to not pass. To set or change weightings or "passing" scores for future quarters, please reach out to your UBS Consultant.

UBS does not set the criteria that creates the scoring provided and makes no representations regarding the scores presented. These scores are intended to assist Plan Sponsors and retirement plan fiduciaries in evaluating investment options and easily reviewing fund's performance against the criteria set by the Plan Sponsor. These scores do not constitute fiduciary investment advice alone and should not be used in place of the retirement Plan fiduciaries' prudent review of the investment options or discussion of investment options with your UBS Consultant. The criteria set by the Plan Sponsor and used to generate the scores should not be the only factors considered when choosing to add, remove or maintain an investment option in the plan. See the Definitions section for a description of the Morningstar Ratings contained in the Fund Fact Sheets section of this document.

The Fund Scoring Process – There are three types of fund evaluation methods available: Active, Passive, and Target Date. Active is the default fund scoring option and is available to be utilized for all funds. Passively managed funds, as identified by Morningstar, and/or Target Date Funds can have their own separate scoring and evaluation criteria set by the Plan Sponsor.

The definitions of the criteria available for each type of fund scoring method, and their associated options are contained in the Definitions Section. A list of the criteria utilized by the Plan is listed in the Executive Summary. Each evaluation criteria has a quantitative threshold that determines whether or not that evaluation criteria is met for the fund, based on fund data as of the most current calendar quarter. For example, if the "Manager Tenure is greater than 10 years" criteria is selected, then this evaluation criteria for a fund will meet requirements for the quarter as long as the current fund manager has managed the fund for longer than 10 years. If manager tenure data is 10 or less years or data is missing, then the criteria does not pass. The plan sponsor can also chose to use weightings for the different evaluation criteria.

Target Date Fund Scoring Option - Target Date Fund Scoring can be based on a weighted rank scoring method if the Plan Sponsor determines that is appropriate and adopts Importance Factors and a Scoring Threshold, as described below. When this option is utilized, the score for a target date fund is calculated based on its composite weighted ranking within its peer group.

- Importance Factors are Target Date criteria selected by the Plan Sponsor to be weighted by importance on a 100-point scale. Any single criteria selected can be weighted from 1 to 100 but the total for all weighted criteria must equal 100. A weighted composite ranking within each Target Date Asset Category (e.g. Target Date 2020, or Target Date 2030) is created based on the Importance Factors selected. A weighted ranking means that each Importance Factor is ranked against each fund in its peer group, then weighted according to the Importance Factor weighting selected by the Plan Sponsor, then the weighted rankings are combined to create a single composite fund ranking or fund score. The weighted score, or weighted ranking of each target date fund evaluated, is then adjusted to fit the chosen Scoring Scale and compared to the Scoring Threshold.
- The Scoring Scale will adjust the original weighted composite ranking to fit the Scoring Scale established by the Plan Sponsor. For example, if a calculated weighted composite ranking of a fund was 50 out of the 100 possible score, and the designated scoring scale was 12, the fund would then show a score of 6 in the report (50/100\*12).
- The Scoring Threshold defines what score is required for a fund to "Pass" for the quarter. For example, if the Scoring Scale was 12 and the Scoring Threshold was 7, a fund that scored a 7 or above would pass.

Asset Allocation Section – The Asset Allocation Section lists each fund held by the Plan and is organized by Morningstar asset category. Other categories that are not Morningstar asset categories include:

- Core Holdings: Plan assets that do not fall into a Morningstar asset category because the investment is not a mutual fund or is not tracked by Morningstar. Examples of the types of items that can be included in this category include stable value funds, assets held within a brokerage windows, and company stock.
- Non-Core Holdings: Plan assets that are not investments. Most frequently this category is utilized for in-Plan loans.

The pie chart labeled "% of Assets" represents the composite of the underlying holdings of all funds in the Plan. Definitions of the pie chart components:

- · Cash: Cash and fixed-income securities with maturities of less than a year.
- U.S. Stocks: Common equity shares of companies domiciled in the United States.
- Non-U.S. Stocks: Common equity shares of companies domiciled outside of the United States.
- U.S. Bonds: Fixed-income securities issued by companies domiciled in the United States and U.S. governmental bodies (federal, state, and municipal).
- Non-U.S. Bonds: Fixed-income securities issued by companies domiciled outside of the United States and foreign governmental bodies.
- Other: Includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferreds (corporate securities that are exchangeable for a set amount of another security, usually common shares, at a pre-stated price). "Other" also includes securities such as warrants and options.
- Unidentified: Includes funds in which the fund itself or the allocation data was not available from Morningstar.



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as of 06/30/2024 92 of 96 Investment Fee Analysis Section - provides information regarding the internal fund expenses for certain investments within the Plan, as stated in each fund's prospectus or otherwise.

- Core Assets represents asset values of plan investments for which the expense analysis is performed. The Investment Fee Analysis Section provides a net expense ratio for Core Assets which is the weighted average of each investment's expense ratio within Core Assets (excluding custom fund assets).
- Other Core Assets (Custom funds) represents asset values of plan investments for which there is no expense ratio available for expense analysis purposes
- Non-Core Assets represents asset values for certain plan investments that are excluded from the expense calculations such as employer stock, brokerage window assets, loans, etc.

Portfolio Style Section - The Portfolio Style Section provides a series of grids that represent a graphical representation of the "investment style" of Plan investments and include fund name, assets, and the fund score for the most recent period.

- The equity style grid classifies securities according to market capitalization (the vertical axis) and growth and value factors (the horizontal axis).
- The fixed income grid classifies investments according to credit quality (the vertical axis) and sensitivity to changes in interest rates as measured by a bond's duration (the horizontal axis).
- Target Date Funds, Asset Allocation, and Specialty fund types have been placed in separate style categories to distinguish funds assigned to them, as these funds often contain both equity and fixed income holdings.
  - The "Target Date Funds" category contains the assets held in the Plan's target date funds, which are classified in Morningstar's target date asset categories (e.g. Target-Date 2025). The funds are combined and described as the target date series and the total combined assets are listed.
  - The "Asset Allocation" style category includes funds that comprise both equity and fixed income holdings, and contains funds in the following categories: Allocation--15% to 30% Equity, Allocation--30% to 50% Equity, Allocation--50% to 70% Equity, Allocation--70% to 85% Equity, Allocation--85% + Equity, Convertibles, World Allocation, Tactical Allocation.
  - The "Specialty" style category contains the following Morningstar categories: Communications, consumer cyclical, consumer defensive, energy limited partnership, equity energy, equity precious metals, financial, global real estate, health, industrials, infrastructure, miscellaneous sector, natural resources, real estate, technology, utilities.

#### **Risk Considerations**

Some of the general risk considerations associated with the investment options included in this report are described below. The descriptions are not meant to be a complete list of all investment risks. For more complete information regarding fees, expenses, risks and restrictions associated with these investments please review the offering documents and marketing materials. Investors should consult their tax advisor about their specific tax situation before investing in any securities. In addition, clients should familiarize themselves with the particular market risks and the other risks associated with the specific investment. All investments contain risk and could lose value.

Offshore Funds: Offshore mutual funds are not registered with the Securities and Exchange Commission and cannot be sold to any person who is a citizen or resident of the United States.

Target Date Funds: Target date funds are funds where the target date is the approximate date when investors plan to start withdrawing their money. Generally, the asset allocation of each fund will change on an annual basis, with the asset allocation becoming more conservative as the fund nears the target retirement date. The principal value of the fund(s) is not guaranteed at any time, including at the target date. Investors should consider factors in addition to age or retirement date, including risk tolerance, personal circumstances, and complete financial situation, prior to investing in a target date fund.

Alternative Investments: Non-traditional asset classes are alternative investments that include hedge funds, private equity, and private real estate (collectively, non-traditional or alternative investments). These investments can be subject to substantial risks (including the risks associated with limited liquidity, the use of leverage, short-sales and concentrated positions), can involve complex structures and strategies, and possibly are not easily valued. The risks of alternative investments should be carefully considered in light of an investor's investment objectives, risk tolerance and financial circumstances. Alternative investments are speculative and entail substantial risks, which can place investor capital at risk. It is possible that alternative investments have not been registered with the Securities and Exchange Commission or under any state securities laws. The market for such investments could be highly illiquid and subjectively valued, and these reports provide values for informational purposes only. Accuracy is not guaranteed. These values, ould differ substantially from prices, if any, at which a unit could be bought or sold and do not necessarily represent the value, you would receive from the issuer upon liquidation. Issuer estimated values, if any, are generally updated on a regular (annual or semi-annual) basis and are supplied to us by the issuer, but can also be calculated based on different information from what is used by third parties to derive their estimated values.

Money Market Funds: An investment in a money market fund is not insured or guaranteed by the FDIC or any other government agency. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investment in the fund.

**Stable Value Funds**: There is no guarantee a stable value portfolio will achieve its investment objectives. Stable value portfolios are not guaranteed by the US government, the Federal Deposit Insurance Corporation (FDIC), the fund company or any other entity. Unit price, yield, duration and return will vary. Although stable value investment contracts seek to reduce the risk of principal loss, investing in a stable value portfolio involves risk, including credit risk, management risk and loss of principal. These risks could result in a decline in the portfolio's value or cause a withdrawal or transfer from a portfolio to occur at less than a participant's invested value. Stable value investment contracts involve several unique risks, which include but are not limited to: a stable value investment contract issuer could default, become insolvent, file for bankruptcy protection, or otherwise be deemed by the Plan's auditor to no longer be financially responsible; an event or condition outside the normal operation of the Plan could occur (including but not limited to Plan changes, employer bankruptcy, significant layoffs, Plant closings, corporate spin-offs, divestitures, or restructurings); some portfolio securities could become



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impaired or default; certain communications from the Plan or the Plan's agents could cause an investment contract to not pay benefits at contract value; or there could be a change in tax law or accounting rules. Any of these risks, if realized, could cause a write-down in the value of a portfolio and a risk of loss of all or a part of a participant's invested value in a portfolio.

**Fixed Income**: Investing in the fixed income market is subject to risks including market, interest rate, issuer, credit, default and inflation risk. An investment in a portfolio could be worth more or less than its original cost when redeemed. Derivatives often involve certain costs and risks such as liquidity, interest rate, market, credit, management, default risk, and the risk that the position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

Variable Annuities: A variable deferred annuity is a long-term financial product designed for retirement purposes. It is a contractual agreement in which payment(s) are made to an insurance company, which agrees to pay out an income or a lump sum amount at a later date. There are fees and charges associated with a variable annuity contract, which include, but are not limited to, operations charges, sales and surrender charges, administrative fees, and additional charges for optional benefits. Variable annuities are sold by prospectus and you should carefully consider important information on the subaccounts' investment objectives, risk, charges and expenses. Please read the prospectus and offering documents carefully before you invest. Your UBS Consultant can provide a copy of the prospectus. For current month-end returns: <a href="http://advisor.morningstar.com/familyinfo.asp">http://advisor.morningstar.com/familyinfo.asp</a>.

Withdrawals from an annuity contract are taxable as ordinary income, not as capital gains and, if taken by a participant prior to age 59 1/2, will likely be subject to an additional 10% federal income tax penalty. Withdrawals could also be subject to surrender charges. Withdrawals will reduce the death benefit, living benefits and cash surrender value. For tax purposes, withdrawals will come from any gain in the contract first. Please see the prospectus for complete details. Amounts in the annuity's variable investment portfolios are subject to fluctuation in value and market risk, including loss of principal.

Unregistered group variable annuities and registered group variable annuities that are solely available for use in qualified Plans are rated and ranked based on their position within the bell curve of the open end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings and ranks are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category average or number of funds within the peer group.

For variable annuity subaccounts, standardized return is total return based on its inception date within the separate account and is adjusted to reflect recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E risk charge, administration fees, and actual ongoing fund-level expenses. The benchmark used for each individual subaccount performance is an index that has been assigned to the particular manager or fund.

#### Scope of our Services

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## The Materials are intended to aid in providing you with information and advice about your Plan. Therefore, the Materials should only be considered in conjunction with the actual advice of UBS, our standard account documents, agreements and disclosures and the additional factors that warrant consideration for your particular Plan, including costs.

If this output is provided as part of a proposal, it is marketing material. You must make independent decisions with respect to any proposals contained within this report. In making those decisions you have reviewed the terms of any Plan with respect to which you are a fiduciary and your obligations to any such Plan under ERISA. This report should be used solely for the purposes of discussion with your prospective UBS Consultant and your independent consideration. UBS does not intend this to be fiduciary or best interest investment advice or a recommendation that you take a particular course of action. If you would like more details about any of the information provided, or personalized recommendations or advice, please contact your UBS Financial Advisor.

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As a firm providing wealth management services to clients, UBS Financial Services Inc. offers investment advisory services in its capacity as an SEC-registered investment advisory services and brokerage services are separate and distinct, differ in material ways and are governed by different laws and separate arrangements. It is important that clients understand the ways in which we conduct business, that they carefully read the agreements and disclosures that we provide to them about the products or services we offer. For more information, please review client relationship summary provided at ubs.com/relationshipsummary.

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#### FUNDS IN ANALYSIS (Mutual Funds)

Review Period = 12/31/2023

INVESTMENT	EXPENSE RATIO	STATUS	RATIONALE	ACTION
Columbia Dividend Income Inst3 - CDDYX	0.55	•	Lowest share class	No action required
American Funds Growth Fund of Amer R6 - RGAGX	0.30	•	Lowest share class	No action required
Fidelity Contrafund - FCNTX	0.39	٠	All lower cost share classes unavailable at Recordkeeper	Check for availability in the future
American Century Mid Cap Value R6 - AMDVX	0.63	•	Lowest cost share class net of revenue sharing	Document decision
Carillon Eagle Mid Cap Growth R6 - HRAUX	0.64	٠	Lowest share class	No action required
Columbia Small Cap Value II Inst3 - CRRYX	0.80	٠	Lowest share class	No action required
Franklin Small Cap Growth R6 - FSMLX	0.67	٠	Lowest share class	No action required
Vanguard Total Intl Stock Index Admiral - VTIAX	0.12		No rationale, propose share class change	For discussion
American Funds Europacific Growth R6 - RERGX	0.47	٠	Lowest share class	No action required
DFA Emerging Markets Core Equity I - DFCEX	0.39	٠	Lowest share class	No action required
Vanguard Total Bond Market Index Adm - VBTLX	0.05		No rationale, propose share class change	For discussion
Victory Income R6 - URIFX	0.49	٠	Lowest share class	No action required
Fidelity Advisor High Income Advtg I - FAHCX	0.94	٠	Lowest cost share class net of revenue sharing	Document decision
American Funds 2015 Trgt Date Retire R6 - RFJTX	0.30	٠	Lowest share class	No action required
American Funds 2020 Trgt Date Retire R6 - RRCTX	0.31	٠	Lowest share class	No action required
American Funds 2025 Trgt Date Retire R6 - RFDTX	0.32		Lowest share class	No action required
American Funds 2030 Trgt Date Retire R6 - RFETX	0.33	٠	Lowest share class	No action required
American Funds 2035 Trgt Date Retire R6 - RFFTX	0.35	٠	Lowest share class	No action required
American Funds 2040 Trgt Date Retire R6 - RFGTX	0.37	٠	Lowest share class	No action required
American Funds 2045 Trgt Date Retire R6 - RFHTX	0.37		Lowest share class	No action required

\*Acceptable Share Class = Client decision to maintain share class, subject to action above noted

Status: 🛑 = Acceptable Share Class 🔺 = Action Required

\*Action Required = Share class change advised

This report is only applicable to investments in mutual funds. The share class analysis is performed annually. The review and expense ratio are effective as of the date in the review period above noted. Expense Ratio is subject to change.

USS always recommends the lowest cost share class available at your Recordkeeper. Consistent with your fiduciary duty, you, and not UBS, are responsible for share class selection. UBS recommends that a decision to select an alternate share class be reviewed with counsel.

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FUNDS IN ANALYSIS (Mutual Funds) Review Period =						
	INVESTMENT	EXPENSE RATIO	STATUS	RATIONALE	ACTION	
	American Funds 2050 Trgt Date Retire R6 - RFITX	0.38	•	Lowest share class	No action required	
	American Funds 2055 Trgt Date Retire R6 - RFKTX	0.38		Lowest share class	No action required	
	American Funds 2060 Trgt Date Retire R6 - RFUTX	0.39		Lowest share class	No action required	
	American Funds 2065 Trgt Date Retire R6 - RFVTX	0.39		Lowest share class	No action required	

#### FUNDS NOT IN ANALYSIS (All Other Security Types)

INVESTMENT

BlackRock Equity Index Fund CL R - F00000XDJK

Status: 🛑 🛛 = Acceptable Share Class 🔺 = Action Required

\*Acceptable Share Class = Client decision to maintain share class, subject to action above noted

\*Action Required = Share class change advised

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# **Plan Highlights**



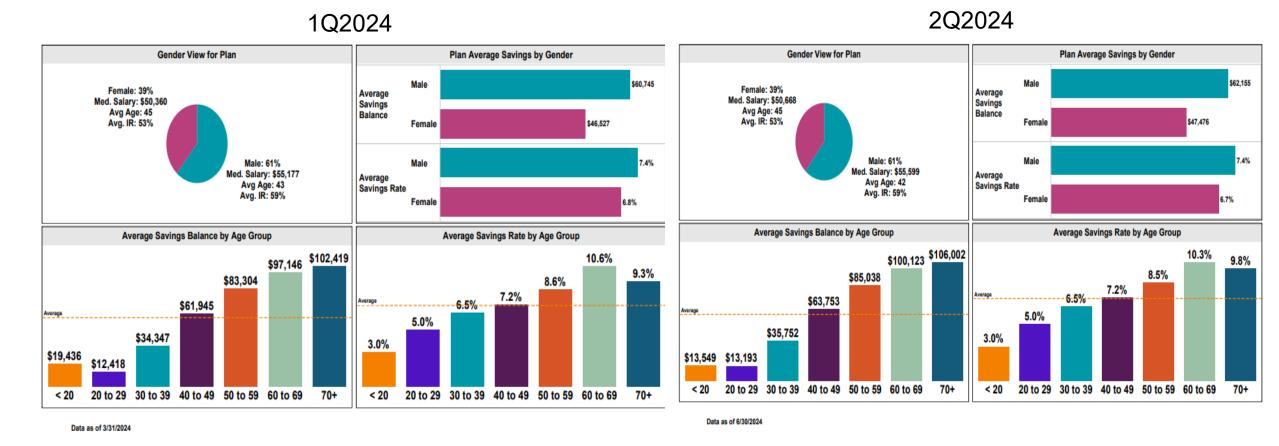
# **Quarterly Highlights**

401(a) Beneficiary Designation Increase	Efforts <ul> <li>January Beneficiary Mailer</li> <li>One on One Appointments</li> <li>Monthly webinars</li> <li>Beneficiary flyers</li> </ul>	10% increase in 90 days
Take action today — Name beneficiaries for your Gwinnett County Retirement Plan accounts.	<ul> <li>Results</li> <li>6,568 Beneficiary forms on file</li> <li>Increased to 97.9% from 87.6%</li> </ul>	



# Gwinnett County Savings Profile

Second Quarter 2024



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# Participant Average Deferral by Age

Second Quarter 2024

Participant Deferrals by plan and age group						
June 30, 2024	401(a) Plan	457(b) Plan Pre-Tax	457(b) Plan Roth			
	%	%	%			
<21*	6.02%	3.37%	5.00%			
21-30	5.52%	4.14%	5.36%			
31-40	4.77%	5.07%	5.66%			
41 – 50	4.72%	6.02%	6.17%			
51 – 60	4.88%	7.67%	6.54%			
61+	4.81%	9.40%	8.03%			
Plan Average	5.12%	5.95%	6.13%			

\*Excludes Forfeiture Accounts

## Gwinnett County 401(a) Plan

Second Quarter 2024

	3Q2023	4Q2023	1Q2024	2Q2024
Total Plan Participants (Active / Terminated)	6,733 (4,359 / 2,374)	6,822 (4,425/ 2,397)	6,881 (4,477/ 2,404)	7,001 (4,533/ 2,468)
Percentage of Employees with a Designated Beneficiary	85.6%	86.9%	87.6%	97.9%
Total Plan Assets	\$389,225,590	\$437,676,605	\$475,680,246	\$492,051,217
Average Balance	\$57,808	\$64,156	\$69,129	\$70,282

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## Gwinnett County 457(b) Plan- DC Participants Only Second Quarter 2024

	2Q2024
Total Plan Participants (Active / Terminated)	7,163 (4,378/ 2,785)
Percentage of Employees with a Designated Beneficiary - who have a balance	6,568/ 7,163= 91.6%
Total Plan Assets	\$292,059,420
Average Balance	\$40,773
Number of Participants with a Loan	647
Outstanding Loan Balance	\$4,201,320
Average Participant Loan Balance	\$6,493

## Gwinnett County 457(b) Plan Second Quarter 2024

	3Q2023	4Q2023	1Q2024	2Q2024
Total Plan Participants (Active / Terminated)	7,609 (4,882 / 2,727)	7,652 (4,934/ 2,718)	7,678 (4,978/ 2,700)	7,739 (4,954/ 2,785)
Percentage of Employees with a Designated Beneficiary	88.9%	90.3%	90.5%	91.4%
Total Plan Assets	\$287,971,529	\$321,325,671	\$346,923,621	\$358,587,623
Average Balance	\$37,846	\$41,992	\$45,184	\$46,335
Average Participant Loan Balance	\$6,542	\$6,516	\$6,958	\$7,171

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## Gwinnett County 401(h) Plan

Second Quarter 2024

	3Q2023	4Q2023	1Q2024	2Q2024
Total Plan Participants (Active / Terminated)	434 (266 / 168)	430 (266/ 164)	428 (260/ 168)	425 (233/ 192)
Total Plan Assets	\$9,394,081	\$10,001,787	\$10,567,881	\$10,760,384
Average Balance	\$21,645	\$23,259	\$24,691	\$25,318



# Gwinnett County Plan Highlights

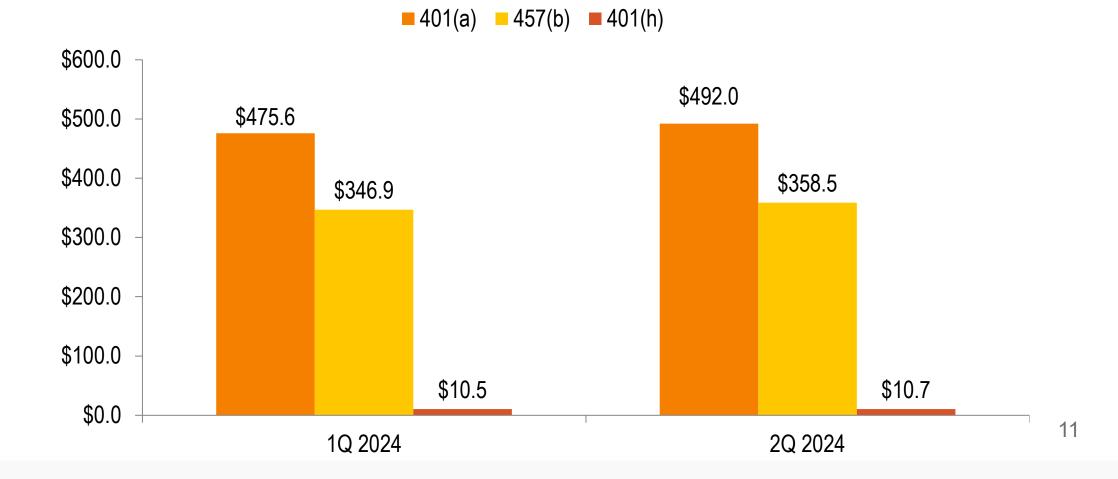
### Second Quarter 2024

	401(a)	457(b)	401(h)	Total
Plan Assets as of 04/01/2024	\$475,680,246	\$346,923,621	\$10,567,881	\$833,171,748
Contributions	\$12,841,361	\$9,281,577	\$114,060	\$22,236,998
Distributions	(\$4,759,097)	(\$4,149,723)	(\$75,507)	(\$8,984,327)
Forfeitures	(\$392,948)		(\$37,700)	(\$430,648)
Other Activity *	\$298,365	(\$385,022)	\$46,265	(\$40,392)
Earnings	\$8,383,290	\$6,917,170	\$145,385	\$15,445,845
Plan Assets as of 06/30/2024	\$492,051,217	\$358,587,623	\$10,760,384	\$861,399,224
Total Eligible employees	4,533	5,060	233	
Active Employees with Deferral on File	4,533	4,954		
Total participation rate 06/30/2024	100 %	97.9 % Roth Contribution rate-35.5%		
Percentage and Total # of Employees with a Designated Beneficiary	7,001 (with Bal) 6,860=97.9%	7,739 (with Bal) 7,077=91.4%		
Percentage of Terminated Participants with a Designated Beneficiary	2,307/ 2,468= 93.5%	2,313/2,785= 83.0%		

\* Other activity includes (Net loans issues, Loans paid back, fees, transfers, etc.)

## Total Plan Assets (MM)

Compare by period

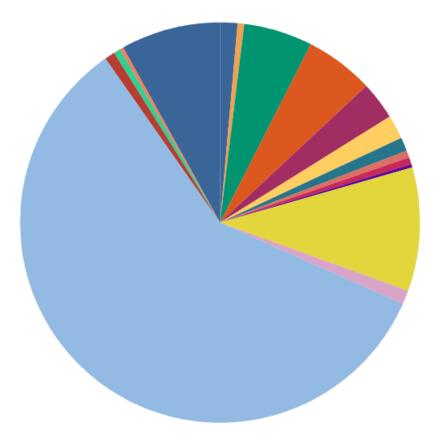


## **Participant Account Reconciliation**

Second Quarter 2024

	401(a)	457(b)	401(h)	Total
Participants as of 04/01/2024	6,881	7,678	428	14,987
New Accounts (first contribution posted in 2Q24)	200	178	—	378
Closed Accounts	80	117	3	200
Participants as of 06/30/2024	7,001	7,739	425	15,165
Terminated Employees with an account balance	2,468	2,785	192	5,445

### Percentage of Total Assets by Fund Second Quarter 2024



American Century Mid Cap Value	1.28%
American Europacific Growth	0.61%
American Growth Fund of America	5.65%
BlackRock Equity Index	5.46%
Carillon Eagle Mid Cap Growth	3.02%
Charles Schwab PCRA	1.98%
Columbia Dividend Income Inst3	1.21%
Columbia Small Cap Value	0.62%
Deemed Loan Fund	0.01%
DFA Emerging Markets Core Equity I	0.34%
Fidelity Advisor High Income Advanta	0.41%
Fidelity Contrafund	9.98%
Franklin Small Cap Growth	1.21%
Invesco Developing Markets R6	0.00%
Invesco Growth and Income	0.00%
Monumental Life investment	0.00%
Target Date Funds	58.54%
Vanguard Total Bond Market Index	0.70%
Vanguard Total International Stock I	0.70%
Victory Income Fund Class R6 Shares	0.14%
Voya Stable Value Option	8.14%
Total:	100.00%

### Total Plan Assets by fund Second Quarter 2024

Fund Name	Assets	Participants invested	Participants utilizing One Fund		
		Unique SSN*	401(a)	457(b)	401(h)
AMERICAN CENTURY MID CAP VALUE	\$10,979,842.90	3	1	2	0
AMERICAN FUNDS EUROPACIFIC GR	\$5,219,810.98	1	1	0	0
AMERICAN FUNDS GROWTH FUND	\$48,334,289.32	45	16	38	1
AMERICAN FUNDS TARGET 2015	\$4,960,319.33	21	10	13	5
AMERICAN FUNDS TARGET 2020	\$10,169,526.19	54	28	41	4
AMERICAN FUNDS TARGET 2025	\$35,884,827.90	196	165	164	9
AMERICAN FUNDS TARGET 2030	\$55,312,863.82	316	221	274	9
AMERICAN FUNDS TARGET 2035	\$70,082,025.95	408	292	350	10
AMERICAN FUNDS TARGET 2040	\$74,210,849.57	432	325	364	12
AMERICAN FUNDS TARGET 2045	\$73,414,936.53	525	414	442	7
AMERICAN FUNDS TARGET 2050	\$76,322,707.85	547	467	447	2
AMERICAN FUNDS TARGET 2055	\$54,540,505.95	632	576	529	0
AMERICAN FUNDS TARGET 2060	\$35,401,179.86	919	856	744	0
AMERICAN FUNDS TARGET 2065	\$10,780,694.21	602	577	526	1
BLACK ROCK EQUITY INDEX	\$46,722,437.54	45	21	32	7
CARILLON EAGLE MID CAP GROWTH	\$25,858,029.47	8	6	4	1
COLUMBIA DIVIDEND INCOME	\$10,378,832.60	5	1	5	0
COLUMBIA SMALL CAP VALUE	\$5,302,321.16	0	0	0	0
FIDEILITY ADVISOR HIGH INCOME	\$3,524,275.17	4	2	2	0
FIDELITY CONTRAFUND	\$85,405,628.16	51	26	36	3
FRANKLIN SMALL CAP GROWTH	\$10,317,380.67	4	3	1	0
DFA EMERGING MARKETS	\$2,896,224.35	2	0	1	1
CHARLES SCHWAB PCRA	\$16,867,877.62	11	4	9	0
VICTORY INCOME FD CLASS R6	\$1,231,647.73	0	0	0	0
VANGUARD TOTAL INTL STOCK IND	\$5,950,543.83	3	2	2	0
VANGUARD TOTAL BOND MARKET IND	\$5,975,778.91	9	5	7	1
VOYA STABLE VALUE OPTION	\$69,674,328.67	591	160	299	171
LOAN	\$5,679,540.21				
GRAND TOTAL	\$861,399,226.45				

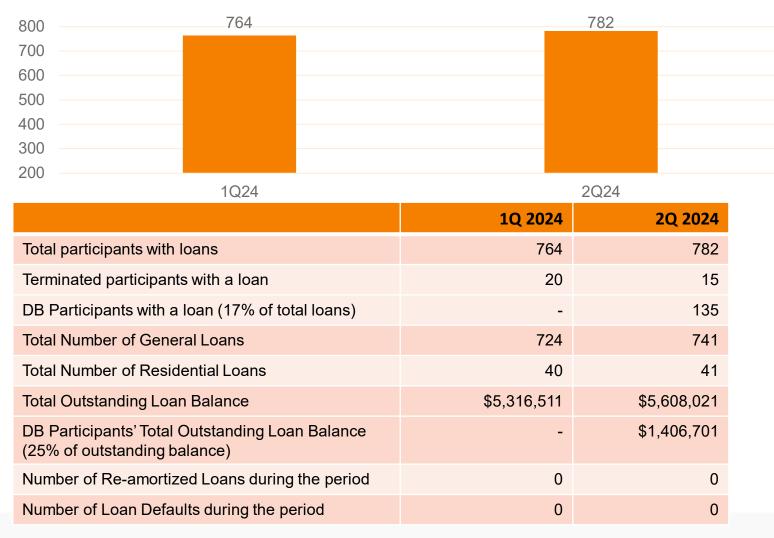
\*Unique SSNs across all three plans using one fund

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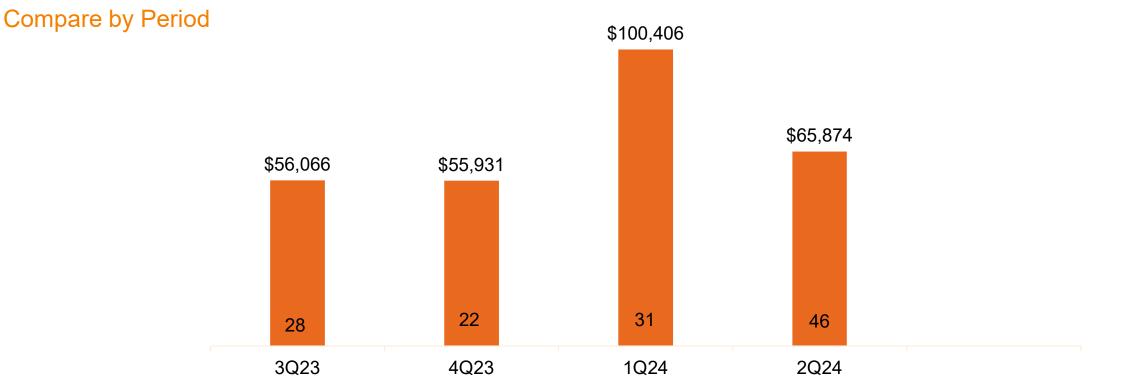
# Plan Administration

## Loan Activity

### Compare by Period



# **Unforeseen Emergency Withdrawals**



- During the 2nd quarter, there was a decrease in the dollar amount taken for unforeseeable emergency withdrawals. However, the number of transactions increased.
- Nine participants did take more than one hardship in the quarter.
- Only one DB participant took a hardship this quarter which accounted for 6.5% of the total dollar amount taken for the quarter.

# Distribution by type – All Plans

### Second Quarter 2024



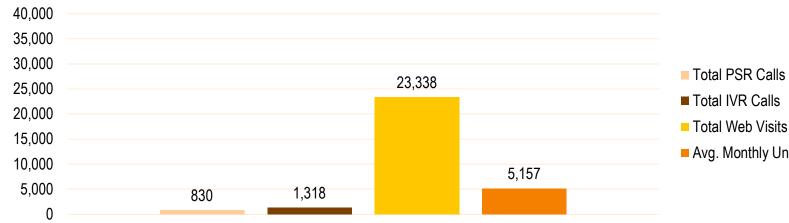
Rollover Non Rollover

Top 5 Rollover Institutions							
Amount # %							
Fidelity	\$889,326	17	22.42%				
Empower	\$447,508	1	11.28%				
Vanguard	\$366,730	7	9.24%				
Charles Schwab	\$278,379	18	7.02%				
Pershing LLC	\$177,484	1	4.47%				

	1Q	2Q
Minimum Distributions	\$0 (0)	\$0 (0)
Voluntary Term Withdrawals	\$11,656,827 (778)	\$8,712,277 (786)
Death Claims	\$250,513 (14)	\$128,480 (11)
UE Withdrawals	\$100,406 (39)	\$65,874 (46)
Withdrawals (REHN)	\$76,567 (81)	\$75,507 (85)
Total	\$12,084,317	\$8,982,138

## Participant Engagement

Second Quarter 2024



Actions by type*	1Q	2Q
Deferral updates	694	525
Fund Transfers and Rebalance transactions	344	316
Investment election changes and reallocations	581	446
Loan requests (16% DB participants)	98	104
Distributions (<1% DB participants)	972	927

- Total Web Visits
- Avg. Monthly Unique Web Visits

# Participant Initiatives and Strategies – 2024 Strategy



## 2024 communication campaigns

Campaign	Objective	Audience	Medium	Timing
Beneficiary designation	Beneficiary designation	Active participants missing a beneficiary in one or both plans	• Mail • Email	<ul> <li>Mailing sent 1/3/24</li> <li>Email sent 1/9/24</li> </ul>
Catch-up flyer mailing	Remind participants turning age 50 and older in 2024 about additional contribution limits.	Participants turning age 50 and older in 2024.	Mail	February 2024
Be prepared	Encourage participants to take full advantage of the Gwinnett County plans to help be financially secure in retirement.	<ul> <li>Participants contributing less than 10% to the Deferred Compensation Plan.</li> <li>Two versions</li> <li>1. Non-pension eligible</li> <li>2. Pension eligible</li> </ul>	Email or Postcard	August 2024
First-Year Checklist	<ul> <li>1.Continue participating</li> <li>2.Register your account online (cyber security)</li> <li>3.Name a beneficiary</li> <li>4.Account tools</li> <li>5.Meet with a Retirement Education Specialist</li> </ul>	Participants hired in the past 12 months	Email or Postcard	August 2024
Plan to stay	Retention	Active participants nearing retirement (age 55+)	Email or Postcard	September 2024
Beneficiary designation	Beneficiary designation and regular review	All active participants	Postcard	November 2024 (time change theme)



## **Beneficiary outreach**

Communication	Audience	Results
Three mailers Sent 1/3/2024	Missing 401(a) beneficiary only (766)	
	Missing 457(b) beneficiary only (532)	
	Missing 401(a) and 457(b) beneficiaries (532)	
	Missing 401(a) beneficiary only (403)	45% opened; 10% clicked
Three emails Sent 1/9/2024	Missing 457(b) beneficiary only (374)	33% opened; 11% clicked
	Missing 401(a) and 457(b) beneficiaries (395)	31% opened; 7% clicked



Your immediate attention is required. Our records indicate you do NOT have beneficiaries on file for your Gwinnett County Defined Contribution 401(a) Plan.

It's important that the savings you've accumulated are passed along to the right people. Please log in and designate your beneficiary to protect the people who matter most to you. It's easy!

- 1. Log in to your account at GCRetire.com.
- Select your name in the top right-hand corner of your retirement account web page and choose Personal Information.
- Click on Gwinnett County Defined Contribution Plan 401(a) under Beneficiary Information and add your beneficiaries.

If applicable, check the Beneficiary Information for your Gwinnett County Deferred Compensation Plan - 457(b) account as well to make sure it's up to date.

You may want to check your accounts at least annually to make sure the right person is listed. It's especially important to do this when you experience a major life event, such as marriage, the birth of a child or a divorce.



If you haven't registered your account online, simply visit <u>GCRetire.com</u> and click Register Now.

Questions? Please contact Customer Service at 855.492.1818 weekdays from 8:00am – 8:00pm, excluding New York Stock Exchange holidays.

You may also speak with one of your local Retirement Plan Specialists' below for further assistance.

Angel Mario Phone: 770.822.7874 Email: <u>Angel.Mario@Voya.com</u> Wendy Moy Phone: 770.822.7782 Email: <u>Wendy.Moy@Voya.com</u>

VOVA

**Take action today** — Name beneficiaries for your Gwinnett County Retirement Plan accounts.



It's important that the savings you've accumulated are passed along to the right people. Please log in to designate your beneficiary and protect the people who matter most to you. It's easy!



Select **your name** in the top right-hand corner of your retirement account web page and choose **Personal Information**.



Mail

Click on Gwinnett County Defined Contribution Plan - 401(a) under **Beneficiary Information** and add your beneficiaries.

If applicable, check the Beneficiary Information for your Gwinnett County Deferred Compensation Plan - 457(b) account as well to make sure it's up to date.

Make sure to check your accounts at least annually to make sure the right person is listed. It's especially important to do this when you experience a major life event, such as marriage, the birth of a child or a divorce.

If you haven't registered your account online, simply visit GCretire.com and click Register Now.

If you have any questions, please contact Customer Service at 855.492.1818 weekdays from 8:00am – 8:00pm, excluding New York Stock Exchange holidays.

You can also speak with one of your local Voya Retirement Plan Specialists below for further assistance.

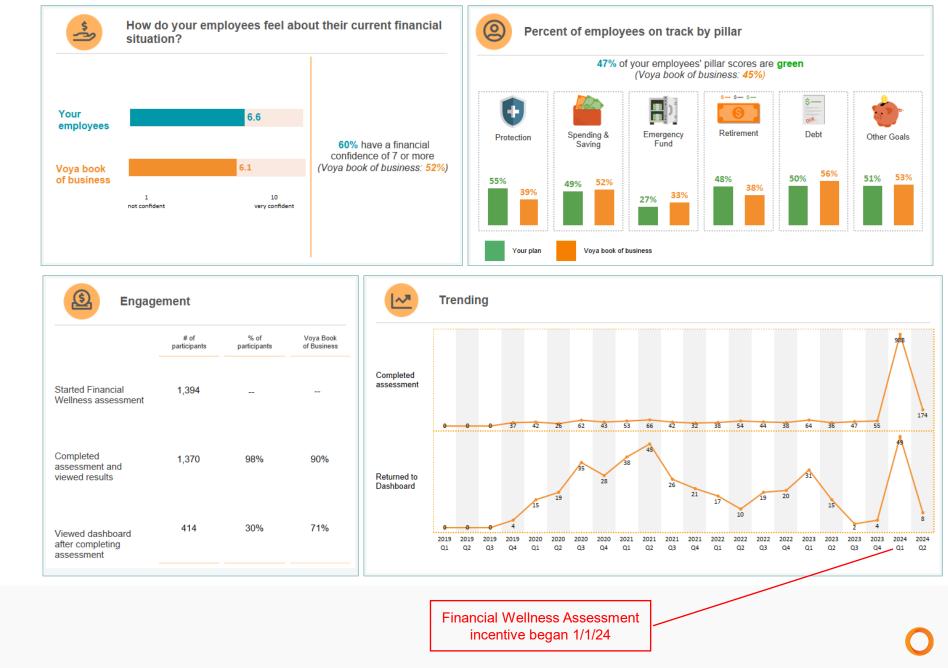
Angel Mario Wendy Moy Phone: 770.822.7874 Phone: 770.822.782 Email: Angel.Mario@Voya.com Email: Wendy.Moy@Voya.com

nation from registered Plan Service Representatives is for educational purposes only and is not legal, tax or investment advice. I Plan Service Representatives are registered representatives of Voya Financial Advisors, linc., member SPC-Plan administrative ces are provided by Voya Institutional Plan Services, LLC (VPS). VIPS is a member of the Voya<sup>#</sup> family of companies.



### Financial Wellness Assessment

Cumulative as of 6/30/24



Information contained herein is proprietary, confidential and nonpublic and is not for public release.

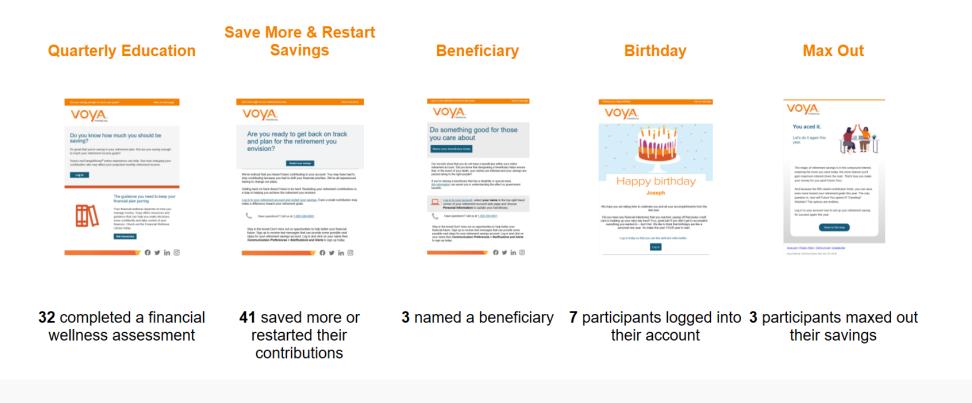
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## 2Q24 Personalized Messaging Email Summary

#### For the period 4/1/24 to 6/30/24

Personalized Financial Wellness Messaging has reached out to 3,967 participants

Of those, 35% engaged with personalized financial wellness emails.



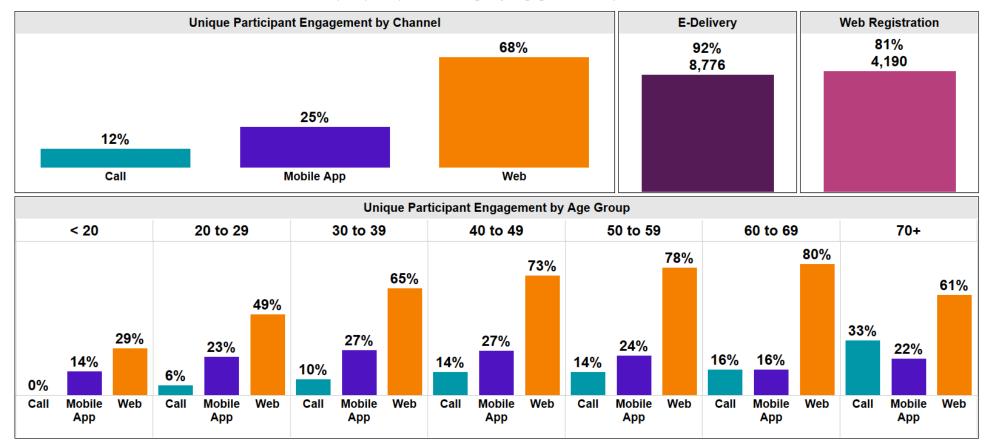
Information contained herein is proprietary, confidential and non-public and is not for public release.

## 2Q24 Participant Engagement

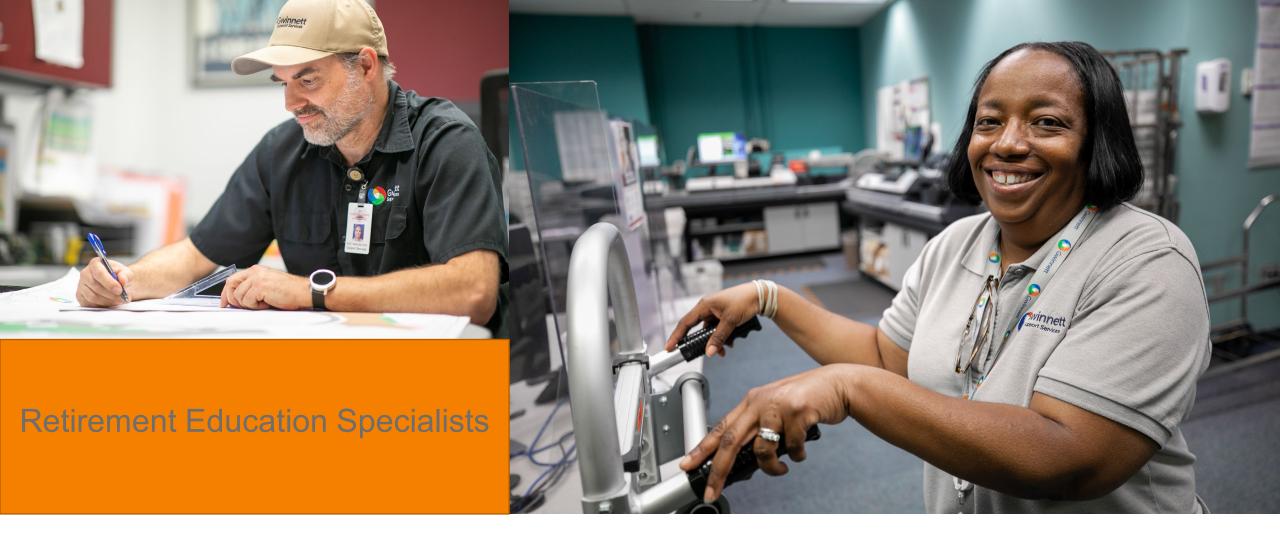
#### As of 6/30/24

Engagement

75% of plan participants have engaged (used web, mobile, or called) over the past 12 months 68% of plan participants have digitally engaged over the past 12 months



Information contained herein is proprietary, confidential and non-public and is not for public release.



### Plan Consultant Engagement: Angel Mario Second Quarter 2024

Month	New Hire Orientation	Attendees	# of Group Meetings	# of Attendees	In Person Individual	Phone Individual	Email Individual	Individual Meeting Totals
April	1	29	3	329	60	34	25	119
Мау	N/A	N/A	4	84	87	23	32	142
June	N/A	N/A	4	97	21	15	14	50
Total	1	29	11	510	168	72	71	311

• Group = Group Meetings (to be a group, there must be 3 or more employees in attendance)

Total Attendees = the number of employees who attended a group meeting

• There were 2 holidays, and 5 PTO days this quarter

### Plan Consultant Engagement: Wendy Moy Second Quarter 2024

Month	New Hire Orientation	Attendees	# of Group Meetings	# of Attendees	In Person Individual	Phone Individual	Email Individual	Individual Meeting Totals
April	1	30	4	389	53	38	8	99
Мау	2	70	2	23	93	33	3	129
June	2	66	2	12	26	18	3	47
Total	5	166	8	424	172	89	14	275

Group = Group Meetings (to be a group, there must be 3 or more employees in attendance)

• Total Attendees = the number of employees who attended a group meeting

There were 2 holidays this quarter and 4 PTO days

28

# **National Retirement Security Month**



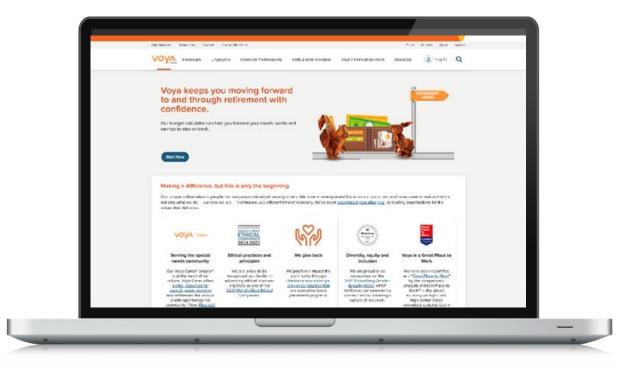
## Questions







# Gwinnett County 401(a) Plan



## Cash flow summary – 401(a) Plan

### Second Quarter 2024

Cash In	
Employee Before-tax Contributions	\$4,726,936
Employer Contributions	\$7,154,884
Supplemental Match	\$841,858
Rollover Contributions	\$117,682
Total Cash In	\$12,841,361
Cash Out	
Terminations	(\$4,759,097)
Forfeitures	(\$392,948)
Fees	(\$78,642)
Total Cash Out	(\$5,230,688)
Net Cash Flow	\$7,610,673
* Fees- Administrative. Overnight. Self Directed Brokerage	

\* Fees- Administrative, Overnight, Self Directed Brokerage

### Plan Assets – 401(a) Second Quarter 2024

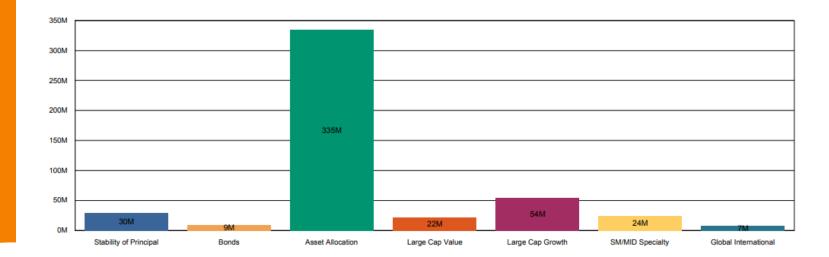
Fund Name	<u>Assets</u>	# of Participants invested in this fund	<u>% of total Assets</u>
AMERICAN CENTURY MID CAP VALUE	\$5,225,754.37	276	1.06%
AMERICAN FUNDS EUROPACIFIC GR	\$2,831,271.78	152	0.58%
AMERICAN FUNDS GROWTH FUND	\$17,858,529.81	535	3.63%
AMERICAN FUNDS TARGET 2015	\$2,357,539.54	54	0.48%
AMERICAN FUNDS TARGET 2020	\$4,854,169.16	108	0.99%
AMERICAN FUNDS TARGET 2025	\$20,573,424.04	297	4.18%
AMERICAN FUNDS TARGET 2030	\$32,259,330.50	457	6.55%
AMERICAN FUNDS TARGET 2035	\$42,348,072.59	572	8.60%
AMERICAN FUNDS TARGET 2040	\$49,157,895.52	666	9.99%
AMERICAN FUNDS TARGET 2045	\$52,689,510.30	795	10.70%
AMERICAN FUNDS TARGET 2050	\$55,615,300.66	975	11.30%
AMERICAN FUNDS TARGET 2055	\$40,417,197.46	1,053	8.21%
AMERICAN FUNDS TARGET 2060	\$26,606,530.39	1,171	5.41%
AMERICAN FUNDS TARGET 2065	\$7,965,313.32	623	1.62%
BLACK ROCK EQUITY INDEX	\$21,839,470.58	520	4.44%
CARILLON EAGLE MID CAP GROWTH	\$10,823,444.40	416	2.20%
CHARLES SCHWAB PCRA	\$10,779,509.25	66	2.20%
COLUMBIA DIVIDEND INCOME	\$4,178,260.73	250	0.85%
COLUMBIA SMALL CAP VALUE	\$2,740,721.06	190	0.56%
DFA EMERGING MARKETS	\$1,694,446.62	148	0.35%
FIDEILITY ADVISOR HIGH INCOME	\$1,714,027.24	789	0.35%
FIDELITY CONTRAFUND	\$35,897,193.52	781	7.30%
FRANKLIN SMALL CAP GROWTH	\$5,690,203.43	296	1.16%
VANGUARD TOTAL INTL STOCK IND	\$2,917,974.38	214	0.60%
VANGUARD TOTAL BOND MARKET IND	\$2,747,267.97	984	0.56%
VICTORY INCOME FD CLASS R6	\$502,493.06	37	0.10%
VOYA STABLE VALUE OPTION	\$29,766,366.23	2,010	6.05%
GRAND TOTAL	\$492,051,217.91		100.00%

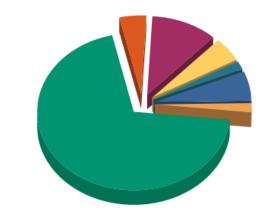
### Plan Assets – 401(a) Second Quarter 2024 (Excluding Self-Directed Brokerage)



	Percentage of Total Plan
Total Assets	Assets
\$29,801,470	6.19%
\$9,142,049	1.90%
\$334,897,278	69.56%
\$21,839,470	4.34%
\$53,787,441	11.17%
\$24,492,448	5.09%
\$7,465,728	1.55%
	Total Assets         \$29,801,470         \$9,142,049         \$9,142,049         \$334,897,278         \$334,897,278         \$21,839,470         \$53,787,441         \$24,492,448         \$24,492,448

### Plan Assets by Asset Class – 401(a) Plan Second Quarter 2024

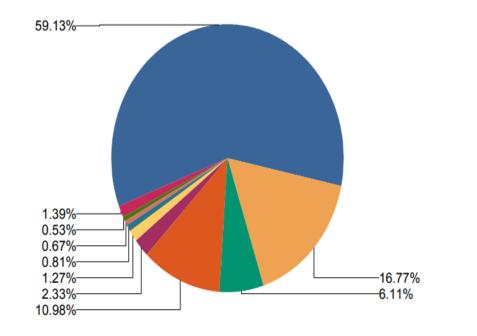


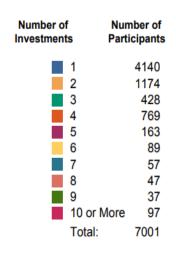


	0.400
Stability of Principal	6.19%
Bonds	1.90%
Asset Allocation	69.56%
Large Cap Value	4.54%
Large Cap Growth	11.17%
SM/MID Specialty	5.09%
Global International	1.55%
Total:	100.00%

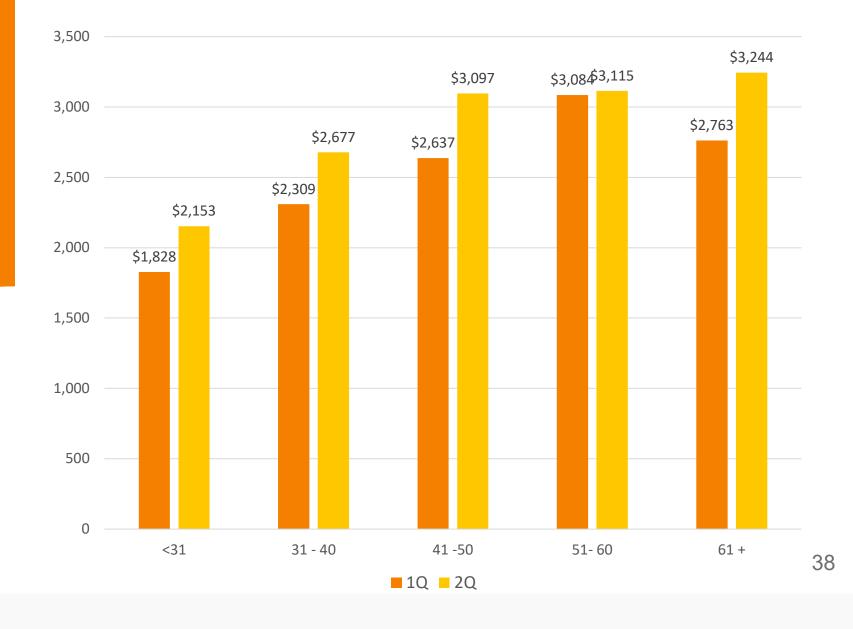


Participants with Balances by Number of Investments 401(a) Second Quarter 2024

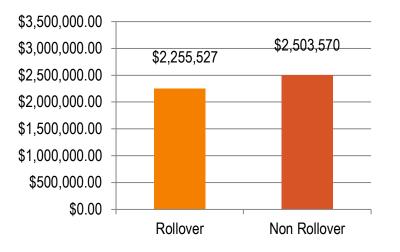




Average deferral by age group – 401(a) Compare by period



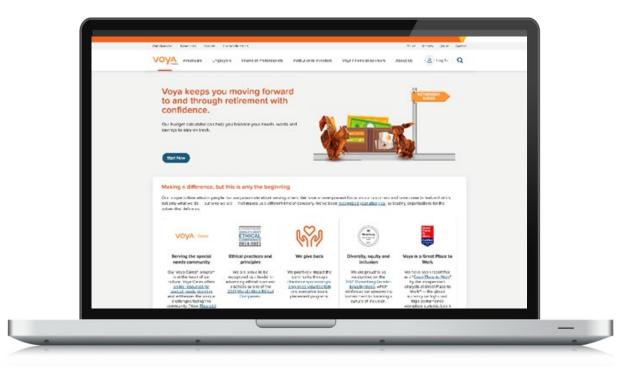
### Distributions – 401(a) Second Quarter 2024



Top 5 Rollover Institutions			
	Amount	#	%
Fidelity	\$484,957	7	21.50%
Empower	\$447,508	1	19.84%
Charles Schwab	\$278,379	8	12.34%
Vanguard	\$213,494	3	9.47%
Pershing LLC	\$177,484	1	7.87%

	April	Мау	June
Minimum Distributions	\$0	\$0	\$0
	(0)	(0)	(0)
Voluntary Term Withdrawals	\$1,386,754	\$2,142,369	\$1,217,595
	(97)	(137)	(113)
Death Claims	\$0	\$12,378	\$0
	(0)	(1)	(0)
Total	\$1,386,754	\$2,154,747	\$1,217,595

# Gwinnett County 457(b) Plan





# Cash flow summary – 457(b) Plan- Plan Level

### Second Quarter 2024

Cash In	
Employee Before-tax Contributions	\$6,273,956
Employee Rollover Contributions	\$224,064
Employee Roth Contributions	\$2,778,841
Roth Rollovers	\$4,714
Loan Repayments	\$875,419
Total Cash In	\$10,156,994
Cash Out	
Terminations	(\$3,902,448)
Withdrawals	(\$247,274)
Loan Issuances	(\$1,148,181)
Fees	(\$100,121)
Total Cash Out	(\$5,398,024)
Net Cash Flow	\$4,758,970

\* Fees- Administrative, Overnight, Self Directed Brokerage



### Plan Assets – 457(b) Second Quarter 2024

		#of Participants invested	<u>in</u>
Fund Name	<u>Assets</u>	this fund	% of total Assets
AMERICAN CENTURY MID CAP VALUE	\$5,634,604.64	445	1.60%
AMERICAN FUNDS EUROPACIFIC GR	\$2,334,875.87	243	0.66%
AMERICAN FUNDS GROWTH FUND	\$29,995,532.79	1,000	8.50%
AMERICAN FUNDS TARGET 2015	\$2,472,399.58	84	0.70%
AMERICAN FUNDS TARGET 2020	\$5,136,362.20	157	1.46%
AMERICAN FUNDS TARGET 2025	\$14,924,605.06	404	4.23%
AMERICAN FUNDS TARGET 2030	\$22,240,506.88	627	6.30%
AMERICAN FUNDS TARGET 2035	\$26,864,840.25	697	7.61%
AMERICAN FUNDS TARGET 2040	\$24,437,934.05	772	6.92%
AMERICAN FUNDS TARGET 2045	\$20,442,367.57	829	5.79%
AMERICAN FUNDS TARGET 2050	\$20,561,189.47	903	5.82%
AMERICAN FUNDS TARGET 2055	\$14,071,805.01	977	3.99%
AMERICAN FUNDS TARGET 2060	\$8,794,649.47	1,028	2.49%
AMERICAN FUNDS TARGET 2065	\$2,785,057.52	586	0.79%
BLACK ROCK EQUITY INDEX	\$23,883,927.37	816	6.77%
CARILLON EAGLE MID CAP GROWTH	\$14,502,291.98	722	4.11%
CHARLES SCHWAB PCRA	\$5,797,874.52	75	1.65%
COLUMBIA DIVIDEND INCOME	\$6,076,766.17	407	1.72%
COLUMBIA SMALL CAP VALUE	\$2,484,014.43	273	0.70%
DFA EMERGING MARKETS	\$1,168,050.67	224	0.33%
FIDEILITY ADVISOR HIGH INCOME	\$1,762,671.04	730	0.50%
FIDELITY CONTRAFUND	\$48,460,391.16	1,308	13.73%
FRANKLIN SMALL CAP GROWTH	\$4,559,308.43	398	1.29%
PARTICIPANT LOAN FUND	\$5,679,540.21	791	0.02%
VANGUARD TOTAL INTL STOCK IND	\$2,950,163.53	312	0.84%
VANGUARD TOTAL BOND MARKET IND	\$3,089,366.23	965	0.88%
VICTORY INCOME FD CLASS R6	\$724,687.46	67	0.21%
VOYA STABLE VALUE OPTION	\$36,751,840.01	2,236	10.41%
GRAND TOTAL	\$358,587,623.57		100.00%

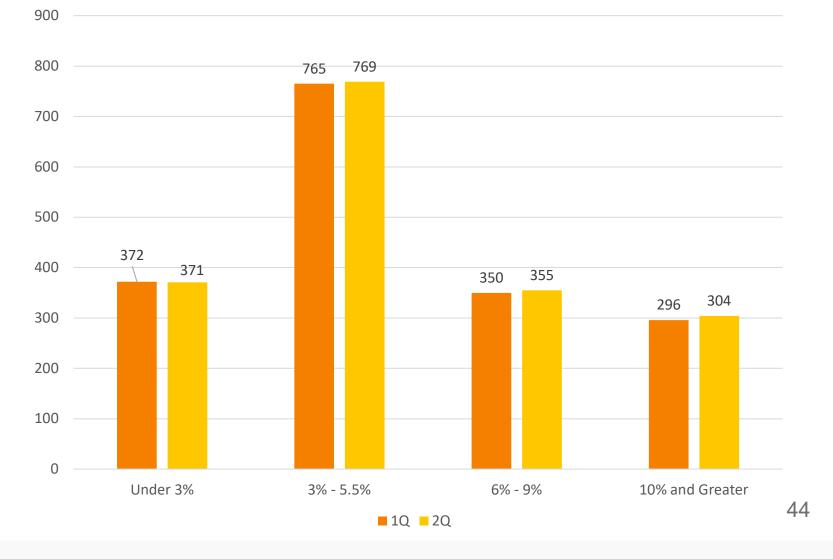
### Plan Assets by Asset Class-457(b) Second Quarter 2024 (Excluding Self-Directed Brokerage and Loan Funds)

		Percentage of Total Plan
Asset Classes	Total Assets	<u>Assets</u>
Stability of Principal	\$36,751,840	10.59%
Stable Value		
Bonds	\$11,653,490	3.36%
Fidelity Advisor® High Income Advantage Fund		
Victory Income FD Class R6		
Vanguard® Total Bond Market Index Fund		
Asset Allocation	\$162,731,717	46.87%
American Funds Target 2015 through American Funds Target 2065		
Large Cap Value	\$23,883,927	6.88%
BlackRock Equity Index Fund		
Columbia Dividend Income		
Large Cap Growth	\$78,455,923	22.60%
American Funds The Growth Fund of America		
Fidelity Contra Fund		
SM/MID Specialty	\$27,180,219	7.83%
American Century Mid Cap Value Fund		
Franklin Small Cap Growth Fund		
Carillon Eagle Mid Cap Growth		
Columbia Small Cap Value Fund II		
	¢6 452 000	1.86%
Global International	\$6,453,090	1.0070
DFA Emerging Markets		
Vanguard® Total International Stock Index Fund American Funds EuroPacific Growth Fund		
Amencan Funus EuroPacific Growin Funu		

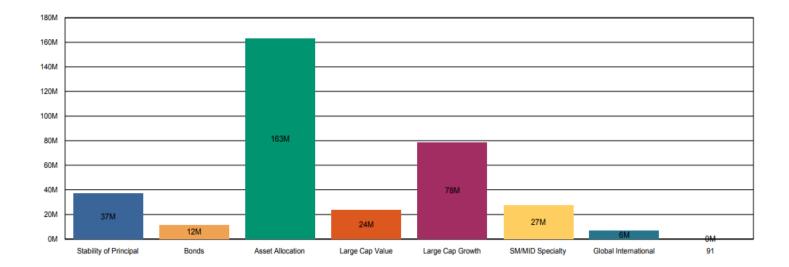
## ROTH Deferrals – Compare by period

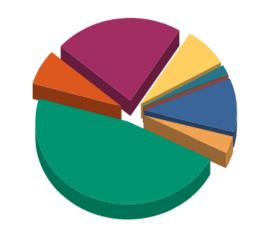
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### Roth Deferral Percentages



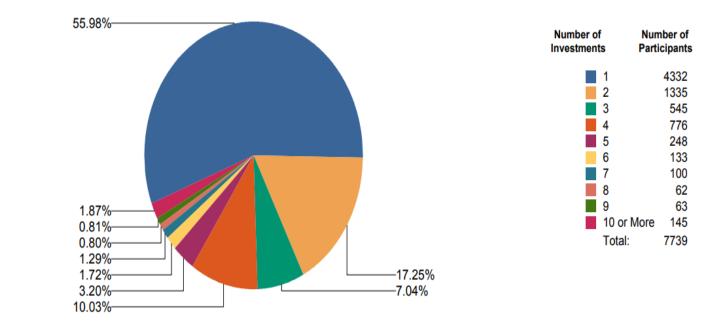
### Plan Assets by Asset Class – 457(b) Second Quarter 2024



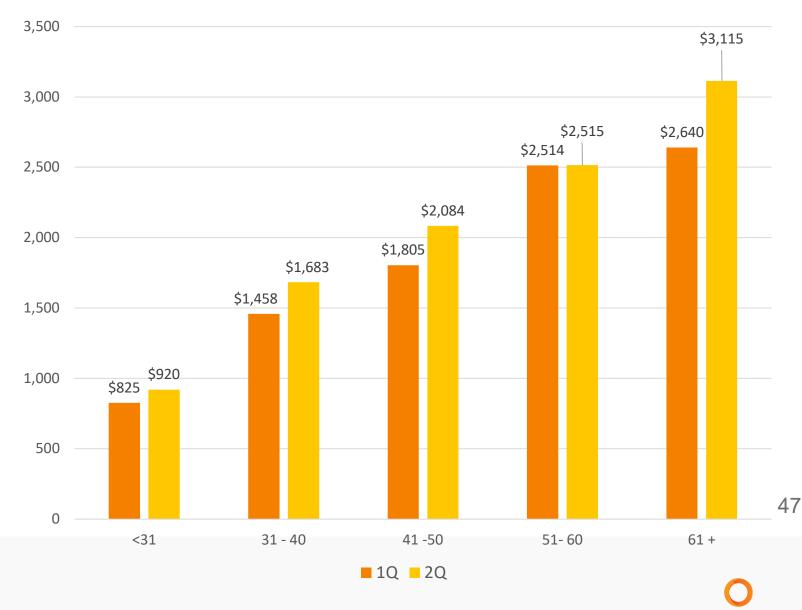


Stability of Principal Bonds Asset Allocation Large Cap Value Large Cap Growth SM/MID Specialty Global International 91 Total:	10.59% 3.36% 46.87% 6.88% 22.60% 7.83% 1.86% 0.02% 100.00%
Total:	100.00%

Participants with Balances by Number of Investments – 457(b) Second Quarter 2024



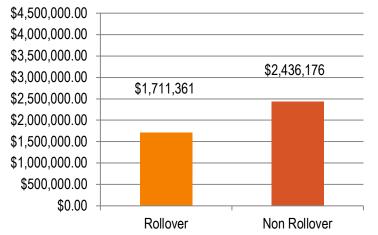
### Average deferral by age group – 457(b) Compare by period



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## Distributions – 457(b)

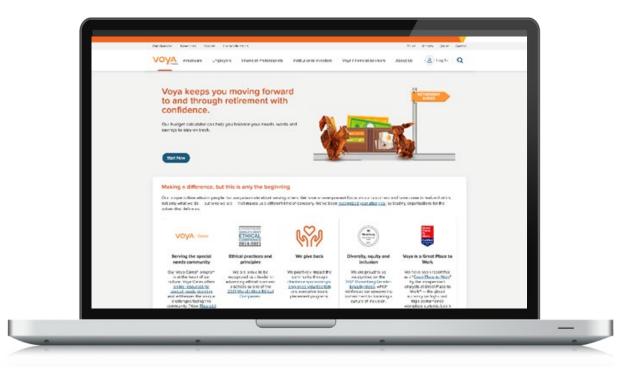
#### Second Quarter 2024



Top 5 Rollover Institutions						
Amount # %						
Charles Schwab	\$840,379	10	49.11%			
Fidelity	\$404,369	10	23.63%			
Vanguard	\$153,236	4	8.95%			
Capital Bank and Trust	\$83,034	1	4.85%			
Truist Investment Services	\$54,649	1	3.19%			

	April	Мау	June
Death Claims	\$82,929	\$11,956	\$21,217
	(3)	(4)	(3)
UE Withdrawals	\$27,470	\$13,044	\$25,358
	(19)	(10)	(17)
Minimum Distributions	\$0	\$0	\$0
	(0)	(0)	(0)
Voluntary Term	\$1,979,679	\$939,455	\$1,046,425
Withdrawals	(172)	(149)	(118)
Total	\$2,090,078	\$964,455	\$1,093,000

# Gwinnett County 401(h) Plan



## Cash flow summary – 401(h) Plan

Second Quarter 2024

Cash In	
Employer Contributions	\$114,060
Total Cash In	\$114,060
Cash Out	
Terminations	(\$75,507)
Forfeitures	(37,700)
Fees	(\$4,741)
Total Cash Out	(\$117,948)
Net Cash Flow	(\$3,888)

\* Fees- Administrative, Overnight, Self Directed Brokerage

### Plan Assets – 401(h) Second Quarter 2024

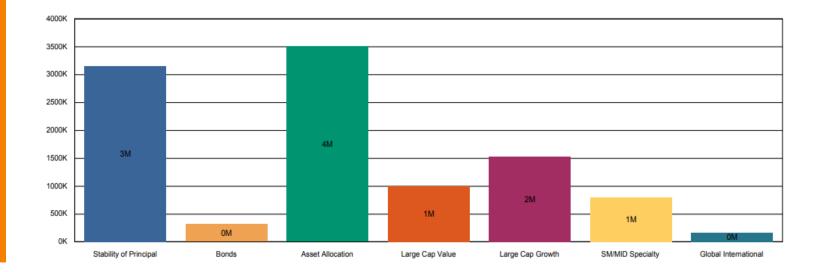
Fund Name	<u>Assets</u>	#of Participants invested in this fund	<u>% of total Assets</u>
AMERICAN CENTURY MID CAP VALUE	\$119,483.89	38	1.11%
AMERICAN FUNDS EUROPACIFIC GR	\$53,663.33	15	0.50%
AMERICAN FUNDS GROWTH FUND	\$480,226.72	60	4.46%
AMERICAN FUNDS TARGET 2015	\$130,380.21	17	1.21%
AMERICAN FUNDS TARGET 2020	\$178,994.83	16	1.66%
AMERICAN FUNDS TARGET 2025	\$386,798.80	29	3.59%
AMERICAN FUNDS TARGET 2030	\$813,026.44	36	7.56%
AMERICAN FUNDS TARGET 2035	\$869,113.11	28	8.08%
AMERICAN FUNDS TARGET 2040	\$615,020.00	34	5.72%
AMERICAN FUNDS TARGET 2045	\$283,058.66	21	2.63%
AMERICAN FUNDS TARGET 2050	\$146,217.72	13	1.36%
AMERICAN FUNDS TARGET 2055	\$51,503.48	6	0.48%
AMERICAN FUNDS TARGET 2065	\$30,323.37	2	0.28%
BLACK ROCK EQUITY INDEX	\$999,039.59	77	9.28%
CARILLON EAGLE MID CAP GROWTH	\$532,293.09	68	4.95%
CHARLES SCHWAB PCRA	\$290,493.85	7	2.70%
COLUMBIA DIVIDEND INCOME	\$123,805.70	33	1.15%
COLUMBIA SMALL CAP VALUE	\$77,585.67	29	0.72%
DFA EMERGING MARKETS	\$33,727.06	13	0.31%
FIDEILITY ADVISOR HIGH INCOME	\$47,576.89	16	0.44%
FIDELITY CONTRAFUND	\$1,048,043.48	83	9.74%
FRANKLIN SMALL CAP GROWTH	\$67,868.81	25	0.63%
VANGUARD TOTAL INTL STOCK IND	\$82,405.92	27	0.77%
VANGUARD TOTAL BOND MARKET IND	\$139,144.71	41	1.29%
VICTORY INCOME FD CLASS R6	\$4,467.21	2	0.04%
VOYA STABLE VALUE OPTION	\$3,156,122.43	236	29.33%
GRAND TOTAL	\$10,760,384.97		100.00%

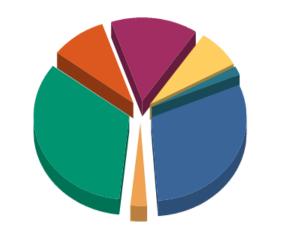
### Plan Assets by Asset Class – 401(h) Second Quarter 2024

(Excluding Self-Directed Brokerage)

		Percentage of Total Plan
Asset Classes	<b>Total Assets</b>	<u>Assets</u>
Stability of Principal	\$3,156,122	30.14%
Stable Value		
Bonds	\$314,994	3.01%
Fidelity Advisor® High Income Advantage Fund	T - )	
Victory Income FD Class R6		
Vanguard® Total Bond Market Index Fund		
Asset Allocation	\$3,504,436	33.47%
American Funds Target 2015 through American Funds Target 2065		
Large Cap Value	\$999,039	9.54%
BlackRock Equity Index Fund		
Columbia Dividend Income		
Large Cap Growth	\$1,528,270	14.60%
American Funds The Growth Fund of America		
Fidelity Contra Fund		
SM/MID Specialty	\$797,231	7.61%
American Century Mid Cap Value Fund	<i><i><i></i></i></i>	1.0170
Franklin Small Cap Growth Fund		
Carillon Eagle Mid Cap Growth		
Columbia Small Cap Value Fund II		
	<b>A</b> 4 0 0 7 0 0	1.00%
Global International	\$169,796	1.62%
DFA Emerging Markets		
Vanguard® Total International Stock Index Fund		
American Funds EuroPacific Growth Fund		

### Plan Assets by Asset Class – 401(h) Secure Quarter 2024

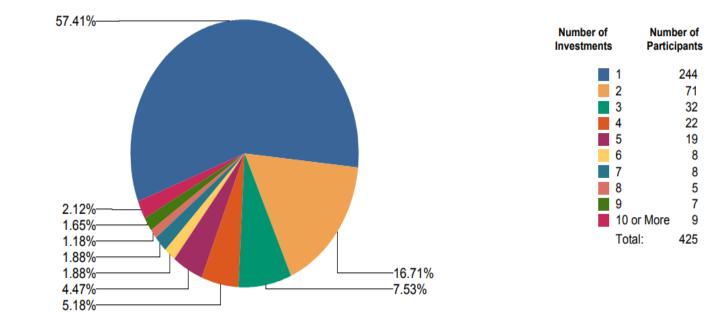




Ciphility of Dringing	30,14%
Stability of Principal	
Bonds	3.01%
Asset Allocation	33.47%
Large Cap Value	9.54%
Large Cap Growth	14.60%
SM/MID Specialty	7.61%
Global International	1.62%
Total:	100.00%

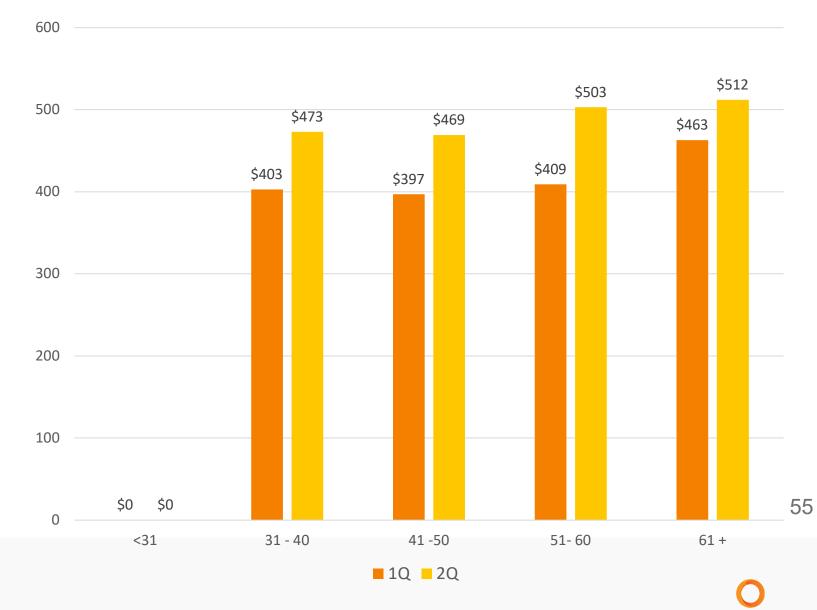


Participants with Balances by Number of Investments – 401(h) Second Quarter 2024





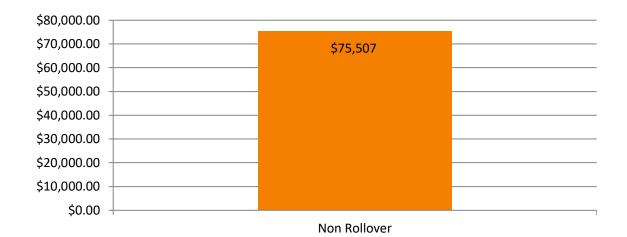
### Average deferral by age group – 401(h) Compare by period



FINANCIAL

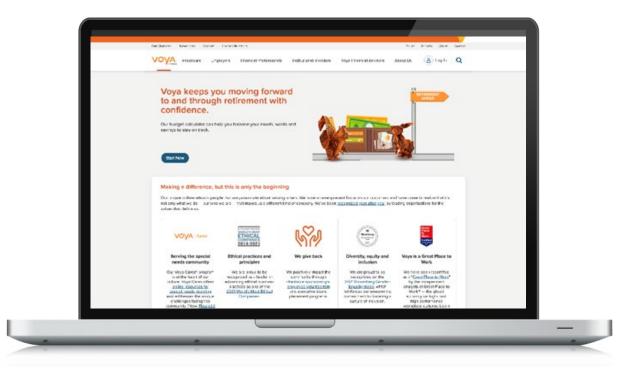
## Distributions – 401(h)

#### Second Quarter 2024



	April	Мау	June
Withdrawals (REHN)	\$22,871	\$29,024	\$23,612
	(24)	(36)	(25)

# Plan Consultant Engagement



2Q24 Individual Meeting Demographics					
Category	Angel Mario	Wendy Moy			
Male	129	123			
Female	182	152			
Age: Under 30	9	23			
Age: 30-39	45	70			
Age: 40-49	76	92			
Age: 50-59	119	53			
Age: 60+	62	37			
Defined Benefit Plan	69	25			
Defined Contribution Plan	242	250			

2Q24 Individual Meeting Topics & Employment Status					
Category	Angel Mario	Wendy Moy			
New Registration on GCRetire.com	8	9			
Account Review/MyOrangeMoney	277	251			
Asset Allocation	147	57			
Making Contribution Changes	65	26			
Beneficiary Add/Edit	36	35			
Retirement Planning	25	40			
Active Employee	302	263			
Terminated	3	5			
Retired	6	7			



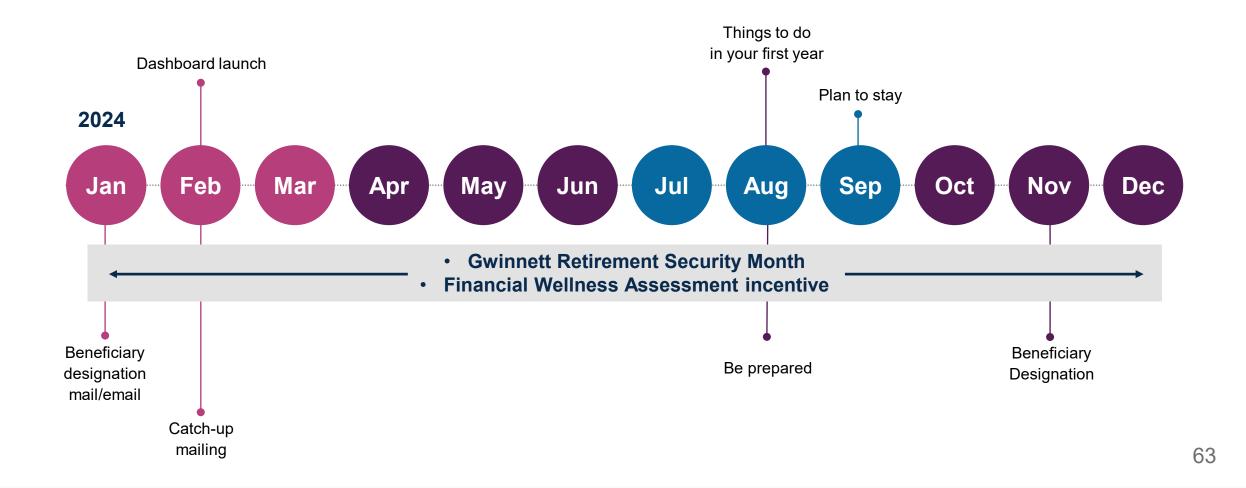
2Q24 Site Visits by Department						
Angel's Departments	# of Visits: Current Quarter	# of Visits: YTD	Wendy's Departments	# of Visits: Current Quarter	# of Visits: YTD	
County Administration	0	6	Financial Services	1	1	
Law Department	2	2	Human Resources	1	4	
Water Resources	9	11	Support Services	0	5	
Correctional Services	1	5	Transportation	2	7	
Juvenile Court	0	0	Planning & Development	0	0	
Court Administration	0	0	Sheriff	0	0	
Recorders Court Judges	0	0	Clerk of Court	0	4	
District Attorney	0	0	Probate Court Judges	0	0	
Clerk of Recorders Court	0	0	Solicitor	1	1	
Child Advocacy & Juvenile Services	0	0	Communications	1	1	
Information Technology Services	1	1	Tax Commissioner	0	0	
			Animal Welfare	2	2	

2Q24 Site Visits by Department: SHARED DEPARTMENTS						
	Angel			Wendy		
Department# of Visits: Current Quarter# of Visits: YTDDepartment# of Visits: Current Quarter# of Visits: YTD			# of Visits: YTD			
Police Services	5	8	Police Services	6	9	
Fire Services	4	15 (+45 NRSM)	Fire Services	2	9 (+45 NRSM)	
Community Services	0	0	Community Services	0	1	

# **2024 Participant Calendars**



## 2024 campaign calendar



## 2024 Scheduled Personalized Messaging Sends

	Journey	Launch date*	Topic / theme*
	Q1 Education – Digital engagement	January	Cyber Security S.A.F.E. – myVoyage
Q1 -	Q1 Education – Financial Wellness	February	Financial Wellness
02	Q2 Education – Financial Wellness	April	ASW + online participant experience
Q2 -	Q2 Education – Digital engagement	June	Retirement savings
	Q3 Education – Financial Wellness	July	Voya Learn live session
	Q3 Education – Digital engagement	August	Market volatility
04 5	Q4 Education – Financial Wellness	October	National Retirement Security Month
	Q4 Education – Digital engagement	December	End of year. Voya Learn live session
	*Dates and topics are subject to change		

\*Dates and topics are subject to change

## 2024 Voya Education Content Calendar

<b>Q1</b> Get organized	<b>Q2</b> Take action	<b>Q3</b> Evaluate protection needs	<b>Q4</b> Set yourself up for the new year
<ul> <li>Financial wellness</li> <li>Beneficiaries</li> <li>Saving for college</li> <li>Student loan debt</li> </ul>	<ul> <li>Dashboard</li> <li>Debt management</li> <li>Emergency savings</li> <li>Retirement savings</li> </ul>	<ul> <li>Estate planning</li> <li>Voya Cares</li> <li>HSAs</li> <li>Voluntary benefits</li> </ul>	<ul> <li>Organize finances</li> <li>Mental health/finances</li> <li>Credit card/debt management</li> <li>Retirement income</li> </ul>
<ul> <li>Taxes</li> <li>Lifestage guidance</li> <li>Starting out</li> </ul>	Lifestage guidance         • Mid-career	<ul> <li>Cybersecurity</li> <li>Market volatility</li> <li>Lifestage guidance</li> <li>Nearing retirement</li> </ul>	<ul> <li>Lifestage guidance</li> <li>In retirement</li> </ul>
	Market vola	atility/timely topics	FINANCIAL

## Q3 2024 Content Hubs



#### **Evaluate protection needs**

- Voluntary benefits
- Insurance
- Cybersecurity
- Estate planning
- Market volatility

#### Lifestage guidance:

Nearing retirement

	Articles	Video VoyaLearnOnDemand.com	Learning pods	Live sessions
Jul	<ul> <li>Financial protection</li> <li>Estate planning</li> <li>Financial scams protection</li> </ul>	<ul> <li><u>Open enrollment</u></li> <li><u>Estate planning</u></li> </ul>	<ul> <li><u>Steps to protect</u> <u>yourself today and</u> <u>tomorrow</u></li> </ul>	<ul> <li>Estate planning</li> <li>Financial wellness</li> <li>Financial wellness (Span.)</li> </ul>
Aug	<ul> <li><u>Health Savings</u> <u>Accounts</u></li> <li><u>Life Insurance</u></li> <li><u>Find a financial</u> <u>professional</u></li> <li>Supplemental insurance</li> </ul>	<ul> <li><u>Health savings</u> <u>account</u></li> <li><u>Flexible spending</u> <u>account</u></li> <li><u>Disability income</u> <u>insurance</u></li> </ul>	• <u>Steps to protect</u> <u>yourself today and</u> <u>tomorrow</u>	<ul> <li><u>Healthcare in</u> <u>retirement</u></li> <li><u>Protection</u></li> <li><u>Protection (Span.)</u></li> </ul>
Sept	<ul> <li><u>401(k)/403(b) Day</u></li> <li><u>Market volatility</u></li> <li><u>Special needs</u> <u>planning</u></li> <li><u>Nearing retirement</u></li> </ul>	<ul> <li><u>Understanding market</u> <u>volatility</u></li> <li><u>Special needs</u> <u>planning</u></li> <li><u>Nearing retirement:</u> <u>Getting started</u></li> </ul>	<ul> <li><u>Navigate market</u> <u>volatility</u></li> <li><u>Special needs</u> <u>planning</u></li> <li><u>Nearing retirement</u></li> </ul>	<ul> <li><u>Stay the course</u></li> <li><u>Stay the course</u> 66 (Span.)</li> </ul>

## Gwinnett County Benchmark – 457(b) Plan

Plan Design Feature	Gwinnett County 7,739 ppts Assets \$358m	Plan A 6,400 ppts Assets \$597m	Plan B 8,100 ppts Assets \$448m	Plan C 17,500 ppts Assets \$766m
Market/Plan	County/457(b) Plan	County/457(b) Plan	County/457(b) Plan	County/457(b) Plan
Participation Rate	97.9%	88%	27%	49%
Average Deferral Rate	7%	n/a	5%	7%
Auto Enroll	Yes, 3% pre-tax	No	No	No
Auto Increase	Yes, 1% up to 10%	No	No	No
Eligibility	Immediate	Immediate	Immediate	Immediate
Pre-tax Contributions	1% to 99.5%	Yes	Yes; minimal deferral \$240 per year up to 100% of ppt compensation for year	1% to 99.9%
After-tax Contributions	No	No	No	No
Roth	1% to 99.5%	Yes	Yes; minimal deferral \$240 per year up to 100% of ppt compensation for year	No
Employer Match	On 401a plan only; if ppt contributed up to 3% to 457(b) plan, sponsor will contribute extra 1%, up to 8%, in 401(a) plan	No	No	100% of contribution, not to exceed 6%
Catch-up Contributions	Yes	Yes	Yes	Yes
Special Catch-up	Yes	Yes	Yes	Yes
Vesting	100% Immediate	100% Immediate	100% Immediate	100% Immediate
SDB	Yes	Yes	Yes	Yes
Managed Accounts	No	Yes	No	Yes
Loans	Yes	No	No	Yes
% Outstanding Loans	15%	n/a	n/a	19%
eDelivery	79%	73%	46%	50%

## Gwinnett County Benchmark – 401(a) Plan

Plan Design Feature	Gwinnett County 7,001 ppts Assets \$492m	Plan A 1,200 ppts Assets \$350m	Plan B 19,800 ppts Assets \$428m	Plan C 14,000 ppts Assets \$586m
Market/Plan	County/401(a) plan	County/401(a) plan	Municipal/401(a) plan	State/401(a) plan
Participation Rate	100%	43%	78%	100%
Average Deferral Rate	6%	n/a	5%	9%
Auto Enroll	Yes, 5% pre-tax	No	No	No
Auto Increase	No	No	No	No
Eligibility	Immediate	Immediate	Immediate	Immediate
Pre-tax Contributions	5% or 7.5%	1% to 99.9%	No	9%
After-tax Contributions	No	No	1% to 100%*	No
Roth	No	No	No*	No
Employer Match	7%; if ppt contributed up to 3% to 457 plan, sponsor will contribute extra 1%, up to 8%, in 401(a) plan	Yes	Yes	5%
Catch-up Contributions	No	Yes	No	No
Special Catch-up	No	Yes	No	No
Vesting	1 year = 0%; 2 years = 0%; 3 years = 33%; 4 years = 67%; 5 years = 100%	1 year = 20%; 2 years = 40%; 3 years = 60%; 4 years = 80%; 5 years = 100%	<1 year 0%; 1 year 20%; 2 years 40%; 3 years 60%; 4 years 80%; 5 years+ 100%	100% Immediate
SDB	Yes	No	Yes	No
Managed Accounts	No	Yes	Yes	Yes
Loans	No	Yes	Yes	No
% Outstanding Loans	n/a	17%	23%	n/a
eDelivery	76%	69%	70%	38%

\*2 city plans do offer pre-tax, but no post tax

# **Voya Stable Value**



# Core Intermediate Stable Value Fund

#### **Stabilizer Rate Renewal\***

	12/31/2023	03/31/2024	06/30/2024	09/30/24
Net Rate	2.11%	2.21%	2.23%	1.92%
Market Value	\$61,860,491	\$64,662,140	\$64,020,972	\$57,172,318
Book Value	\$69,572,699	\$72,443,052	\$70,962,752	\$64,359,223
MV/BV	88.91%	89.26%	90.22%	88.83%

\*Stabilizer Rate Renewals are projected at the end of each quarter



Not FDIC/NCUA/NCUSIF Insured | Not a Deposit of a Bank/Credit Union | May Lose Value | Not Bank/Credit Union Guaranteed | Not Insured by Any Federal Government Agency

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Health Savings Accounts offered by Voya Benefits Company, LLC (in New York, doing business as Voya BC, LLC). HSA custodial services provided by Voya Institutional Trust Company.





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The Personalized Enrollment Guidance tool provides information and options for you to consider in making healthcare, health savings, emergency savings, and retirement savings choices. Those choices are solely up to you to make. Personalized Enrollment Guidance does not provide you with fiduciary advice with respect to your plan elections and contributions. None of SAVVI, Voya, nor WEX Health acts in a fiduciary capacity in providing Personalized Enrollment Guidance or other services to you; any such fiduciary capacity is explicitly disclaimed.

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## **Disclosures (3/3)**

Advisory Services provided by Voya Retirement Advisors, LLC (VRA). VRA is a member of the Voya Financial (Voya) family of companies. For more information, please read the Voya Retirement Advisors Disclosure Statement and Advisory Services Agreement. These documents, as well as information on fees, may be viewed online by accessing the advisory services link(s) through your plan's web site. You may also request these from a VRA Investment Advisor Representative by calling your plan's information line. VRA has retained Morningstar Investment Management LLC as an independent "financial expert" (as defined in the Department of Labor's Advisory Opinion 2001-09A) to develop, design, and implement the asset allocations and investment recommendations generated by the Advisory Services. Morningstar Investment Management LLC is a federally registered investment advisor and wholly owned subsidiary of Morningstar, Inc. Neither VRA nor Morningstar Investment Management LLC or any other party and past performance is no guarantee of future results. The Morningstar name and logo are registered trademarks of Morningstar, Inc. All other marks are the exclusive property of their respective owners. Morningstar Investment Management LLC and Morningstar, Inc. are not members of the Voya family of companies.

In 2023, Voya Financial was one of 135 companies recognized by Ethisphere® as one of the 2023 World's Most Ethical Companies®, based on performance in 2022. The World's Most Ethical Company assessment is based upon Ethisphere's Ethics Quotient® framework, which offers a quantitative way to assess a company's performance in an objective, consistent and standardized way. The information collected provides a comprehensive sampling of definitive criteria of core competencies, rather than all aspects of corporate governance, risk, sustainability, compliance and ethics. Scores are generated in five key categories: ethics and compliance program (35%), culture of ethics (20%), environmental and social impact (20%), governance (15%) and leadership and reputation (10%) and provided to all companies who participate in the process. While Voya's Senior Vice President of Corporate and Organizational Development sits on Ethisphere's Equity and Social Justice Initiative Advisory Council, he plays no role in the selection process for the World's Most Ethical Company award, but this fact has been disclosed to the extent it may be perceived as a possible conflict of interest. There is a processing fee of \$3,500 USD to participate. There is also a \$35,000 USD licensing fee for use of the logo. "World's Most Ethical Companies" and "Ethisphere" names and marks are registered trademarks of Ethisphere LLC.

In March 2023, Voya Financial employees were recognized by the Stevie Awards for Sales & Customer Service with a Gold Stevie award (Customer Service Team of the Year – Recovery situation – Financial Services) and a Bronze Stevie (Contact Center Professional of the Year). The Stevie Awards for Sales & Customer Service recognize the achievements of contact center, customer service, business development and sales professionals worldwide. Nominees were asked to provide written answers to four questions describing their achievements or a video of up to five minutes in length that answered the same questions. Submissions were reviewed by a panel of volunteer judges with a 1-10 rating score. The recognitions are based on 2022 information and an entry fee was paid for consideration. Awards and/or rankings are not representative of actual client experiences or outcomes and are not indicative of any future performance.

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## Gwinnett County Stable Value Update

Presented by: Bob Waldo - Director, Preservation of Capital Sales and Relationship Management

#### 08/15/2024



Agenda

#### Stable Value Market Update

**Gwinnett County Contract Position** 

**Gwinnett County Metrics** 

**Performance & Characteristics** 



## Stable Value Market Update

#### VOYA.

#### Stable Value Market Update

Stable Value Market DC Assets*	2/3 /2022 - \$936B 06/30/2023 - \$916B 09/30/2023 - \$894B  2/3 /2023 - \$882B 03/3 /2024 - \$868B
Overall Market Cash Flow	2022 – Neutral 1st half of year, negative 2nd half of year 2023 – Negative Yield curve inversion spurring retirees to move out of plan 2024 – Continues to be negative but seeing a slowdown
Stable Value Market To Book Ratios	2022: Sharp rise in rates has driven ratios negative 2023: Spring rally in bonds reversed downward trend for short period of time but ratios continue to trend downwards 2024: Have flattened out; waiting on FED cuts to help accelerate market-to- book improvements
Interest Rates	2022 – FED actions have significantly increased rates/portfolio yields year to date 2023 – FED actions have continued to increase rates 2024 – FED has held rates showing signs of cuts 3 <sup>rd</sup> and 4 <sup>th</sup> quarter 2024
New Stable Value Utilization	HSA plans, 529 plans and MEPs/PEPs Secure 2.0 may bring CITs to 403b Plans

 $\ast$  SVIA Quarterly Characteristics Survey 2022, 2023 and Q12024

VOYA

### Gwinnett County Contract Position

#### VOYA.

### **Gwinnett County**

#### Contract Position as of June 30, 2024

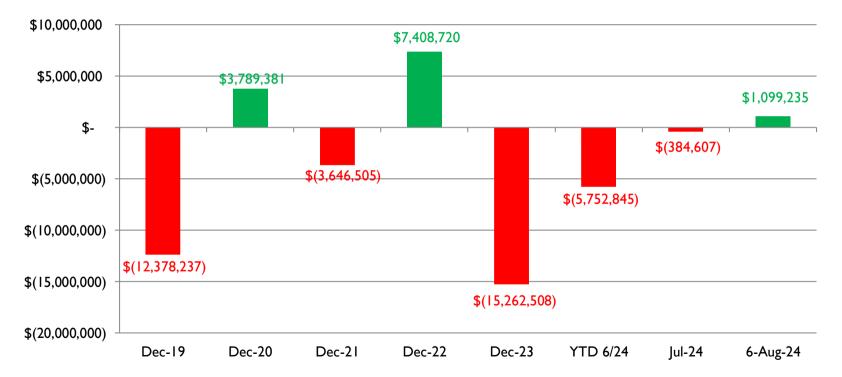
Market Value (MV)	\$62,669,529
Book Value (BV)	\$69,509,501
Market Value – Book Value:	-\$6,839,972
MV/BV	90.16%
Current Net Crediting Rate	1.92% (07/01/2024 - 09/30/2024)
Intermediate Stable Value Fur Portfolio (as of 05/31/2024)	nd Yield: 5.24% Duration: 4.35 Years
Intermediate Stable Value Fur Portfolio (as of 06/30/2024)	nd Yield: 5.16% Duration: 4.37 Years
Intermediate Stable Value Fur Portfolio (as of 08/06/2024)	nd Yield: 4.46% Duration: 4.32 Years MV/BV: 92.57%



## **Gwinnett County Metrics**

VOYA.

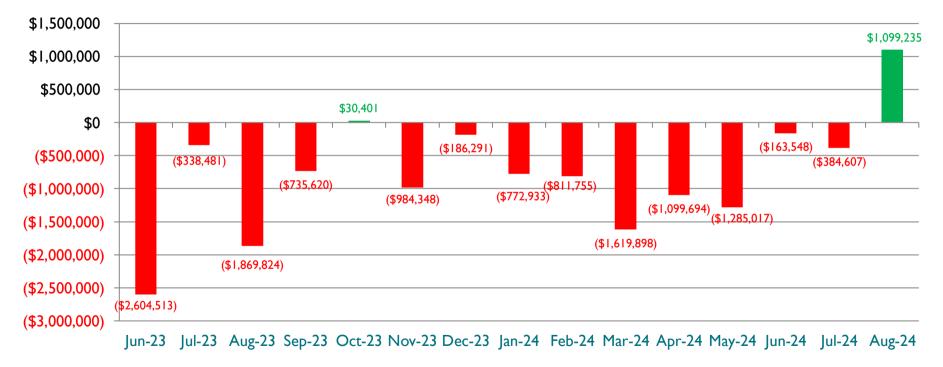
# **Gwinnett County Net Cashflow**



Information contained herein is proprietary, confidential and non-public and is not for public release.

VOVA,

# Gwinnett County Net Cashflow – June 2023 – July 2024



Data As of 08/06/2024

VOYA.

## Gwinnett County Historical Stabilizer Data

Date	Market Value	Book Value	Market to Book Ratio	Gross Crediting Rate	Net Crediting Rate
12/31/2019	\$77,757,502	\$75,920,794	102.42%	3.12%	2.63%
03/31/2020	\$82,351,073	\$79,296,092	103.85%	2.92%	2.43%
06/30/2020	\$83,406,348	\$78,648,907	106.05%	2.99%	2.50%
09/30/2020	\$83,280,134	\$78,528,034	106.05%	2.77%	2.28%
12/31/2020	\$86,195,030	\$81,542,662	105.71%	2.70%	2.21%
03/31/2021	\$83,603,161	\$80,774,724	103.50%	2.36%	I.87%
06/30/2021	\$83,521,793	\$80,406,760	103.87%	2.27%	I.78%
09/30/2021	\$81,541,123	\$78,776,573	103.51%	2.16%	I.67%
12/31/2021	\$81,242,840	\$79,293,844	102.46%	2.18%	I.69%
03/31/2022	\$79,378,556	\$81,631,133	97.24%	2.15%	I.66%
06/30/2022	\$80,617,356	\$85,543,942	94.24%	2.21%	1.72%
09/30/2022	\$79,880,587	\$88,594,706	90.16%	2.23%	1.74%
12/31/2022	\$80,262,920	\$88,224,136	90.98%	2.57%	2.08%
03/31/2023	\$79,724,269	\$86,241,085	92.44%	2.25%	1.76%
06/30/2023	\$70,322,655	\$77,743,786	90.45%	2.09%	1.60%
09/30/2023	\$66,013,173	\$75,225,601	87.75%	2.72%	2.23%
12/31/2023	\$68,435,450	\$74,479,679	91.89%	2.60%	2.11%
03/31/2024	\$64,961,160	\$71,672,977	90.64%	2.70%	2.21%
06/30/2024	\$62,669,529	\$69,509,501	90.16%	2.72%	2.23%



# Performance & Characteristics

Information contained herein is proprietary, confidential and non-public and is not for public release.

## VOYA

### Performance Summary

Quarter Ending June 30, 2024



	Quarter	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception*
Portfolio Gross (%)	0.58	0.34	3.99	-1.53	0.54	1.51	2.99
Benchmark (%)	0.46	0.04	3.55	-1.77	0.22	1.33	2.91
Relative to Gross (%)	0.13	0.30	0.44	0.24	0.32	0.18	0.08

Calendar Year Returns	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Portfolio Gross (%)	5.45	-9.42	-1.05	6.38	6.87	0.88	2.24	2.20	1.16	4.17
Benchmark (%)	5.18	-9.51	-1.29	5.60	6.67	0.92	2.27	1.97	1.21	4.12

\*Performance inception date is 7/07/2004. Benchmark: Bloomberg U.S. Intermediate Aggregate Index

Performance returns for time periods greater than 1 year are annualized. Past performance does not guarantee future results.

Investors cannot invest directly in an index. See Explanatory Notes Section for footnotes and disclosures.

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Information contained herein is proprietary, confidential and non-public and is not for public release.





## Portfolio Characteristics

Quarter Ending June 30, 2024

Benchmark

4.36

AA

4.97

35

5.43

3.29

Portfolio

4.37

AA-

5.08

47

5.18

3,70

Top Credit Exposures	% of Portfolio
BANK OF AMERICA CORP	1.38
JPMORGAN CHASE & CO	1.24
MORGAN STANLEY	1.05
ROYAL BANK OF CANADA	0.54
UBS AG	0.48
DTE ENERGY COMPANY	0.43
ABBVIE INC	0.39
EVERSOURCE ENERGY	0.38
CVS HEALTH CORP	0.38
SOUTHERN COMPANY (THE)	0.34

Performance Attribution	Q1	Q2	YTD
Duration/Curve	4	1	5
Asset Allocation	12	3	16
Security Selection	1	9	10
Total	17	13	30

Benchmark: Bloomberg U.S. Intermediate Aggregate Index
Past performance does not guarantee future results.
See Explanatory Notes Section for footnotes and disclosures.
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1.	05	Yield to Maturity (%)
0.	54	OAS
0.4	48	Average Maturity (Years)
0.4	43	Coupon (Average)
0.	39	
0.3	38	Returns-Based
0.3	38	Statistics (10 years)
0.1	24	Standard Deviation (%)

Holdings-Based Characteristics

Effective Duration (Years)

Average Quality

Returns-Based		
Statistics (10 years)	Portfolio	Benchmark
Standard Deviation (%)	3.68	3.64
Tracking Error (%)	0.29	N/A
Information Ratio	0.60	N/A
Alpha (annualized %)	0.18	N/A
Beta	1.01	1.00
R-Squared	0.99	1.00
Sharpe Ratio	-0.01	-0.05



INVESTMENT MANAGEMENT

Information contained herein is proprietary, confidential and non-public and is not for public release.

## **VOYA**.

#### **Bob Waldo**

Vice President, Stable Value Product Group Years of Insurance experience: 40 Years with company: 12



Bob Waldo serves as Vice President within Voya's Retirement business. In his role he is directly responsible for sales and distribution of Stable Value products in the Northeast region, and with select Stable Value investment managers. He has over 40 years of experience in the insurance industry, including over 28 working with Stable Value Products in the Defined Contribution 401(k), 457, 403(b) and 529 markets.

Prior to joining the firm, he was an Assistant Director in charge of National Sales for both the Stable Value and Structured Settlements products at Hartford Life Insurance Company. Previously, Bob worked at Allstate Insurance Company and Connecticut Mutual Insurance Company.

He received a BA in Economics from the University of Rhode Island. He holds a FINRA Series 6 securities registration and insurance licenses in all states.

#### STATEMENT OF INVESTMENT OBJECTIVES AND GUIDELINES

#### GWINNETT COUNTY PUBLIC EMPLOYEES RETIREMENT SYSTEM

#### **INTRODUCTION**

The Gwinnett County Board of Commissioners ("GCBC") has created the Gwinnett County Public Employees Retirement System (the "GCPERS") as the umbrella organization to govern and administer its local pension, other post-employment benefits (OPEB), and retirement savings programs. The GCPERS is intended to meet the statutory requirements applicable to public retirement systems.

The Retirement Plans Management Committee ("RPMC") acts as the Trustee of the Gwinnett County Defined Benefit Plan (the "Plan") and the Gwinnett County Defined Benefit Plan Master Trust (the "Trust") established by GCBC under the GCPERS in accordance with and subject to the terms, conditions and provisions set forth in the Plan and Trust. The RPMC also serves as the Trustee of the Gwinnett County OPEB Trust (the "OPEB Trust"), which was established by GCBC for the purpose of pre-funding other post-employment benefits provided under its welfare benefit plans in accordance with statements issued by the Governmental Accounting Standards Board (GASB).

The Plan is managed by the RPMC (the "Trustees" or "Committee") established by the Gwinnett County Board of Commissioners under the GCPERS. The address of the Plan is 75 Langley Drive, Lawrenceville, Georgia 30046-6935. The Trustees retain the services of a third-party to administer the Plan.

Plan assets are held, managed, invested and reinvested by the Trustees in accordance with this Statement of Investment Objectives and Guidelines (the "Statement") and with an investment management agreement between the RPMC and one or more asset managers. OPEB Trust assets shall also be held, managed, invested and reinvested by the Trustees in accordance with this Statement and shall be treated in the same manner as Plan assets for purposes of this Statement. An investment consulting firm has been retained to assist the Plan in the attainment of its objectives and to monitor compliance with the adopted objectives and guidelines.

The duties and responsibilities of the Trustees, some of which are delegated to administrators, asset managers, investment advisors and others, include the following:

- A. Determining the date to make contributions to the Plan to cover operating costs and to maintain the Plan on a sound actuarial basis;
- B. Using and applying the assets of the Plan for the payment of all reasonable and necessary expenses of administering the Plan;

- C. Contracting with a vendor for funding purposes or to provide pension benefits to Plan participants;
- D. Maintaining the Plan in compliance with all applicable federal and state regulations concerning the management and conduct of the pension trust funds;
- E. Designating a Custodian bank to receive all Plan deposits;
- F. Investing that portion of the Plan that is not needed for current expenditures;
- G. Having the books and records of all Trustee transactions audited annually; and
- H. Periodically contracting for an independent actuarial review.

In addition, the Trustees have certain duties and powers that they alone may exercise, including, among others:

- A. The duty to elect from their members a Chairman and Vice Chairman and to appoint a member to the Audit Committee;
- B. The power to recommend removal of another Trustee;
- C. The power to construe the provisions of the Plan documents;
- D. The power to contract with administrators to provide actuarial, accounting, legal and administrative services and to maintain books, records and other data necessary for the proper administration of the Plan;
- E. The power to contract with consultants, administrators, and investment advisors and hire asset managers and Investment Managers to provide services related to the investment of Plan assets; and
- F. The power to promulgate rules and regulations for the sound and efficient administration of the Plan.

Whether or not the duties or responsibilities are delegated, the Trustees are responsible for the sound and efficient operation of the Plan and for administering the Plan for the exclusive benefit of the Plan's participants and beneficiaries.

#### **PURPOSE**

The purpose of this Statement is to set forth investment policies, objectives, and guidelines which the RPMC judges to be appropriate and prudent for the management of Plan assets, in consideration of the needs of the Plan's participants and beneficiaries and in compliance with the Public Retirement Systems Investment Authority Law, O.C.G.A. § 47-20-80 *et seq.* The

Statement is to assist the RPMC in more effectively supervising and monitoring the investment program of the Plan.

In the various sections of this Statement, the Trustees of the Plan define this investment program by:

- A. Stating the Trustees' attitudes, expectations and objectives in the investment of the Plan assets;
- B. Providing guidelines for the investment portfolio that control the level of risk assumed and ensures that assets are managed in accordance with stated objectives;
- C. Encouraging effective communication between the Trustees, the Plan Administrator, the investment advisors (the "Consultant"), and the Investment Managers; and
- D. Establishing criteria to monitor and evaluate the performance results achieved by the Investment Managers.

#### **STATEMENT**

This Statement represents the Trustees' current philosophy regarding the investment of the Plan assets. In addition, although the Trustees shall utilize this Statement in making decisions concerning the Plan, it shall not necessarily be bound solely by its contents. This Statement is a means of achieving the Plan's goals and meeting the Plan's obligations for benefits.

The primary asset classes of the investment portfolio will be:

A. Cash

Cash levels will vary with a zero (0) percent target but with an allocation range of zero (0) percent to five (5) percent.

B. Fixed Income Portfolio

To obtain a favorable total return on invested assets through a "liquid" diversified portfolio of high quality income-producing assets, which stress preservation of capital and income.

C. Equity Portfolio

To obtain a favorable total rate of return on invested assets and to provide long-term growth through a diversified portfolio of equity securities.

D. Alternative Investments

The Plan may invest up to ten (10) percent of its total assets in certain "alternative investments," as defined in O.C.G.A. § 47-20-87, to obtain a favorable total rate of return on invested assets consistent with their respective risk.

The investment portfolio is designed to balance the risk of the investment instruments with projected growth and income in order to meet the policy objectives.

#### **OBJECTIVES**

The objectives of the Statement are as follows:

- A. To optimize the long-term return on Plan assets at an acceptable level of risk; provide the greatest possible long-term benefit to members of the Plan by maximizing the total rate of return on investment within prudent limits of risk for the Plan and consistent with any investment return requirement assumed by the Plan's actuaries in determining the present and future soundless of the Plan;
- B. To maintain a broad diversification across asset classes diversify the investments of the Plan so as to minimize the risk of large losses, unless doing so is clearly not prudent under the circumstances;
- C. To maintain careful control of the risk level within each asset class;
- D. To focus on a long-term return objective; and
- E. To satisfy all fiduciary and other controlling laws and regulations.

These objectives shall be accomplished using a portfolio of investments that the Trustees feel is conducive to participation in rising markets while allowing for adequate protection in falling markets. It is the intention of the Trustees to give each Investment Manager full investment discretion with the exception of any restrictions specifically noted to each Investment Manager and those detailed in the following paragraphs.

I. <u>Operating Cash</u>: The balance maintained within the operating cash account shall be synchronized with the projected uses and contributions to and from the trust. The lowest cash balance target will be projected on a rolling month to month basis over a twelve (12) month horizon with the intent to minimize the requirement to conduct non-scheduled investment calls where realized losses may occur, and to maximize the returns which may be received through active management. The intent of the operating cash account is not to build the trust assets or balances; rather, it shall be structured in a manner that will provide sufficient liquidity to pay obligations such as normal operating expenses and benefit obligations. The amount maintained with the operating cash account shall not be included in the computation of the target asset allocation.

- II. <u>Cash</u>: Target Allocation zero (0) percent (including short term cash investments). As a result of normal market movements and cash flows to and from the Trust, the asset mix is expected to fluctuate around the allocation. A maximum upward deviation of five (5) percentage points from the target is an acceptable range and in accordance with these guidelines. A targeted allocation combined with a permissible allocation range shall be used in efforts to control risk and maximize the effectiveness of the Plan's asset allocation strategy, while minimizing portfolio turnover.
  - A. Categories of Investment Securities
    - 1. U.S. Treasury Bills;
    - 2. Short-term U.S. Government/Agency obligations;
    - 3. High Grade Commercial Paper rated by Moody's (P-1) and Standard & Poor's (A-1);
    - 4. Other Dollar Denominated Money Market Instruments including foreign investments purchased shall be rated as acceptable investments;
    - 5. Repurchase Agreements of U.S. Government or Agency Securities (the Plan must take possession of the collateral);
    - 6. Money Market funds rated by Standard & Poor's as acceptable investments; and
    - 7. Futures, options or other instruments designed to manage risk exposure.
  - B. Investment Restrictions
    - 1. The maximum amount that may be invested in the securities of an individual issuer not backed by the full faith and credit of the U.S. Government or a federally sponsored agency is five (5) percent of the assets of the portfolio.
    - 2. Leverage techniques, private placements, short techniques or any direct participation plans cannot be used.
    - 3. All investments must be eligible investments under the Public Retirement Systems Investment Authority Law, O.C.G.A. § 47-20-80 *et seq*.
- III. <u>Fixed Income Portfolio</u>: Target Allocation forty (40) percent (including short term cash investments). As a result of normal market movements and cash flows to and from the Trust, the asset mix is expected to fluctuate around the allocation target. A maximum deviation of ten (10) percentage points from the target (in either direction) is an acceptable range and in accordance with these guidelines. A targeted allocation combined with a permissible allocation range shall be used in efforts to control risk and maximize the effectiveness of the Plan's asset allocation strategy, while minimizing portfolio turnover.

#### A. Policy

The objective is to obtain a favorable total return utilizing various classes of investment grade fixed income securities.

- B. Performance Guidelines
  - 1. The total return on the portfolio should be judged against the total return of a representative bond index (net of fees) over each trailing three (3) and five (5) year period or market cycle.
  - 2. In addition, it is expected that an Investment Manager's fixed income returns will rank above the median (50th percentile) versus a representative database over each rolling three (3) to five (5) year period or market cycle.
- C. Investment Restrictions
  - 1. All fixed income securities shall be of "Investment Grade" or higher quality as defined by Moody's, Standard & Poor's, or Fitch. If any security's rating falls below Investment Grade by two (2) or more rating services, the Investment Manager shall promptly inform the Trustees in writing of the intended disposition of the security. The disposition should occur within ninety (90) days of the downgrade unless directed otherwise by the Trustees.
  - 2. No more than five (5) percent of the portfolio may be invested in any single corporate issue.
  - 3. Leverage, private placements, shorting securities or any direct participation plans cannot be used.
  - 4. All investments must be eligible investments under the Public Retirement Systems Investment Authority Law, O.C.G.A. § 47-20-80 *et seq*.
- D. Categories of Investment Securities
  - 1. U. S. Treasury securities;
  - 2. U. S. Government agency obligations;
  - 3. Mortgage-related securities;
  - 4. Corporate debt (including asset-backed) securities;
  - 5. Taxable state and municipal securities;
  - 6. Foreign (including emerging market debt) securities;

- 7. High quality Guaranteed Investment Contracts (GICs) (AA or better as rated by A. M. Best);
- 8. Futures, options or other instruments designed to manage risk exposure; and
- 9. Exchange Traded Funds (ETFs).
- IV. <u>Equity Portfolio</u>: Target Allocation sixty (60) percent. As a result of normal market movements and cash flows to and from the Trust, the asset mix is expected to fluctuate around the allocation target. A targeted allocation combined with a permissible allocation range shall be used in efforts to control risk and maximize the effectiveness of the Plan's asset allocation strategy, while minimizing portfolio turnover.
  - A. Policy

Growth of capital and surplus is sought primarily through equity investments in a diversified common stock portfolio.

B. Percent of Portfolio

As a result of normal market movements and cash flows to and from the Trust, the asset mix is expected to fluctuate around the allocation target. Generally, a maximum deviation of ten (10) percentage points from the target allocation (in either direction) is an acceptable range and in accordance with these guidelines. Notwithstanding the foregoing, the maximum permissible allocation of the Plan's assets in equities shall be the limit applicable to "large retirement systems" in O.C.G.A. § 47-20-84.

- C. Performance Guidelines
  - 1. This portion of the portfolio will be judged against the benchmark established for each asset class (net of fees) over each trailing three (3) and five (5) year period or market cycle or another appropriate benchmark which more closely resembles the overall character of the Investment Manager's equity portfolio.
  - 2. In addition, it is expected that an Investment Manager's equity returns will rank above the median (fiftieth percentile) (50<sup>th</sup> percentile) versus a representative database over each trailing three (3) and five (5) year period or market cycle.

#### D. Investment Restrictions

- 1. For diversification purposes, no individual security position shall exceed ten (10) percent of an Investment Manager's total equity portfolio asset market value. REIT portfolio manager(s) shall be allowed to invest up to ten (10) percent of their portfolio in any one issue based on cost value. Commingled investment vehicles, such as mutual funds, are exempt from this restriction.
- 2. There shall be no purchase that would cause a position in the portfolio to exceed five (5) percent of the issue outstanding, based on cost value.
- 3. There shall be no investments in non-marketable or illiquid securities.
- 4. Each Investment Manager may employ market-timing decisions through cash management.
- 5. Leverage techniques, private placements, short techniques or any direct participation plans cannot be used.
- 6. All investments must be eligible investments under the Public Retirement Systems Investment Authority Law, O.C.G.A. § 47-20-80 *et seq*.
- E. Categories of Investment Securities
  - 1. Domestic common stocks;
  - 2. Foreign common stocks traded on U. S. Exchanges;
  - 3. Convertible preferred and convertible debt securities;
  - 4. Futures, options or other instruments designed to manage risk exposure;
  - 5. Exchange Traded Funds (ETFs);
  - 6. Open and closed end mutual funds; and
  - 7. Commingled funds and trusts.
- V. <u>Alternative Investments</u>: The Plan may invest in "alternative investments," as defined in O.C.G.A. § 47-20-87. Alternative investments will not in the aggregate exceed ten (10) percent of the total assets of the Plan (determined on the basis of the assets' aggregate historical cost). Investment vehicles such as privately placed investment pools (structured as a partnership, limited liability company, trust, corporation, joint venture, or other entity or investment vehicle of any type) may be used to invest in venture capital, real estate, private equity, hedge funds and other types of alternative investments permitted by O.C.G.A. § 47-20-87.

The nature of such investing calls for a longer-term investment horizon than that of other fund investments. It is expected that certain investments may initially be illiquid in nature, may require a lock-up period, and that the return of capital and profits will generally occur between five and ten years after the initial investment. The annualized returns provided by these investments are expected to be consistent with their respective risk. Each vehicle should be diversified to avoid large losses.

- A. Alternative Investment Restrictions
  - 1. Alternatives investments shall be made in accordance with O.C.G.A. § 47-20-87.
  - 2. An alternative investment shall not exceed in any case 20% of the aggregate amount of:
    - a. The capital to be invested in the applicable private pool, including all parallel pools and other related investment vehicles established as part of the investment program of the applicable private pool; and
    - b. The securities being issued in each case determined at time such alternative investment is initially either made or committed to be made, as applicable but taking into consideration any investment that have previously been or are concurrently being made or committed to be made.
  - 3. The investment shall have at least four other investors not affiliated with the issuer.
  - 4. The issuer shall have at least \$100 million in assets, including committed capital, at the time the investment is initially made or committed.

#### **ASSET ALLOCATION**

I. Asset Allocation Policy

An asset allocation/liability study will be conducted periodically to determine an appropriate asset mix and investment management structure designed to maximize long-term investment returns while minimizing investment risk. Specific asset allocation policies will be addressed whenever the members of the RPMC, the Investment Committee or the Consultant deems necessary. Some specific occurrences which might prompt the RPMC to review the asset allocation policy would include:

- 1. Changes in state law or new legislation or regulations;
- 2. Changes in funding level of the Plan or changes in Actuarial methods;

GWINNETT COUNTY PUBLIC EMPLOYEES RETIREMENT SYSTEM

- 3. Changes in Plan demographics or benefit design;
- 4. Changes in prospects for County revenue growth, growth of work force or employee salaries; and
- 5. Changes in capital markets, interest rates, the outlook for future asset class returns or availability of new asset classes.
- II. Target Asset Allocations

The Asset class targets and ranges will be based on market values. The RPMC recognizes that a rigid asset allocation would be both impractical and undesirable under various market conditions. Therefore, the allocation of the Plan's assets may vary from time to time within the following ranges, without being considered an exception to this investment policy.

Asset Class	Target	Range	Benchmark*
US Large Cap	25.0%	20% - 35%	Russell 1000
US Mid Cap	7.5%	5% - 15%	Russell Mid Cap Index
US Small Cap	7.5%	5% - 15%	Russell 2000 Index
International	15%	10% - 25%	MSCI ACWI ex U.S.
Real Estate	5%	0% - 15%	NAREIT Equity Index
Fixed Income	35%	25% - 50%	BarCap Aggregate
International Fixed Income Excluding U.S.	5%	0% - 15%	Citigroup WGBI ex U.S.
Alternative Investments	0%	0% - 10%	To be determined by the Consultant
Cash	0%	0% - 5%	Citigroup – 3-Month Treasury Bill
Total	100%		

\*Or any other appropriate index that best fits an investment manager's style and objective.

In order to keep the Plan in-line with the defined asset allocation targets and ranges (as defined by this policy), the Investment Committee will review the asset allocation on a quarterly basis. In the event market fluctuation causes any portfolio allocation to fall outside of its target range, the Investment Committee may take necessary action to rebalance. The preferred rebalancing tool shall be net cash flows if available, to minimize portfolio turnover and transaction costs. The rebalancing process may result in the movement of assets from recently strong performing asset classes which may be highly valued into lower valued asset classes. Over the long-term, this discipline is expected to enhance portfolio returns while reducing risk (volatility) by realizing gains in one asset class and using those funds to make additional purchases in the undervalued asset class.

The RPMC may use passive investments for those asset classes where the asset class or the Investment Managers have not been able to generate excess returns. These products include

index funds and exchange traded funds (ETFs). Also, passive investment funds will be used during interim periods when Investment Managers have been terminated and active manager searches are being conducted.

#### **RESPONSIBILITIES**

- I. <u>In dealing with investments, each member of the RPMC</u>, Investment Managers, the Investment Consultant, and every other fiduciary as defined in O.C.G.A. § 47-20-88 shall:
  - A. Discharge its duties solely in the interests of Plan participants and their beneficiaries, and for the exclusive purposes of providing benefits to Plan participants and their beneficiaries.
  - B. Only make investments with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent expert acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.
  - C. Not subordinate the interests of Plan participants and their beneficiaries or sacrifice investment returns or accept increased investment risk in the promotion of any nonpecuniary interests. Such nonpecuniary interests shall include, but are not limited to, the furtherance of any social, political, or ideological interests.

#### II. Investment Managers shall:

- A. Provide quarterly written documentation of portfolio activity, portfolio valuations, performance data, and other information as requested by the Plan Administrator, the RPMC, and the Consultant WITHIN THIRTY (30) DAYS OF THE END OF EACH CALENDAR QUARTER. Each Investment Manager's quarterly report should include a summary of all executions, including transaction price, fees, and commission disclosure.
- B. Report immediately to the Plan Administrator, Trustees, and Consultant, in writing, any substantive changes in investment strategy, portfolio structure or portfolio manager, and market value of managed assets as well as significant changes in the ownership, affiliations, organizational structure, financial condition, professional personnel staffing and clientele of the investment management organization.
- C. Submit a completed Form ADV (used to regulate Investment Advisors) on an annual basis to the Plan Trustees. If any changes are made to key personnel, ownership or any other critical areas of the Investment Manager's firm, a copy of the amended ADV should be sent to the Plan Administrator, Trustees and Consultant within sixty (60) days of the change.
- <u>D</u>. <del>D.</del>

Exercise prudent discretionary authority over the assets entrusted to the Investment Manager, subject to these guidelines, objectives and restrictions.

- E. E. To the extent that the responsibility for voting proxies is the responsibility of the Investment Manager, vote and execute all proxies and(i) solely and exclusively in the best economic interests or rights of the Plan, (ii) in favor of confidential proxy balloting, and (iii) in support of management unless, in the opinion of the Investment Manager, such vote would be detrimental to the best economic interests or rights of the Plan. The Investment Manager shall give a general summary report to the Trustees of proxy voting activities on an annual basis and provide to the Trustees their guidelines on proxy voting activities. Investment Managers shall vote all proxies in accordance with their fiduciary responsibilities to the Plan.
- F. F. Acknowledge in writing the receipt of this Statement and the acceptance of its terms. If the Investment Manager believes at any time that any changes, additions, or deletions to the Statement are advisable, it will be the responsibility of the Investment Manager to recommend such changes, in writing, to the Plan Administrator, Trustees, and Consultant.
- G. Comply with the Public Retirement Systems Investment Authority Law, O.C.G.A. § 47-20-80 et seq., and specifically including the provision applicable to Large Retirement Systems found at O.C.G.A. § 47-20-84.

- H. Acknowledge in writing that it is a fiduciary with respect to the Plan assets under its management and certify in writing that it is either an investment advisor, bank, or insurance company, which is qualified to be appointed as Investment Manager.
- III. III. The RPMC shall:
  - A. Perform an annual review of this Statement and solicit input for any modifications or changes from the Consultant or the Investment Committee. Investment Managers will be notified of revisions to the policy, and individual contracts with Investment Managers will be modified as needed to comply with any changes in the Statement.
  - B. Hire competent registered professional Investment Managers to manage the assets of the Plan. This selection process shall include the establishment of specific search criteria, analysis, and due diligence review of potential managers, and interviews when appropriate. Investment Managers must meet the following minimum criteria: (i) registered as an investment advisor as defined in the Investment Advisors Act of 1940, be a bank as defined in such Act, or be an insurance company qualified to perform the services of Investment Manager under the laws of more than one state; (ii) historical quarterly performance that complies with the parameters established in each search and consistent with the investment strategy under consideration; and (iii) demonstrated financial and professional staff stability based on requisite historical company information. No Investment Manager shall be hired who has not, by their record and experience, demonstrated their investment experience, their fiduciary responsibility, and their capacity to undertake the mandate for which they are being considered.
  - C. Accept the specific investment guidelines or mandates appropriate to each Investment Manager established by the Consultant and approved by the Investment Committee of the RPMC. These guidelines will account for the unique characteristics of the asset class, style, and strategies of each Investment Manager and shall be agreed to by each Investment Manager managing Plan assets. These mandates shall set return targets, risk measures, benchmarks, diversification standards and other matters appropriate to the specific mandates.
  - D. Evaluate the performance of Investment Managers on an annual basis. Performance review will not only include the examination of investment returns, but the risk assumed to achieve those returns. Evaluation of overall investment returns should generally be over a longer (such as a three (3) year) period. Comparisons to appropriate benchmarks, market indexes and manager indexes will be used to evaluate relative performance. Investment Managers will also be evaluated for adherence to this Statement. Performance reviews will also focus on material changes in the Investment Manager's organization, such as philosophical and personnel changes, acquisitions or losses of major accounts, etc.
  - E. Terminate Investment Managers whenever in the opinion of the RPMC:
    - 1. Their performance has been inconsistent with the benchmarks established by

their mandate either due to inadequate excess investment returns (net of fees) or a high level of risk. Decisions based on performance will be made only after a full market cycle, typically three (3) to five (5) years, although the period may be shorter when severe underperformance or other evidence exist that suggests inconsistencies between the Investment Manager's stated style and the characteristics of investments actually made;

- 2. They have committed a significant breach of their mandate or directive, have breached a fiduciary duty, have experienced the loss of key personnel, change in ownership, consultant downgrade, or any other reasons that may cause a concern to the RPMC. The RPMC may put an individual Investment Manager on a Watch List to monitor any deficiencies or items of concern about the Investment Manager; or
- 3. Their investment management fees are not reasonable or otherwise not in line with industry standards.

Investment Managers may be terminated if there are any changes in the asset allocation structure which may dictate or require a change in Investment Managers.

The Consultant will make a specific recommendation to the RPMC on the termination of Investment Managers. This recommendation will be voted on by the Investment Committee prior to submitting to the RPMC.

- F. Hire a Consultant to regularly monitor the performance of Plan assets and provide quarterly reports that monitor performance of each Investment Manager and each investment class. In addition, the Investment Advisor will monitor:
  - 1. Each Investment Manager's adherence to their investment objectives;
  - 2. Comparison and ranking of each Investment Manager results to appropriate peers;
  - 3. Portfolio characteristics that are not in line with the Investment Manager's style or peer group style;
  - 4. Changes in the portfolio managers or in key decision makers; and
  - 5. Material changes in the Investment Manager's organization, investment or professional personnel changes, acquisition or ownership changes, or loss of accounts.
- G. Meet as often as needed with each Investment Manager for due diligence.
- H. Develop investment objectives and performance measurement standards that are consistent with the financial needs of the Plan.

- I. At its discretion and approval, make available a Securities Lending program to the Custodian. The objective will be to provide additional income to the Plan at an acceptable level of risk. Under the Program:
  - 1. All loans shall be marked-to-market daily;
  - 2. Collateral on each loan shall be at least one hundred (100) percent of loan value for domestic securities;
  - 3. Acceptable collateral shall be in the form of cash, U.S. Government securities, or Letters of Credit; and
  - 4. The Custodian will provide borrower default indemnification in the event that securities are not returned.

The Investment Committee will monitor the program on at least an annual basis.

- J. Periodically review and evaluate investment results in the context of predetermined performance standards and implement corrective action as needed.
- K. Periodically review fees, commissions and expenses, including but not limited to investment management, investment consulting, brokerage, transactional, banking, and custodial.
- L. To the extent that the responsibility for voting proxies is not the responsibility of the Investment Manager, the Investment Committee will determine the propershall vote and execute all voting of proxies related to the investment. Because the investment funds are prudently selected and monitored, and underperforming investment funds are removed when necessary; (i) solely and exclusively in the best economic interests or rights of the Plan, (ii) in favor of confidential proxy balloting, and (iii) in support of management unless, in the opinion of the Investment Committee will usually vote in support of the management proposals in the proxies. However, the Investment Committee will review the proxy statements for proposals which could, such a vote would be detrimental to the best economic interests or rights of the Plan and will vote the Plan's shares against those proposals. For example, Subject to the foregoing, the Investment Committee, for example, will generally vote against proposals which:
  - 1. Increase the expenses of the investment fund.
  - 2. Increase the risk of the investments in the investment fund.
  - 3. Would result in a change to an investment style inconsistent with the objective and targeted asset class for which the investment fund was chosen.

- IV. III. The Investment Consultant shall:
  - A. Assist in the development and implementation of investment policies, objectives and guidelines.
  - B. Prepare and present performance evaluation reports and attend Trustee meetings to present evaluation reports. Investment returns shall be compared to objectives and performance benchmarks in conjunction with the Consultant's presentation of results. The Consultant's performance reporting will be quarterly or any interim time period as designated by the Trustees.
  - C. Review contracts and fees for both current and proposed Investment Managers.
  - D. Communicate investment objectives and guidelines to the Investment Managers. Periodically review their adherence to such policies, and to the extent possible, report all violations to the Trustees.
  - E. Notify the Plan Administrator and the Trustees of any material changes in professional personnel or ownership of the Consultant's firm, as it relates to the Gwinnett County Public Employees Retirement System.
  - F. Assist the Plan Administrator, Gwinnett County staff and Trustees with additional projects as requested.
  - G. From information obtained from the Custodian and Investment Manager reports, advise the Plan Administrator and the Trustees of substantive changes in the market value of the Plan's total asset base and/or holdings of an Investment Manager as a result of dramatic changes in market conditions.

#### WATCH LIST AND TERMINATION POLICY

The Watch List is a mechanism used by the Investment Committee and the RPMC to express its general discomfort with or loss of confidence in an Investment Manager. Discomfort may be caused by deficiency in performance, departure of key personnel, material changes in managed assets and clients, financial instability, change in organizational or ownership structure, consultant downgrade, investment strategy or style deviation, contravention of any term or condition of the Investment Management Agreement or any other issue believed to undermine the RPMC's confidence in the Investment Manager.

Based on criteria that are indicators of legitimate relationship and investment performance problems, both qualitative and quantitative criteria of the Investment Manager shall be monitored on an ongoing basis.

Qualitative criteria include the Investment Manager's business, people, investment process and consultant downgrade in research rating. Non-compliance with qualitative criteria will trigger a due diligence review and may lead to a recommendation to place the Investment Manager on the Watch List or terminate the Investment Manager. Quantitative analysis of performance will focus on the following:

- One (1) year peer universe ranking in the ninetieth (90<sup>th</sup>) percentile or lower will trigger a due diligence review.
- Three (3) year and five (5) year peer universe ranking in the fiftieth (50<sup>th</sup>) percentile or lower will trigger a due diligence review and recommendation to the RPMC, which may lead to a Watch List or termination recommendation.
- Three (3) year annualized return less than ninety (90) percent of benchmark return will trigger a due diligence review.

Violations of any quantitative and qualitative criteria will trigger an automatic due diligence review, which may lead to placement on the Watch List or termination. A firm placed on the Watch List will remain on the Watch List for at least two (2) consecutive quarters. A firm may be removed from the Watch List at the discretion of the RPMC. The Watch List Policy does not limit the RPMC's ability to retain or terminate the Investment Manager. Any Investment Manager on the Watch List may be restricted from receiving additional funding by the RPMC. If the RPMC determines (with advice from the consultant) the Investment Manager is unlikely (without style drift) to meet the Investment Manager requirements, the Investment Manager may be terminated.

#### APPROVED BY:

#### For the Gwinnett County Retirement Plans Management Committee:

Signature

Name (Print or Type)

Chairman, Gwinnett County Retirement Plans Management Committee (RPMC) Title

Date

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