

Executive Team:

Dominic D. Brown, CPA, CFE
Chief Executive Officer

Daryn Miller, CFA
Chief Investment Officer

Jennifer Zahry, JD
Chief Legal Officer

Matthew Henry, CFE
Chief Operations Officer



Board of Retirement:

David Couch, Chair
Dustin Contreras, Vice-Chair
Phil Franey
Ajaib Gill
Joseph D. Hughes
Jordan Kaufman
Rick Kratt
Rocio Mosqueda
John Sanders
Tyler Whitezell
Chase Nunneley, Alternate
Robb Seibly, Alternate

November 25, 2025

Trustees, Board of Retirement
Other Interested Parties

Subject: Meeting of the Kern County Employees' Retirement Association Investment Committee

Ladies and Gentlemen:

A meeting of the Kern County Employees' Retirement Association Investment Committee will be held on Wednesday, December 3, 2025, at 8:30 a.m. in the KCERA Boardroom, 11125 River Run Boulevard, Bakersfield, California, 93311.

How to Participate: Listen to or View the Board Meeting

To listen to the live audio of the Board meeting, please dial one of the following numbers and enter ID# 873 0595 7220:

- (669) 900-9128; U.S. Toll-free: (888) 788-0099 or (877) 853-5247

To access live audio and video of the Board meeting, please use the following:

- <https://us02web.zoom.us/j/87305957220?pwd=t5kbeJbFA5Uo1JweVz1dokwXeCuf9O.1>
- Passcode: 635502

Items of business will be limited to the matters shown on the attached agenda. If you have any questions or require additional service, please contact KCERA at (661) 381-7700 or send an email to Administration@kcera.org.

Sincerely,

A handwritten signature in blue ink that reads 'Dominic D. Brown'.

Dominic D. Brown
Chief Executive Officer

Attachments

AGENDA:

All agenda item supporting documentation is available for public review on KCERA's website at www.kcera.org following the posting of the agenda. Any supporting documentation that relates to an agenda item for an open session of any regular meeting that is distributed after the agenda is posted and prior to the meeting will also be available for review at the same location.

**AMERICANS WITH DISABILITIES ACT
(Government Code §54953.2)**

Disabled individuals who need special assistance to listen to and/or participate in the meeting of the Board of Retirement may request assistance by calling (661) 381-7700 or sending an email to Administration@kcera.org. Every effort will be made to reasonably accommodate individuals with disabilities by making meeting materials and access available in alternative formats. Requests for assistance should be made at least two (2) days in advance of a meeting whenever possible.

CALL TO ORDER

ROLL CALL (IN PERSON)

AB 2449 REMOTE APPEARANCE(S)

Items 1 and/or 2 withdrawn from agenda if no trustee(s) request to appear remotely:

1. JUST CAUSE CIRCUMSTANCE(S):
 - a) The following Trustee(s) have notified the Committee of a "Just Cause" to attend this meeting via teleconference. (See Government Code § 54953).
 - NONE
 - b) Call for Trustee(s) who wish to notify the Committee of a "Just Cause" to attend this meeting via teleconference. (See Government Code § 54953) – RECEIVE/HEAR REQUEST(S); NO COMMITTEE ACTION REQUIRED
2. EMERGENCY CIRCUMSTANCE(S):
 - a) The following Trustee(s) have requested the Committee approve their attendance of this meeting via teleconference due to an "Emergency Circumstance." (See Government Code § 54953).
 - NONE
 - b) Call for Trustee(s) requesting the Committee approve their attendance of this meeting via teleconference due to an "Emergency Circumstance." (See Government Code § 54953) – TAKE ACTION ON REQUEST(S) FOR REMOTE APPEARANCE DUE TO EMERGENCY CIRCUMSTANCE

PUBLIC COMMENTS

3. The public is provided the opportunity to comment on agenda items at the time those agenda items are discussed by the Committee. This portion of the meeting is reserved for persons to address the Committee on any matter not on this agenda but under the jurisdiction of the Committee. Committee members may respond briefly to statements made or questions posed. They may ask a question for clarification and, through the Chair, make a referral to staff for factual information or request staff to report back to the Committee at a later meeting. Speakers are limited to two minutes. Please state your name for the record prior to making a presentation.

MATTERS FOR CONSIDERATION

Staff recommendations are shown in caps after each item.

4. [Presentation and update on the 2035 Initiative by Chief Investment Officer Daryn Miller and Investment Consultants Scott Whalen and Brian Kwan, Verus – HEAR PRESENTATION](#)
5. [Discussion and appropriate action on Midstream allocation presented by Chief Investment Officer Daryn Miller and Investment Consultants Scott Whalen and Brian Kwan, Verus – RECOMMEND BOARD OF RETIREMENT APPROVE: 1\) ELIMINATION OF MIDSTREAM ALLOCATION FROM STRATEGIC ASSET ALLOCATION, 2\) REALLOCATION OF TARGET WEIGHT TO OTHER ASSET CLASSES, AND 3\) UPDATE OF ALLOWABLE RANGES](#)
6. [Discussion and appropriate action on Core Fixed Income recommendation presented by Chief Investment Officer Daryn Miller, Senior Investment Officer Geoff Nolan, Investment Officer Rafael Jimenez, and Investment Consultants Scott Whalen and Brian Kwan, Verus – APPROVE FIDELITY INSTITUTIONAL ASSET MANAGEMENT AS CORE FIXED INCOME INVESTMENT MANAGER; AUTHORIZE CHIEF EXECUTIVE OFFICER TO SIGN, SUBJECT TO LEGAL ADVICE AND REVIEW](#)
7. [Discussion and appropriate action on Core Real Estate fund recommendation presented by Chief Investment Officer Daryn Miller, Investment Officer Jack Bowman, and Investment Consultants Scott Whalen and Brian Kwan, Verus – RECOMMEND BOARD OF RETIREMENT APPROVE \\$60MM COMMITMENT TO FORTRESS CRE ENHANCED INCOME FUND AND \\$30MM COMMITMENT TO FORTRESS CRE ENHANCED INCOME FUND CO-INVESTMENT FUND; AUTHORIZE CHIEF EXECUTIVE OFFICER TO SIGN, SUBJECT TO LEGAL ADVICE AND REVIEW](#)

REFERRALS TO STAFF, ANNOUNCEMENTS, OR REPORTS

8. On their own initiative, Committee members may make a brief announcement, refer matters to staff, subject to KCERA's rules and procedures, or make a brief report on their own activities.
9. Adjournment





**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



DECEMBER 2025

Project 2035

Kern County Employees' Retirement Association

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VERUSINVESTMENTS.COM

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Introduction

Executive summary

- The primary objective of *Project 2035* is to understand the emerging risks resulting from the plan's increasingly negative net cashflow position that is expected to occur as the plan approaches full funding
- As part of the analysis, a Monte Carlo model was used that dynamically models:
 - **Plan cashflows:** Benefit payments, contributions, administrative expenses, SRBR transfers
 - **Pacing cashflows:** Illiquid distributions and capital calls
 - **Returns** at an individual asset class level
- Risks analyzed and key takeaways:
 - **Variability of contribution cliff timing** -> The net cashflow position is expected to materially fall starting in fiscal 2037 but could occur with 10% probability as early as fiscal 2033. As full funding is approached, this will be known with greater certainty
 - **Risk of 1) insufficient liquidity and 2) actual illiquid position deviating from target** -> Assuming pacing studies adequately reflect the plan's changing cashflow position over time, the current 18% allocation to private markets does not present concerns under a more negative cashflow stream
 - **Return sequencing risk** -> As KCERA's cashflow position grows increasingly negative, the fund becomes more susceptible to drawdown risk. This risk deserves portfolio consideration.
- Potential solutions worth exploring to manage return sequencing risk:
 - Liability hedging (short or long duration cashflow-matching)
 - Portfolio volatility reduction
 - Tail-risk hedging

KCERA's current state

ASSETS AND LIABILITIES (\$B) ¹



- Plan's funding levels are expected to have improved during fiscal 2025, driven by the actual return of 10.9% exceeding the actuarial target and continued funding efforts
- The restart amortization base from 2011 is a source of significant contributions, and is set to be fully amortized in fiscal 2036 (with the final partial contribution coming in fiscal 2037)
- If plan reaches full funding on an actuarial basis before then, the amortization is eliminated, and contributions will fall materially
- Once full funding is reached, the plan's net outflows are expected to be 4% - 5% of assets annually

6/30/2024		Estimated 6/30/2025
69%	MVA Funded Ratio	73%
70%	AVA Funded Ratio	72%
7.00%	Assumed Return	7.00%

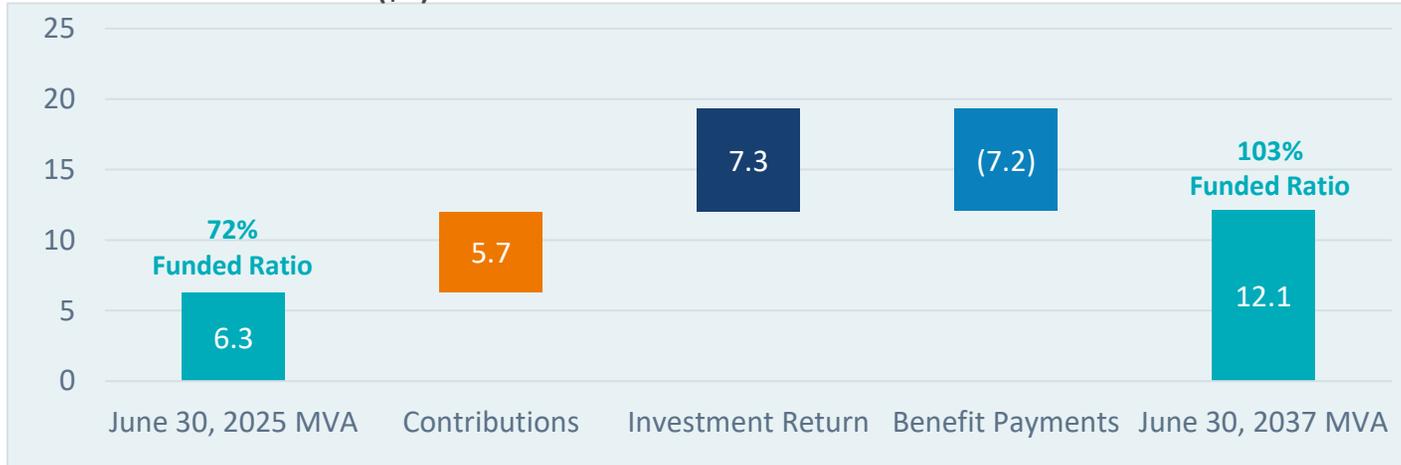
¹6/30/24 balance sheet based on 2024 valuation report. 6/30/25 balance sheet is estimated by Verus based on actual asset return for fiscal 2025. Fiscal 2025 experience was otherwise assumed to be consistent with actuarial assumptions documented in the June 30, 2024 valuation report. Liabilities and assets exclude SRBR.

Actuarial projections

Path to full funding

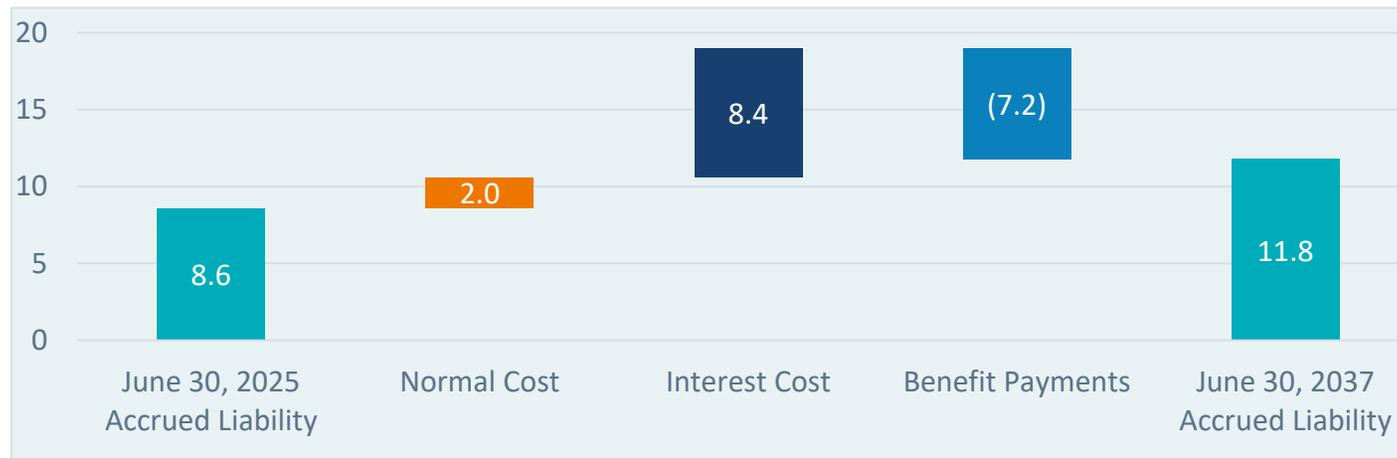
Baseline forecast

12 YEAR OUTLOOK: ASSETS (\$B)



Under the baseline return forecast of 6.8%, the plan is expected to reach full funding in 2037. This is driven by contributions that materially exceed the plan's benefit accruals.

12 YEAR OUTLOOK: ACTUARIAL LIABILITY (\$B)

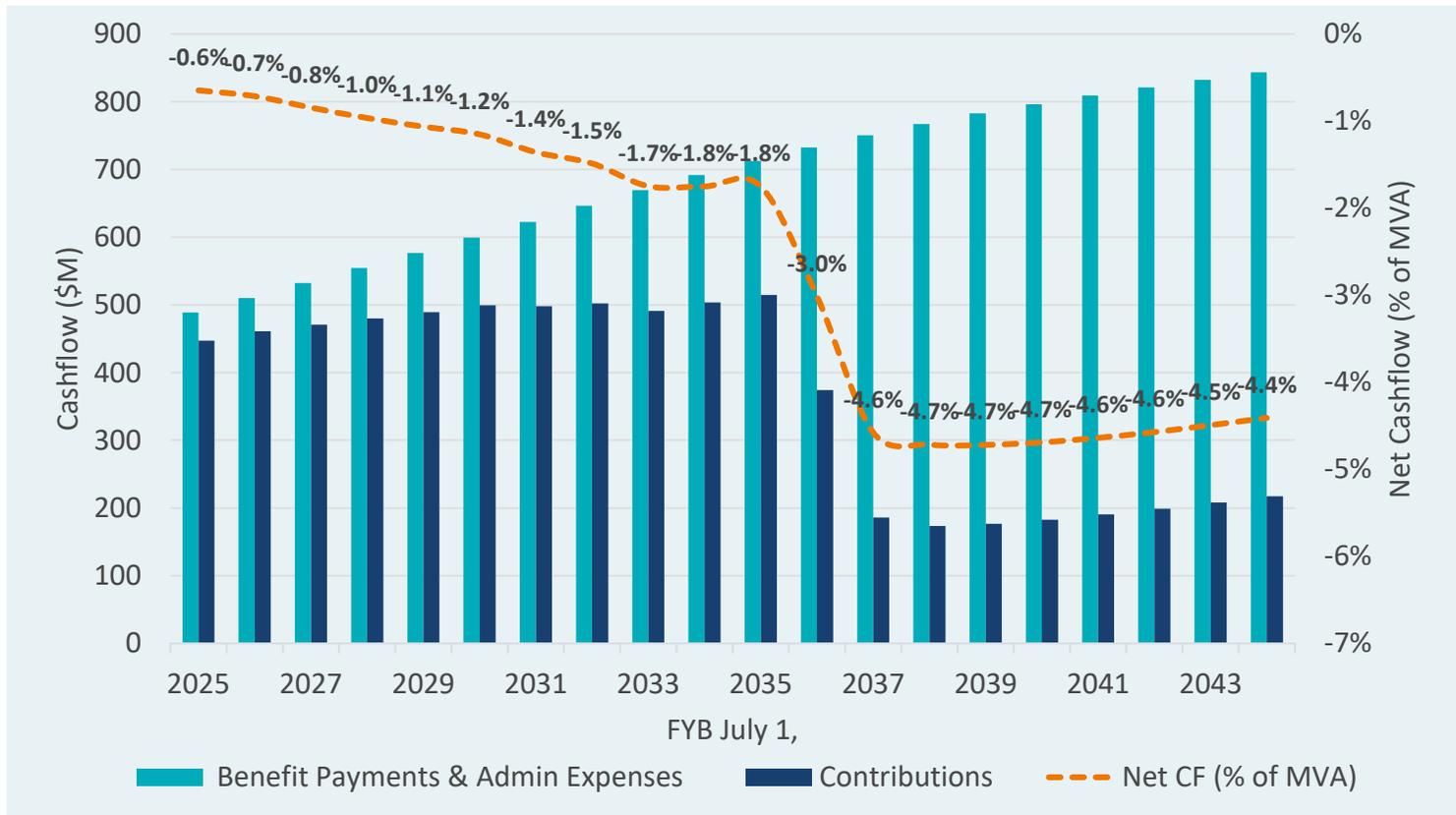


Reflects 6/30/25 estimated starting point and 6.8% annual return. Excludes SRBR. See appendix for additional details.

Annual cashflow projection

Baseline forecast

BASELINE CASH FLOW PROJECTION



The plan's cashflow position is expected to grow increasingly negative over time, with material drop offs in fiscal 2037 and 2038.

Reflects 6/30/25 estimated starting point and 6.8% annual return. See appendix for additional details.

Heat map

Funded status and net cashflow sensitives

Actuarial Funded Ratio	June 30,										
	2025	2027	2029	2031	2033	2035	2037	2039	2041	2043	
Annual Asset Return	2.0%	72%	75%	76%	75%	73%	73%	72%	69%	66%	65%
	3.0%	72%	75%	78%	77%	77%	78%	78%	75%	72%	70%
	4.0%	72%	76%	79%	80%	81%	83%	84%	81%	79%	77%
	5.0%	72%	76%	81%	83%	86%	88%	90%	88%	86%	85%
	6.0%	72%	77%	82%	86%	90%	94%	97%	96%	95%	94%
	7.0%	72%	77%	82%	88%	93%	99%	103%	103%	103%	103%
	8.0%	72%	77%	83%	89%	95%	102%	106%	107%	107%	108%
	9.0%	72%	77%	83%	91%	98%	105%	108%	110%	111%	113%
	10.0%	72%	77%	84%	92%	101%	107%	110%	113%	116%	120%
	11.0%	72%	77%	85%	94%	103%	110%	115%	120%	125%	131%

With upside performance, the plan's cashflow profile could drop off sooner than expected.

In downside scenarios where the plan does not reach full funding, the cashflow are still expected to fall materially in fiscal 2038.

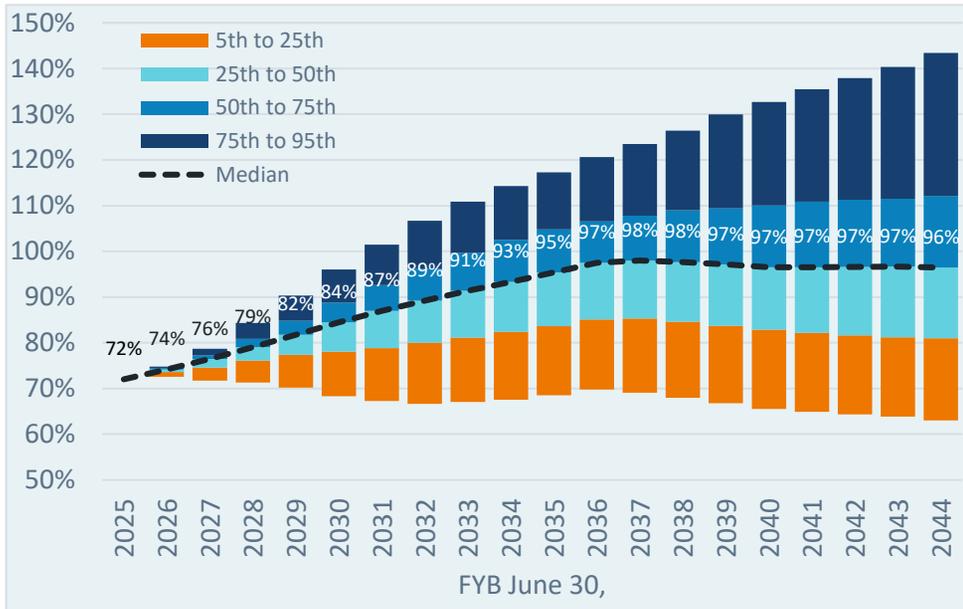
Net Cashflow (% of MVA)	FYB July 1,										
	2025	2027	2029	2031	2033	2035	2037	2039	2041	2043	
Annual Asset Return	2.0%	-0.6%	-0.9%	-0.9%	-0.6%	-0.3%	0.5%	-2.4%	-2.2%	-1.0%	-0.5%
	3.0%	-0.6%	-0.9%	-0.9%	-0.8%	-0.7%	-0.1%	-2.9%	-2.9%	-1.9%	-1.6%
	4.0%	-0.6%	-0.9%	-1.0%	-1.0%	-1.0%	-0.6%	-3.3%	-3.4%	-2.7%	-2.6%
	5.0%	-0.6%	-0.9%	-1.1%	-1.2%	-1.4%	-1.1%	-3.7%	-3.9%	-3.4%	-3.5%
	6.0%	-0.6%	-0.9%	-1.1%	-1.4%	-1.6%	-1.5%	-4.0%	-4.3%	-4.0%	-4.2%
	7.0%	-0.6%	-0.8%	-1.1%	-1.3%	-1.7%	-1.7%	-4.5%	-4.6%	-4.5%	-4.4%
	8.0%	-0.6%	-0.8%	-1.0%	-1.4%	-1.8%	-1.9%	-4.5%	-4.5%	-4.5%	-4.4%
	9.0%	-0.6%	-0.8%	-1.0%	-1.5%	-2.0%	-4.2%	-4.5%	-4.5%	-4.5%	-4.4%
	10.0%	-0.6%	-0.8%	-1.0%	-1.6%	-2.2%	-4.3%	-4.5%	-4.5%	-4.4%	-4.2%
	11.0%	-0.6%	-0.8%	-1.1%	-1.7%	-2.3%	-4.3%	-4.4%	-4.3%	-4.1%	-4.0%

Reflects 6/30/25 estimated starting point. Annual returns are as stated. Excludes SRBR. See appendix for additional details.

Stochastic modeling

Cashflow projection

STOCHASTIC FUNDED RATIO PROJECTION (AVA BASIS)



STOCHASTIC NET CASHFLOW PROJECTION (% OF MVA)



Net Cashflow (% of MVA)	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Percentile																				
95% Percentile	-0.6%	-0.6%	-0.6%	-0.5%	-0.3%	0.0%	0.3%	0.6%	0.7%	1.0%	1.3%	-0.3%	-1.7%	-1.7%	-1.7%	-1.3%	-0.9%	-1.0%	-0.8%	-0.4%
75% Percentile	-0.6%	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.8%	-0.7%	-0.9%	-0.8%	-0.6%	-2.0%	-3.1%	-3.3%	-3.3%	-3.1%	-2.9%	-2.9%	-2.8%	-2.7%
50% Percentile	-0.6%	-0.7%	-0.8%	-0.9%	-1.0%	-1.1%	-1.3%	-1.4%	-1.7%	-1.7%	-1.6%	-3.0%	-4.0%	-4.1%	-4.2%	-4.1%	-4.0%	-4.0%	-3.9%	-3.8%
25% Percentile	-0.6%	-0.8%	-0.9%	-1.0%	-1.2%	-1.4%	-1.8%	-2.0%	-2.4%	-3.0%	-4.1%	-4.5%	-4.7%	-4.8%	-4.8%	-4.7%	-4.7%	-4.6%	-4.5%	-4.5%
5% Percentile	-0.6%	-0.8%	-1.0%	-1.2%	-1.5%	-1.9%	-2.4%	-3.8%	-4.6%	-5.0%	-5.3%	-5.5%	-5.6%	-5.7%	-5.7%	-5.7%	-5.6%	-5.5%	-5.4%	-5.4%
Probability < -2.5%	0%	0%	0%	0%	0%	0%	4%	11%	22%	28%	34%	62%	87%	87%	88%	85%	81%	81%	80%	77%

Reflects 5,000 monte carlo simulations. Funded ratio excluded SRBR and net cashflow is inclusive of SRBR. See appendix for additional details.

Liquidity risk

Liquidity coverage ratio (LCR)

Will a plan need to sell illiquid assets to cover cash outflows?

$$\text{Liquidity Coverage Ratio (LCR)} = \frac{\begin{array}{l} \text{Starting Liquid Financial Assets} \\ \Sigma(\text{Distributions from Illiquid Assets}) \\ \Sigma(\text{Contributions}) \\ \Sigma(\text{Liquid Investment Return}) \end{array}}{\begin{array}{l} \Sigma \text{Benefit Payments} \\ \Sigma \text{Administrative Expenses} \\ \Sigma(\text{Capital Calls for Illiquid Assets}) \end{array}}$$

} Modeled stochastically

LCR Value	Implication
<1	Yes
>1	No

Liquidity assumptions

By asset class

Liquidity Grouping	Asset Class	Policy Allocation
Tier 1 Liquid Assets	Cash	-2.5
	US Treasury	3
	US Long Treasury	4
	Core Fixed Income	4
	Short-Term Gov't/Credit	4
	Total Tier 1	12.5
Other Liquid Assets	Global Equity	33
	Bank Loans	2.5
	Emerging Market Debt (Hard)	2.5
	Securitized Credit	5
	Commodities	4
	Midstream	5
	Hedge Fund	12.5
	Total Liquid	77
Semi-Liquid and Illiquid Assets	Private Equity	5
	Private Credit	8
	Private Real Assets	5
	Core Real Estate	5
	Total Illiquid	23

Deterministic LCR analysis

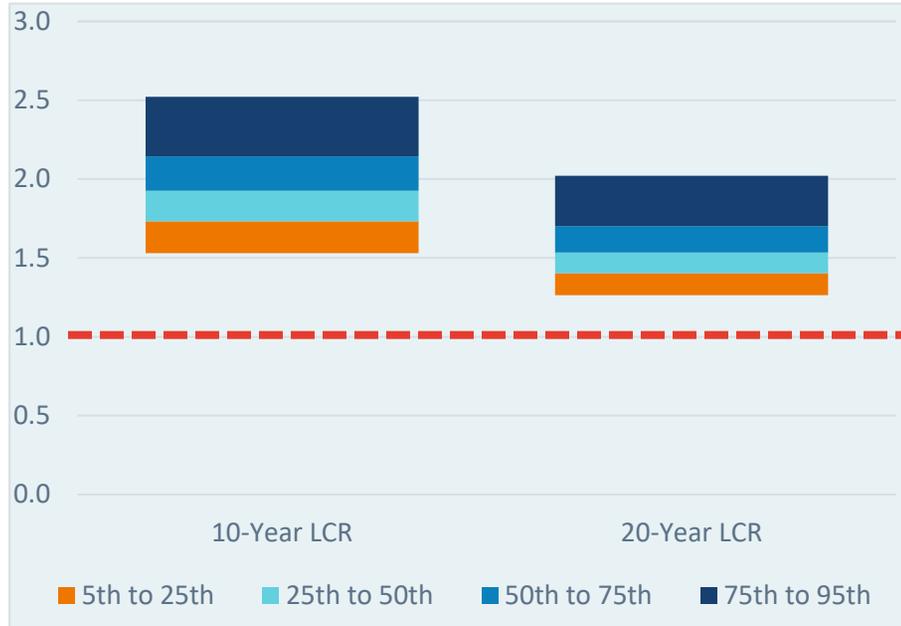
Year beg. June 30,	Market Value of Assets (BOY)			Benefit Payments & Admin Expenses		Net Cash Flow (w/o Private Markets)		Illiquid		Net Cash Flow (w/ Private Markets)		Liquidity Available	
	Liquid	Illiquid	Total	Contributions	Expenses	Net Cash Flow %	Net Cash Flow (\$)	Distributions	Capital Calls	Net Cash Flow %	Net Cash Flow (\$)		
2025	5.0	1.5	6.5	0.4	(0.5)	-0.6%	(0.0)	0.3	(0.3)	-0.6%	(0.0)	Liquid Assets	5.0
2026	5.2	1.7	6.9	0.5	(0.5)	-0.7%	(0.0)	0.3	(0.3)	-0.5%	(0.0)	Private Market Distributions	10.2
2027	5.5	1.8	7.3	0.5	(0.5)	-0.8%	(0.1)	0.3	(0.3)	-0.4%	(0.0)	Total Contributions	7.3
2028	5.8	1.9	7.7	0.5	(0.6)	-1.0%	(0.1)	0.4	(0.3)	-0.4%	(0.0)	Investment Income	9.7
2029	6.2	2.1	8.2	0.5	(0.6)	-1.1%	(0.1)	0.4	(0.3)	-0.3%	(0.0)	Total 20-Year Available Liquidity	32.1
2030	6.5	2.2	8.7	0.5	(0.6)	-1.1%	(0.1)	0.4	(0.3)	-0.2%	(0.0)	Liquidity Needed	
2031	6.9	2.3	9.2	0.5	(0.6)	-1.4%	(0.1)	0.4	(0.3)	-0.2%	(0.0)	Benefit Payments + Plan Expenses	13.7
2032	7.3	2.4	9.7	0.5	(0.6)	-1.5%	(0.1)	0.5	(0.3)	-0.2%	(0.0)	Private Market Capital Calls	7.5
2033	7.8	2.5	10.2	0.5	(0.7)	-1.7%	(0.2)	0.5	(0.4)	-0.4%	(0.0)	Total 20-Year Liquidity Needs	21.3
2034	8.2	2.6	10.7	0.5	(0.7)	-1.7%	(0.2)	0.5	(0.4)	-0.3%	(0.0)	20-Year LCR	1.5
2035	8.7	2.6	11.3	0.5	(0.7)	-1.8%	(0.2)	0.5	(0.4)	-0.2%	(0.0)		
2036	9.2	2.7	11.9	0.4	(0.7)	-3.0%	(0.4)	0.6	(0.4)	-1.5%	(0.2)		
2037	9.6	2.7	12.3	0.2	(0.8)	-4.6%	(0.6)	0.6	(0.4)	-3.1%	(0.4)		
2038	9.8	2.8	12.5	0.2	(0.8)	-4.7%	(0.6)	0.6	(0.4)	-3.3%	(0.4)		
2039	9.9	2.9	12.8	0.2	(0.8)	-4.7%	(0.6)	0.6	(0.4)	-3.3%	(0.4)		
2040	10.1	2.9	13.0	0.2	(0.8)	-4.7%	(0.6)	0.6	(0.4)	-3.3%	(0.4)		
2041	10.3	3.0	13.3	0.2	(0.8)	-4.6%	(0.6)	0.6	(0.4)	-3.2%	(0.4)		
2042	10.4	3.1	13.5	0.2	(0.8)	-4.6%	(0.6)	0.6	(0.5)	-3.1%	(0.4)		
2043	10.6	3.2	13.8	0.2	(0.8)	-4.5%	(0.6)	0.7	(0.5)	-3.0%	(0.4)		
2044	10.9	3.2	14.1	0.2	(0.8)	-4.4%	(0.6)	0.7	(0.5)	-2.9%	(0.4)		

Under baseline return assumptions, KCERA has 1.5 times the necessary liquidity over the next 20 years

See appendix for additional details. Reflects 9.4% and 6.0% annual returns for illiquid and liquid portfolios respectively, which reflects the forecasted return with Verus' 2025 CMAAs.

Stochastic LCR analysis

DISTRIBUTION OF STOCHASTIC LCR OUTCOMES



The stochastic analysis dynamically adjusts all cashflows, both at the plan level (benefit payments, contributions, admin expenses) and within the illiquid portfolio (capital calls and distributions) based on actual capital market experience.

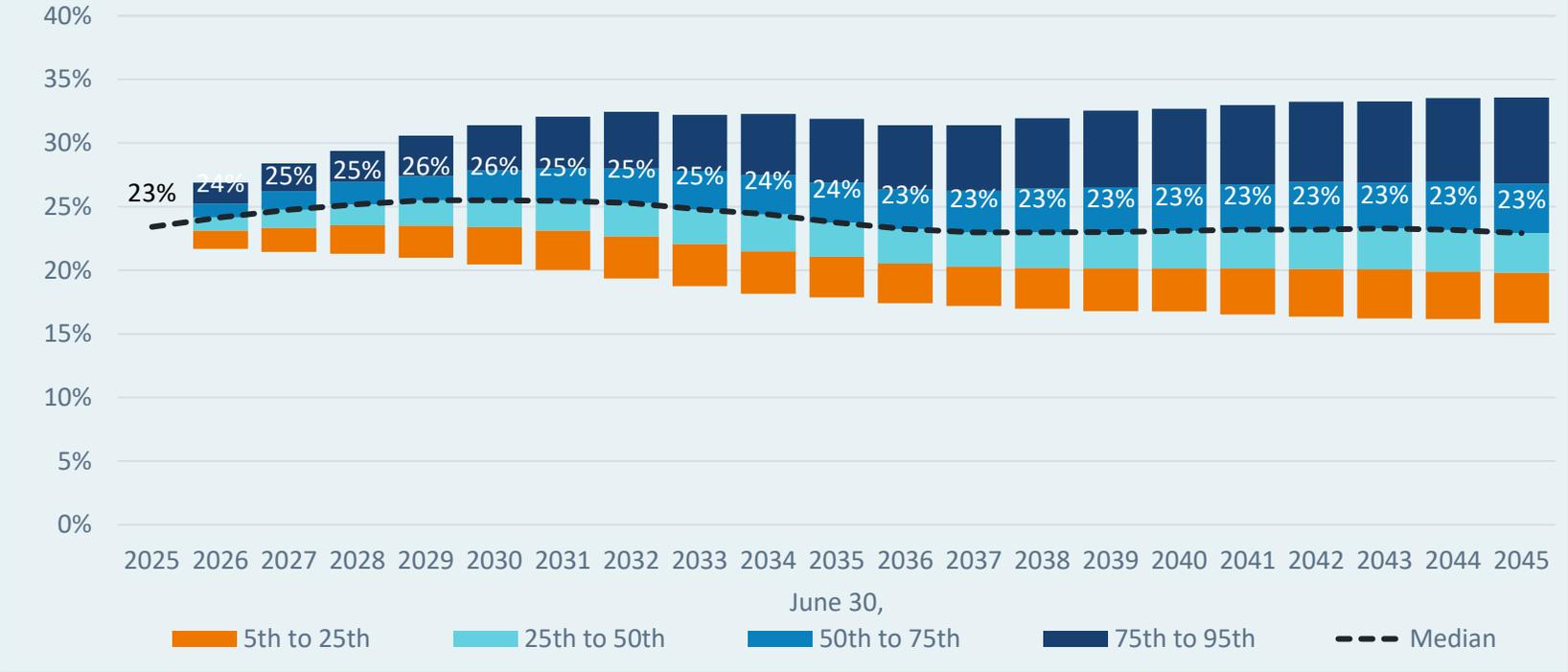
We do not expect the fund to have insufficient liquidity, including in extremely adverse environments.

	10-Year LCR	20-Year LCR
Percentile		
95% Percentile	2.5	2.0
75% Percentile	2.1	1.7
50% Percentile	1.9	1.5
25% Percentile	1.7	1.4
5% Percentile	1.5	1.3
Probability of Liquidity Event	<0.02%	<0.02%

Reflects 5,000 monte carlo simulations. See appendix for additional details.

Stochastic illiquid allocation analysis

ILLIQUID ALLOCATION DISTRIBUTION



In the worst case, we would expect illiquid allocations to grow to 38% of total assets

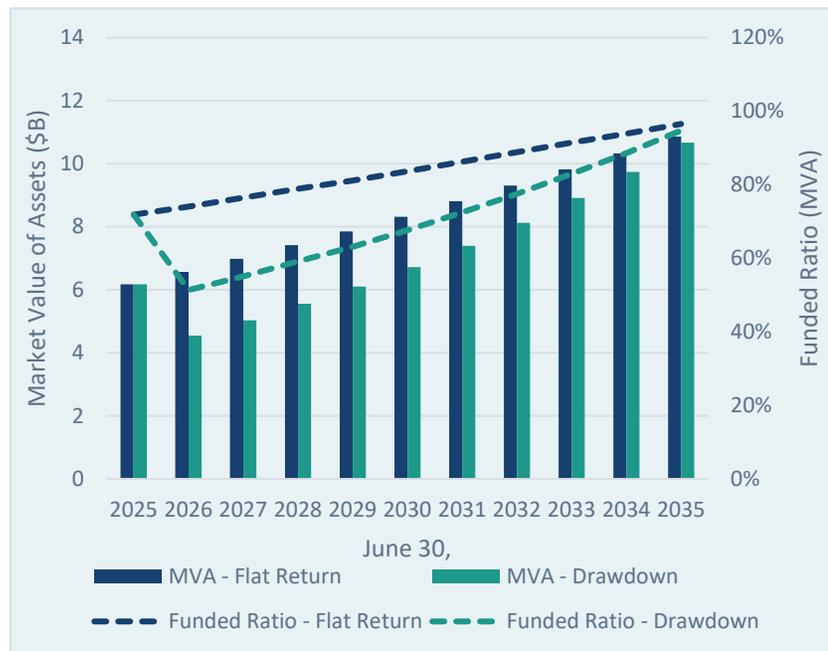
Illiquid Allocation Percentile	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
99% Percentile	23%	28%	30%	31%	33%	34%	35%	36%	36%	35%	36%	35%	35%	36%	36%	37%	38%	38%	38%	38%	38%
95% Percentile	23%	27%	28%	29%	31%	31%	32%	32%	32%	32%	32%	31%	31%	32%	33%	33%	33%	33%	33%	34%	34%
75% Percentile	23%	25%	26%	27%	27%	28%	28%	28%	28%	27%	27%	26%	26%	26%	27%	27%	27%	27%	27%	27%	27%
50% Percentile	23%	24%	25%	25%	26%	26%	25%	25%	25%	24%	24%	23%	23%	23%	23%	23%	23%	23%	23%	23%	23%
25% Percentile	23%	23%	23%	24%	24%	23%	23%	23%	22%	21%	21%	21%	20%	20%	20%	20%	20%	20%	20%	20%	20%
5% Percentile	23%	22%	21%	21%	21%	20%	20%	19%	19%	18%	18%	17%	17%	17%	17%	17%	17%	16%	16%	16%	16%

Reflects 5,000 monte carlo simulations. See appendix for additional details.

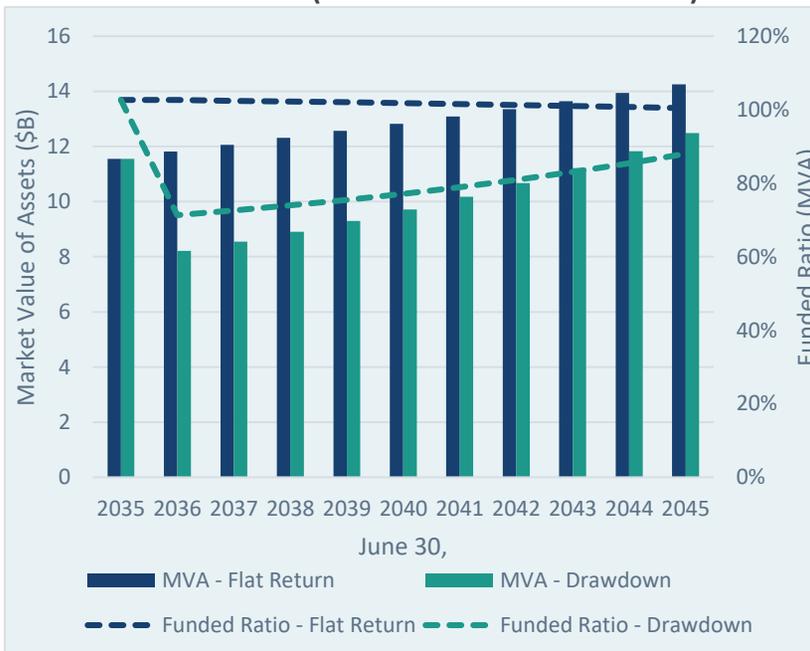
Return sequencing risk

Illustration of return sequencing risk

2025 STARTING POINT (SMALL NEGATIVE OUTFLOW)



2025 STARTING POINT (LARGE NEGATIVE OUTFLOW)



When the plan's cashflow position is neutral, there is no difference between time weighted and money-weighted performance.

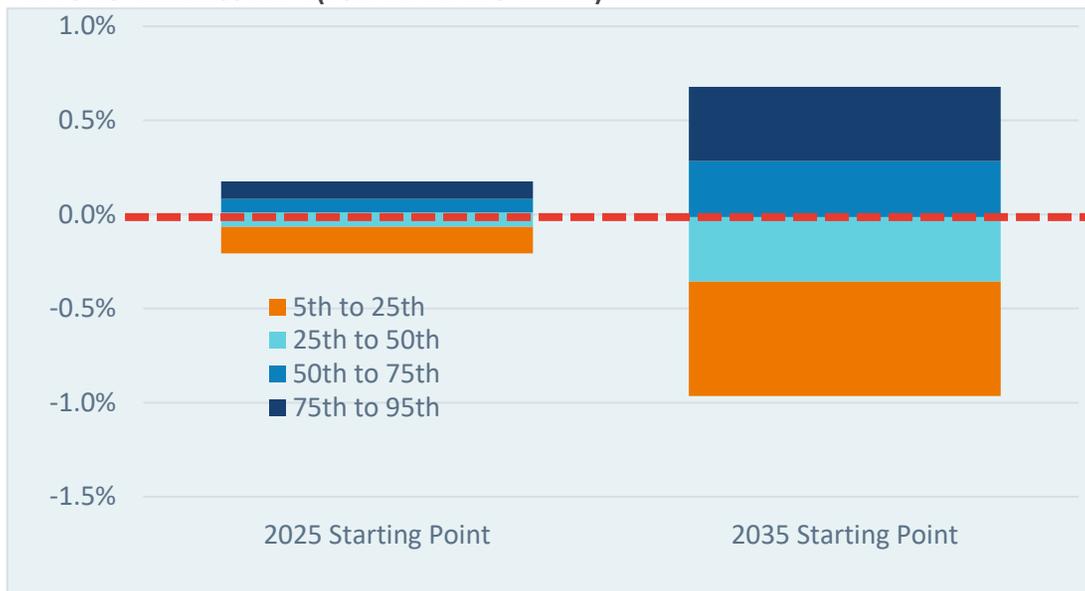
When the plan's cashflow position is negative, early drawdowns can materially hurt long-term performance.

	2025 Starting Point		2035 Starting Point	
	Flat Return	Drawdown	Flat Return	Drawdown
Return Impact				
Time-Weighted Return	6.80%	6.80%	6.80%	6.80%
Internal Rate of Return	6.80%	6.64%	6.80%	5.71%
Time-weighting effect	-	-0.16%	-	-1.09%
MVA (\$B)	10.9	10.7	14.3	12.5
Funded Ratio	97%	95%	100%	84%

Reflects estimated 6/30/25 starting point. Returns are 6.8% annually in flat return scenario, and -25% in year 1 and 11.1% in years 2-10. Cashflows are assumed fixed so that return-sequencing impact can be isolated. See appendix for additional details.

Stochastic return sequencing risk analysis

RANGE OF IRR LESS TWR (10-YEAR ANNUALIZED)



As the plan's cashflow profile becomes materially negative, the sequence of the portfolio's returns starts to have significant impact the plan's long-term performance and presents a source of additional risk.

	2025 Starting Point	2035 Starting Point
Percentile		
95% Percentile	0.2%	0.7%
75% Percentile	0.1%	0.3%
50% Percentile	0.0%	0.0%
25% Percentile	-0.1%	-0.4%
5% Percentile	-0.2%	-1.0%
5th Percentile TWR	1.32%	1.26%
5th Percentile MWR	1.24%	1.04%

Reflects 5,000 monte carlo simulations. Assumes cashflows are fixed so return-sequencing impact can be isolated. See appendix for additional details.

Potential solutions

Summary of solutions considered

Strategy	Risk Factor being addressed
Overall volatility reduction	Return-sequencing risk, illiquidity
Short-term cashflow matching	Return-sequencing risk, illiquidity
Long-term cashflow matching	Return-sequencing risk, illiquidity
Tail risk hedging	Return-sequencing risk, illiquidity
Less private markets	Illiquidity
More predictable private markets (shorter commitment and payout period)	Illiquidity

Liquidity risk: We expect the private markets program to be responsive enough to unexpected changes to be able to reasonably maintain its target allocation over time and without a probability of a liquidity event. Therefore, we do not believe changes are required to the private markets program because of the changing cashflow profile.

Return-sequencing risk: The larger risk stemming from the change in cashflow profile is return-sequencing risk. This risk can be mitigated through reduction in volatility and/or improving the plan's cashflow position.

Initial look at long-term cashflow matching

Liability hedging for public pension plans

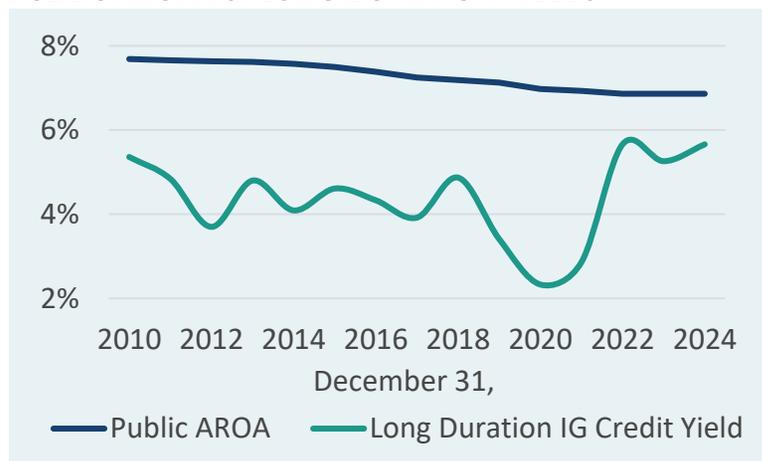
- Liability hedging strategies (LDI) can be an effective means to reduce risk for pension plans:
 - LDI hedges the economic risk between assets and liabilities through a fixed income portfolio that replicates the benefit payment stream owed to participants
 - Traditional public plan reporting assumes pension liabilities are not interest rate sensitive, making LDI implementations challenging. Therefore, we recommend adopting LDI strategies alongside mark-to-market valuation for the portion of the plan backed by LDI
 - The rise in yields in recent years allows LDI solutions to be more economically tenable for public plans

- Benefits of LDI
 - Superior risk/reward tradeoffs
 - Funded status/contribution stability
 - Reduced drawdown (i.e., return-sequencing) risk for negative cashflow plans
 - Limiting downside exposure for well funded plans
 - Risk factor alignment
 - Alternative use of surplus assets that benefits all system stakeholders

PUBLIC RETURN FORECAST VS. LONG DURATION YIELDS¹



PUBLIC AROA VS. LONG DURATION YIELDS²

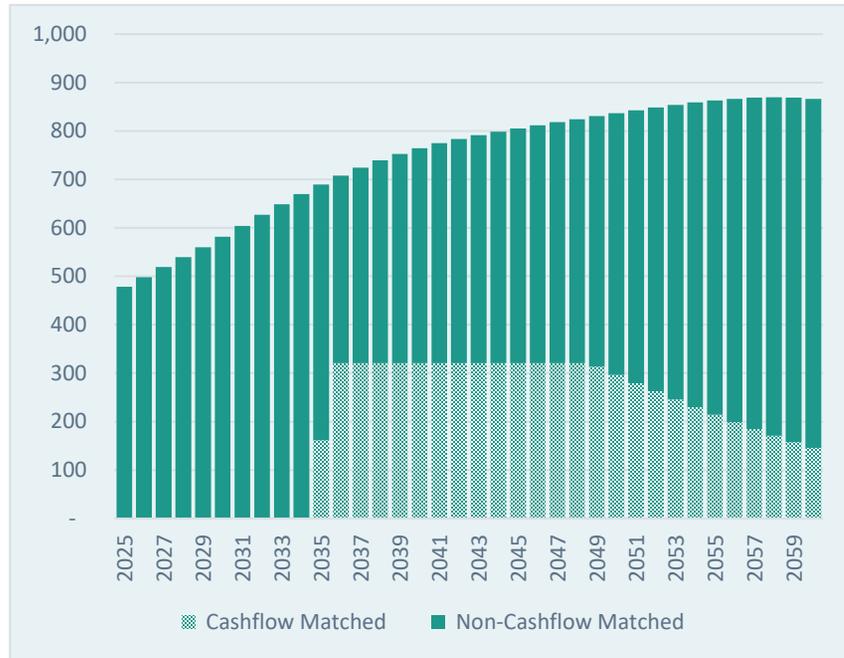


¹Analysis is based on Verus' 2021 CMAAs and 2025 CMAAs. The 2025 CMAAs are adjusted to reflect the capital market environment as of 12/31/2024. The return forecasts reflect a peer portfolio for public plans.

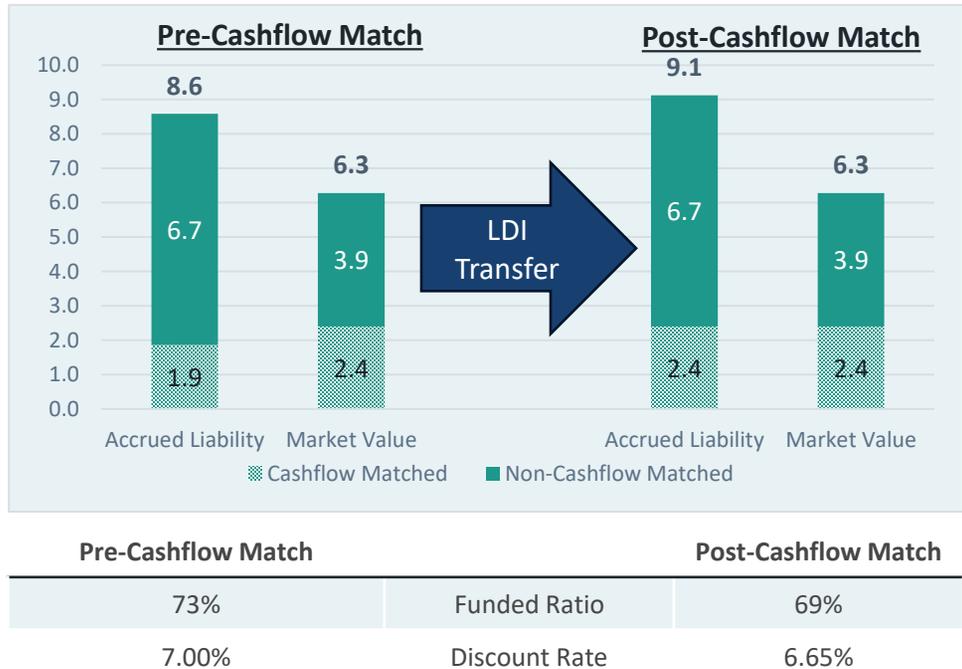
²Long duration IG yields are based on the Bank of America 10-15 Year US Corporate Index effective yield. Public discount rates are based on the publicplansdata.org database. The fiscal 2023 AROA is labeled as 12/31/22 in the chart. The final two years of AROAs are assumed to remain unchanged but were not part of the database.

Illustration of cashflow matching

CASHFLOW ILLUSTRATION



BALANCE SHEET ILLUSTRATION



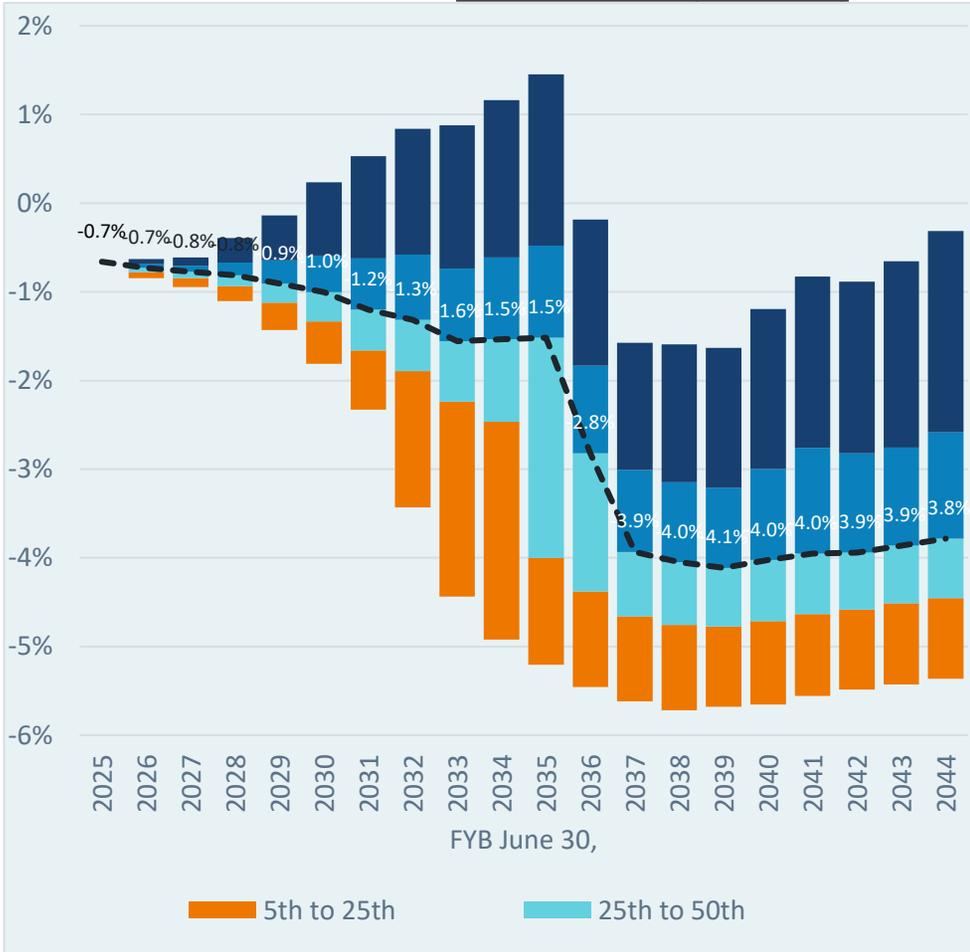
In our example, a cashflow matching portfolio costs \$2.4B and settles \$1.9B of liability. This assumes the portfolio yields 5.65% which reflects the actual investment grade yield for this cashflow stream at 6/30/25.

The plan loses 4% funded status initially but reduces its balance sheet exposure.

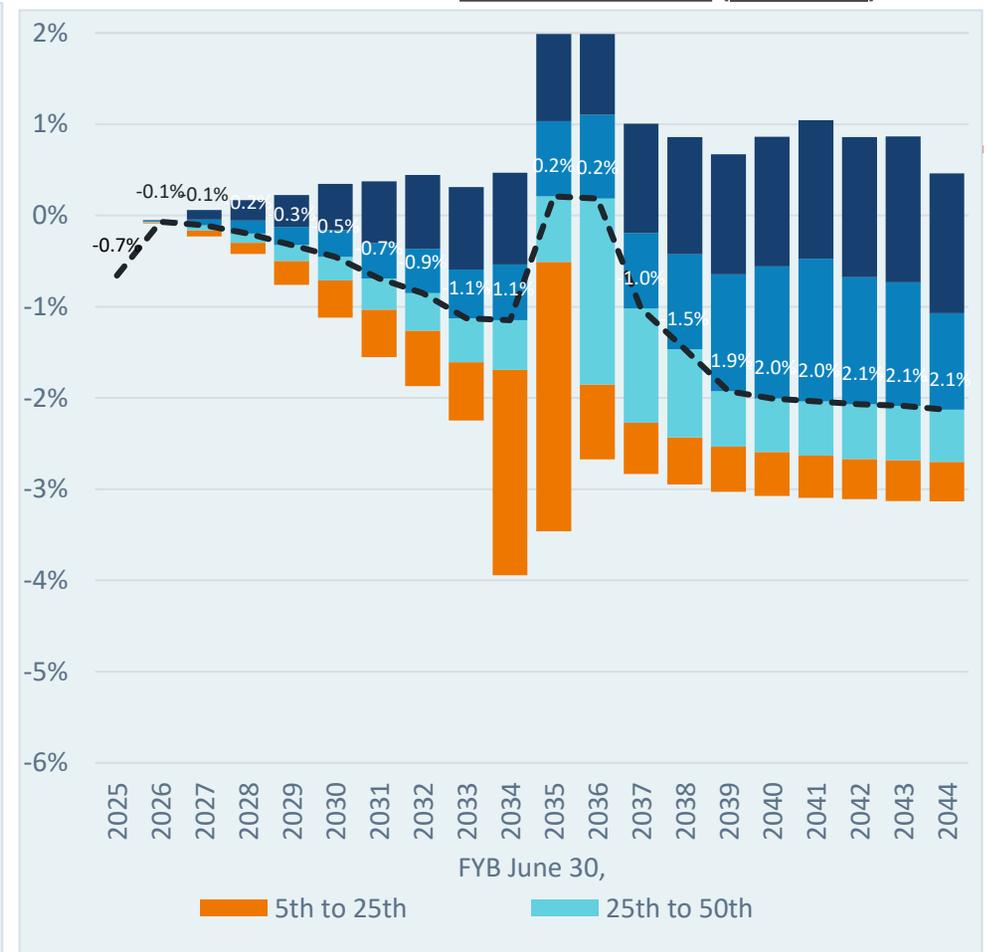
LDI impact on cashflow position

Stochastic analysis

NET CASHFLOW POSITON UNDER CURRENT POLICY (% OF MVA)



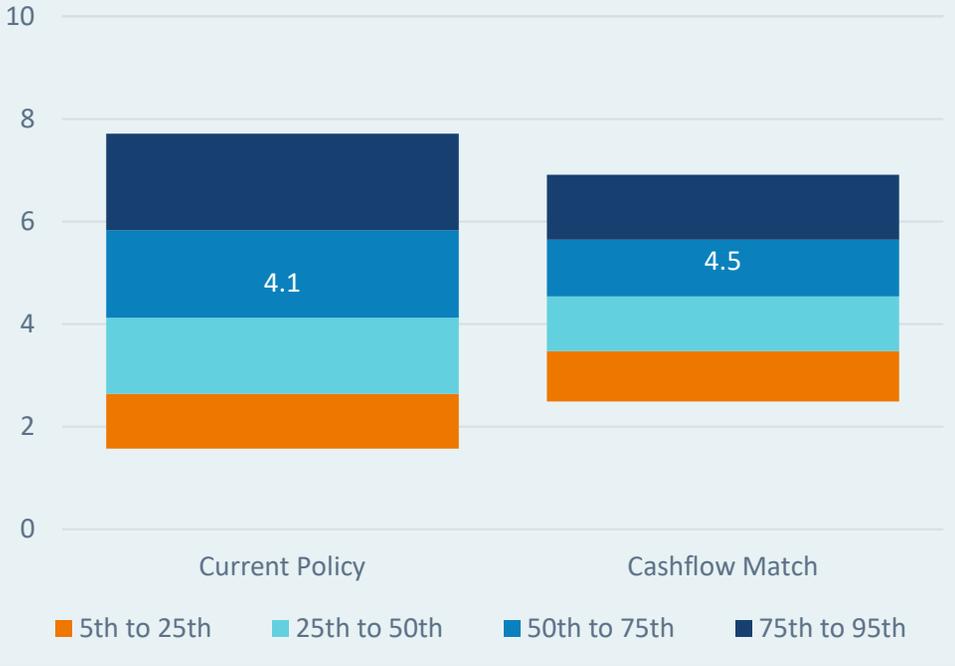
NET CASHFLOW POSITON UNDER CASHFLOW MATCH (% OF MVA)



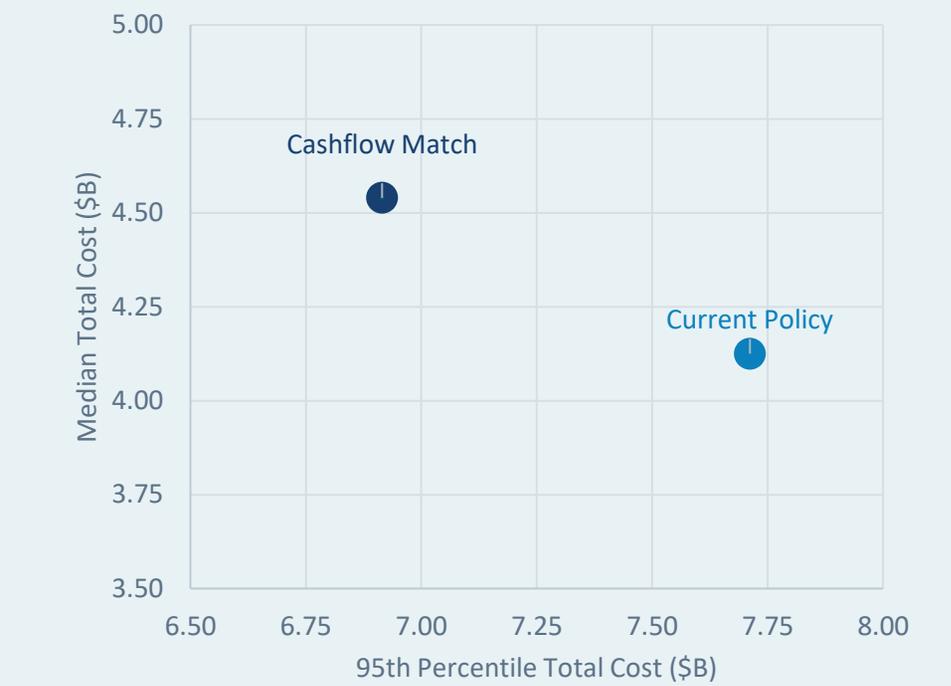
Reflects 5,000 monte carlo simulations. See appendix for additional details.

Stochastic total cost forecast

10-YEAR TOTAL COST DISTRIBUTION (\$B)



TOTAL COST RISK REWARD TRADE-OFF (\$B)



10-Year Total Cost (\$B)	Current Policy	Cashflow Match
Percentile		
95% Percentile	7.7	6.9
75% Percentile	5.8	5.6
50% Percentile	4.1	4.5
25% Percentile	2.6	3.5
5% Percentile	1.6	2.5

Metric estimates the Total Cost to achieve full funding by adding together the following:

- The amount contributed during the projection
- The amount needed to be contributed at the end of the projection to be 100% funded

Reflects 5,000 monte carlo simulations. See appendix for additional details.

LDI considerations

Question	Potential Alternatives	Considerations
Implementation timing	<ul style="list-style-type: none"> Implement in near-term with cashflows beginning in ~10 years Glidepath approach that allocates to LDI once certain funded status thresholds are met 	<ul style="list-style-type: none"> The plan's cashflow position will become increasingly negative as funded status improves. Therefore, a glidepath implementation may be sensible. However, implementing today can take advantage of a flat capital market line that makes fixed income attractive relative to equity
Impact on remaining portfolio	<ul style="list-style-type: none"> Maintain current policy allocation and hold less risk overall Increase risk in non-LDI allocation 	
LDI allocation size	<ul style="list-style-type: none"> What is the appropriate starting allocation? Will the portfolio be rebalanced to a target allocation periodically? Will future funded status improvement trigger additional allocations to LDI ? 	<ul style="list-style-type: none"> Increasing allocations to LDI increase expected costs but reduce costs in downside scenarios
Cashflow pattern	<ul style="list-style-type: none"> Net vs. gross cashflows Short vs. long duration 	
Credit quality	<ul style="list-style-type: none"> Treasury Public credit Private credit 	<ul style="list-style-type: none"> Investment grade private credit can boost returns without introducing liquidity risk because cashflows are matched

The next stage of the analysis will focus on designing what an optimal solution would look like for KCERA.

Next steps

Key considerations and next steps

— Key considerations

- KCERA has a long runway up to the anticipated 2035 “funding cliff” with time to thoroughly evaluate appropriate responses
- We will continue to monitor the situation and adjust our analysis as conditions evolve

— Next steps

- Continue to consider CFM solution with detailed modeling to clearly understand the impact of various design choices
- Identify and consider additional strategies beyond CFM

Appendix

Assumptions and methods

Unless otherwise stated, all assumptions and methods are consistent with KCERA's 2024 actuarial valuation report.

<p>Assets</p>	<p>Cashflows: Contributions are assumed to be made at the beginning of the fiscal year. Benefit payments and administrative expenses are assumed to occur at mid-year.</p> <p>Contributions are modeled according to the plan's funding policy. Benefit payments and administrative expenses were provided by Segal but are inflation sensitive in the model.</p> <p>Capital calls are set for each illiquid allocation so that it reaches its long-term target by the end of the payout period. Distributions are dependent on illiquid returns.</p> <p>SRBR benefit payments are assumed to be proportional to non-SRBR benefit payment profile.</p> <p>Stochastic assumptions: Modeled using Verus 2025 CMAs. See appendix for details. Returns in stochastic scenarios are modeled randomly starting June 30, 2025.</p> <p>Allocation: Liquid allocations are assumed to be re-balanced so that each liquid asset class makes up its target share of the liquid portfolio. The illiquid portfolio is not rebalanced.</p>
<p>Liabilities</p>	<p>Actuarial projection provider: Liability projections were provided by Segal</p> <p>Actuarial Cost Method: Entry Age Normal</p> <p>Valuation Date: June 30, 2024</p> <p>Discount Rate: 7.0%</p> <p>New entrants: New entrants assumed to keep payroll growth at 3% annually</p>
<p>Funding Methodology (ADC)</p>	<p>Future valuation gains and losses are amortized over an 18-year period, as a level percent of pay. If the plan unfunded accrued liability turns negative, all amortization bases are reset to 0 and the surplus is amortized over an open 30-year amortization.</p>
<p>Reserves</p>	<p>Contingency Reserve: Excess actuarial returns are first credited to contingency reserve subject to 3% maximum. Contingency reserve is drawn from to meet actuarial return deficiencies.</p> <p>SRBR: 50% of remaining excess actuarial performance after contingency reserve transfer is transferred to SRBR reserve.</p>
<p>Actuarial Value of Assets</p>	<p>Five-year smoothing, subject to 50% corridor</p>

Methodology

SUMMARY OF THE VERUS APPROACH

- We use a fundamental building block approach to forecast asset class returns, based on several inputs. These include practitioner best-in-class thinking, historical data, and academic research. Each year Verus conducts an in-depth review of our methodology, analyzing new industry research findings and evaluating alternative forecasting approaches to determine whether an improvement to our methodology might be warranted. We maintain flexibility and openness to adjusting our approach if strong evidence suggests change is appropriate.
- For most asset classes, we use the long-term historical volatility after adjusting for autocorrelation.
- Correlations between asset classes are calculated based on the last 10 years. For illiquid assets, such as private equity and private real estate, we use BarraOne correlation estimates.

Asset	Return Methodology	Volatility Methodology*
Inflation	25% weight to the University of Michigan Survey 5-10 year ahead inflation expectation and the Survey of Professional Forecasters (Fed Survey), and the remaining 50% to the market's expectation for inflation as observed through the 10-year TIPS breakeven rate	-
Cash	$1/3 * \text{current federal funds rate} + 1/3 * \text{U.S. 10-year Treasury yield} + 1/3 * \text{Federal Reserve long-term interest rate target}$	Long-term volatility
Bonds	Nominal bonds: current yield; Real bonds: real yield + inflation forecast	Long-term volatility
International Bonds	Current yield	Long-term volatility
Credit	Current option-adjusted spread + U.S. 10-year Treasury – effective default rate	Long-term volatility
International Credit	Current option-adjusted spread + foreign 10-year Treasury – effective default rate	Long-term volatility
Private Credit	Levered gross return (SOFR + spread + original issuance discounts) – management fees – carried interest	Estimated volatility
Equity	Current yield + real earnings growth (historical average) + inflation on earnings (inflation forecast) + expected P/E change	Long-term volatility
Intl Developed Equity	Current yield + real earnings growth (historical average) + inflation on earnings (intl. inflation forecast) + expected P/E change	Long-term volatility
Private Equity**	US large cap domestic equity forecast * 1.85 beta adjustment	Implied annualized volatility, using actual historical private equity performance distribution
Commodities	Collateral return (cash) + spot return (inflation forecast) + roll return (assumed to be zero)	Long-term volatility
Hedge Funds	Return coming from traditional market betas + historical idiosyncratic/alpha return	Long-term volatility
Core Real Estate	Cap rate + real income growth – capex + inflation forecast	65% of REIT volatility
REITs	Core real estate	Long-term volatility
Value-Add Real Estate	Core real estate + 2%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Opportunistic Real Estate	Core real estate + 3%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Infrastructure	Current yield + real income growth + inflation on earnings (inflation forecast)	Long-term volatility
Risk Parity	Modeled as the 10-year return expectations of a <i>representative selection of Risk Parity strategies</i>	Target volatility

*Long-term historical volatility data is adjusted for autocorrelation (see Appendix)

**Private Equity is modeled assuming an 8.0% floor for expected return, and a 3% return premium ceiling over U.S. Large Cap Equity. These adjustments are in place to recognize that higher interest rates (cost of leverage) act as a drag on expected Private Equity returns but that this drag has had limits historically, and to recognize that future Private Equity total universe performance is likely to be more anchored to public equity performance than in past times, given a more competitive market environment

10-year return & risk assumptions

Asset Class	Index Proxy	Ten Year Return		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Forecast						
		Geometric	Arithmetic					
Equities								
U.S. Large	S&P 500	5.3%	6.4%	15.5%	0.10	0.17	0.77	0.80
U.S. Small	Russell 2000	6.3%	8.4%	21.3%	0.12	0.22	0.35	0.44
International Developed	MSCI EAFE	6.7%	8.1%	17.5%	0.17	0.25	0.27	0.33
International Small	MSCI EAFE Small Cap	8.8%	10.8%	21.4%	0.23	0.33	0.27	0.35
Emerging Markets	MSCI EM	7.0%	9.6%	24.2%	0.13	0.24	0.14	0.22
Global Equity	MSCI ACWI	6.0%	7.3%	16.7%	0.13	0.21	0.52	0.57
Global Equity ex USA	MSCI ACWI ex USA	7.0%	8.7%	19.3%	0.17	0.25	0.24	0.31
Private Equity	CA Private Equity	8.0%	10.9%	26.0%	0.16	0.27	-	-
Private Equity Direct	CA Private Equity	9.0%	11.9%	26.0%	0.20	0.31	-	-
Private Equity (FoF)	CA Private Equity	7.0%	10.0%	26.0%	0.12	0.23	-	-
Fixed Income								
Cash	30 Day T-Bills	3.8%	3.8%	1.1%	-	-	-	-
U.S. TIPS	Bloomberg U.S. TIPS 5-10	4.0%	4.2%	5.5%	0.04	0.07	0.18	0.20
Non-U.S. Inflation Linked Bonds	Bbg World Govt. Inflation Linked ex U.S.	3.4%	3.7%	7.4%	-0.05	-0.01	-0.03	0.01
U.S. Treasury	Bloomberg Treasury 7-10 Year	3.8%	4.0%	7.1%	0.00	0.03	-0.02	0.01
Long U.S. Treasury	Bloomberg Treasury 20+ Year	4.1%	4.9%	13.4%	0.02	0.08	-0.06	0.01
Global Sovereign ex U.S.	Bloomberg Global Treasury ex U.S.	2.2%	2.7%	10.0%	-0.16	-0.11	-0.30	-0.26
Global Aggregate	Bloomberg Global Aggregate	3.4%	3.6%	6.7%	-0.06	-0.03	-0.17	-0.14
Core Fixed Income	Bloomberg U.S. Aggregate Bond	4.3%	4.4%	4.7%	0.11	0.13	0.04	0.06
Core Plus Fixed Income	Bloomberg U.S. Universal	4.4%	4.5%	4.7%	0.13	0.15	0.10	0.13
Investment Grade Corp. Credit	Bloomberg U.S. Corporate IG	4.6%	4.9%	8.4%	0.10	0.13	0.19	0.22
Short-Term Gov't/Credit	Bloomberg U.S. Gov't/Credit 1-3 Year	3.9%	3.9%	3.6%	0.03	0.03	0.00	0.00
Short-Term Credit	Bloomberg Credit 1-3 Year	4.2%	4.3%	3.6%	0.11	0.14	0.28	0.29
Intermediate Credit	Bloomberg U.S. Intermediate Credit	4.3%	4.5%	5.9%	0.08	0.12	0.19	0.25
Long-Term Credit	Bloomberg Long U.S. Credit	4.6%	5.2%	11.1%	0.07	0.13	0.13	0.19
High Yield Corp. Credit	Bloomberg U.S. Corporate High Yield	5.6%	6.1%	10.8%	0.17	0.21	0.45	0.47
Bank Loans	S&P/LSTA Leveraged Loan	6.9%	7.3%	8.8%	0.35	0.40	0.58	0.59
Global Credit	Bloomberg Global Credit	4.1%	4.4%	7.8%	0.04	0.08	0.07	0.10
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	7.7%	8.2%	10.5%	0.37	0.42	0.18	0.22
Emerging Markets Debt (Local)	JPM GBI-EM Global Diversified	5.8%	6.5%	12.1%	0.17	0.22	-0.10	-0.04
Securitized Credit	Bloomberg U.S. Securitized	4.7%	4.8%	4.0%	0.23	0.25	-0.03	-0.01

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

10-year return & risk assumptions

Asset Class	Index Proxy	Ten Year Return		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Forecast	Geometric Arithmetic					
Fixed Income (continued)								
Private Credit	S&P LSTA Leveraged Loan Index	8.2%	8.8%	11.8%	0.37	0.42	-	-
Private Credit (Direct Lending - Unlevered)	S&P LSTA Leveraged Loan Index	7.1%	7.5%	8.8%	0.38	0.42	-	-
Private Credit (Direct Lending - Levered)	S&P LSTA Leveraged Loan Index	8.3%	8.9%	11.8%	0.38	0.43	-	-
Private Credit (Credit Opportunities)	S&P LSTA Leveraged Loan Index	8.8%	9.6%	13.4%	0.37	0.43	-	-
Private Credit (Junior Capital / Mezzanine)	S&P LSTA Leveraged Loan Index	8.6%	9.4%	12.9%	0.37	0.43	-	-
Private Credit (Distressed)	S&P LSTA Leveraged Loan Index	9.1%	12.7%	29.1%	0.18	0.31	-	-
Other								
Commodities	Bloomberg Commodity	6.3%	7.4%	16.0%	0.16	0.23	-0.11	-0.04
Hedge Funds	HFRI Fund Weighted Composite	5.0%	5.3%	7.5%	0.16	0.20	0.55	0.56
Hedge Fund of Funds	HFRI Fund of Funds Composite	4.0%	4.3%	7.5%	0.03	0.07	0.39	0.41
Hedge Funds (Equity Style)	Custom HFRI Benchmark Mix*	5.4%	6.3%	13.9%	0.12	0.18	0.37	0.42
Hedge Funds (Credit Style)	Custom HFRI Benchmark Mix*	5.2%	5.6%	9.2%	0.15	0.20	0.61	0.62
Hedge Funds (Assymmetric Style)	Custom HFRI Benchmark Mix*	5.4%	5.6%	6.3%	0.25	0.29	0.55	0.56
Real Estate Debt	Bloomberg CMBS IG	6.8%	7.1%	7.4%	0.41	0.45	0.20	0.22
Core Real Estate	NCREIF Property	7.2%	7.9%	12.5%	0.27	0.33	-	-
Value-Add Real Estate	NCREIF Property + 200bps	9.2%	10.3%	15.4%	0.35	0.42	-	-
Opportunistic Real Estate	NCREIF Property + 300bps	10.2%	12.1%	21.2%	0.30	0.39	-	-
REITs	Wilshire REIT	7.2%	8.8%	19.2%	0.18	0.26	0.34	0.41
Global Infrastructure	S&P Global Infrastructure	8.1%	9.4%	16.8%	0.26	0.33	0.24	0.31
Risk Parity**	S&P Risk Parity 10% Vol Index	6.3%	7.1%	10.0%	0.25	0.33	0.40	0.44
Currency Beta	MSCI Currency Factor Index	2.2%	2.3%	3.3%	-0.48	-0.45	-0.30	-0.28
Inflation		2.4%	-	-	-	-	-	-
60/40 Portfolio	MSCI ACWI / Bbg U.S. Agg	5.5%	6.0%	10.9%	0.16	0.20	0.50	0.53

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

*To represent hedge fund styles, we use a combination of HFRI benchmarks: Equity Style = 33% HFRI Fundamental Growth, 33% HFRI Fundamental Value, 33% HFRI Activist. Credit Style = 20% HFRI Distressed/Restructuring, 20% HFRI Credit Arbitrage, 20% HFRI Fixed Income-Corporate, 20% HFRI Fixed Income-Convertible Arbitrage, 20% HFRI Fixed Income-Asset Backed. Asymmetric Style = 50% HFRI Relative Value, 50% HFRI Macro

**The Risk Parity forecast shown here assumes a 10% target volatility strategy. We recommend customizing this forecast to the target volatility specifications of the risk parity strategy that an investor wishes to model. Please speak with your Verus consultants for customization needs.

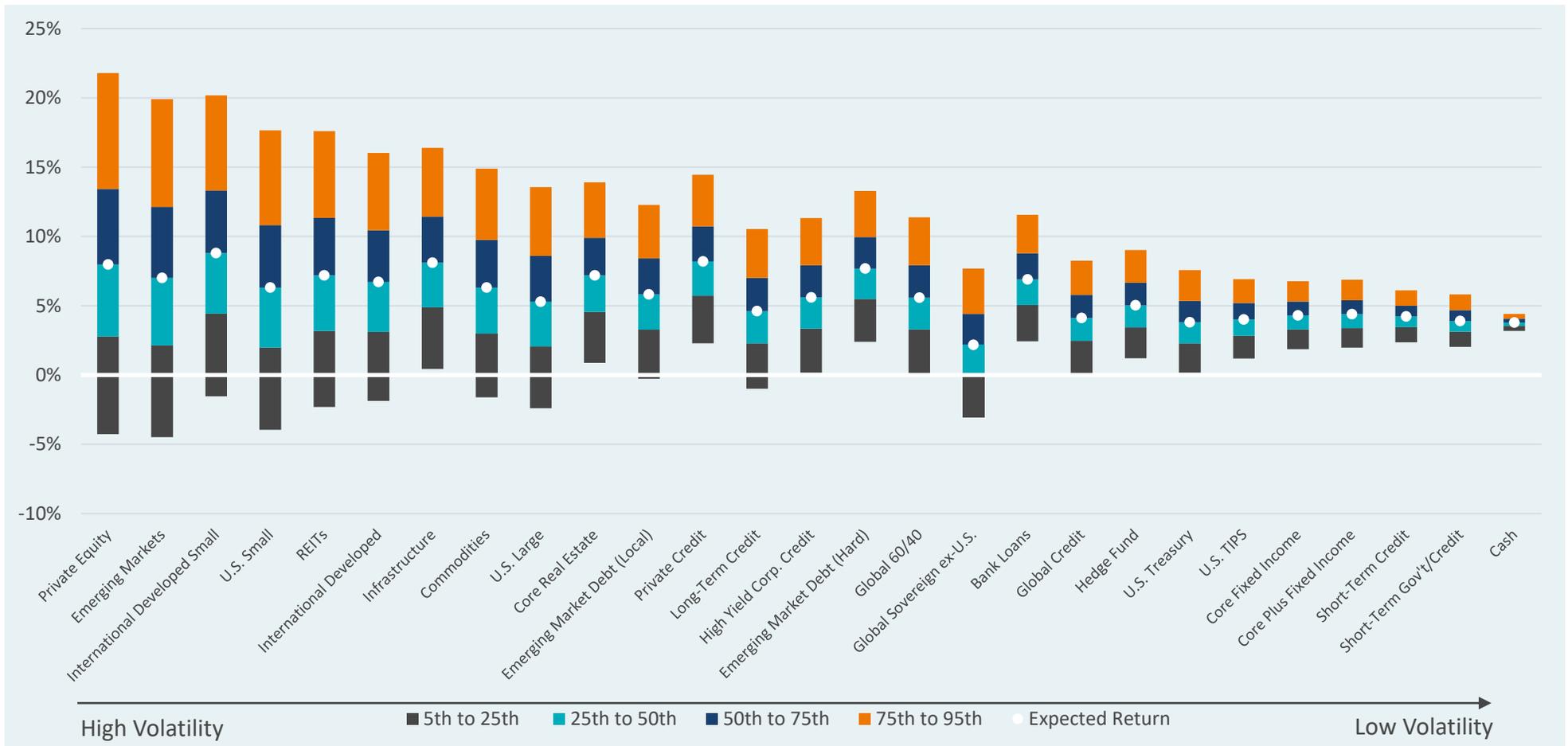
Correlation assumptions

	Cash	US Large	US Small	Intl Large	Intl Small	EM	Global Equity	PE	US TIPS	US Treasury	Global Sovereign ex-US	US Core	Core Plus	Short-Term Gov't/Credit	Short-Term Credit	Long-Term Credit	US HY	Bank Loans	Global Credit	EM Debt USD	EM Debt Local	Commodities	Hedge Funds	Real Estate	REITs	Infrastructure	Currency Beta	Risk Parity	
Cash	1.0																												
US Large	0.0	1.0																											
US Small	-0.1	0.9	1.0																										
Intl Large	0.0	0.9	0.8	1.0																									
Intl Small	0.0	0.9	0.8	1.0	1.0																								
EM	0.0	0.7	0.6	0.8	0.8	1.0																							
Global Equity	0.0	1.0	0.9	0.9	0.9	0.8	1.0																						
PE	-0.1	0.7	0.7	0.6	0.6	0.6	0.7	1.0																					
US TIPS	0.0	0.5	0.4	0.5	0.5	0.4	0.5	0.2	1.0																				
US Treasury	0.1	0.1	0.0	0.1	0.1	0.1	0.1	-0.1	0.8	1.0																			
Global Sovereign ex-US	0.2	0.4	0.3	0.5	0.5	0.5	0.5	0.1	0.7	0.6	1.0																		
US Core	0.1	0.4	0.3	0.4	0.4	0.4	0.4	0.0	0.8	0.9	0.8	1.0																	
Core Plus	0.2	0.5	0.4	0.5	0.5	0.5	0.5	0.1	0.8	0.9	0.8	1.0	1.0																
Short-Term Gov't/Credit	0.3	0.2	0.1	0.3	0.3	0.3	0.3	0.0	0.7	0.8	0.6	0.8	0.8	1.0															
Short-Term Credit	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.2	0.7	0.5	0.7	0.7	0.8	0.7	1.0														
Long-Term Credit	0.1	0.6	0.5	0.6	0.6	0.6	0.6	0.2	0.8	0.7	0.8	0.9	0.9	0.7	0.8	1.0													
US HY	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.5	0.6	0.2	0.5	0.5	0.6	0.4	0.6	0.7	1.0												
Bank Loans	0.0	0.6	0.6	0.6	0.7	0.6	0.6	0.5	0.3	-0.1	0.2	0.2	0.3	0.1	0.5	0.4	0.8	1.0											
Global Credit	0.1	0.7	0.6	0.7	0.8	0.7	0.7	0.3	0.8	0.6	0.8	0.8	0.9	0.7	0.8	0.9	0.8	0.6	1.0										
EMD USD	0.1	0.7	0.6	0.7	0.7	0.7	0.7	0.4	0.6	0.4	0.7	0.6	0.7	0.5	0.7	0.8	0.8	0.7	0.9	1.0									
EMD Local	0.1	0.5	0.4	0.7	0.7	0.8	0.7	0.4	0.5	0.3	0.7	0.5	0.6	0.4	0.5	0.6	0.7	0.5	0.8	0.8	1.0								
Commodities	-0.1	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.2	-0.2	0.2	-0.1	0.0	-0.1	0.1	0.1	0.5	0.5	0.3	0.3	0.4	1.0							
Hedge Funds	0.0	0.8	0.9	0.8	0.9	0.8	0.9	0.6	0.4	-0.1	0.3	0.2	0.4	0.1	0.5	0.5	0.8	0.8	0.7	0.7	0.6	0.5	1.0						
Real Estate	-0.2	0.6	0.5	0.5	0.5	0.4	0.6	0.4	0.2	0.0	-0.1	0.1	0.1	0.0	-0.1	0.2	0.4	0.4	0.3	0.4	0.3	0.2	0.5	1.0					
REITs	-0.1	0.8	0.7	0.7	0.7	0.5	0.7	0.6	0.6	0.4	0.4	0.5	0.6	0.3	0.4	0.7	0.7	0.5	0.7	0.7	0.5	0.3	0.7	0.6	1.0				
Infrastructure	0.0	0.8	0.7	0.8	0.8	0.7	0.8	0.6	0.5	0.2	0.5	0.4	0.5	0.3	0.5	0.6	0.8	0.7	0.8	0.8	0.7	0.5	0.8	0.5	0.7	1.0			
Currency Beta	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.1	0.1	-0.2	-0.1	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.1	-0.3	-0.2	-0.3	-0.1	-0.1	0.1	0.0	-0.1	1.0		
Risk Parity	0.1	0.7	0.7	0.8	0.7	0.6	0.8	0.4	0.7	0.4	0.7	0.6	0.7	0.4	0.7	0.7	0.8	0.5	0.8	0.7	0.6	0.5	0.7	0.1	0.7	0.7	-0.2	1.0	

Note: as of 9/30/24 - Correlation assumptions are based on the last ten years. Private Equity and Real Estate correlations are especially difficult to model due to appraisal-based pricing and lag problems that exist in the data – we have therefore used BarraOne correlation data to strengthen these correlation estimates.

Range of likely 10-year outcomes

10-YEAR RETURN 90% CONFIDENCE INTERVAL



Source: Verus 2025 Capital Market Assumptions, MPI

Date: December 3, 2025
To: Trustees, Investment Committee
From: Daryn Miller, CFA, Chief Investment Officer
Subject: **Reallocate Midstream Portfolio**



Recommendation

Staff recommends eliminating the Midstream Allocation from the Strategic Asset Allocation (SAA) and reallocating the target weight to other asset classes and updating the Allowable Ranges. If approved by the Investment Committee, this recommendation will be presented to the Board for approval on December 10th.

Background

In early 2020, investment staff identified an attractive investment opportunity in Midstream assets. In April 2020 staff recommended changing the SAA to include a 5% Midstream allocation. Staff issued an RFP and performed due diligence on Midstream focused investment manager strategies. In August 2020, a recommendation was made to retain both Blackstone Harvest (Harvest) and PIMCO midstream energy strategies for the 5% midstream allocation.

Analysis

Midstream fundamentals have been largely consistent with the initial investment thesis, and the returns since funding Harvest and PIMCO have been strong. While the investment opportunity persisted for longer than expected (5+ years), key components of the investment thesis are now less compelling, including valuations, yield, inflecting fundamentals, and capital allocation.

Harvest since funded: 31.6%, net annualized
PIMCO since funded: 21.3%, net annualized
September/October 2020 through September 2025

Staff believes that the outsized opportunity and rationale for adding Midstream to the SAA has largely played out, and reallocating the Midstream exposure is now warranted.

Staff recommends eliminating the 5% Midstream allocation and shifting the weight to a combination of Global Public Equity (+1%), Commodities (+1%), Core Real Estate (+2%), and Private Equity (+1%)—consistent with the “Eliminate Midstream Alt” allocation below and in the following Verus materials.

Chief Investment Officer Memo re: Reallocate Midstream Portfolio

December 3, 2025

Page 2

Asset Class	Current Policy	Eliminate Midstream Alt.	Change	Current Allowable Range	Proposed Allowable Range
Domestic				12 - 28%	12 - 29%
International Developed				5 - 18%	5 - 19%
Emerging Markets				0 - 9%	0 - 10%
Global Public Equity	33.0	34.0	+1	23 - 45%	24 - 46%
Core Fixed Income	4.0	4.0			
US Treasury	3.0	3.0			
US Long Treasury	4.0	4.0			
Short-Term Gov't/Credit	4.0	4.0			
TOTAL CORE	15.0	15.0		10 - 25%	10 - 25%
Bank Loans	2.5	2.5			
Emerging Market Debt (Hard)	2.5	2.5			
Securitized Credit	5.0	5.0			
TOTAL CREDIT	10.0	10.0		5 - 15%	5 - 15%
Total Fixed Income	25.0	25.0		15 - 35%	15 - 35%
Commodities	4.0	5.0	+1	0 - 8%	0 - 9%
Core Real Estate	5.0	7.0	+2	2 - 8%	2 - 10%
Private Real Assets	5.0	5.0		0 - 10%	0 - 10%
Midstream Energy	5.0	0.0	-5	0 - 10%	0%
Total Real Assets	19.0	17.0	-2		
Hedge Fund	10.0	10.0		5 - 15%	5 - 15%
Alpha Pool	2.5	2.5		0 - 5%	0 - 5%
Private Equity	5.0	6.0	+1	0 - 10%	0 - 11%
Private Credit	8.0	8.0		0 - 13%	0 - 13%
Total Non-Public Investments	25.5	26.5	+1		
Cash	-2.5	-2.5			
TOTAL	100.0	100.0			

Verus

Verus is supportive of the recommendation, and has provided Strategic Asset Allocation review materials, analyzing the proposed SAA change.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



DECEMBER 2025

Strategic Asset Allocation Review

Kern County Employees' Retirement Association

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Executive summary 3

Strategic asset allocation 4

Appendix - Capital Market Assumptions and modeling assumptions 9

***Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other “forward-looking statements.” No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Additional information about Verus Advisory, Inc. is available on the SEC’s website at www.adviserinfo.sec.gov. Verus – also known as Verus Advisory™.*

Executive summary

- Following a directive from KCERA Investment Staff, Verus reviewed the Plan’s strategic asset allocation (“SAA”), applying updated 2026 Capital Market Assumptions (“CMAs”).
- The purpose of the review was to evaluate expected outcomes, considering a removal of the current 5% allocation to Midstream Energy. This follows the notion that the Midstream investment has served its purpose, and the original investment thesis has been broadly realized.
- While the mean-variance analysis utilized in this evaluation is a quantitative tool, and the considered portfolio adjustment is more qualitatively nuanced, the following analysis offers neutral to modestly supportive evidence in favor of the adjustment.

Strategic asset allocation

Mean variance analysis

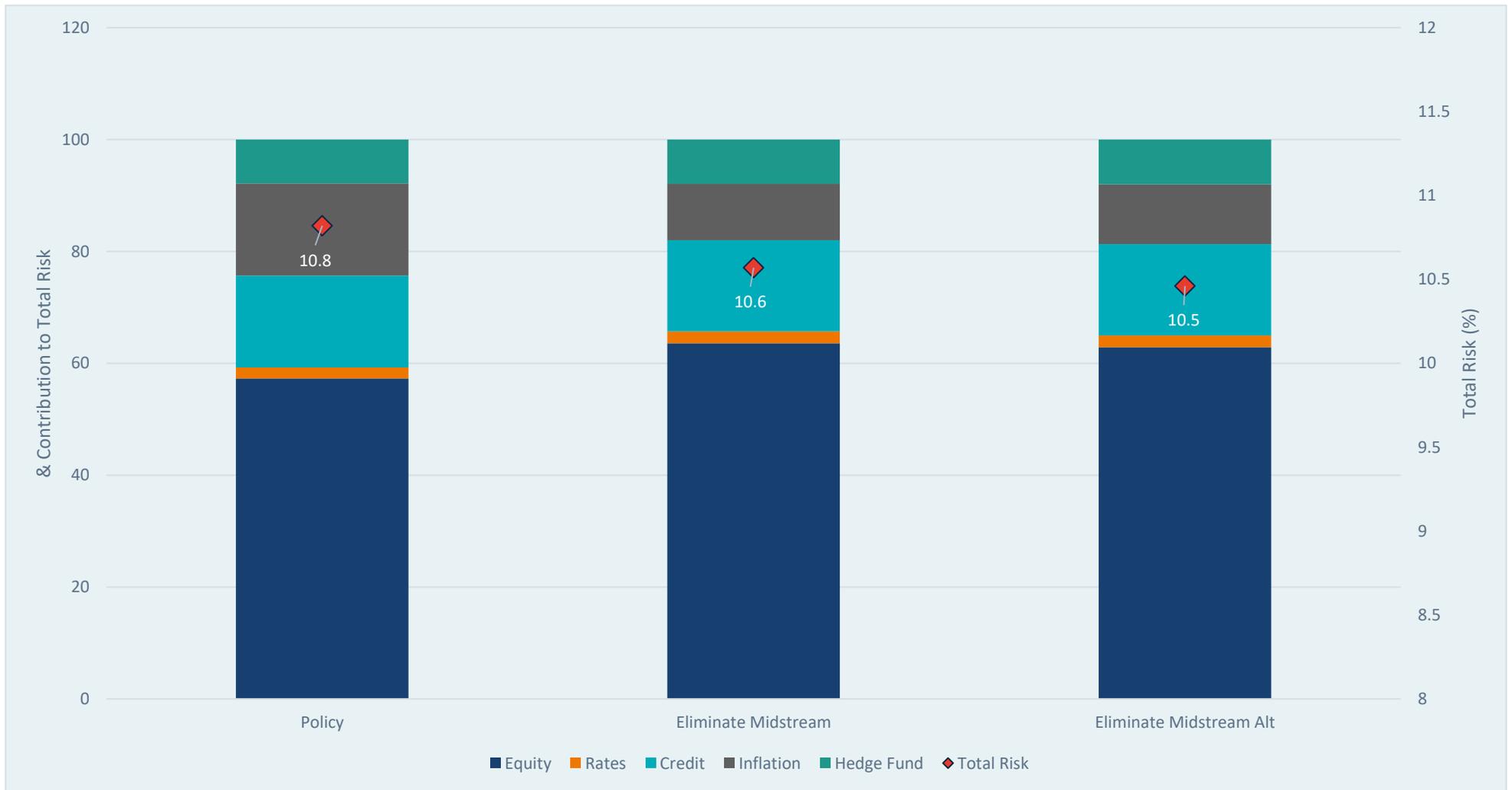
Verus 2026 CMA's (10 Yr)

	Policy	Eliminate Midstream	Eliminate Midstream Alt	Return (g)	Standard Deviation	Sharpe Ratio (g)
Global Equity	33.0	36.0	34.0	6.0	16.6	0.13
Total Equity	33.0	36.0	34.0			
Core Fixed Income	4.0	4.0	4.0	4.7	4.9	0.18
US Treasury	3.0	3.0	3.0	4.2	7.1	0.06
US Long Treasury	4.0	4.0	4.0	4.7	13.4	0.07
Short-Term Gov't/Credit	4.0	4.0	4.0	4.2	3.6	0.11
Bank Loans	2.5	2.5	2.5	6.1	8.7	0.26
Emerging Market Debt (Hard)	2.5	2.5	2.5	7.7	10.5	0.37
Emerging Market Debt (Local)	0.0	0.0	0.0	5.8	12.1	0.17
Securitized Credit	5.0	5.0	5.0	4.7	4.0	0.23
Total Fixed Income	25.0	25.0	25.0			
Commodities	4.0	5.0	5.0	6.3	16.0	0.16
Core Real Estate	5.0	6.0	7.0	7.2	12.5	0.27
Private Real Assets	5.0	5.0	5.0	9.2	15.4	0.35
Midstream Energy	5.0	0.0	0.0	7.9	24.1	0.17
Total Real Assets	19.0	16.0	17.0			
Hedge Fund	10.0	10.0	10.0	5.0	7.5	0.16
Alpha Pool	2.5	2.5	2.5			
Private Equity (Direct)	5.0	5.0	6.0	8.0	26.0	0.16
Private Credit	8.0	8.0	8.0	7.7	13.3	0.29
Total Non-Public Investments	25.5	25.5	26.5			
Cash	-2.5	-2.5	-2.5	3.7	1.1	-
Total Allocation	100	100	100			

	Policy	Eliminate Midstream	Eliminate Midstream Alt
Mean Variance Analysis			
Forecast 10 Year Return	6.9	6.8	6.9
Standard Deviation	10.8	10.6	10.5
Return/Std. Deviation	0.6	0.6	0.7
1st percentile ret. 1 year	-15.3	-15.0	-14.7
Sharpe Ratio (g)	0.30	0.30	0.30

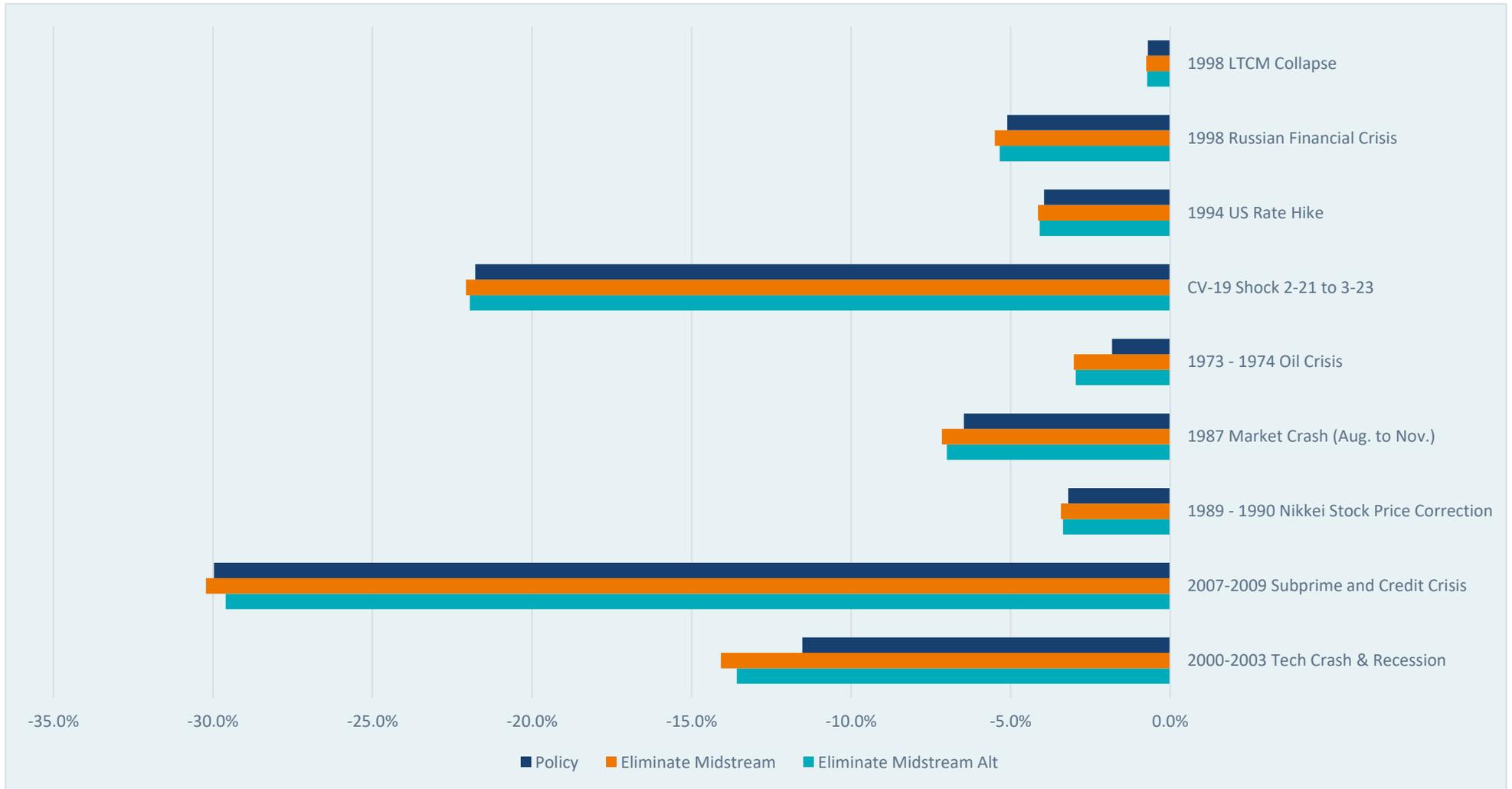
Source: Verus/MPI

Risk decomposition



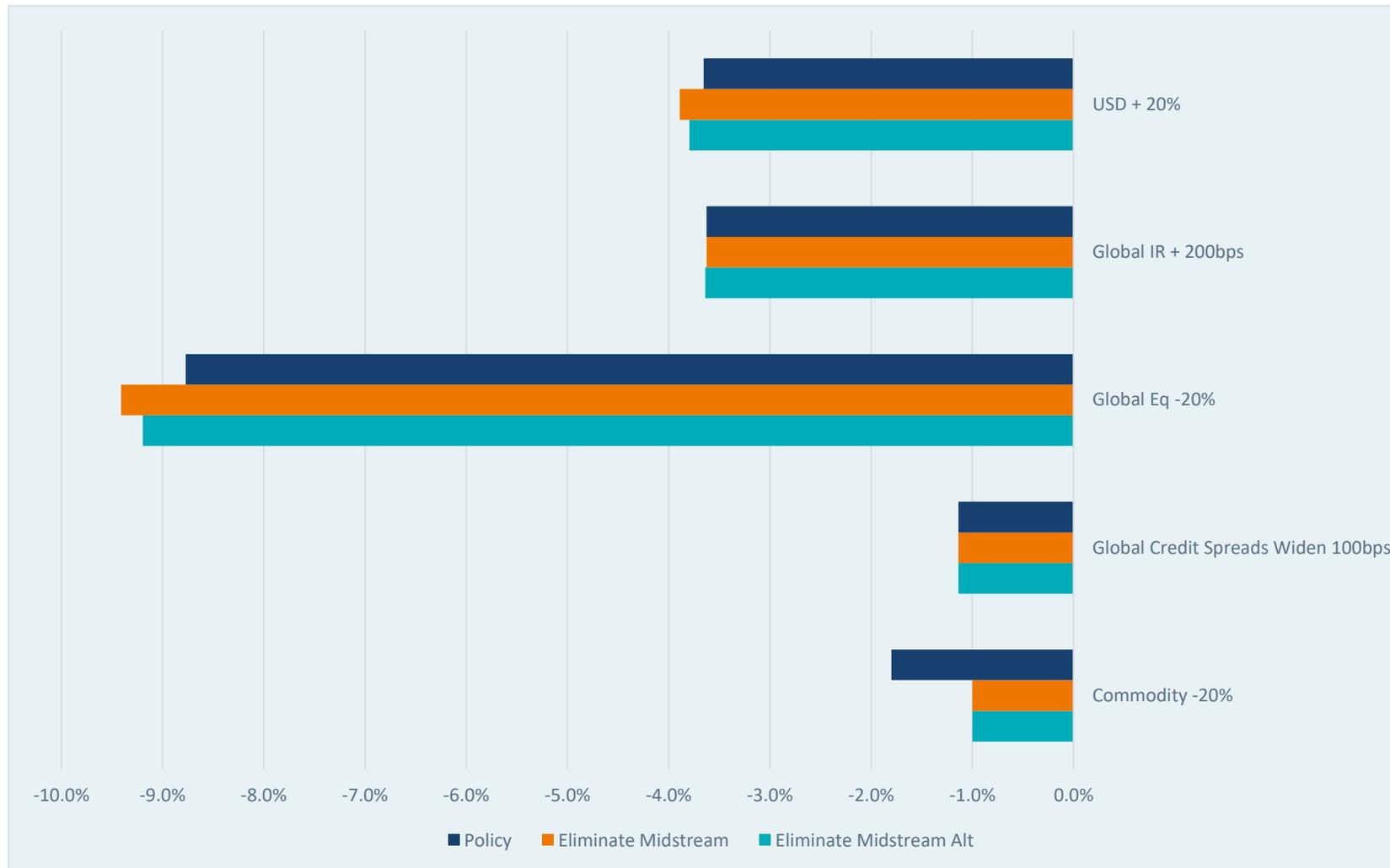
Source: MPI, Verus

Scenario analysis



Source: Verus. Portfolio allocations are shocked under historical market conditions.

Stress tests



Source: Verus. Historical index performance. Stress tests are uncorrelated market shocks.

Appendix - Capital Market Assumptions and modeling assumptions

Methodology

SUMMARY OF THE VERUS APPROACH

- We use a fundamental building block approach to forecast asset class returns, based on several inputs. These include practitioner best-in-class thinking, historical data, and academic research. Each year Verus conducts an in-depth review of our methodology, analyzing new industry research findings and evaluating alternative forecasting approaches to determine whether an improvement to our methodology might be warranted. We maintain flexibility and openness to adjusting our approach if strong evidence suggests change is appropriate.
- For most asset classes, we use the long-term historical volatility after adjusting for autocorrelation.
- Correlations between asset classes are calculated based on the last decade. For certain illiquid assets we use a Bloomberg factor model and adjustments for price lags to forecast correlations.

Asset	Return Methodology	Volatility Methodology*
Inflation	25% weight to the University of Michigan Survey 5-10 year ahead inflation expectation and the Survey of Professional Forecasters (Fed Survey), and the remaining 50% to the market's expectation for inflation as observed through the 10-year TIPS breakeven rate	-
Cash	$1/3 * \text{current federal funds rate} + 1/3 * \text{U.S. 10-year Treasury yield} + 1/3 * \text{Federal Reserve long-term interest rate target}$	Long-term volatility
Bonds	Nominal bonds: current yield; Real bonds: real yield + inflation forecast	Long-term volatility
International Bonds	Current yield	Long-term volatility
Credit	Current option-adjusted spread + U.S. 10-year Treasury – effective default rate	Long-term volatility
International Credit	Current option-adjusted spread + foreign 10-year Treasury – effective default rate	Long-term volatility
Private Credit	Levered gross return (SOFR + spread + original issuance discounts) – management fees – carried interest	Estimated volatility
Equity	Current yield + real earnings growth (historical average) + inflation on earnings (inflation forecast) + expected P/E change	Long-term volatility
Intl Developed Equity	Current yield + real earnings growth (historical average) + inflation on earnings (intl. inflation forecast) + expected P/E change	Long-term volatility
Private Equity**	US large cap domestic equity forecast * 1.85 beta adjustment	Implied annualized volatility, using actual historical private equity performance distribution
Commodities	Collateral return (cash) + spot return (inflation forecast) + roll return (assumed to be zero)	Long-term volatility
Hedge Funds	Return coming from traditional market betas + historical idiosyncratic/alpha return	Long-term volatility
Core Real Estate	Cap rate + real income growth – capex + inflation forecast	65% of REIT volatility
REITs	Core real estate	Long-term volatility
Value-Add Real Estate	Core real estate + 2%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Opportunistic Real Estate	Core real estate + 3%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Infrastructure	Current yield + real income growth + inflation on earnings (inflation forecast)	Long-term volatility
Risk Parity	Modeled as the 10-year return expectations of a <i>representative selection of Risk Parity strategy exposures</i>	Target volatility

*Long-term historical volatility data is adjusted for autocorrelation (see Appendix)

**Private Equity is modeled assuming an 8.0% floor for expected return, and a 3% return premium ceiling over U.S. Large Cap Equity. These adjustments are in place to recognize that higher interest rates (cost of leverage) act as a drag on expected Private Equity returns but that this drag has had limits historically, and to recognize that future Private Equity total universe performance is likely to be more anchored to public equity performance than in past times, given a more competitive market environment

10-year return & risk assumptions

Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Geometric	Arithmetic					
Equities								
U.S. Large	S&P 500	5.4%	6.5%	15.5%	0.10	0.17	0.86	0.88
U.S. Small	Russell 2000	6.4%	8.4%	21.2%	0.12	0.22	0.37	0.45
International Developed	MSCI EAFE	6.8%	8.2%	17.4%	0.17	0.25	0.44	0.50
International Small	MSCI EAFE Small Cap	9.4%	11.4%	21.2%	0.26	0.36	0.35	0.42
Emerging Markets	MSCI EM	6.7%	9.3%	24.2%	0.12	0.23	0.38	0.45
Global Equity	MSCI ACWI	6.0%	7.3%	16.6%	0.13	0.21	0.67	0.70
Global Equity ex USA	MSCI ACWI ex USA	6.9%	8.6%	19.2%	0.16	0.25	0.42	0.47
Private Equity	CA Private Equity	8.0%	10.9%	26.0%	0.16	0.27	-	-
Private Equity Direct	CA Private Equity	9.0%	11.9%	26.0%	0.20	0.31	-	-
Private Equity (FoF)	CA Private Equity	7.0%	10.0%	26.0%	0.12	0.24	-	-
Fixed Income								
Cash	30 Day T-Bills	3.7%	3.7%	1.1%	-	-	-	-
U.S. TIPS	Bloomberg U.S. TIPS 5-10	4.5%	4.7%	5.5%	0.13	0.16	0.18	0.20
Non-U.S. Inflation Linked Bonds	Bbg World Govt. Inf Linked Bond ex U.S.	4.1%	3.7%	7.3%	0.04	-0.01	-0.04	-0.01
U.S. Treasury	Bloomberg Treasury 7-10 Year	4.2%	4.4%	7.1%	0.06	0.08	-0.15	-0.11
Long U.S. Treasury	Bloomberg Treasury 20+ Year	4.7%	5.6%	13.4%	0.07	0.13	-0.19	-0.13
Global Sovereign ex U.S.	Bloomberg Global Treasury ex U.S.	2.7%	3.2%	9.9%	-0.11	-0.06	-0.26	-0.21
Global Aggregate	Bloomberg Global Aggregate	3.8%	4.0%	6.6%	0.00	0.03	-0.15	-0.11
Core Fixed Income	Bloomberg U.S. Aggregate Bond	4.7%	4.8%	4.9%	0.18	0.20	-0.05	-0.02
Core Plus Fixed Income	Bloomberg U.S. Universal	4.8%	4.9%	4.6%	0.22	0.24	0.04	0.06
Investment Grade Corp. Credit	Bloomberg U.S. Corporate Investment Grade	4.8%	5.1%	8.3%	0.12	0.16	0.15	0.18
Short-Term Gov't/Credit	Bloomberg U.S. Gov't/Credit 1-3 Year	4.2%	4.3%	3.6%	0.11	0.14	-0.10	-0.09
Short-Term Credit	Bloomberg Credit 1-3 Year	4.4%	4.5%	3.6%	0.17	0.19	0.23	0.24
Intermediate Credit	Bloomberg U.S. Intermediate Credit	4.6%	4.8%	5.9%	0.14	0.17	0.21	0.22
Long-Term Credit	Bloomberg Long U.S. Credit	4.7%	5.3%	11.0%	0.08	0.14	0.11	0.16
High Yield Corp. Credit	Bloomberg U.S. Corporate High Yield	5.7%	6.2%	10.7%	0.18	0.22	0.55	0.56
Bank Loans	Morningstar LSTA US Leveraged Loan	6.1%	6.5%	8.7%	0.26	0.31	0.62	0.63
Global Credit	Bloomberg Global Credit	4.3%	4.6%	7.7%	0.06	0.10	0.13	0.16
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	7.4%	7.8%	10.5%	0.35	0.38	0.23	0.27
Emerging Markets Debt (Local)	JPM GBI-EM Global Diversified	5.6%	6.3%	12.1%	0.16	0.21	0.13	0.19
Securitized Credit	Bbg U.S. Securitized: MBS, ABS, and CMBS	5.1%	5.2%	4.0%	0.35	0.35	-0.12	-0.09
Multi-Asset Credit	50/50 (High Yield / Bank Loans)	5.9%	6.4%	9.3%	0.23	0.27	-	-

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

10-year return & risk assumptions

Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Geometric	Arithmetic					
Fixed Income (continued)								
Private Credit	Morningstar LSTA US Leveraged Loan	7.7%	8.5%	13.3%	0.29	0.35	-	-
Private Credit (Direct Lending - Unlevered)	Morningstar LSTA US Leveraged Loan	6.3%	6.7%	8.7%	0.29	0.33	-	-
Private Credit (Direct Lending - Levered)	Morningstar LSTA US Leveraged Loan	7.4%	8.1%	12.3%	0.29	0.35	-	-
Private Credit (Credit Opportunities)	Morningstar LSTA US Leveraged Loan	8.4%	9.6%	16.0%	0.29	0.36	-	-
Private Credit (Junior Capital / Mezzanine)	Morningstar LSTA US Leveraged Loan	7.8%	8.7%	14.0%	0.29	0.35	-	-
Private Credit (Distressed)	Morningstar LSTA US Leveraged Loan	8.6%	12.2%	29.1%	0.16	0.29	-	-
Other								
Commodities	Bloomberg Commodity	6.4%	7.7%	15.8%	0.17	0.25	0.14	0.20
Hedge Funds	HFRI Fund Weighted Composite	5.1%	5.4%	7.5%	0.17	0.21	0.70	0.70
Hedge Fund of Funds	HFRI Fund of Funds Composite	4.1%	4.4%	7.5%	0.04	0.08	0.50	0.51
Hedge Funds (Equity Style)	Custom HFRI Benchmark Mix*	5.4%	6.3%	14.0%	0.11	0.18	0.50	0.53
Hedge Funds (Credit Style)	Custom HFRI Benchmark Mix*	5.3%	5.7%	9.3%	0.16	0.20	0.77	0.77
Hedge Funds (Asymmetric Style)	Custom HFRI Benchmark Mix*	5.3%	5.6%	6.3%	0.25	0.29	0.63	0.63
Real Estate Debt	Bloomberg CMBS IG	6.3%	6.6%	7.3%	0.34	0.38	0.12	0.14
Core Real Estate	NCREIF Property	7.2%	7.9%	11.7%	0.29	0.35	-	-
Value-Add Real Estate	NCREIF Property + 200bps	9.2%	10.2%	14.4%	0.38	0.44	-	-
Opportunistic Real Estate	NCREIF Property + 300bps	10.2%	12.0%	19.8%	0.32	0.41	-	-
REITs	FTSE Nareit Equity REITs	7.2%	8.8%	18.0%	0.19	0.28	0.25	0.33
Global Infrastructure	S&P Global Infrastructure	8.2%	9.5%	16.5%	0.27	0.35	0.44	0.50
Risk Parity**	S&P Risk Parity 10% Vol Index	6.9%	7.4%	10.0%	0.32	0.36	0.52	0.55
Currency Beta	MSCI Currency Factor Index	2.1%	2.2%	3.3%	-0.52	-0.48	-0.74	-0.72
Inflation		2.7%	-	-	-	-	-	-
60/40 Portfolio (Global Equity / Core Fixed)		5.7%	6.3%	11.0%	0.17	0.23	0.62	0.60

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

*To represent hedge fund styles, we use a combination of HFRI benchmarks: Equity Style = 33% HFRI Fundamental Growth, 33% HFRI Fundamental Value, 33% HFRI Activist. Credit Style = 20% HFRI Distressed/Restructuring, 20% HFRI Credit Arbitrage, 20% HFRI Fixed Income-Corporate, 20% HFRI Fixed Income-Convertible Arbitrage, 20% HFRI Fixed Income-Asset Backed. Asymmetric Style = 50% HFRI Relative Value, 50% HFRI Macro

**The Risk Parity forecast shown here assumes a 10% target volatility strategy. We recommend customizing this forecast to the target volatility specifications of the risk parity strategy that an investor wishes to model. Please speak with your Verus consultants for customization needs.

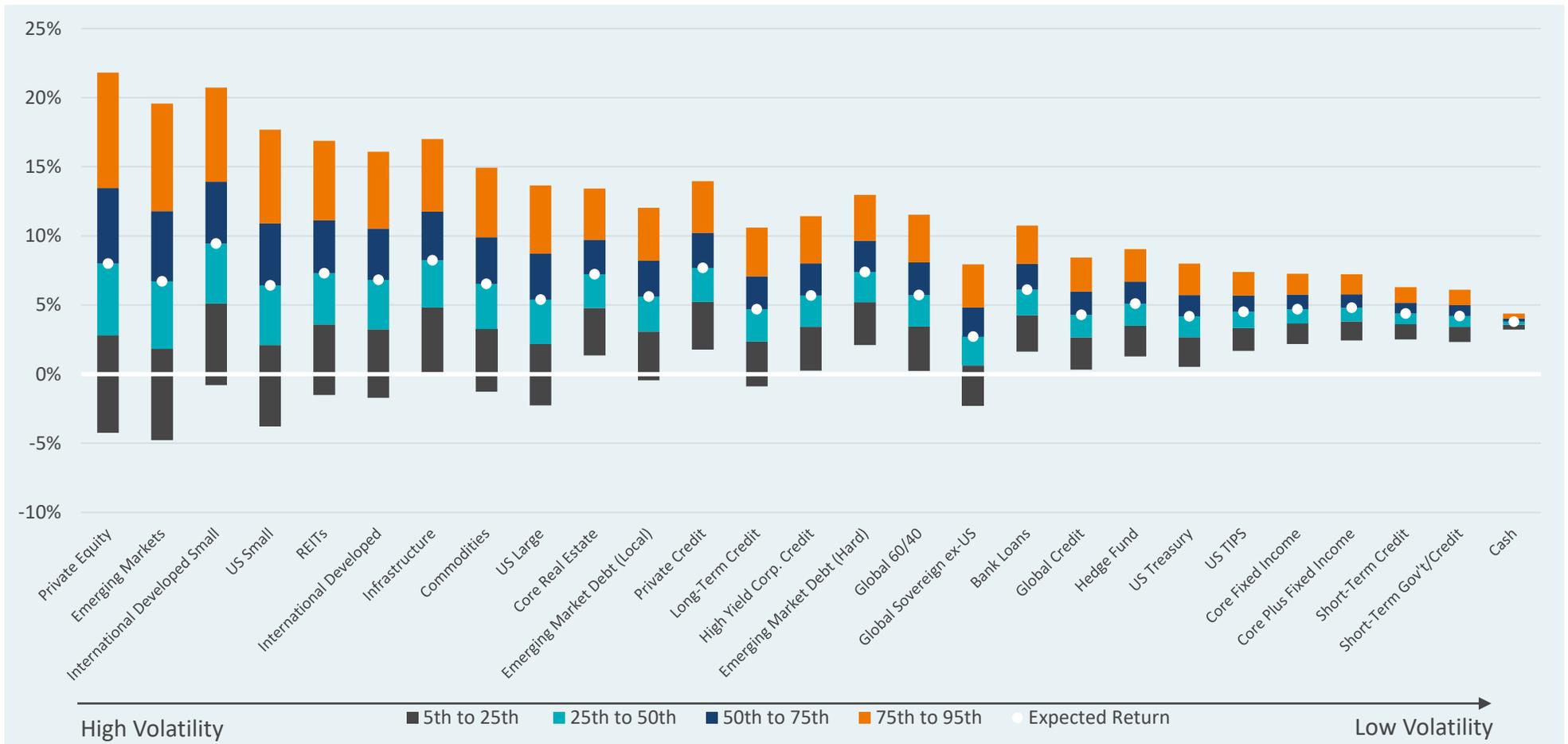
Correlation assumptions

	Cash	US Large	US Small	Intl Large	Intl Small	EM	Global Equity	PE	US TIPS	US Treasury	Global Sovereign ex-US	US Core	Core Plus	Short-Term Gov't/Credit	Short-Term Credit	Long-Term Credit	US HY	Bank Loans	Global Credit	EMD USD	EMD Local	Commodities	Hedge Funds	Real Estate	REITs	Infrastructure	Currency Beta	Risk Parity	
Cash	1.0																												
US Large	0.0	1.0																											
US Small	-0.1	0.9	1.0																										
Intl Large	0.0	0.8	0.8	1.0																									
Intl Small	0.0	0.8	0.8	1.0	1.0																								
EM	0.0	0.7	0.6	0.8	0.8	1.0																							
Global Equity	0.0	1.0	0.9	0.9	0.9	0.8	1.0																						
PE	0.0	0.7	0.6	0.5	0.5	0.5	0.7	1.0																					
US TIPS	0.0	0.5	0.4	0.5	0.5	0.4	0.5	0.1	1.0																				
US Treasury	0.2	0.2	0.1	0.2	0.2	0.2	0.2	-0.1	0.8	1.0																			
Global Sovereign ex-US	0.1	0.4	0.3	0.5	0.6	0.6	0.5	0.1	0.7	0.7	1.0																		
US Core	0.2	0.4	0.3	0.4	0.4	0.4	0.4	0.1	0.8	0.9	0.8	1.0																	
Core Plus	0.1	0.5	0.4	0.5	0.5	0.5	0.5	0.1	0.9	0.9	0.8	1.0	1.0																
Short-Term Gov't/Credit	0.4	0.2	0.1	0.3	0.3	0.3	0.3	0.0	0.7	0.8	0.7	0.9	0.8	1.0															
Short-Term Credit	0.2	0.4	0.4	0.5	0.6	0.5	0.5	0.1	0.7	0.6	0.7	0.8	0.9	0.9	1.0														
Long-Term Credit	0.0	0.6	0.5	0.6	0.6	0.6	0.6	0.2	0.8	0.7	0.8	0.9	0.9	0.7	0.8	1.0													
US HY	0.0	0.8	0.8	0.8	0.8	0.7	0.8	0.4	0.6	0.2	0.5	0.5	0.6	0.4	0.7	0.7	1.0												
Bank Loans	0.0	0.6	0.7	0.6	0.7	0.6	0.6	0.3	0.3	-0.1	0.2	0.2	0.3	0.1	0.5	0.4	0.8	1.0											
Global Credit	0.0	0.6	0.6	0.8	0.8	0.7	0.7	0.2	0.8	0.6	0.8	0.8	0.9	0.7	0.9	0.9	0.8	0.6	1.0										
EMD USD	0.1	0.7	0.6	0.7	0.7	0.7	0.7	0.4	0.6	0.4	0.7	0.7	0.7	0.5	0.7	0.8	0.8	0.7	0.9	1.0									
EMD Local	0.1	0.5	0.4	0.7	0.7	0.8	0.7	0.4	0.5	0.3	0.7	0.5	0.6	0.4	0.6	0.7	0.7	0.5	0.8	0.8	1.0								
Commodities	-0.1	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.2	-0.2	0.1	0.0	0.0	-0.1	0.1	0.1	0.5	0.5	0.3	0.3	0.4	1.0							
Hedge Funds	-0.1	0.8	0.9	0.8	0.8	0.7	0.8	0.4	0.4	0.0	0.3	0.3	0.4	0.1	0.5	0.5	0.8	0.7	0.7	0.7	0.5	0.5	1.0						
Real Estate	-0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.1	0.1	0.2	0.0	0.2	0.2	0.3	0.1	0.3	0.3	0.1	0.2	0.4	1.0					
REITs	-0.1	0.8	0.8	0.7	0.7	0.6	0.8	0.5	0.6	0.3	0.5	0.5	0.6	0.3	0.5	0.7	0.7	0.6	0.7	0.7	0.5	0.4	0.7	0.3	1.0				
Infrastructure	0.0	0.8	0.7	0.8	0.8	0.7	0.8	0.5	0.5	0.2	0.5	0.4	0.5	0.3	0.6	0.6	0.8	0.7	0.7	0.8	0.7	0.5	0.7	0.2	0.8	1.0			
Currency Beta	0.0	-0.1	-0.2	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	-0.2	-0.1	-0.2	1.0	
Risk Parity	0.0	0.8	0.7	0.8	0.8	0.7	0.8	0.5	0.7	0.5	0.6	0.6	0.7	0.5	0.7	0.7	0.8	0.6	0.8	0.8	0.6	0.5	0.7	0.3	0.8	0.8	-0.1	1.0	

Note: as of 9/30/25 - Correlation assumptions are based on the last ten years. Private Equity and Private Real Estate correlations are especially difficult to model due to appraisal-based pricing and lag issues that exist in the data. For Private Equity we use Bloomberg's Private Equity factor estimates to calculate correlation to other assets. For Private Real Estate we de-lag stated quarterly returns to better estimate correlations to other assets.

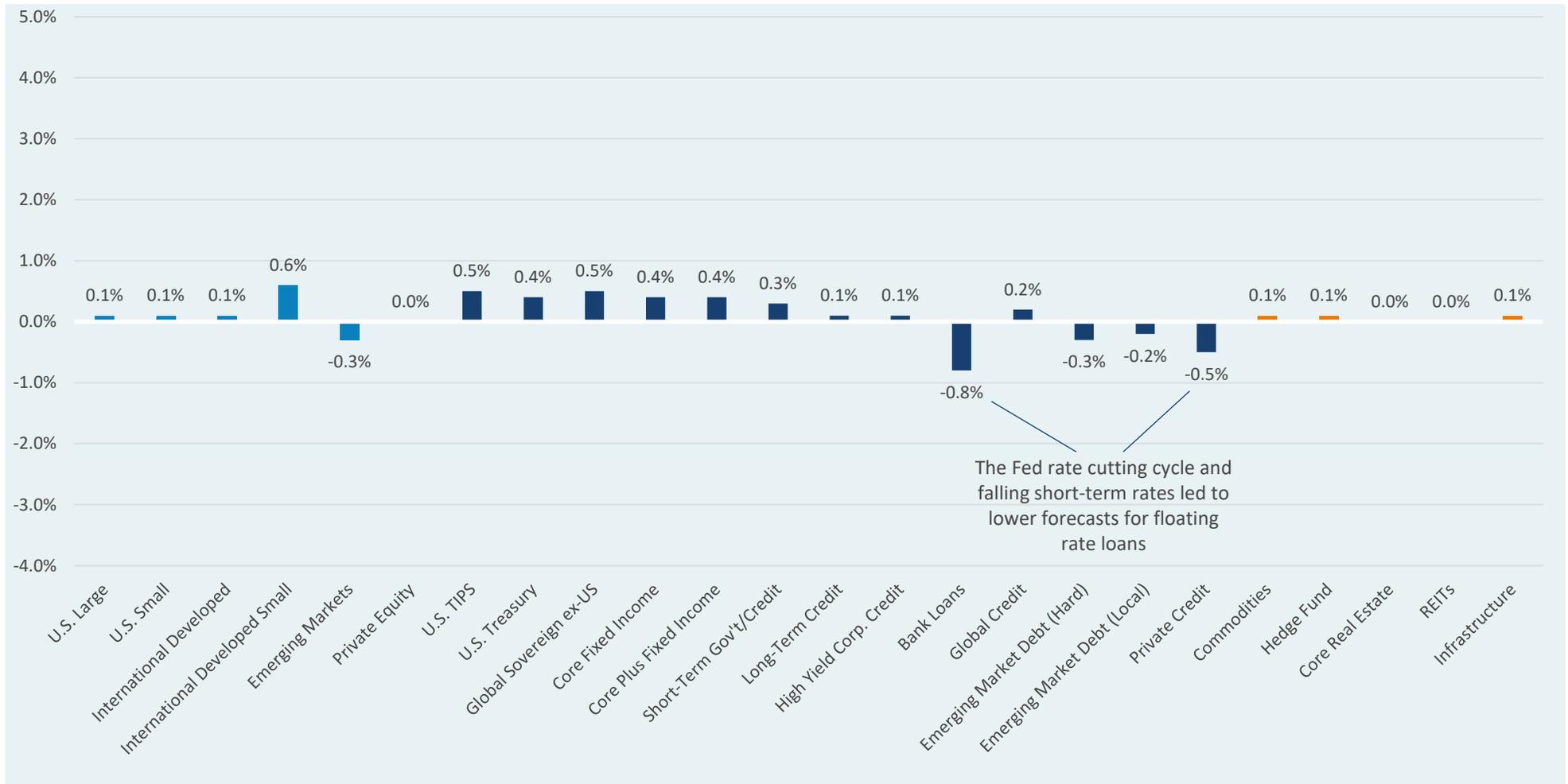
Range of likely 10-year outcomes

10-YEAR RETURN 90% CONFIDENCE INTERVAL



Source: Verus 2026 Capital Market Assumptions, MPI

2026 vs. 2025 return forecast



Source: Verus, 2026 Capital Market Assumptions relative to 2025 Capital Market Assumptions

Market summary & forecast impacts

- Two key themes of the 2026 Verus Capital Market Assumptions include higher bond yields and higher inflation expectations, which contributed to improved fixed income forecasts and moderately higher real asset forecasts. Richer risk asset pricing had an opposite effect, particularly in domestic markets, dampening return expectations as risk premia were squeezed.
- The 10-year U.S. Treasury rose from 3.79% to 4.15% as a surprisingly resilient domestic economy and stubborn inflation, as well as concerns over tariff-fueled price rises, kept the Federal Reserve in a more hawkish stance. Readers will notice that our Cash forecast fell slightly from 3.8% to 3.7%—a net effect of *higher for longer* interest rates but also expectations for a Fed rate cutting cycle.
- Risk asset valuations moved broadly higher during the year across both Equity and Credit markets, which dampened future return expectations. U.S. Large Cap and Small Cap Equities are now in the 96th and 95th valuation percentile, respectively, while credit spreads have reached incredibly tight levels. These valuations follow a very strong year of market returns. However, increased inflation expectations lifted nominal return forecasts, resulting in slightly higher capital market assumptions, on net. Improved fixed income forecasts, and less movement in equity forecasts, resulted in a flattening of the risk curve (the return expectations for high-quality fixed income and other safer assets is more competitive with equity and riskier assets).
- Despite the increase in inflation during recent years, and then a moderation of inflation back closer to the Federal Reserve’s 2% target, the market’s long-term inflation expectations have shown little movement. The Survey of Professional Forecasters was stable at a 2.3% future expected inflation rate during the year, while market-priced inflation expectations (U.S. TIPS Breakeven Rate) moved up from 2.2% to 2.4%. On the other hand, household inflation expectations moved notably higher from 3.0% to 3.7%, likely fueled by tariff concerns. Overall, our forecast for the rate of inflation over the next ten years moved up from 2.4% to 2.7%.

All data cited above is as of 9/30/25

Modeling Assumptions

<u>Verus CMA Mapping</u>	<u>KCERA Asset Class</u>	<u>Notes</u>
Global Equity	TOTAL EQUITY	
US Treasury	7-10 Year UST	
Short-Term Gov't/Credit	Short-term IG	
Core Plus Fixed Income	Core Plus (PIMCO)	
Core Fixed Income	Core Fixed Income (Mellon Agg)	
Securitized Credit	Total Securitized	
Bank Loans	Total Bank Loans	
Emerging Market Debt	Total EMD	Current mix is a blend of Hard/Local. Other mixes are hard currency only
Commodities	TOTAL COMMODITIES	
Hedge Fund	TOTAL HEDGE FUND	
Alpha Pool (Hedge Fund)	TOTAL ALPHA POOL	Modeled as Hedge Fund
Midstream	TOTAL MIDSTREAM	Midstream uses a custom capital market assumption. The expected geometric return is the current yield (5.2%) + Verus Inflation forecast (2.7%) = 7.9%. The volatility assumption is the 20-year volatility of the Alerian MLP index (24.1%).
Core Real Estate	TOTAL CORE REAL ESTATE	
Value Add Real Estate	TOTAL PRIVATE REAL ASSET	Private Real Assets are proxied to Value add RE
Private Equity (Direct)	TOTAL PRIVATE EQUITY	
Private Credit	TOTAL PRIVATE CREDIT	Private credit is modeled as: 45% Direct Lending, 45% Credit Opportunities, and 10% Distressed
Opportunistic	TOTAL OPPORTUNISTIC	Opportunistic is shown in the current mix only. The manager Sixth Street TAO Partners is mapped to Credit Opportunities and the remaining opportunistic managers are mapped to global equities
Cash	TOTAL CASH	

Date: December 3, 2025

To: Trustees, Investment Committee

From: Daryn Miller, CFA, Chief Investment Officer
Geoff Nolan, Senior Investment Officer
Rafael A. Jimenez, CFA, Investment Officer



Subject: Fidelity Broad Market Duration

RECOMMENDATION

Staff recommends an investment of \$220M in the Fidelity Institutional Asset Management Broad Market Duration Strategy (“Strategy”). The Strategy will pursue a tailored investment mandate that invests in US Treasuries, securitized and asset-backed debt, and investment grade corporate bonds. The proposed recommendation fulfills the majority of the Plan’s 4% allocation to Core Fixed Income which is benchmarked to the Bloomberg Barclays US Aggregate Bond Index (“Agg” or “Benchmark”).

The funding source for the recommended investment will be the proceeds from the termination of the existing PIMCO Core Plus Strategy (“PIMCO”) and a partial redemption from the Mellon Aggregate Bond Fund (“Mellon”). The termination of PIMCO falls under Staff’s delegation authority. The Plan will maintain exposure to the passive Mellon vehicle to complete the 4% target allocation to Core Fixed Income.

FIXED INCOME CORE ALLOCATION

The Plan’s Strategic Asset Allocation (SAA) includes a 25% allocation to Fixed Income. The Fixed Income allocation is bifurcated into a 15% *Core* allocation and a 10% *Credit* allocation; each allocation serves a unique purpose in the context of the greater SAA. The Core allocation serves the primary goal of providing liquidity and risk mitigation. The Credit allocation serves the secondary objective of income generation and diversification. The 4% allocation to Core Fixed Income is part of the broader Core allocation.

In August 2023, Staff conducted a Fixed Income Strategic Review to assess the efficacy of the asset class to fulfill its role within the broader KCERA Portfolio. Staff concluded that a structural shift in the Fixed Income Portfolio was necessary to meet the objective stated in the Investment Policy Statement (IPS) and these changes were instituted in the Plan’s updated SAA. This recommendation is part of the broader reconstitution of the Fixed Income Portfolio consistent with the goal of de-risking the current portfolio to meet the asset class objective to mitigate risk and serve as a source of liquidity. More specifically, the transition from PIMCO is consistent with the replacement of a Core “Plus” strategy with a Core mandate that is constrained to the sectors in the Benchmark. The sectors that PIMCO has exposure to which will not be represented in the Strategy include non-investment grade bonds, emerging markets debt, and foreign currency (FX).

As of September 30th, 2025, the Fixed Income Portfolio had a market value of \$1.39B with \$701M (10.5% of Plan Assets) in Core Fixed Income.

STRATEGY BENCHMARK

The Bloomberg Barclays US Aggregate Bond Index is a broad market-capitalization weighted benchmark that measures the performance of the US investment grade bond market, including Treasuries, securitized and asset-backed debt, and corporate bonds. The largest bond issues and sectors have the greatest impact on Benchmark composition and performance. The largest sector in the Agg are Treasuries, followed by smaller and similar-sized exposures to securitized debt and corporate bonds.

The primary risk in the Benchmark is interest rate risk as fixed rate securities are sensitive to rate changes. Bonds exhibit negative correlation between market value and the direction of interest rates. Duration is a measure of price sensitivity to interest rate changes and can be measured in years as the weighted average time until a bond's cash flows are received. The duration of the Agg is approximately 6 years and for context, a higher duration implies greater sensitivity to interest rates changes. A secondary risk in the Benchmark is credit risk or the risk that an issuer of debt will be unable to make the contractual interest payments or repayment of principal. Although the risk of default is contained within the investment grade sector, credit risk is a consideration, particularly in corporate bonds.

Active managers in the Core Fixed Income universe can generate excess return relative to the Agg through differentiated sector exposure, an active duration posture, and security selection. Active managers can achieve active sector exposure through an assessment of relative value between sectors and allocating toward sectors in which the Firm has developed expertise or is well-resourced. Active sector exposure and security selection can be expected to be the primary drivers of alpha generation. Active duration positioning can be expressed at the aggregate portfolio level relative to the Agg or at specific segments of the Treasury yield curve. Managers that incorporate active duration rely on a macroeconomic view that is different from what is reflected in rates markets.

FIDELITY INSTITUTIONAL ASSET MANAGEMENT

Fidelity Institutional Asset Management ("Fidelity", "FIAM", "Manager", or "Firm") is a subsidiary of the broader Fidelity Investments parent company that provides a wide range of financial services including investment management, brokerage services, and insurance. Fidelity was founded in 1946 and has been managing fixed income portfolios since 1971. FIAM manages \$592B in assets, \$143B in fixed income assets, and \$133B in investment grade fixed income composites as of September 30th, 2025.

Fidelity is headquartered in Boston, Massachusetts and the entire investment grade team is based out of Merrimack, New Hampshire. The Broad Market Duration Strategy has an AUM of \$28.6B and the track record dates back to January 1995.

INVESTMENT PHILOSOPHY & PROCESS

The Strategy's objective is to generate consistent risk-adjusted excess return through an investment framework that also emphasizes risk mitigation. The team expects to deliver on these objectives through the use of multiple alpha levers and incorporating the breadth of the Firm's resources, including fundamental analysis and macroeconomic inputs. The investment philosophy is based on the belief that

active sector allocation, curve positioning, and security selection can all contribute to alpha generation.

The investment process is an iterative framework that combines top-down considerations with bottom-up analysis. The process begins with an assessment of the economic environment. The team formulates a macro view based on an evaluation of market risk and the Firm's sector specialists are an important input to understanding the opportunity set. The investment process then relies on a relative value assessment to determine the optimal sector allocation. The Strategy is not expected to have a structural tilt toward a specific sector and changes in the sector allocation are based on relative value expectations at the broader sector level. The investment process ends with security selection and ongoing oversight of the portfolio. Security selection incorporates the fundamental and technical analysis of the Firm's deep research platform.

The primary source of alpha is expected to be active sector allocation and security selection. Duration positioning is expected to contribute to alpha at the margin. Treasuries primarily serve as a duration management tool and aggregate portfolio duration can be expected to be benchmark-neutral. However, to a lesser extent, the team can also utilize Treasuries to express an active view on the shape of the yield curve. The investment process emphasizes consistency and is expected to incorporate all of Fidelity's resources.

PORTFOLIO MANAGEMENT TEAM

The Core and Core Plus platforms at Fidelity count on a co-Portfolio Manager structure that is responsible for the comprehensive management of the Strategy. The Strategy has relied on a team-based approach to portfolio management since inception and the structure mitigates key person risk and facilitates the implementation of decisions more effectively than under a committee approach. The Strategy has four portfolio managers who are generalists aligned under the investment process.

KCERA Investment Staff has become familiar with the Strategy through primary interaction with portfolio manager, Celso Munoz, CFA. Mr. Munoz counts on 26 years of investment experience and has been with the Firm since 2005. Mr. Munoz has been in the co-PM role since October 2016. Staff has also underwritten the investment strategy and process through interaction with portfolio manager, Stacie Ware, PhD. Ms. Ware counts on 11 years of industry experience and has been with Fidelity since 2018. Ms. Ware began her career as the platform's dedicated quantitative analyst prior to assuming decision-making responsibilities in October 2024. The portfolio management team includes Mike Plage, who has been in the co-PM role since March 2012 and Brian Day, who has been in the co-PM role since October 2024.

The Broad Market Duration Strategy counts on over 135 research professionals across the Fidelity fixed income platform that spans the spectrum of sub-asset classes. Fixed Income research analysts average 17 years of industry experience and also rely on collaboration with their equity counterparts as a resource.

RISK MANAGEMENT

The Strategy has integrated a robust risk management framework that has helped ensure the consistency of investment results. Fidelity employs a proprietary risk model to allow for maximum customization. Fidelity's model forecasts ex-ante tracking error and bifurcates the estimate into

systematic and idiosyncratic factors; the forecast considers the expected correlation between factors.

The Manager does not incorporate formal active sector exposure limits but is mindful of each sector's contribution to portfolio duration from a portfolio construction perspective. Active duration positioning is contained within a range of +/- one third of a year relative to the Benchmark and +/- one half of a year at the Key Rate Duration (KRD) level. The Strategy's risk management framework targets a tracking error between 1% - 1.5%. Adherence to the Strategy's risk protocols has been central to achieving consistent outperformance and attractive risk-adjusted returns.

VEHICLE & TERMS

Staff recommends an investment in Fidelity in a Separately Managed Account (SMA) format subject to an Investment Management Agreement & Guidelines. The SMA structure is suitable given the degree of customization that can be incorporated to meet Staff's objective for the mandate. The manager has proposed a competitive management fee.

INVESTMENT PROCESS

Staff utilized eVestment to screen the universe of prospective managers for a Core Fixed Income mandate. The screen was structured to identify a cohort of candidates that have demonstrated the ability to generate alpha and strong risk-adjusted returns in a consistent manner. Staff arrived at an initial list of 15 strategies managed by 13 distinct managers after screening for excess return and information ratio over different rolling time periods. Staff conducted introductory conversations with these investment managers to form a qualitative assessment of the team, investment philosophy, and process. Staff eliminated strategies that exhibited qualitative fit concerns including investing in off-benchmark sectors, lack of risk management oversight, and structural tilts toward a single sector. Staff conducted further diligence on 6 managers to better understand net-of-fees historical performance, risk management, and strategy characteristics. Staff identified 3 finalists and originally intended to fulfill the allocation through two complementary strategies. However, after observing a higher than anticipated correlation of excess return, Staff made the decision to consolidate the mandate into one strategy. Fidelity was selected after thoughtful consideration of performance, investment methodology, risk management, and conviction in the ability to replicate historical investment results.

VERUS

Verus undertook an assessment of Staff's underwriting process to determine the Manager's institutional quality and provided a complementary memorandum that is supportive of Staff's recommendation. The Verus memorandum is appended to this document.

SUMMARY

The recommended investment in Fidelity represents an attractive opportunity for the Plan to gain access to a high conviction manager that has developed an expertise in constructing investment grade debt portfolios that generate excess return in a consistent and repeatable manner. The investment in Fidelity allows the Plan to earn a return that is consistent with the objective of the Fixed Income Core allocation.

Memorandum

To: Investment Committee, Kern County Employees' Retirement Association
From: Scott J. Whalen, CFA, CAIA, Managing Director and Senior Consultant
Brian J. Kwan, CFA, CAIA, Managing Director and Senior Consultant
Date: December 3, 2025
RE: Core Fixed Income Due Diligence – Fidelity Broad Market Duration Strategy

Background

KCERA's Strategic Asset Allocation includes a 25% target weight to fixed income, of which 4% (or approximately \$270 million) is dedicated to traditional core fixed income. Search activity was recently initiated to find an active strategy to manage \$220 million of the core allocation (the remaining \$50 million will stay in the current, passively managed strategy).

The evaluation and selection of a core fixed income manager is one of the final steps in realizing the restructuring of KCERA's overall fixed income portfolio. This search activity has led to a recommendation to the Investment Committee to hire the Fidelity Broad Market Duration strategy.

This memo provides a review of the comprehensive due diligence process that led to the recommendation, a description of the recommended strategy, and a statement affirming our favorable view of Staff's conclusion.

Evaluation and Due Diligence Process

Manager evaluations to fulfill the core fixed income mandate began with an eVestment screening process, focused on identifying strategies with a consistent ability to generate strong, risk-adjusted excess returns over an appropriate benchmark. Screening criteria included:

- Excess returns across 3-year rolling periods;
- An Information Ratio of at least 0.5 across 3-year rolling periods; and
- Excess return at or above the 60th percentile of managers in the eVestment US Core Fixed Income Universe.

This process yielded 15 strategies managed by 13 firms. Introductory conversations were held with all managers passing the first set of screens to assess firm structure, investment platform, and drivers of excess return. Managers were selectively eliminated at this point, based on qualitative concerns such as investing in off-benchmark sectors, a structural tilt toward a single sector, or insufficient risk management capabilities. This narrowed the universe to six candidates. Detailed performance analysis followed, which reduced the candidate pool further. Finalist interviews were conducted with three managers that included deep dives into risk management and discussions with credit analysts to gain a thorough understanding of their approach to credit underwriting.

Through the process outlined above, Fidelity emerged as the highest conviction candidate. The team followed up with an analysis of excess return correlations between Fidelity and the other finalist candidates to determine whether to ultimately recommend one manager or two. Based on the minimal

diversification benefit observed through this analysis, the team decided to recommend Fidelity on a stand-alone basis.

Strategy Description

The Broad Market Duration strategy employs a disciplined, multistage investment process in which portfolio managers determine security and sector allocations.

The process begins with the formulation of macroeconomic views, leveraging insights from quantitative and macroeconomic research, portfolio managers, credit analysts, and traders. Key market-shaping factors considered include government and central bank policies, fiscal dynamics, demographic trends, trade policy, currency management, default cycles, inflation, and business cycle developments.

Subsequently, the portfolio management team and sector specialists identify the most attractive market sectors on a risk-adjusted basis, forming expectations for returns and risks. Once these macro and sector perspectives are established, risk is allocated across the investable universe, with positions and key rate exposures sized accordingly.

Security selection follows, with portfolio managers and sector specialists identifying bonds that optimize risk-adjusted returns within the established macro and sector framework. Position sizing reflects long-term correlations, current fundamentals, credit quality, liquidity, and technical factors.

Portfolio construction is the final stage, integrating portfolio management expertise with advanced technology to optimize positioning. This process is iterative and continuously refined by the investment team to ensure alignment with strategic objectives and market conditions.

The strategy has demonstrated competitive performance across multiple time periods.

Verus Position

Based on our review of the evaluation and due diligence work of Staff and the independent work conducted by Verus, we are supportive of Staff's recommendation to invest \$220 million in the Fidelity Broad Market Duration strategy.

*Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward-looking information will be achieved. Investing entails risks, including possible loss of principal.
Verus – also known as Verus Advisory™.*

Date: December 3, 2025

To: Trustees, Investment Committee

From: Daryn Miller, CFA, Chief Investment Officer
Geoff Nolan, Senior Investment Officer
Jack Bowman, Investment Officer

Subject: **Core Real Estate Recommendation**



RECOMMENDATION

Staff recommends a \$60 million commitment to Fortress CRE Enhanced Income Fund (“Fund” or “FCRE”), as well as a \$30 million commitment to the Seed Capital Co-Investment vehicle. These commitments will be part of KCERA’s (“Plan”) core real estate allocation.

CORE REAL ESTATE ALLOCATION

As stated in the Plan’s Investment Policy Statement (“IPS”), “The primary goal of the core real estate allocation are income generation, positive correlation to inflation, and diversification.”

As of September 30, 2025, the Plan has \$381 million dollars allocated to seven different managers in the core real estate allocation, representing a 5.6% allocation, with a policy target of 5% and an adjusted policy target of 6%.

As a refresher, Staff brought a core real estate deep dive in August 2024 that presented the idea of diversifying the Plan’s exposure to two ODCE managers to a more diversified allocation. Since then, Staff has added three real estate debt managers (including one land banking strategy), a diversified non-traded REIT, and a NNN strategy. FCRE would add further diversification to the allocation.

FORTRESS INVESTMENT MANAGEMENT

Fortress Investment Group (“Fortress” or “Manager”) is a global investment management firm founded in 1998 by Wesley Edens, Robert Kauffman, and Randal Nardone. Fortress is a highly diversified global investment manager across a range of credit and real estate strategies. The Firm has 13 global offices and manages approximately \$54 billion in assets as of September 30, 2025, of which real estate is \$19 billion.

ANALYSIS

Market Opportunity

The following themes in the commercial real estate (“CRE”) market provide an attractive environment for alternative lenders, such as Fortress, to step into the lending gap to provide financing. The opportunity is driven by the convergence of secular trends and favorable cyclical market dynamics:

- Reset valuations: CRE has experienced 20-40%+ declines in valuations since peak 2021/2022.

- Large opportunity set: “Wall of maturities” through 2028 (~\$4.5 trillion) coupled with an anemic real estate sales market, forcing capital events at the property level to be undertaken at reduced valuations along with more expensive and restrictive debt.
- Constrained supply of capital: Following COVID and its material impact on the real estate markets, there was a general reduction in broad based lending from banks, mortgage REITS, insurance companies and funds, reducing competition for those managers, like Fortress, that were not impacted by this downturn. While the largest banks continued to lend to their best customers, the majority of other banks pulled back from real estate lending, particularly those where the exposure and resulting regulatory impact was material.
 - For example, bank CRE lending origination volume has declined 55% since 2022.
- Lender’s being paid for the risk: Elevated base rates, spreads, and covenants have created an attractive lender’s market.
- Attractive “back leverage” financing opportunity: Recently there has been a movement back into CRE markets to provide “back leverage” to funds like FCRE, on a senior secured basis, by the largest banks, super regionals, large regional banks and insurance companies. The more focused statewide and local banks are still managing down exposures so are not active. This “back leverage” is focused on the senior part of the capital structure with acceptable capital charges for the lenders. LTV tranches for these lenders, having taken large write downs on their CRE portfolios, are tighter and more conservative than prior to COVID. This lending gap and attractive leverage financing allows funds like FCRE to find opportunities and enhance fund returns.

Team

The team is lead by Tim Sloan (Vice Chairman, Head of Global Real Estate), and Co-Heads of the Global Real Estate Credit Business Noah Shore and Spencer Garfield. Tim Sloan was previously the CEO of Wells Fargo & Company where he spent 30+ years. Noah and Spencer have an average of 30+ years of experience and 15 years at Fortress. The Co-Heads are supported by 20 investment professionals and 45 asset management professionals. The in-house asset management team is a key differentiator of the Fortress team. While this isn’t a “loan to own” strategy, having the ability to take over and manage a property, when needed, with an in-house team is unique and a differentiator.

Fortress CRE Enhanced Income Fund

Fortress CRE Enhanced Income Fund seeks to originate a diversified portfolio of floating rate, short duration, primarily senior secured loans collateralized by well-located, high-quality commercial properties.

Target portfolio:

- Investment type: commercial first mortgages, mezzanine loans, preferred equity and bridge financing
- Origination source: public and private
- Sectors: multifamily, industrial & logistics, hospitality, retail, and select office
- Geography: U.S. and Western Europe
- Asset business plan: new and redevelopment, value-add & renovations
- Covenants: significant structural enhancements to protect capital in downside scenario

Vehicle & Terms

The Fund has an open-ended, evergreen structure, where the fund will continue to invest capital and does not have a definitive end. The Fund will invest primarily in the United States (85%) and the remaining in Europe (up to 15%). The Fund is targeting a 12-14% net IRR and a 10-12% annualized cash income yield, paid out quarterly.

The Fund has an initial target fund size of \$2-3 billion. The Fund is looking to raise \$500 million of Seed Capital, which will include up to 50% of fee-paying commitments to the Fund with fee free co-investment capacity. The Seed Capital terms include a) 50% management fee discount for an initial 3-year lockup period, then a 1.25% management fee on net assets thereafter, and b) 12.5% carried interest over a 6.0% preferred return. The Lockup Period for Seed Capital is 3 years from the date of the first capital contribution with a 90-day notice ahead of any annual redemption request thereafter.

Fortress CRE Enhanced Income Fund seeks to originate a diversified portfolio of floating rate, short duration, primarily senior secured loans collateralized by well-located, high-quality commercial properties

Consultant Recommendation

Verus, the Plan's general consultant, undertook an independent assessment of the Manager to determine their institutional quality and provided a complementary memorandum that is supportive of Staff's recommendation. The Verus memorandum is appended to this document.

CONCLUSION

The recommended investment in Fortress CRE Enhanced Income Fund represents an attractive opportunity for the Plan to gain access to a high-conviction manager with a proven track record to achieve strong returns in both low and high interest rate environments. Fortress's investment strategy demonstrates alignment with Staff's investment thesis, outlook for the asset class, and objectives of the asset class. This strategy will further diversify the Plan's Core Real Estate allocation as proposed during the 2024 deep dive.

Memorandum

To: Investment Committee, Kern County Employees' Retirement Association
From: Brian J. Kwan, CFA, CAIA, Managing Director and Senior Consultant
Scott J. Whalen, CFA, CAIA, Managing Director and Senior Consultant
Date: December 3, 2025
RE: Fortress CRE Enhanced Income Fund Due Diligence

Background

KCERA's Strategic Asset Allocation includes a 5% target allocation to core real estate with an adjusted allocation of 6%. The current allocation of approximately 5.5% represents an underweight position in the asset class. Last year, KCERA Staff and Verus provided a core real estate deep dive review in which they indicated additional diversifying strategies within the asset class would be explored. Given the repricing across the real estate market due to higher rates and shifting fundamentals, strategies that look beyond traditional sub-asset class sectors (office, multi-family residential, retail, and light industrial), as well as real estate debt provide an attractive risk/return tradeoff. Following an investigation into several strategies in these categories, KCERA Staff plans to invest \$60 million in seed capital and \$30 million in the Co-Investment share class to the following real estate debt investment strategy:

- Fortress CRE Enhanced Income Fund

KCERA has current allocations to the following Fortress funds within the private credit portfolio:

- Credit Opportunities Fund V Expansion
- Credit Opportunities Fund VI
- Lending Fund II
- Lending Fund III

This memo provides a review of the comprehensive due diligence process that led to the recommendation, a description of the recommended strategy, and a statement affirming our favorable view of Staff's conclusion.

Evaluation and Due Diligence Process

A thorough review of the strategy took place, including:

- Investment strategy assessment
- Investment team interviews
- Follow-up discussion with investment team
- Review of current investments, pipeline, and historical deals
- Mandate sizing analysis

Strategy Description

Fortress Investment Group ("Fortress") is a global investment firm focused on credit and real estate with over \$53 billion in assets under management. Fortress was founded in 1998 by Wesley R. Edens (former partner at BlackRock) and Rob Kauffman and Randal A. Nardone (both formerly managing directors at

UBS). Fortress expanded from private equity to hedge funds, real estate-related investments, and debt securities. When Fortress went public via an IPO in 2007, it was the first large private equity firm in the United States to be traded publicly. Fortress was acquired by Softbank in 2017, and Fortress operated as an independent business inside Softbank. In 2024, Fortress' management team and Mubadala Capital acquired all Fortress equity held by Softbank. Currently, Fortress operates independently under its own brand and is led by Executive Chairman Peter Briger and co-CEOs Drew McKnight and Jack Neumark. The firm has 405 investment professionals across 13 global offices and offers 10 platforms across credit and real estate.

The real estate platform, started in 2002, manages \$19 billion in assets across:

- Debt: Senior, mezzanine, construction, transitional, and NAV loans
- Equity: CMBS, SASB, conduit, secondaries, CRE CLOs
- Securities: Distressed transactions in residential, hospitality, logistics, and senior housing
- Asset Management: workouts and restructuring

The real estate credit platform is led by co-CIOs Tim Sloan (Head of Global Real Estate), Spencer Garfield (co-Head of Global CRE Credit), and Noah Shore (co-Head of Global CRE Credit), who are further supported by 65 professionals across investment and asset management teams. The team works together across the entire investment process which includes sourcing, underwriting and due diligence, monitoring, and realization.

The CRE Enhanced Income strategy targets a diversified portfolio of floating-rate, short-duration, primarily senior secured loans backed by high-quality commercial properties in the U.S. and Europe. Investment types include commercial first mortgages, mezzanine loans, preferred equity, and bridge financing. Target sectors include multifamily, industrial/logistics, hospitality, retail, and select office. The process emphasizes capital preservation through strong covenants and structural protections. Target returns are 12-14% net with annualized income yield of 10-12% net.

Verus Position

Based on our review of the evaluation and due diligence work of Staff and the independent work conducted by Verus, we are supportive of Staff's decision to invest \$60 million in seed capital and \$30 million in the Co-Investment share class in the Fortress CRE Enhanced Income Fund.

Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward-looking information will be achieved. Investing entails risks, including possible loss of principal.

Verus – also known as Verus Advisory™.
