

City of Sacramento
Administration, Investment, & Fiscal Management
Board Report
915 I Street Sacramento, CA 95814
www.cityofsacramento.org

File ID: 2026-00740

5/21/2026

**Sacramento City Employees' Retirement System (SCERS or System) Fiscal Year (FY) 2026/27
Asset Allocation Policy**

File ID: 2026-00740

Location: Citywide

Recommendation: Adopt a **Resolution** to approve an Asset Allocation Policy for SCERS for FY2026/2027.

Contact: Stacy Hussey, Chief Investment Officer, (916) 808-7746 shussey@cityofsacramento.org; John Colville, City Treasurer, (916) 808-8297, jcolville@cityofsacramento.org; Office of the City Treasurer

Presenter: Stacy Hussey, Chief Investment Officer, (916) 808-7746 shussey@cityofsacramento.org, Office of the City Treasurer

Attachments:

- 1-Description/Analysis
- 2-AIFM Staff Report Asset Allocation Policy 2026
- 3-AIFM 2026-2027 Asset Allocation Resolution
- 4-Exhibit A (Segal Marco Advisors, 2026 Asset Allocation Review)

Description/Analysis

Issue Detail: The Administration, Investment and Fiscal Management Board (Board) has adopted policies governing the investment of funds held in SCERS which are contained in an Investment Policy document. Pursuant to the Investment Policy, the Board shall annually review and adopt an Asset Allocation Policy for the next fiscal year. Investment staff herein proposes an Asset Allocation Policy setting forth an asset mix for the SCERS portfolio for FY2026/27

Policy Considerations: The establishment of an asset allocation policy is a key tool for the Board to set the SCERS portfolio's overall risk and return characteristics. Pursuant to City Charter section 383 and the System's Investment Policy, the overarching standard governing the investment and management of the System's funds is the "prudent person" standard as described in the Probate Code section 16040. The proposed Asset Allocation Policy recommendations are consistent with that standard.

Economic Impacts: None.

Environmental Considerations: The proposed action is not subject to the California Environmental Quality Act (CEQA) because it is not a “project” as defined in Section 15378 of the CEQA Guidelines.

Sustainability: None.

Commission/Committee Action: None.

Rationale for Recommendation: The prudent and transparent management of funds held by SCERS on behalf of the beneficiaries of the System is enhanced by the adoption of an Asset Allocation Policy setting forth the parameters under which such funds are invested.

Financial Considerations: None. The investment of SCERS funds is within the exclusive purview of the Board. The System, acting through the Board, is responsible for all costs in implementing the SCERS investment program.

Local Business Enterprise (LBE): Not applicable.

**REPORT TO
Administration, Investment and Fiscal
Management Board
City of Sacramento**

915 I Street, Sacramento, CA 95814-2604
www.CityofSacramento.org

Staff Report
May 21, 2026

**Honorable Members of the
Administration, Investment, and Fiscal Management Board**

Title: SCERS FY 2026-2027 Asset Allocation Policy

Recommendation: Adopt a Resolution approving Asset Allocation Policy for the Sacramento City Employees' Retirement System for Fiscal Year 2026-2027

Contact: Stacy Hussey, Chief Investment Officer
City Treasurer's Office, (916) 808-7746

Presenters: Stacy Hussey

Department: Office of the City Treasurer

Division: Investment and Cash Management

Organization No: 08000

Coordinator: None

Comments: Staff proposes an Asset Allocation Policy for Fiscal Year 2026-2027

Description/Analysis

Issue: The Administration, Investment and Fiscal Management Board ("Board") has adopted policies governing the investment of funds held in the Sacramento City Employees' Retirement System ("SCERS" or "System") which are contained in an Investment Policy document. Pursuant to the Investment Policy, the Board shall annually review and adopt an Asset Allocation Policy for the next fiscal year. Investment staff herein proposes an Asset Allocation Policy setting forth an asset mix for the SCERS portfolio for FY 2026-2027.

Policy Considerations: The establishment of an asset allocation policy is a key tool for the Board to set the SCERS portfolio's overall risk and return characteristics. Pursuant to City Charter section 383 and the System's Investment Policy, the overarching standard governing the investment and management of the System's funds is the "prudent person" standard as described in the Probate Code section 16040. The Asset Allocation Policy recommendations are consistent with that standard.

Environmental Considerations: The proposed action is not subject to the California Environmental Quality Act (CEQA) because it is not a "project" as defined in Section 15378 of the CEQA Guidelines.

Commission/Committee Action: None

Rationale for Recommendation: The prudent and transparent management of funds held by SCERS on behalf of the beneficiaries of the System is enhanced by the adoption of an Asset Allocation Policy setting forth the parameters under which such funds are invested.

Financial Considerations: None.

Emerging Small Business Development (ESBD): Not applicable.

Respectfully Submitted by: 
Stacy Hussey, Chief Investment Officer

Recommendation Approved:


John Colville, City Treasurer

Attachments:

1. Background
2. Resolution
3. Segal Marco Advisors, "2026 Asset Allocation Review"

Background – The SCERS Plan

Unlike the vast majority of defined benefit pension plans, the Sacramento City Employees' Retirement System ("SCERS" or "System") is a closed Plan that has not accepted new members since 1978 and is approaching the full payout phase. The following information was reported by Foster & Foster with an effective date of June 30, 2025. As of June 30, 2025, the SCERS Plan has the following characteristics:

- 1 active member (the same amount as of June 30, 2024)
- Average age of 70.5 (up from 69.5 as of June 30, 2024)
- 48.3 years of service (up from 47.3 as of June 30, 2024)
- 706 retired members that draw pension benefits (down from 735 retirees as of June 30, 2024)

The SCERS Plan (the "Plan") incurs member benefit payments and administrative expenses that exceed \$27 million annually. Pursuant to the System's Investment Policy, Plan assets are to be managed, among other things, to generate sufficient liquidity to pay for such items on a timely basis. These liabilities are only nominally offset by active member contributions of approximately \$1,000 (unchanged from the fiscal year ending June 30, 2024). Retiree benefit payments and administrative expenses are paid from funds accumulated in an Operating account. The Operating account is funded mainly through three main sources: Investment income, the City's Annual Required Contribution, and cash within the SCERS investment portfolio.

1. Investment Income consists of interest paid on the System's fixed income instruments and dividends paid on equity holdings.
2. The City's Annual Required Contribution is calculated annually by the System's actuary. The City typically transmits the Contribution amount in monthly installments after the commencement of the fiscal year.
3. Portfolio cash holdings. The SCERS investment portfolios typically carry varying levels of cash during the year. While the investment managers strive to maintain fully invested status consistent with the Board's asset allocation policy, cash may exist within the portfolios from time to time. Such cash is generated by the maturity or redemption of fixed income investments, security sale transactions, and the ongoing options program. The demand for cash in the Operating account arises at various times during the year, spreading the need for cash throughout the year. Cash consistently has been available when needed due to lead time notice of such need. The investment managers are usually given ample notice to liquidate investments with the specific intent to fund the Operating account thereby avoiding untimely or unfavorable forced liquidation of securities.

For the fiscal year ending June 30, 2025, the cash required to fund the Operating account came from the three main sources:

Investment Income – Interest	\$4,023,739	15%
Investment Income – Dividends	2,647,560	10%
City Contribution	1,362,000	5%
Portfolio Cash Holdings	<u>19,491,861</u>	70%
 Total:	 \$27,525,160	 100%

The SCERS Plan is a “closed” fund, i.e., it is closed to new members, with a single active member contributing to the Plan. As noted above, the Plan has an annual cash disbursement requirement that far exceeds such contributions made by the remaining active member. Investment performance is relied upon to generate the cash needed and when possible, grow the amount of investable capital, which is the generator of required cash flow. The preservation of capital is an increasingly important objective along with investment returns and liquidity to pay retiree benefits. Accordingly, the balancing of these objectives has driven the Board to emphasize fixed income interest and equity dividend income generating investments in the investment mix. These asset classes strive to provide, to the extent possible, a balance between a firm foundation of steady, reliable income, and capital preservation. By emphasizing both income and growth aspects in the Plan’s investment mix, the Board has achieved a Plan-wide total return sufficient to maintain an acceptable funded level of the Plan for the long term. The latest actuarial report reflected a funded level of 109.6%, which equates to a policy with less need for taking unnecessary risks.

The SCERS assets are invested internally through a diversified portfolio of actively managed fixed-income and equity assets. Pursuant to the SCERS Investment Policy, investment staff monitors the performance of the SCERS portfolio by comparison with market metrics developed in conjunction with Segal Marco Advisors that are appropriate to each individual asset class within the portfolio and to the portfolio as a whole. In addition to the guidance provided by comparisons to market metrics, investment strategies within the allocations authorized by the Board are structured with the intent to achieve the System’s actuarial return assumption of 6.0% to the extent possible without violating the overall prudent investment standard required by the investment policy. Return on Plan assets is presented to the Board on a monthly and quarterly basis in addition to an annual actuarial study of the Plan.

Status of the Markets

The broad U.S. stock market closed the 2025 calendar year with a 16.3% gain as measured by the S&P 500 price-only Index. On a total return basis, the S&P 500 gained over 17.7% after adding the dividends paid by the 500 companies represented. The markets spent most of 2025 focused on the news cycle of a new president taking office, with a focus on deciphering the potential impacts in the market for the incoming administration. The calendar year started with a Fed Funds Target rate set at 4.50%. The Fed cut interest rates by 25 basis points in September, October and December, to end the calendar year at 3.75%. Equity markets welcomed these easing moves in 2025 which led to healthy equity gains in the calendar year. As of this writing, the Fed has not touched interest rates since the last cut in December 2025, and the projections for future rate cuts have diminished as international conflicts increase and

inflation has proven to be stickier than anticipated.

The Russell 1000 Value Index also had positive returns that were slightly less than the growth focused portfolios. The index had a 13.57% return for calendar year 2025. As growth equities maintained popularity and fixed income investments continued to provide higher yields, value-focused investments saw a slightly less dramatic rise than in growth portfolios.

In the bond market, the benchmark 10-year Treasury bond started 2025 at 4.57% and ended the year at 4.17%. As the front end of the curve came in significantly due to the Fed's intervention, longer dated yields came in less dramatically- continuing the steepening treasury curve trend. The Fed continues to broadcast its desire to see inflation under control before additional rate cuts are enacted, but external worldwide events and conflicts are proving difficult to make this target reachable in the near term.

Proposed Asset Allocation Strategy

The investment staff of the City Treasurer's Office assists the Board in discharging the Board's Charter-mandated duty to manage and invest the SCERS portfolio. In doing so, the Treasurer's Office utilizes modern portfolio theory and risk management techniques, together with strategic asset allocation, to best position the portfolio for desired results. The portfolio will be designed to comply with the Board's investment standards and, ultimately, to allow for the continued prudent administration of the Plan until the final payment is made to its beneficiaries. In furtherance of these purposes, the investment staff proposes minor changes to the existing asset allocation that includes both fixed income and equity components, while still keeping a slight overweight to equities. In the most recent actuarial report presented by Foster & Foster in the Fall of 2025, they recommended maintaining the Plans actuarial target at 6.0%. Their continued overall theme in the presentation was that the Plan should focus on maintaining the great gains it has achieved in the last several years by now reducing risk to the minimum amount that is necessary in the Plan to meet its actuarial assumptions. As such, ever mindful of the need for income from the Plan, we are suggesting increasing the overall fixed income allocation from 40.0% to 47.50%, with the remaining 52.50% remaining in equities. Attached to this report is the 2026 Asset Allocation Review prepared by Segal Marco Advisors. The initial report proposed a 50/50 split between fixed income and equities, but this allocation did not result in confidence in achieving long term returns of the actuarial rate of 6%. As such, staff revised this weighting and the report was updated to reflect the now proposed 47.5%/52.5% split.

This updated report models the return of the portfolio based upon the proposed ("Alternate") allocation to have a 20-year expected return between 5.8% and 6.3% (Geometric and Arithmetic). Please see attached **Exhibit A** for the Segal Marco Advisors report for full asset class and return model assumptions.

Fixed Income Component

As indicated above, the Fixed Income Component now generates 15% of the annual cash requirements of the Plan. Over the past several years interest income had trended downward in a reduced interest rate environment. However, over the last 24 months as rates increased, we have been able to allocate these funds at higher interest rate levels. Currently, funds are now being reinvested in the Fixed Income account at higher interest rates than were available in 2021-2023. We anticipate more income from the fixed fund will be allocated to the operating

account going forward. The current value of the Fixed Income Component is still historically low. It has shrunk over the past fifteen (15) years from a high of \$166 million as of June 2008 (47% of the SCERS assets), to \$140 million as of June 2011 (46%), to \$106 million as of March 2026 (42% of the SCERS assets). Despite this historically lower allocation, the Fixed Income Component plays a key role in supporting the overall SCERS' portfolio through reduced volatility and portfolio diversification. Over the last 4 years, staff has recommended additional allocations to the fixed fund. The mature and closed nature of the Plan warrants us to focus more on these income producing instruments to support the operating account for the Plans' beneficiaries.

The Fixed Income Component has an average yield of just over 4.21% as of March 2026. The fund has continued to outperform its benchmark primarily due to its allocation to parts of the curve that were not as sensitive to interest rate movements that occurred. We are confident that the Fixed Income Component will continue to serve the overall portfolio needs of the Plan and provide a lower volatility base through negative correlation with the other Plan assets. As a result of this negative correlation, traditionally the fixed income component is the asset class that exhibits lower returns in comparison to the equity components. In calendar year 2025, in an environment where the Fed was lowering interest rate, the US Broad Investment Grade Index had a positive 7.32% return versus our portfolios' 7.66% return. Going forward, we acknowledge that the returns in the fixed income portfolio will most likely underperform the equity components as we continue in a more stable interest rate environment. Regardless of portfolio returns, the additional income and the funds' hold to maturity stance offsets any mark to market paper returns. We expect the income generated by the Fixed Fund to increase significantly going forward.

Total Fixed Component: 47.5% (7.5% Increase)

Equity Component

As of this writing in early 2026, investor sentiment in the equity space is starting to turn negative, especially in a handful of very large technology sector names. The large, outsized moves in many of these names pushed index returns such as the S&P 500 up in the previous year and many perceive they are now overvalued. As a result of these large gains, the S&P 500 index's top 10 names now represent over 36% of the total index. This has led to a situation where the other approximate 490 names make up 64% of the fund. There is some room for debate as to whether the S&P 500 is truly a diversified measure of the broader markets as a result of these weightings. Markets continue to be cautious that tariffs, trade wars, and domestic and international policies may derail what has been exuberant support for the equities market over the last couple of years. In spite of the continued unrest with the Russia/Ukraine conflict and the newer Middle East incursion, earnings are still mostly focused on domestic issues moving forward

As we head into wrapping up FY 2025-2026, we are cognizant of the challenges that lie ahead both in the domestic markets and around the world. Investment staff seeks to weather these current dynamic market conditions and to best position the portfolio to meet the 6.0% actuarial assumption, while simultaneously slightly de-risking the portfolio. We believe a more balanced allocation to equities and fixed income gives us the best opportunity to achieve the actuarial objectives while still having more narrow opportunities for outperformance. High levels of

uncertainty will likely persist and may be the most important influence on markets for the foreseeable future.

The proposed adjusted asset allocation reduces the allocation to both the Large Cap Fund and the Equity Income Fund by 3.75% each. We are removing the stated allocation to the International Fund at 0%. We view the International Fund as the most aggressive asset class and as such believe it is not a necessary component in the portfolios at this time.

In terms of goals for the next fiscal year, the investment staff intends to continue to take steps to reduce the volatility of the SCERS equity portfolios. We believe that capital preservation is just as crucial as capital appreciation in a plan with such a highly funded status. We intend to efficiently manage the individual stock holdings, while maintaining a focus on the cash generation aspect of the portfolios to support needed Operating Account funds. These goals will be supported by modifying the existing allocation to the Equity Components set forth below. Investment staff believes that this recommended asset mix, subject to the 5% variance allowed under the Investment Policy, provides the best opportunity to generate returns near, and potentially in excess of, the actuarial assumption.

Large Cap Growth:	26.25% (Reduced by 3.75%)
Equity Income :	26.25% (Reduced by 3.75%)
Total Equity Component:	52.50% (Reduced by 7.5%)

FY 2026-2027 ASSET ALLOCATION

(\$ In Millions)

	Market Value on 3/31/2026	Current Allocation	FY 25-26 Approved Allocation	FY 26-27 Recommended Allocation	Recommended Dollar Allocation	Dollar Change
Fixed Bonds	\$106.67	42.28%	40.00%	47.50%	\$119.85	\$13.18
Equity						
Large Cap Growth	\$71.67	28.41%	30.00%	26.25%	\$66.23	(\$5.44)
Equity Income	73.97	29.32%	30.00%	26.25%	66.23	(7.74)
Total Equity	\$145.64	57.72%	60.00%	52.50%	\$132.46	(\$13.18)
Investment Total	\$252.31	100.00%	100.00%	100.00%	\$252.31	\$0.00
Operating Fund	2.80				2.80	0.00
Grand Total	\$255.11				\$255.11	

*The SCERS' Investment Policy allows variances in Board-approved allocations of up to Five Percent (5%).

RESOLUTION NO. 2026-004

Adopted by the Administration, Investment and Fiscal Management Board of the Sacramento City Employees' Retirement System on May 21, 2026

RESOLUTION APPROVING THE ASSET ALLOCATION POLICY FOR THE SACRAMENTO CITY EMPLOYEES' RETIREMENT SYSTEM

BACKGROUND

- A. Pursuant to the Sacramento City Employees' Retirement System's Investment Policy, the Board is presented with a proposed Asset Allocation Policy to be applied to the System's assets for the following fiscal year. The Asset Allocation Policy sets forth the asset mix for the System's funds that is a key component to determining the portfolio's overall risk and return characteristics.
- B. The proposed Asset Allocation Policy is consistent with the City Charter's and Investment Policy's mandates to manage the System's assets in a prudent manner.

BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE ADMINISTRATION, INVESTMENT, AND FISCAL MANAGEMENT BOARD RESOLVES AS FOLLOWS

- 1. The asset allocation of the SCERS' investment portfolio for the fiscal year 2026-2027 and until revised by further action by the Board shall be as follows.

<u>Fixed Income Component:</u>	Fixed Income/Real Estate	47.50%
<u>Equity:</u>	Large Cap Growth	26.25%
	Equity Income	26.25%
	International	<u>0.00%</u>
	Total Equity:	<u>52.50%</u>
Total Fixed & Equity		100.00%

- 2. The City Treasurer's Office is directed to affect the necessary liquidations and transfers to implement the foregoing allocations by no later than June 30, 2026.

 Dave O'Toole, Chair

ATTEST:

 Secretary to the Board

Exhibit A



Sacramento City Employees' Retirement System

Asset Allocation Review

February 2026 / Jeffrey Nipp, Senior Consultant

Overview

Considerations on asset allocation

While we believe capital market assumptions are an important foundation to properly constructing a long-term investment portfolio, great care should be taken not to fully rely on the expected risk and return output, or the mean-variance optimization. By doing so, you would over allocate to investments that are less liquid in nature and less frequently priced. When designing your investment program, a variety of factors should also be included such as risk and drawdown tolerance, cash flow needs, liability and liquidity risk, among others.

Assumptions should be used as a guide

The creation of capital market assumptions is a multi-facet process that focuses on establishing forward-looking inputs for the purpose of making informed asset allocation decisions. These assumptions are not intended to predict the future but rather put into perspective potential outcomes and set realistic expectations. Given the inputs are forward looking and incorporate various time periods, actual outcomes may differ materially.

Diversification a key tenet

Diversification is the backbone of modern portfolio theory which suggests the best way to construct an investment portfolio is through the use of multiple asset classes and investments. By allocating capital across lesser correlated asset classes, volatility and risk can be reduced which can improve risk-adjusted return.

Current market conditions

Where possible, current macro-economic and asset class specific market conditions are incorporated into our assumptions. These market conditions are global in nature, and may include, but are not limited to, metrics such as current interest rates, inflation, growth forecasts, valuations.

Allowance for active management

- Assumptions are based on expected market returns for a specified index and do not incorporate additional return from active management. Given some asset classes can not be invested in passively such as hedge funds and private equity, these are an exception.
- All numbers represent Segal Marco Advisors' forward looking asset class assumptions, and as such, reflect estimates as of a certain date. These assumptions are not a guarantee of future performance, do reflect high levels of uncertainty, and are subject to change without notice.

Guiding Themes for 2026 Assumptions

Themes

Comments

Fed rate cuts late in 2025 reduced the yield curve at the short end, while the longer end of the curve remained relatively flat. Similarly, the European Central Bank (ECB) cut rates, though more aggressively early in 2025.

- Shorter-term U.S. rates lower and longer-term yields were relatively flat at the end of 2025, causing the U.S. yield curve to steepen.
- Cash and risk-free rate down 30 basis points for 2026 while incorporating a term premium, or higher compensation for longer dated notes, into our projection.
- Inflation remained “sticky” through much of 2025 keeping pressure on the Fed, until easing later in the year. The breakeven inflation level implied by yields on Nominal Treasuries vs. TIPS decreased marginally. Tariffs, fiscal policy and wage growth remain headwinds for lower U.S. inflation. Eurozone inflation forecast targeted at +/-2%, the data driven ECB may keep rates steady.

Global economic growth in 2026 is projected to be resilient, with the International Monetary Fund (IMF) forecasting a 3.3% expansion, driven by resilient consumers, AI investment and strong services sectors. Emerging markets (above 4%) may outpace advanced economies (approx. 1.8%). Global risks include geopolitical tensions and trade policy changes.

- The breakeven U.S. inflation level for 10-year and 20-year treasuries decreased marginally to 2.26% and 2.44% respectively by mid-December 2025.
- Labor markets and job growth are projected to stabilize in 2026 after a sluggish 2025. Job growth projections must continue to balance the push-and-pull of greater human capital demand with increased efficiency through technological advances in an already tight labor market.
- U.S. capital expenditures (capex) will be driven by massive commitments to AI focused sectors (chips, data centers, hardware). Technology, finance, services, infrastructure and transportation should widen the capex scope and benefit.

A global policy divergence has begun to materialize between the U.S. and other developed and developing economies. We are witnessing the effects of deglobalization in areas including, but not limited to, foreign policy, trade, defense and social/humanitarian efforts.

- Significant shift toward protectionist trade, a reversal on climate commitments, and a reduction in international development aid.
- Key developments include new tariffs, change in green energy incentives, and a shift away from multilateralism, creating a more fragmented, transactional global order.
- Segal Marco risk premiums generally increased for 2026, although in most asset classes, not enough to compensate for the reduction in the risk-free rate.
- Net result, diversified portfolio return calculations for 2026 are approximately +/- 10 basis points lower than in 2025. Calculated portfolio risk is marginally lower as well, though most asset class volatilities are well above historical averages.

Valuations across publicly traded equities are historically high by most measures.

- A notable valuation adjustment (-0.40%) is applied to U.S. Equity returns.
- Above mentioned drivers of volatility are a corollary to the valuation adjustment.
- Selective pockets of opportunity continue to exist as private markets either continue to adapt from prior drawdowns (private equity, real estate) or sustain growth with opportunities (infrastructure, private credit)

Capital Market Assumptions:

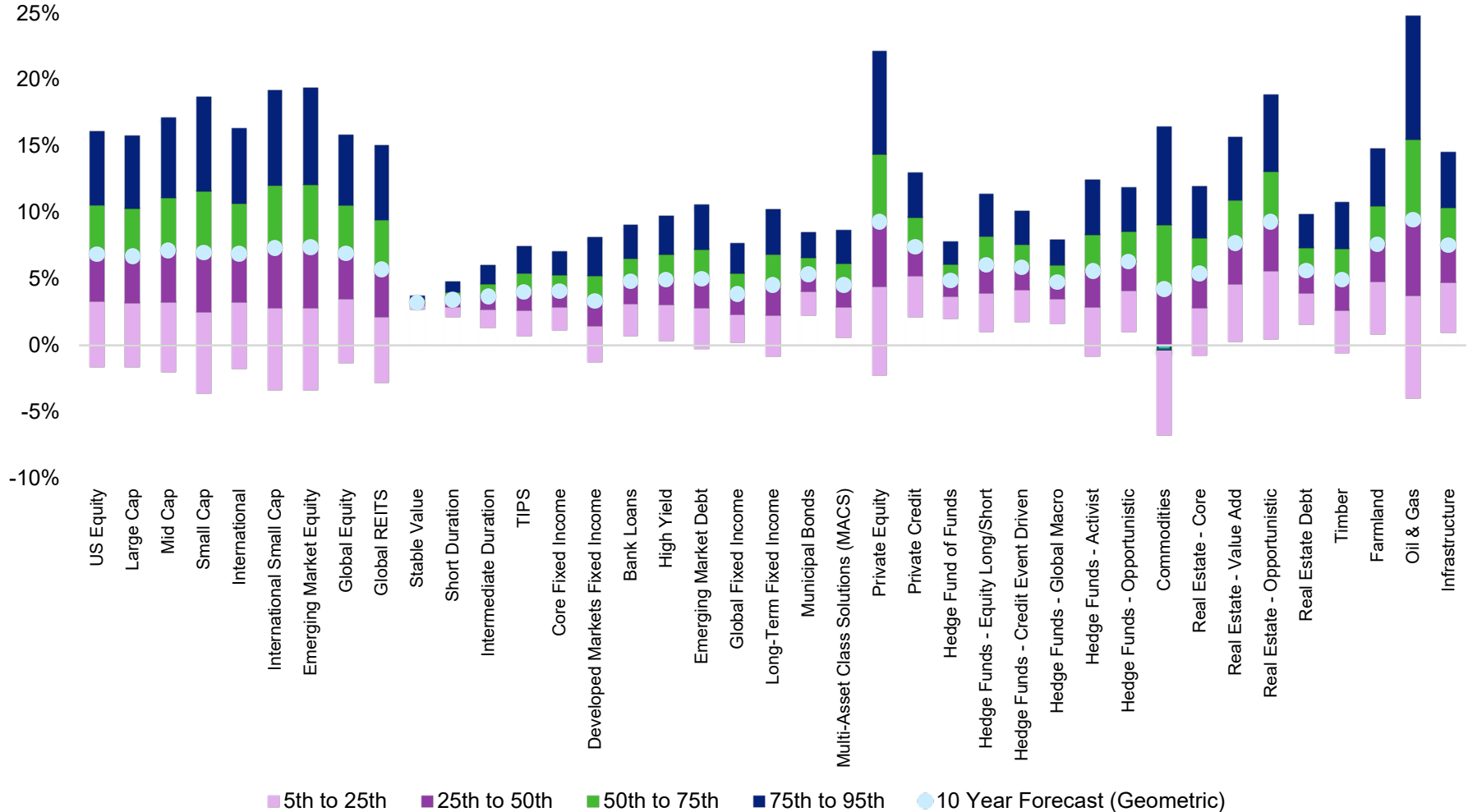
Asset Class	10 Year Arithmetic Return	10 Year Geometric Return	20 Year Arithmetic Return	20 Year Geometric Return	Standard Deviation
Equity					
Large Cap	8.0%	6.7%	8.1%	6.8%	17.0%
Fixed Income					
Core Fixed Income	4.2%	4.1%	4.3%	4.1%	5.7%
Alternatives					

Correlation Matrix

Correlations		Large Cap	Core Fixed Income
Large Cap	1		
Core Fixed Income	0.39	1	

Distribution of Asset Class Returns

Incorporating asset class risk (standard deviation of returns) provides a distribution of potential return outcomes around the expected return of the asset class.



Asset and Product Mixes

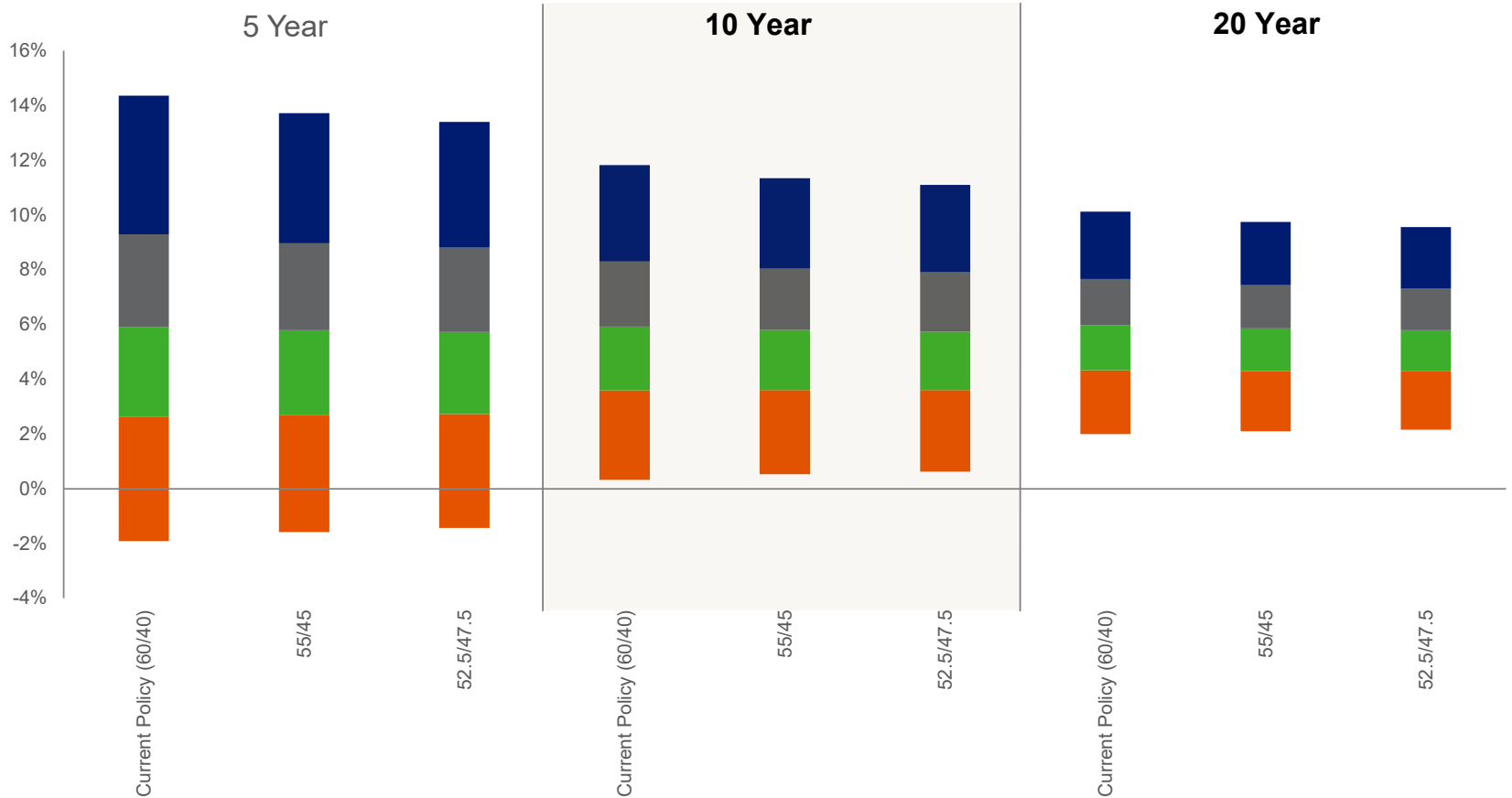
	Current Policy (60/40)	55/45	52.5/47.5
Large Cap	60.0%	55.0%	52.5%
Total Equity	60.0%	55.0%	52.5%
Core Fixed Income	40.0%	45.0%	47.5%
Total Fixed Income	40.0%	45.0%	47.5%
Total Alternative	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%
10 Year Expected Return (Arithmetic)	6.5%	6.3%	6.2%
10 Year Expected Return (Geometric)	5.9%	5.8%	5.7%
Standard Deviation	11.1%	10.5%	10.1%
Sharpe Ratio	0.30	0.30	0.30
20 Year Expected Return (Arithmetic)	6.6%	6.4%	6.3%
20 Year Expected Return (Geometric)	6.0%	5.9%	5.8%
Portfolio Yield	2.5%	2.6%	2.7%

Asset Mixes

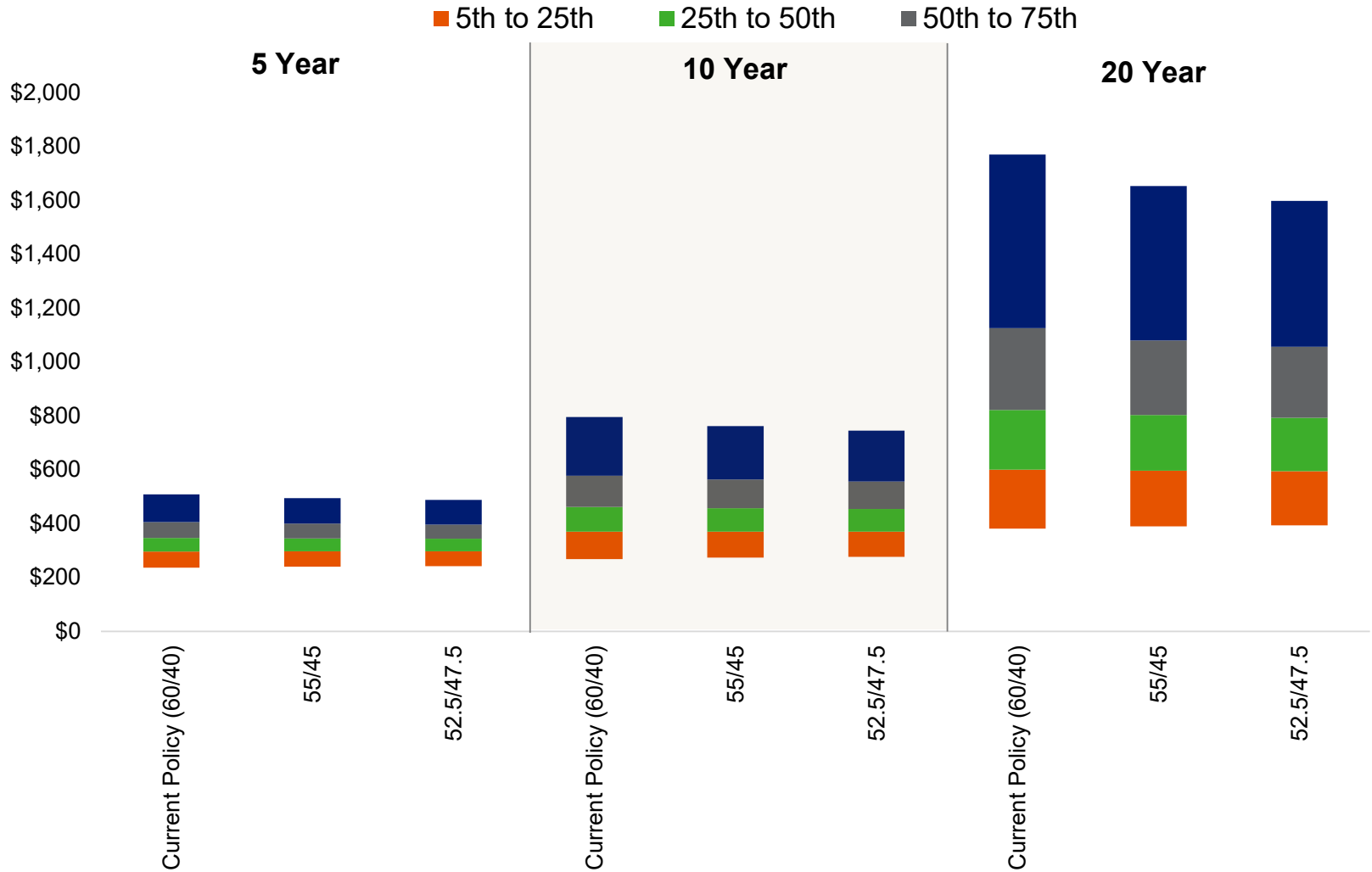
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Total	100.0%	100.0%	100.0%
10 Year Expected Return (Arithmetic)	6.5%	6.3%	6.2%
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Portfolio Yield	2.5%	2.6%	2.7%

Forecast-Return Percentiles

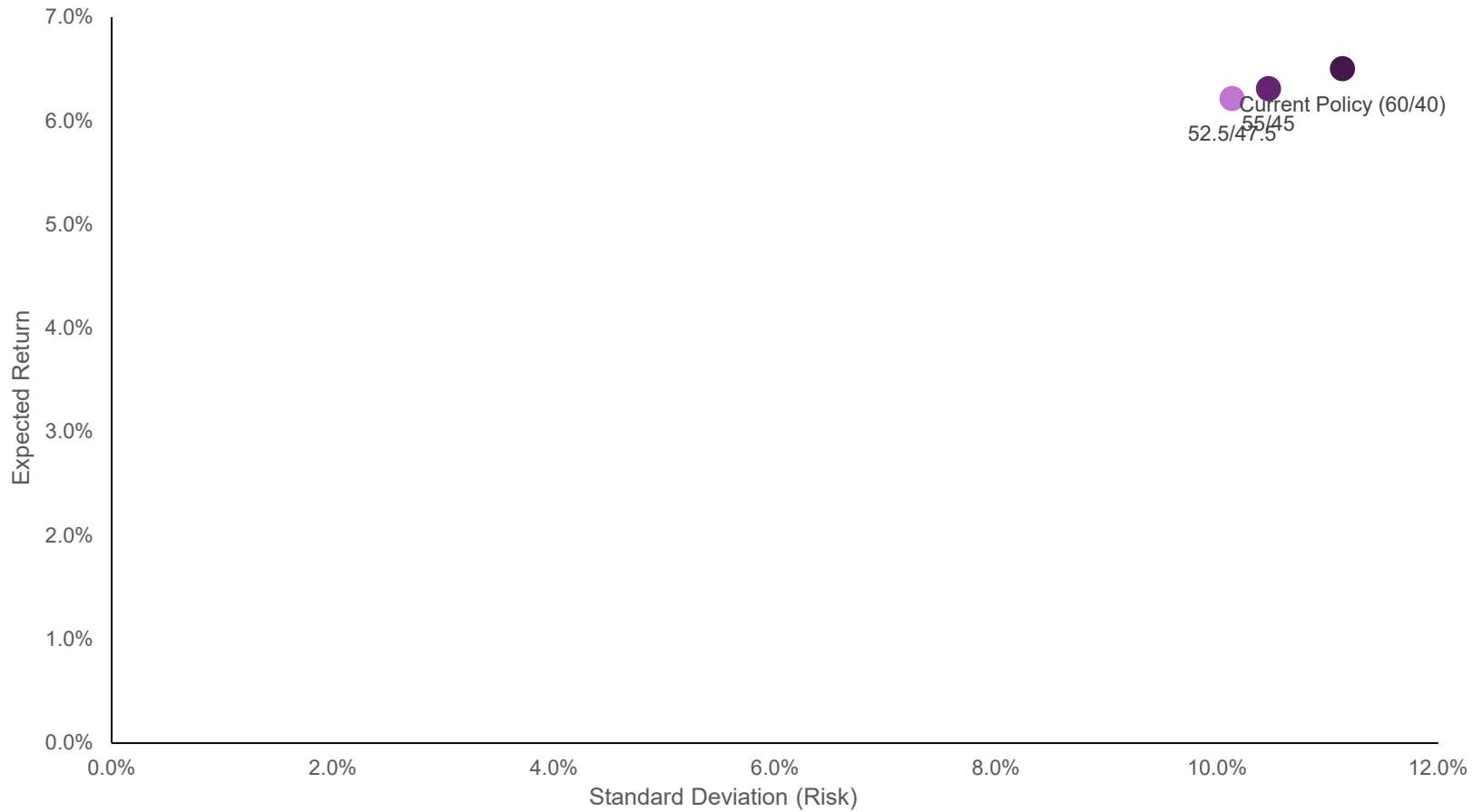
5th to 25th 25th to 50th 50th to 75th 75th to 95th



Forecast-Wealth Percentiles (in \$millions)



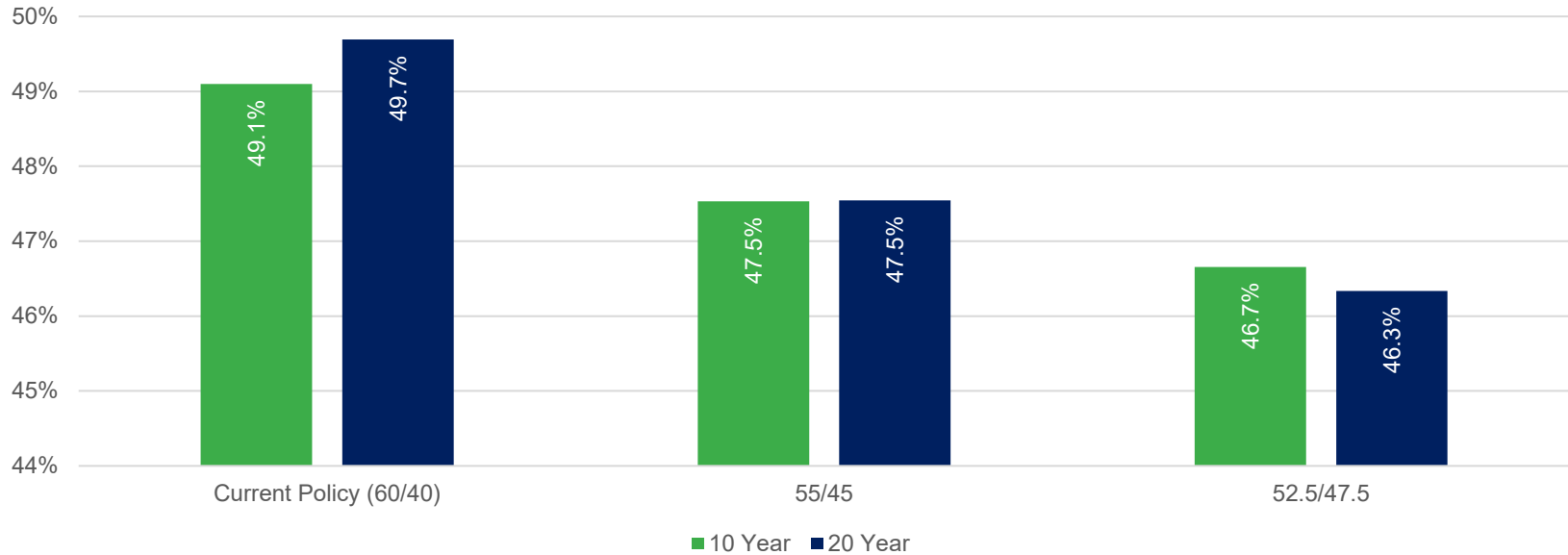
Risk Return Plot



Risk Allocation

	Current Policy (60/40)	55/45	52.5/47.5
Large Cap	88.3%	85.2%	83.5%
Total Equity	88.3%	85.2%	83.5%
Core Fixed Income	11.7%	14.8%	16.5%
Total Fixed Income	11.7%	14.8%	16.5%
Total Alternative	0.0%	0.0%	0.0%
Total Assets	100.0%	100.0%	100.0%
10 Year Expected Return (Arithmetic)	6.5%	6.3%	6.2%
10 Year Expected Return (Geometric)	5.9%	5.8%	5.7%
Standard Deviation	11.1%	10.5%	10.1%
Sharpe Ratio	0.30	0.30	0.30
20 Year Expected Return (Arithmetic)	6.6%	6.4%	6.3%
20 Year Expected Return (Geometric)	6.0%	5.9%	5.8%
Portfolio Yield	2.5%	2.6%	2.7%
10 Year Geometric VaR (1st Percentile)	-1.9%	-1.6%	-1.4%
10 Year Geometric VaR (5th Percentile)	0.3%	0.5%	0.6%

Probability of Achieving Specified Returns



	Current Policy (60/40)	55/45	52.5/47.5
10 Year			
10 Yr Prob Achieving at Least 6.25%	46.3%	44.5%	43.6%
10 Yr Prob Achieving at Least 6.00%	49.1%	47.5%	46.7%
10 Yr Prob Achieving at Least 5.75%	52.0%	50.6%	49.8%
<i>10 Yr Prob Achieving at Least 0%</i>	<i>95.9%</i>	<i>96.5%</i>	<i>96.8%</i>
20 Year			
20 Yr Prob Achieving at Least 6.25%	45.7%	43.3%	42.0%
20 Yr Prob Achieving at Least 6.00%	49.7%	47.5%	46.3%
20 Yr Prob Achieving at Least 5.75%	53.7%	51.8%	50.8%
<i>20 Yr Prob Achieving at Least 0%</i>	<i>99.4%</i>	<i>99.5%</i>	<i>99.6%</i>

Appendix

Methodology

A key tenet of strategic asset allocation is that diversification across major asset classes can enhance a portfolio's risk adjusted return. As part of the modeling process, we develop expectations for investment returns and risks for each asset class, and correlations between asset classes. These assumptions represent our best thinking for long-term expectations and establish a mid-point within a wider range of potential outcomes. To develop the components of our assumptions, we used a systematic process rooted in quantitative analysis decomposing drivers of risk and return. In addition to the quantitative analysis, qualitative feedback from market participants supplemented our analysis to help corroborate our assumptions and potential outcomes.

Expected Returns

We use a building-block approach to formulate expected returns based on the underlying principle that investors demand compensation for each component of risk in an asset class. Inflation / cash serve as two primary building blocks given that investors demand a level of return for an investment that at least equals inflation and provides a greater return than the risk-free rate (cash) in order for an investor to be willing to take incremental risk. Next, various types of risk premia are considered to establish an aggregate risk premium for each asset class, which is then added to the risk free rate. Examples of risk premia including duration, credit risk, equity risk, illiquidity risk, among others.

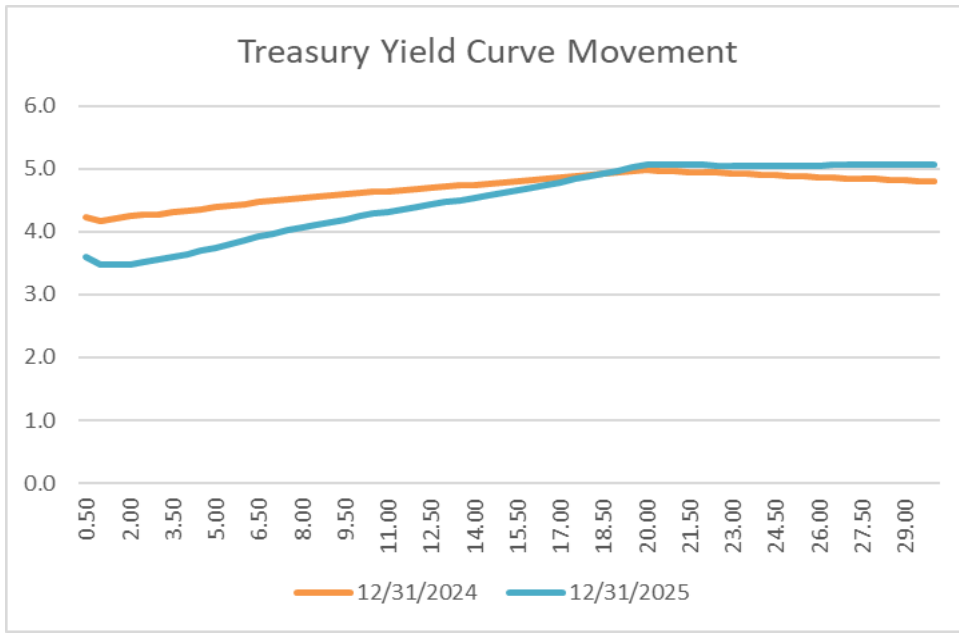
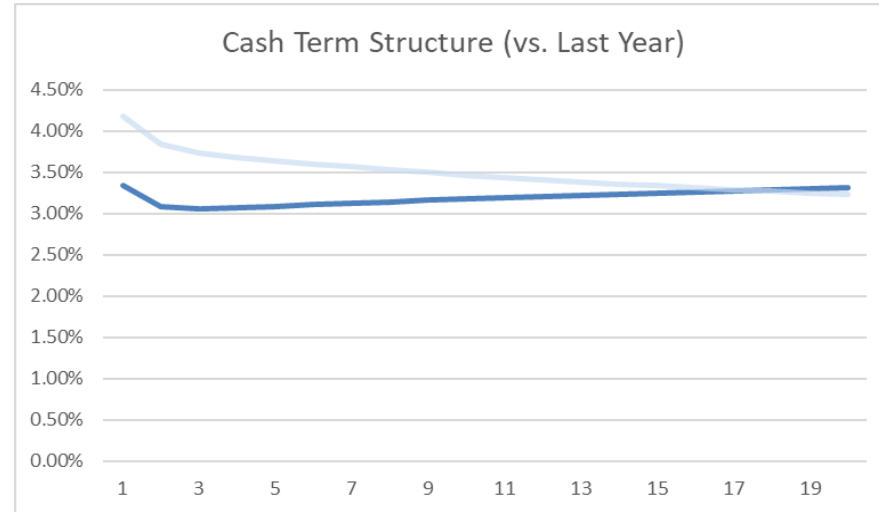
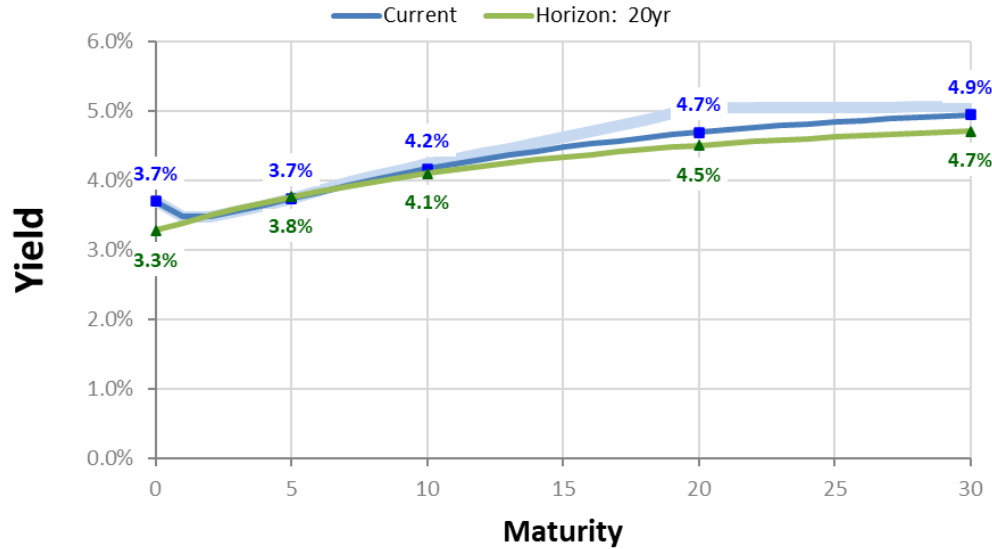
Expected Risk (Standard Deviation)

The standard deviation is a statistical measurement that estimates the volatility or variability of returns for an asset class. The greater the standard deviation, the higher (and lower) actual returns are expected to be above (and below) the projected return assumption. Where possible, our calculations of standard deviation are informed by current market prices, or market implied volatility. Additionally, volatility of historical returns is considered where relevant, primarily derived using historical returns for the underlying asset class or sub-asset class index proxies. We then make qualitative adjustments to incorporate the current macro environment to the extent we believe it is relevant.

Correlations

- Correlation is a statistical measurement of how two asset classes move in relation to each other. By including asset classes that are less correlated, the portfolio becomes more diversified and has lower projected risk. Correlation is measured using correlation coefficients that range in value between -1 and +1. A value of +1 denotes a perfect positive correlation meaning for every 1% the asset moved, a perfect positively correlated asset moved exactly 1% in the same direction. A value of -1% denotes a perfect negative correlation meaning for every 1% the asset moved, the perfect negatively correlated asset moved exactly 1% in the opposite direction.
- Our calculations of correlations are primarily derived using historical returns for the underlying asset class or sub-asset class index proxies. Correlations are calculated utilizing monthly observations, where available, and focusing on 10 year periods to maintain consistency with the 10 year risk and return outlooks.

Treasury Yield Curve Projection – Cash Assumption



Strategic Asset Class Expected Returns

Cash Component

Asset class expected returns are generally comprised of two components:

- Expected return on cash over the horizon
- The additional expected premium to be earned for accepting the volatility of not investing in cash

Given the current shape of the Treasury yield curve and our view regarding the likely future shape, expected cash returns will have a decreasing term-structure in our models (that is, an expected return that is lower for longer investment horizons)

Consequently, all asset classes will likewise have a decreasing term-structure associated with cash component of the expected return (consistent with a view that short-term Treasury yields will peak in the next 18 months before retreating to a much lower equilibrium level)

Time-varying expected cash returns:

Investment Horizon	Expected Annual Cash Return	Change vs 2025 CMA
5 Years	3.1%	-70 bps
10 Years	3.1%	-60 bps
15 Years	3.2%	-40 bps
20 Years	3.2%	-30 bps

Capital Market Assumptions: 10 Year

Asset Class	Index Proxy	Arithmetic Return	Geometric Return	Standard Deviation
Fixed Income				
Cash	90 Day U.S. Treasury Bill	3.1%	3.1%	2.0%
Stable Value	Hueler Stable Value	3.2%	3.2%	1.0%
Short Duration	Bloomberg Barclays 1-5 Year Govt/Credit	3.5%	3.5%	2.5%
Intermediate Duration	Bloomberg Barclays Intermediate Govt/Credit	3.8%	3.7%	4.5%
TIPS	Bloomberg Barclays TIPS Index	4.2%	4.0%	6.5%
Core Fixed Income	Bloomberg Barclays U.S. Aggregate Index	4.2%	4.1%	5.7%
Developed Markets Fixed Income	Citigroup Non-U.S. World Gov't Bond (Unhedged)	3.7%	3.3%	9.0%
Bank Loans	Credit Suisse Leveraged Loan	5.1%	4.8%	8.0%
High Yield	Citigroup High Yield Market	5.3%	5.0%	9.0%
Emerging Market Debt (50% LC)	50% JPM EMBI / 50% JPM GBI	6.5%	5.0%	10.5%
Global Fixed Income (Unhedged)	Bloomberg Barclays Global Aggregate (Unhedged)	4.1%	3.9%	7.2%
Long-Term Fixed Income	Bloomberg Barclays U.S. Long Govt/Credit	5.1%	4.5%	10.7%
Municipal Bonds	Bloomberg Barclays Municipal Bond	5.5%	5.4%	6.0%
Equity				
US Equity	Russell 3000	8.2%	6.9%	17.3%
Large Cap	S&P 500	8.0%	6.7%	17.0%
Mid Cap	Russell Mid Cap	8.7%	7.1%	18.8%
Small Cap	Russell 2000	9.1%	7.0%	22.0%
Developed Equity (Unhedged)	MSCI EAFE (Unhedged)	8.3%	6.9%	17.7%
International Small Cap	MSCI EAFE Small Cap	9.5%	7.3%	22.3%
Emerging Markets Equity	S&P / Intl Finance Corp Investable Composite	9.6%	7.4%	22.5%
Global Equity (Unhedged)	MSCI World (Unhedged)	8.2%	7.0%	16.8%
Global REITS	FTSE EPRA Nareit Global	7.1%	5.7%	17.5%
Alternatives				
Multi-Asset Class Solutions (MACS)	MACS Custom Index	4.8%	4.5%	7.8%
Private Equity	Venture Economics – All Private Equity	11.8%	9.3%	24.2%
Private Credit	S&P / LSTA Middle Market Index	7.9%	7.4%	10.5%
Hedge Fund of Funds	HFRI Fund of Funds Composite	5.0%	4.9%	5.6%
Hedge Funds – Equity Long/Short	HFRI Equity Hedge (Total) Index	6.5%	6.1%	10.0%
Hedge Funds – Credit Event Driven	50% HFRI Event Driven / 50% HFRI Relative Value	6.2%	5.9%	8.0%
Hedge Funds – Global Macro	HFRI Macro	4.9%	4.8%	6.0%
Hedge Funds – Activist	HFRI Activist	6.4%	5.6%	12.9%
Hedge Funds – Opportunistic	HFRI Fund of Funds Composite	6.8%	6.3%	10.5%
Real Assets				
Commodities	Bloomberg Commodity Index	6.6%	4.2%	23.0%
Real Estate – Core	NCREIF Property Index	6.1%	5.4%	12.3%
Real Estate – Value Add	Courtland Partners Index – Value	8.7%	7.7%	15.0%
Real Estate – Opportunistic	Courtland Partners - Opportunistic	10.7%	9.3%	18.0%
Real Estate Debt	Bloomberg Barclays CMBS IG	5.9%	5.6%	8.0%
Timber	NCREIF Timberland	5.5%	5.0%	11.0%
Farmland	NCREIF Farmland	8.4%	7.6%	13.5%
Oil & Gas	S&P Oil & Gas Exploration & Production Select Industry	13.0%	9.5%	29.0%
Infrastructure	FTSE Global Core Infrastructure 50/50 Index	8.3%	7.5%	13.2%

Capital Market Assumptions: 20 Year

Asset Class	Index Proxy	Arithmetic Return	Geometric Return	Standard Deviation
Fixed Income				
Cash	90 Day U.S. Treasury Bill	3.2%	3.2%	2.0%
Stable Value	Hueler Stable Value	3.3%	3.5%	1.0%
Short Duration	Bloomberg Barclays 1-5 Year Govt/Credit	3.5%	3.7%	2.5%
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Relative Risk and Return

