

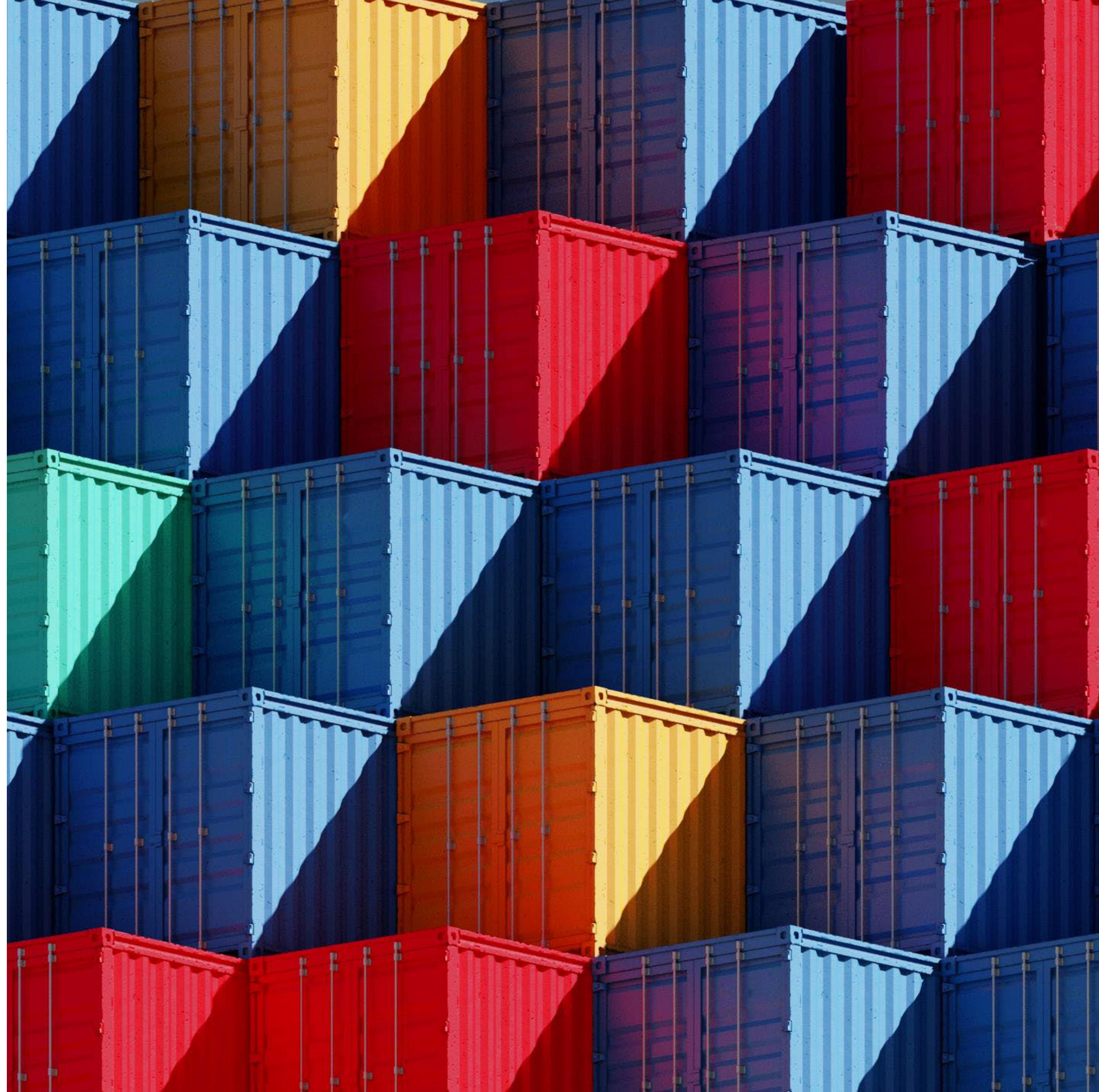


# Historical Review of Florida State Board of Administration (SBA) Expected Return on Pension Assets

Florida Retirement System (FRS)  
Assumption Conference

October 2024

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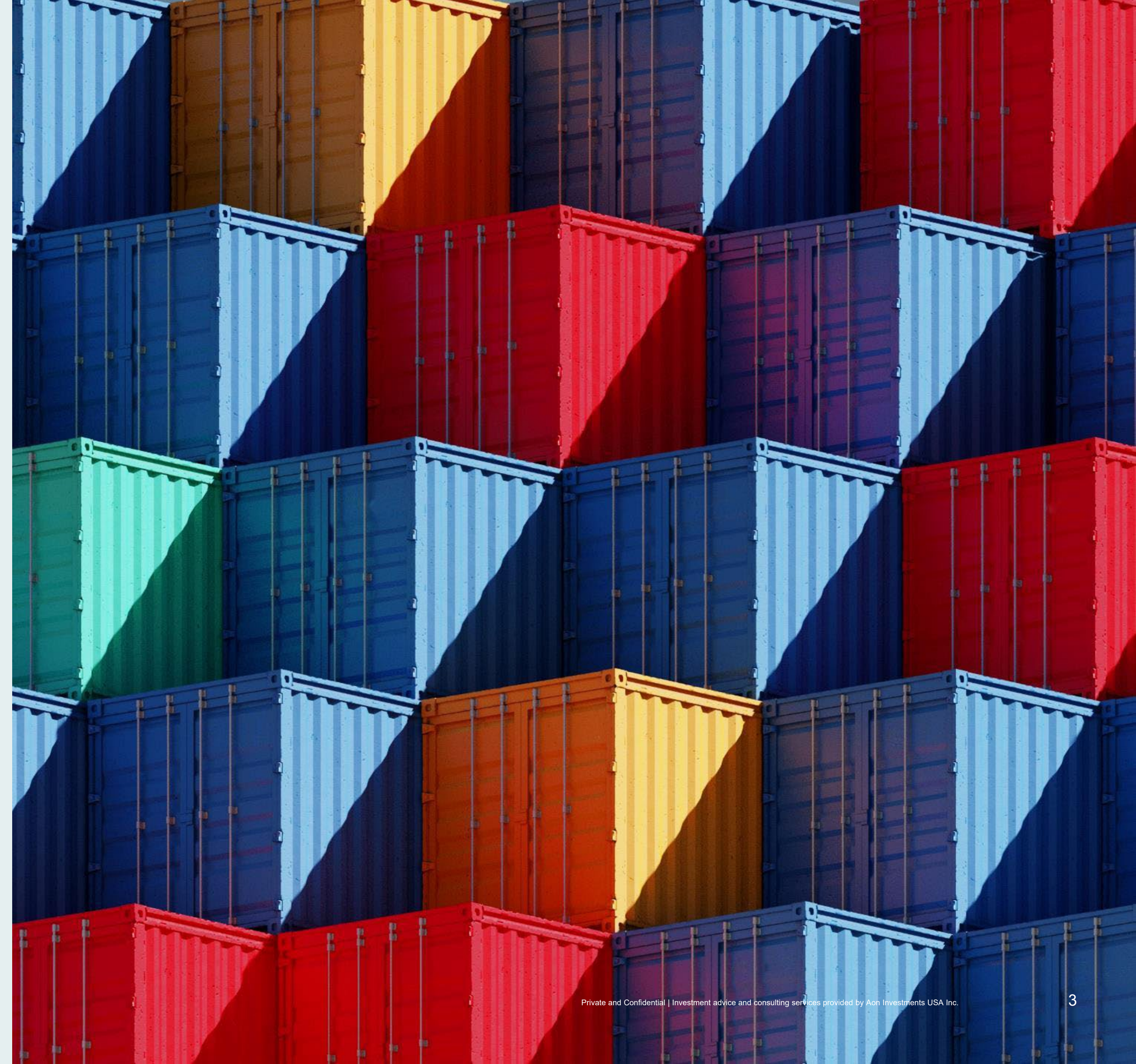


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# 1

## Executive Summary



# Executive Summary

## Purpose of Presentation

Review SBA's approach to capital market expectations

## Capital Market Assumptions

### Methodology

SBA uses the equity risk premiums (ERP) from 3 consulting firms (Aon, Mercer, and Wilshire) to remove biases from any one firm

### Assumed ERPs (Averaged/Aon's)

2023: 1.67%/2.20%

2024: 0.75%/2.00%

### Expected return assumption

2023: 6.86%

2024: 6.32%<sup>1,2</sup>

## Benchmarking

Aon benchmarks its assumptions annually against the Horizon Survey (also shown)

Aon's assumptions tend to be middle of the pack in the Horizon Survey each year

## Peer Comparisons

FRS' actuarial assumed rate of return for FYE 2023: 6.70%

Total public pension universe median: 7.00%<sup>3</sup>

Median of similar sized peers: 6.88%<sup>3</sup>

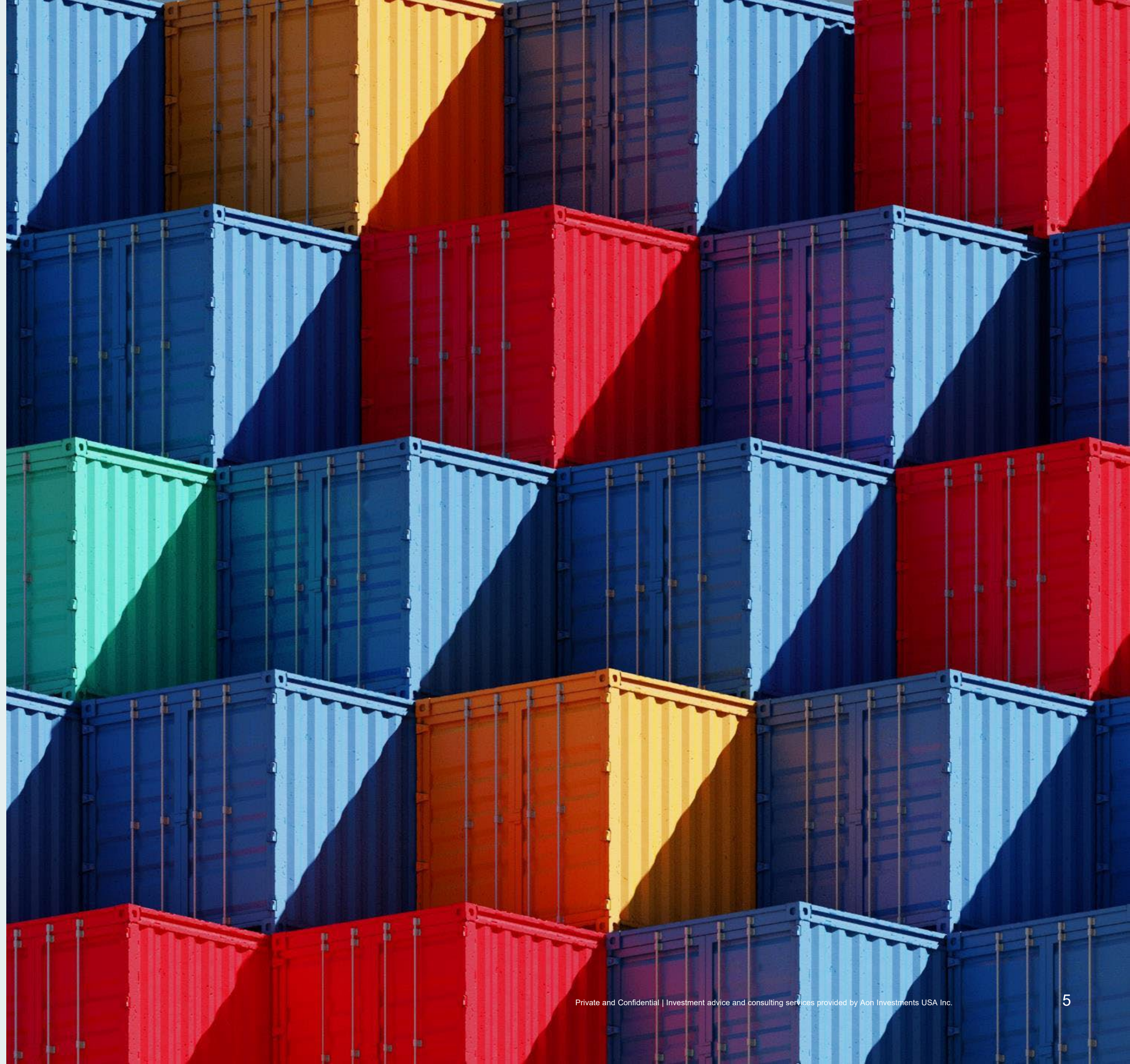
<sup>1</sup> Expected returns are using Aon's Q3 2024 10/30-Year Capital Market Assumptions (CMAs) as of June 30, 2024 adjusted for the delta in average Global Equity Risk Premium (ERP) among three investment advisors: Aon, Mercer, and Wilshire (-125bps adjustment), which are projections about the future returns of asset classes. For asset classes that can be implemented passively, which includes most public assets, alpha and active management fees are not included in the return expectations. For asset classes that can only be implemented actively, such as hedge funds and private assets, we assume alpha and higher active manager fees. Expected returns are geometric (long-term compounded). Expected returns presented are models and do not represent the returns of an actual client account. Your actual returns may differ from the model expected returns presented based on your plan's individual fees/expenses. AIUSA's advisory fees are described in Part 2A of AIUSA's Form ADV. Not a guarantee of future results. See appendix for capital market assumptions disclosure pages.

<sup>2</sup> The portfolio's expected return of 6.32% is based upon current policy target weights for each asset class and the asset classes' expected returns and correlations. The portfolio's expected return is subject to change should the current policy targets change and/or the investment objective of an asset class change.

<sup>3</sup> The public pension universe is defined on page 15 while pension plans of similar size are defined on page 16.

# 2

## Capital Market Assumptions



# Assumptions – Development

## Overview

**The SBA approach averages the global equity risk premiums<sup>1</sup> from three investment advisors (Aon Investments, Mercer, and Wilshire)**

Building block approach is used

- Price inflation and fixed income returns reflect market conditions and yields
- For all other asset classes (“risk assets”), a risk premium is added to fixed income returns

**Average risk premium is used to scale Aon Investments’ expected returns for the “risk assets”**

The difference between Aon Investments’ equity risk premium and the average equity risk premium is added to “risk asset” capital market assumptions from Aon Investments to normalize the expected returns

Based on feedback from the Investment Advisory Council (IAC), the time period used in the averaging method is 10 years

<sup>1</sup> Equity Risk Premium is defined as the excess return earned over bonds that compensates investors for taking on higher risk  
Mercer and Wilshire capital market assumptions provided by Florida SBA. Aon is not affiliated with Mercer or Wilshire and does not guarantee the accuracy or completeness of this information, and cannot be held accountable for inaccurate data provided by third parties.

# Assumptions – Development

## Equity risk premium

The SBA averages the global equity risk premiums<sup>1</sup> from three consulting firms and then uses that average risk premium to scale Aon Investments’ expected returns for the “risk assets”

**2024 Average Global Equity Risk Premium = Average (Global Equity Return – U.S. Bond Return) = 0.75%**

	Aon Investments	Mercer	Wilshire	Average
2024 Assumptions (10-year geometric average expected returns)				
- As of Date	June 2024	July 2024	June 2024	
- Global Equity	6.90%	5.50%	5.10%	5.83%
- Core U.S. Bonds	4.90%	5.10%	5.25%	5.08%
- Global Equity Risk Premium	<b>2.00%</b>	0.40%	-0.15%	<b>0.75%</b>
2023 Global Equity Risk Premium	2.20%	1.50%	1.30%	1.67%
Change 2024 vs. 2023	-0.20%	-1.10%	-1.45%	-0.92%
Prior Years:				
- 2022	3.95%	3.40%	2.55%	3.30%
- 2021	4.55%	3.67%	3.55%	3.92%
- 2020	5.50%	4.77%	5.20%	5.15%
- 2019	4.55%	3.70%	3.40%	3.88%

An average ERP of 0.75% would mean that Aon’s capital market assumptions for risk assets would be **reduced by 125bps** in the 2024 asset-liability analysis

<sup>1</sup> Equity Risk Premium is defined as the excess return earned over bonds that compensates investors for taking on higher risk; all returns are 15-year (Pre-2023) / 10-year (Post-2023) geometric average (compounded) expected returns. Calculations may not sum to total due to rounding.

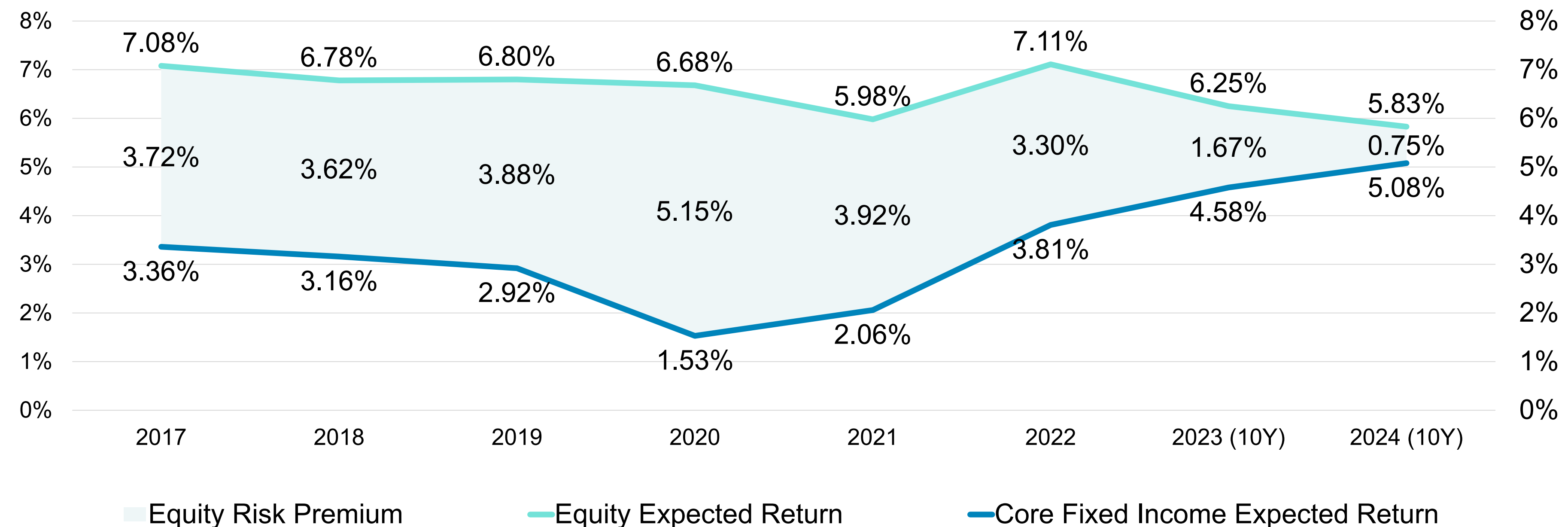
# Assumptions – Development

## Breakdown of equity risk premium assumption

The decrease in the 2024 equity risk premium<sup>1</sup> was driven by the combination of increases in projected fixed income returns and decreasing projected equity returns

- Below is a 8-year historical look at the breakdown of the global equity risk premium

### Breakdown of Global Equity Risk Premium



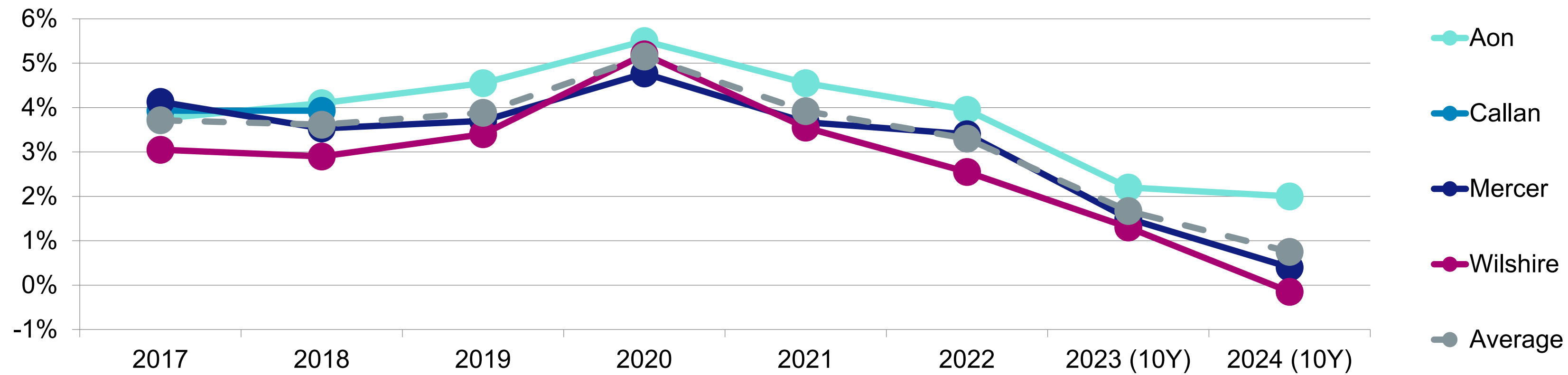
<sup>1</sup> Equity Risk Premium is defined as the excess return earned over bonds that compensates investors for taking on higher risk; all returns are 15-year (Pre-2023) / 10-year (Post-2023) geometric average (compounded) expected returns Pre-2019 averaging based on Aon, Callan, Mercer, and Wilshire capital market assumptions; 2019 and beyond based on Aon, Mercer, and Wilshire capital market assumptions



# Assumptions – Development

## Historical equity risk premium assumption

Average Global Equity Risk Premium = Average (Global Equity Return – U.S. Bond Return)



Equity Risk Premium <sup>1</sup>	Asset-Liability Study							
	2017	2018	2019	2020	2021	2022	2023 (10Y)	2024 (10Y)
Aon	3.75%	4.10%	4.55%	5.50%	4.55%	3.95%	2.20%	<b>2.00%</b>
Callan	3.93%	3.93%	N/A	N/A	N/A	N/A	N/A	N/A
Mercer	4.13%	3.53%	3.70%	4.77%	3.67%	3.40%	1.50%	0.40%
Wilshire	3.05%	2.90%	3.40%	5.20%	3.55%	2.55%	1.30%	-0.15%
Average	3.72%	3.62%	3.88%	5.15%	3.92%	3.30%	1.67%	<b>0.75%</b>

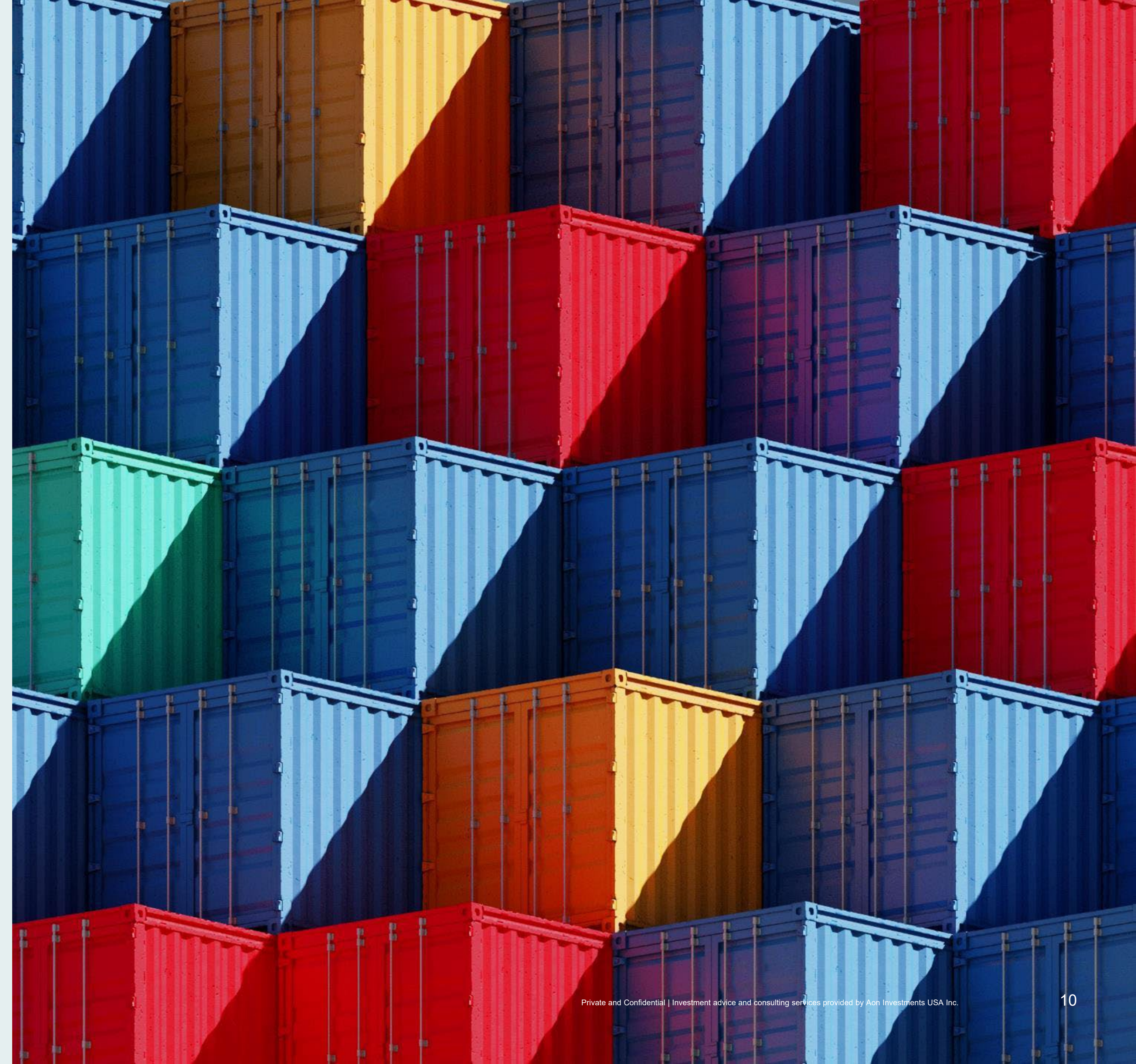
Aon Investments' capital market assumptions for risk assets would be **reduced by 125bps** in the 2024 asset-liability analysis

<sup>1</sup> Equity Risk Premium is defined as the excess return earned over bonds that compensates investors for taking on higher risk; all returns are 15-year (Pre-2023) / 10-year (Post-2023) geometric average (compounded) expected returns

<sup>2</sup> Callan was previously included in the averaging but removed starting in 2019 because its capital market assumption date did not coincide with the same timeframe as the other consultants and the asset-liability study; Callan only updates their capital market assumptions once a year while the other consultants update quarterly

# 3

## Benchmarking



# Benchmarking Our Assumptions vs. Peers

## 2024 Horizon Survey results

### What is the Horizon Survey?

Since 2010, Horizon Actuarial Services, LLC has conducted a capital market assumption survey of investment firms to aid in determining reasonable assumptions for a pension plan's expected return on assets

- While Aon does not seek to change our approach based on how we stack up to peers, it is a helpful double-check to make sure we are not too far off from others in the industry

For the 2024 survey, 41 investment advisors participated.

### How does Aon compare to the 2024 survey results?

Aon Investments' 2024 10-year assumptions for expected returns (as of March 31, 2024)

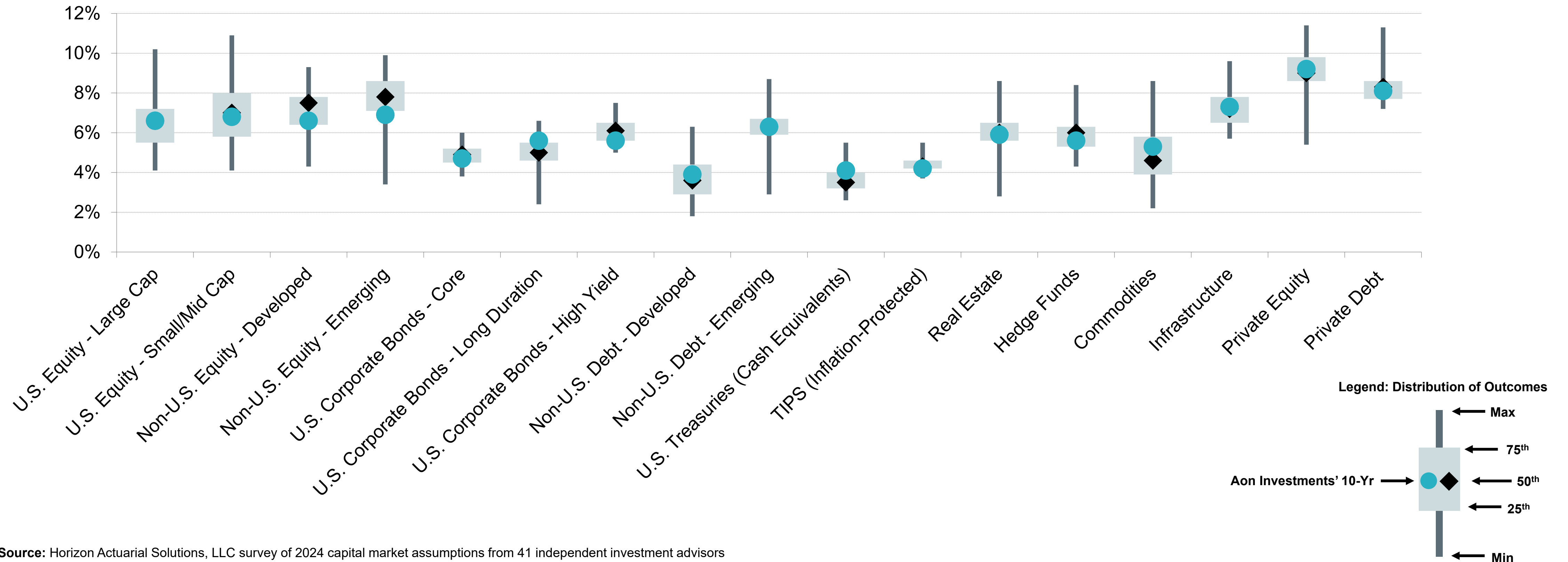
- **Equities:** approximately middle of the pack for U.S. Equities; lower for Non-U.S. Equities
- **Fixed Income:** approximately middle of the pack relative to the survey's median level; lower for U.S. High Yield; higher for Cash and Long Duration Credit
- **Alternatives:** approximately middle of the pack relative to the survey's median level; higher for Commodities

**Source:** Horizon Actuarial Solutions, LLC survey of 2024 capital market assumptions from 41 independent investment advisors. The survey was conducted by Horizon Actuarial Services, LLC, an independent consulting firm specializing in providing actuarial and consulting services to multiemployer benefit plans. Aon Investments USA Inc. ("AIUSA") is not affiliated with Horizon Actuarial Services, LLC. AIUSA did not pay to participate in the survey and no direct or indirect compensation has been provided by AIUSA for participation. Aon does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader. Please refer to the more thorough disclosure and additional information about the methodology used in compiling the survey results via the website of the publication.

# Aon Investments' Capital Market Assumptions vs. Horizon Survey

## 10-Year assumptions

Expected Geometric Returns of 41 Investment Advisors  
(10-Year Forecast)



**Source:** Horizon Actuarial Solutions, LLC survey of 2024 capital market assumptions from 41 independent investment advisors  
Aon Investments' expected returns are annualized over 10-years as of 2Q 2024 (3/31/2024). CMAs contain projections about future returns on asset classes. Our CMA projections are designed to reflect the typical cost of implementing an investment program. Not a guarantee of future results. Additional information regarding our capital market assumptions can be made available upon request.

# Equity Risk Premium – Horizon vs. SBA Methodology

		2017	2018	2019	2020	2021	2022	2023	2024
<b>Horizon Survey<sup>1</sup></b>	U.S. Large Cap Equity	6.5%	6.1%	6.3%	6.2%	5.7%	6.0%	6.9%	6.6%
	U.S. Small Cap Equity	6.9%	6.6%	6.5%	6.9%	6.3%	6.6%	7.2%	7.0%
	Int'l Developed Equity	7.0%	6.7%	6.8%	6.8%	6.5%	6.5%	7.4%	7.5%
	Emerging Markets Equity	8.0%	7.6%	7.9%	7.9%	7.3%	7.5%	7.9%	7.8%
	Core Fixed Income	3.2%	3.4%	3.5%	2.5%	2.0%	2.4%	4.7%	4.9%
	Blended Global Equity <sup>2</sup>	6.9%	6.5%	6.7%	6.6%	6.2%	6.4%	7.2%	7.0%
	Core Fixed Income	3.2%	3.4%	3.5%	2.5%	2.0%	2.4%	4.7%	4.9%
	<b>Equity Risk Premium</b>	<b>3.7%</b>	<b>3.1%</b>	<b>3.2%</b>	<b>4.1%</b>	<b>4.2%</b>	<b>4.0%</b>	<b>2.5%</b>	<b>2.1%</b>
<b>SBA Methodology<sup>3</sup></b>	Aon	3.75%	4.10%	4.55%	5.50%	4.55%	3.95%	2.20%	2.00%
	Callan	3.93%	3.93%	N/A	N/A	N/A	N/A	N/A	N/A
	Mercer	4.13%	3.53%	3.70%	4.77%	3.67%	3.40%	1.50%	0.40%
	Wilshire	3.05%	2.90%	3.40%	5.20%	3.55%	2.55%	1.30%	-0.15%
	<b>SBA Avg. Methodology</b>	<b>3.72%</b>	<b>3.62%</b>	<b>3.88%</b>	<b>5.15%</b>	<b>3.92%</b>	<b>3.30%</b>	<b>1.67%</b>	<b>0.75%</b>

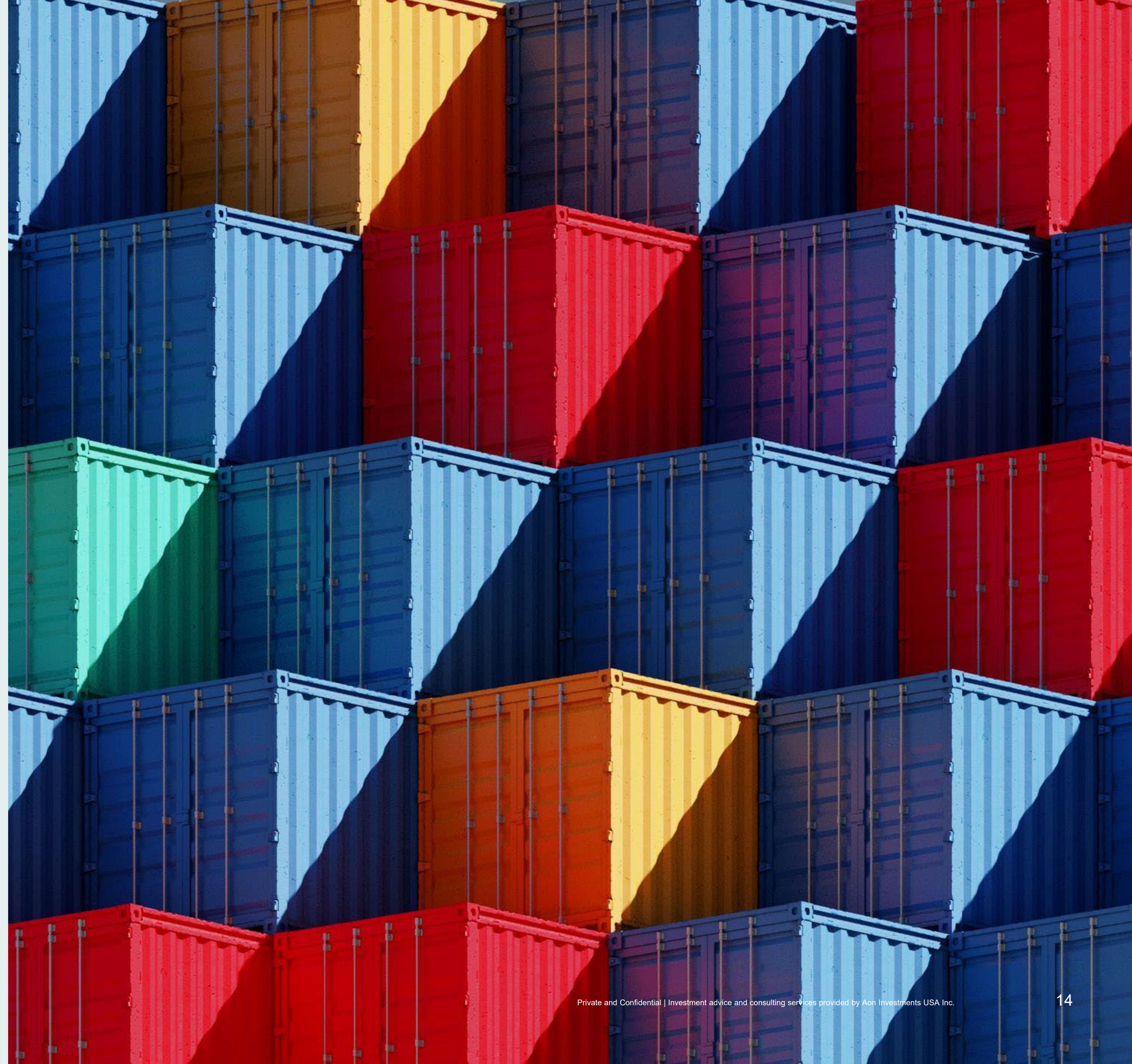
<sup>1</sup> Horizon survey information uses the median U.S. equity, international equity, and core fixed income returns from the annual surveys

<sup>2</sup> Since Horizon does not produce a global equity assumption, one was inferred based on a 60% weighting to U.S. equities (85% large cap; 15% small cap) and 40% international equity (70% developed; 30% emerging markets)

<sup>3</sup> Time period of SBA Methodology is based on when asset-liability analysis was conducted during a given year and may not sync up to the same time period as of the Horizon survey

# 4

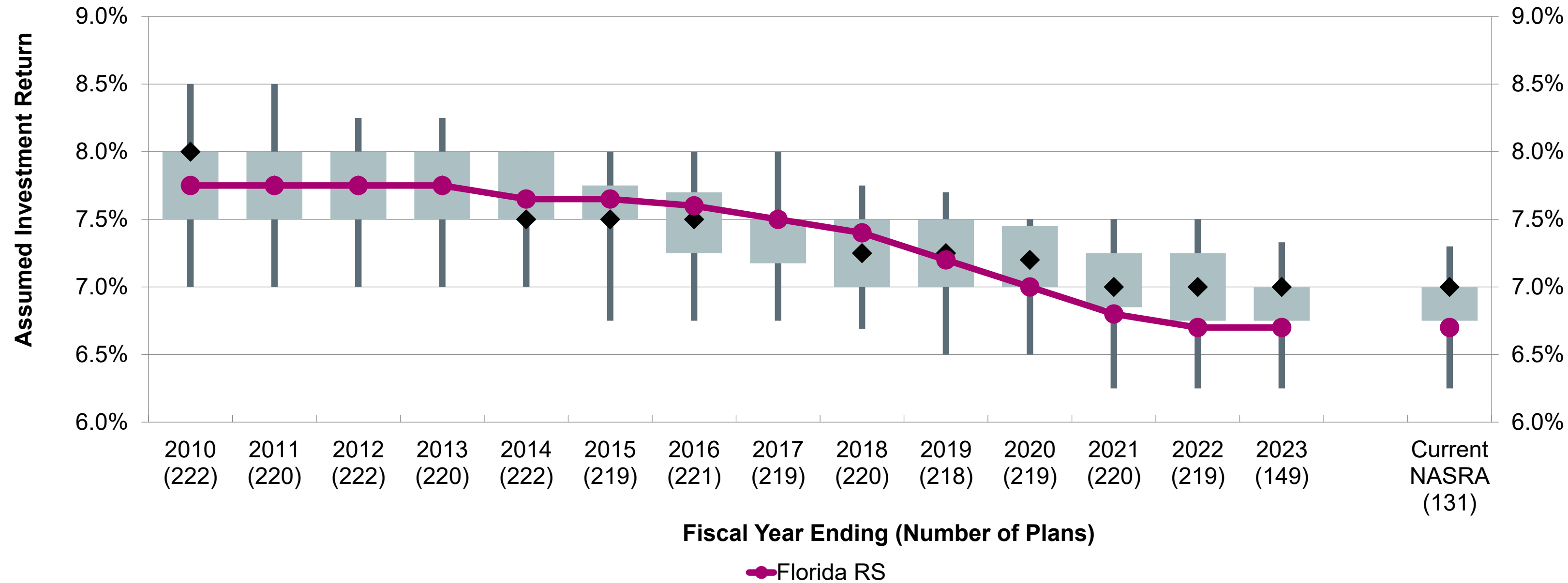
## Peer Comparisons



# Peer Comparisons – All Public Plans

Expected return assumption versus peers<sup>1</sup>

## Distribution of U.S. Public Pension Investment Return Assumptions



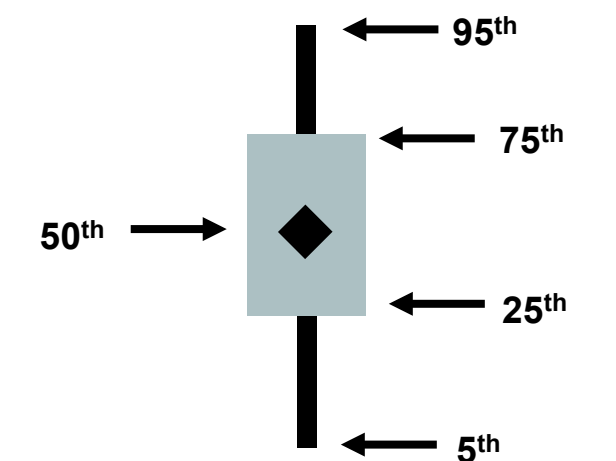
Source: Public Pensions Data

Source: NASRA

## Key Takeaways

- The historical actuarial assumption trend for investment returns has declined from an 8.00% median in FYE 2010 to 7.00% as of FYE 2023, per Public Plans Data<sup>1</sup>
- Current actuarial assumptions, as tracked by NASRA as of June 2024, have a median actuarial assumption of 7.00%

Legend: Distribution of Outcomes



Sources: Public Plans Data (publicplansdata.org) as of June 2024; NASRA downloadable investment return assumptions as of June 2024  
<sup>1</sup> Peers defined as public funds published within publicplansdata.org as of June 2024; Number of plans per year are shown in parentheses

# Peer Comparisons – Similar Asset Size

Expected return assumption versus peers<sup>1</sup>

Plan	Expected Return Assumption
California Public Employees' Retirement System <sup>1</sup>	6.80%
California State Teachers' Retirement System <sup>1</sup>	7.00%
Florida Retirement System <sup>1</sup>	6.70%
New York State and Local Employees' Retirement System <sup>2</sup>	5.90%
New York State Teachers' Retirement System <sup>1</sup>	6.95%
Teacher Retirement System of Texas <sup>1</sup>	7.00%
Average	6.73%
Median	6.88%

## Key Takeaway

- Using plans with large asset bases, Florida Retirement System's expected return assumption is in-line with the peer average and just under the median expectation

<sup>1</sup> Source: NASRA downloadable investment return assumptions as of October 2024

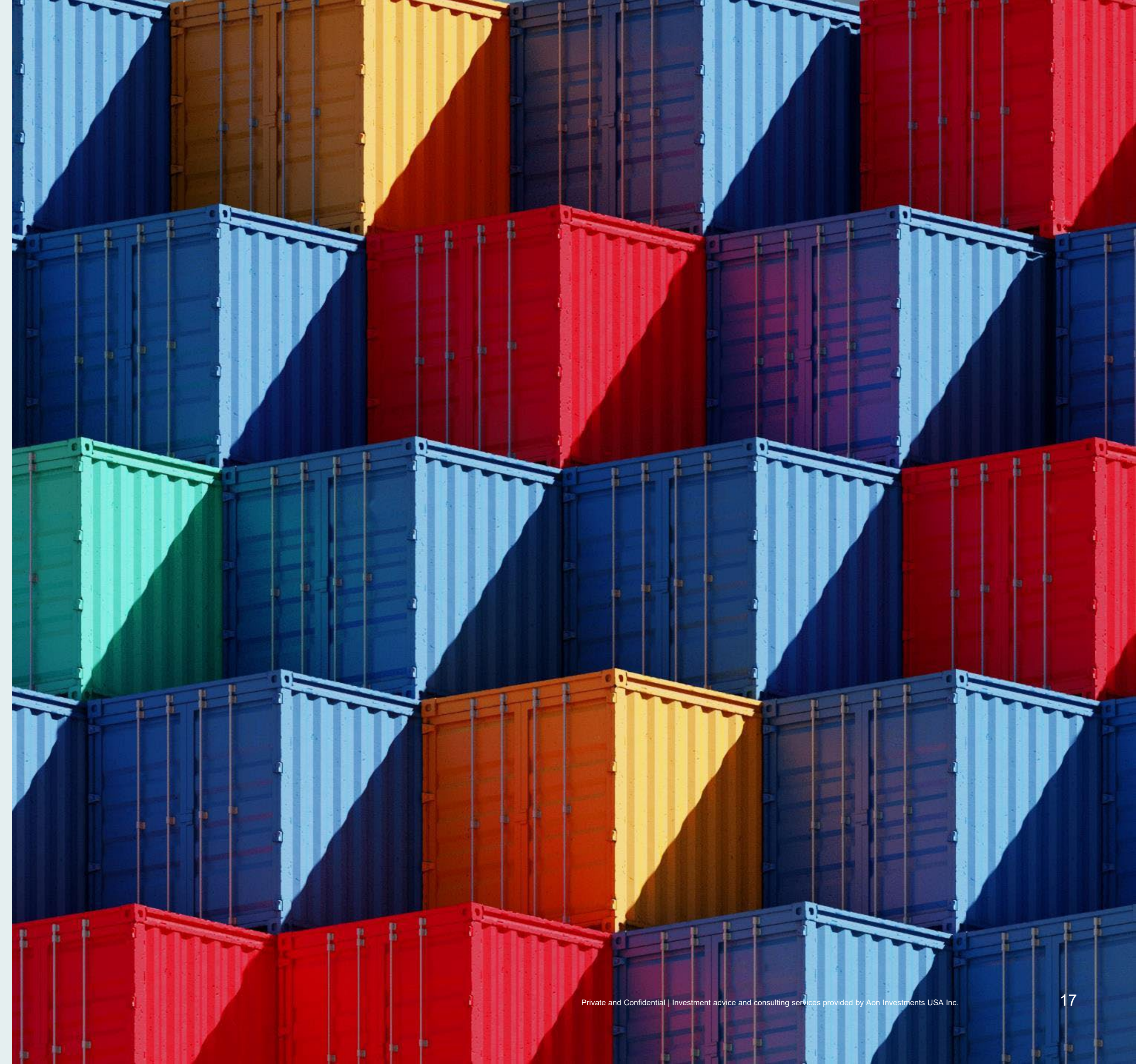
<sup>2</sup> Source: <https://www.osc.ny.gov/files/retirement/resources/pdf/actuary-report-2023.pdf>

Peers shown are similar in size to Florida SBA. Return assumptions provided by the third-party sources listed above. Aon does not guarantee the accuracy or completeness of this information and cannot be held accountable for inaccurate data provided by third parties. Reliance upon information in this material is at the sole discretion of the reader.



# 5

## Conclusions



# Conclusions

## Capital Market Assumptions

### Methodology

- SBA uses the equity risk premiums (ERP) from 3 consulting firms (Aon, Mercer, and Wilshire) to remove biases from any one firm

### Assumed ERPs (Averaged/Aon's)

- 2023: 1.67%/2.20%
- 2024: 0.75%/2.00%

### Expected return assumption

- 2023: 6.86%
- 2024: 6.32%<sup>1,2</sup>

## Benchmarking

- Aon benchmarks its assumptions annually against the Horizon Survey (also shown)
- Aon's assumptions tend to be middle of the pack in the Horizon Survey each year

## Peer Comparisons

- FRS' actuarial assumed rate of return for FYE 2023: 6.70%
- Total public pension universe median: 7.00%<sup>3</sup>
- Median of similar sized peers: 6.88%<sup>3</sup>

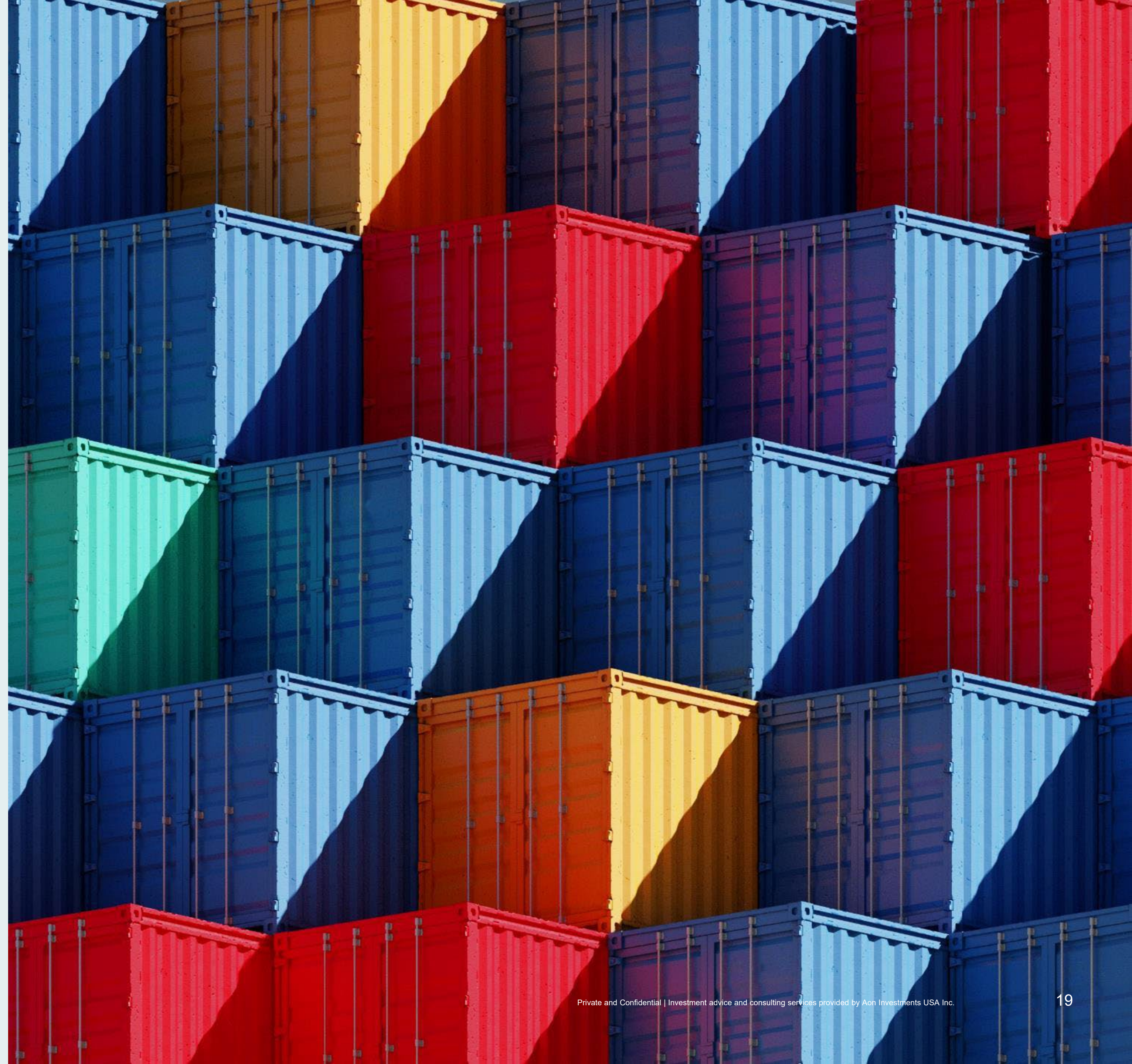
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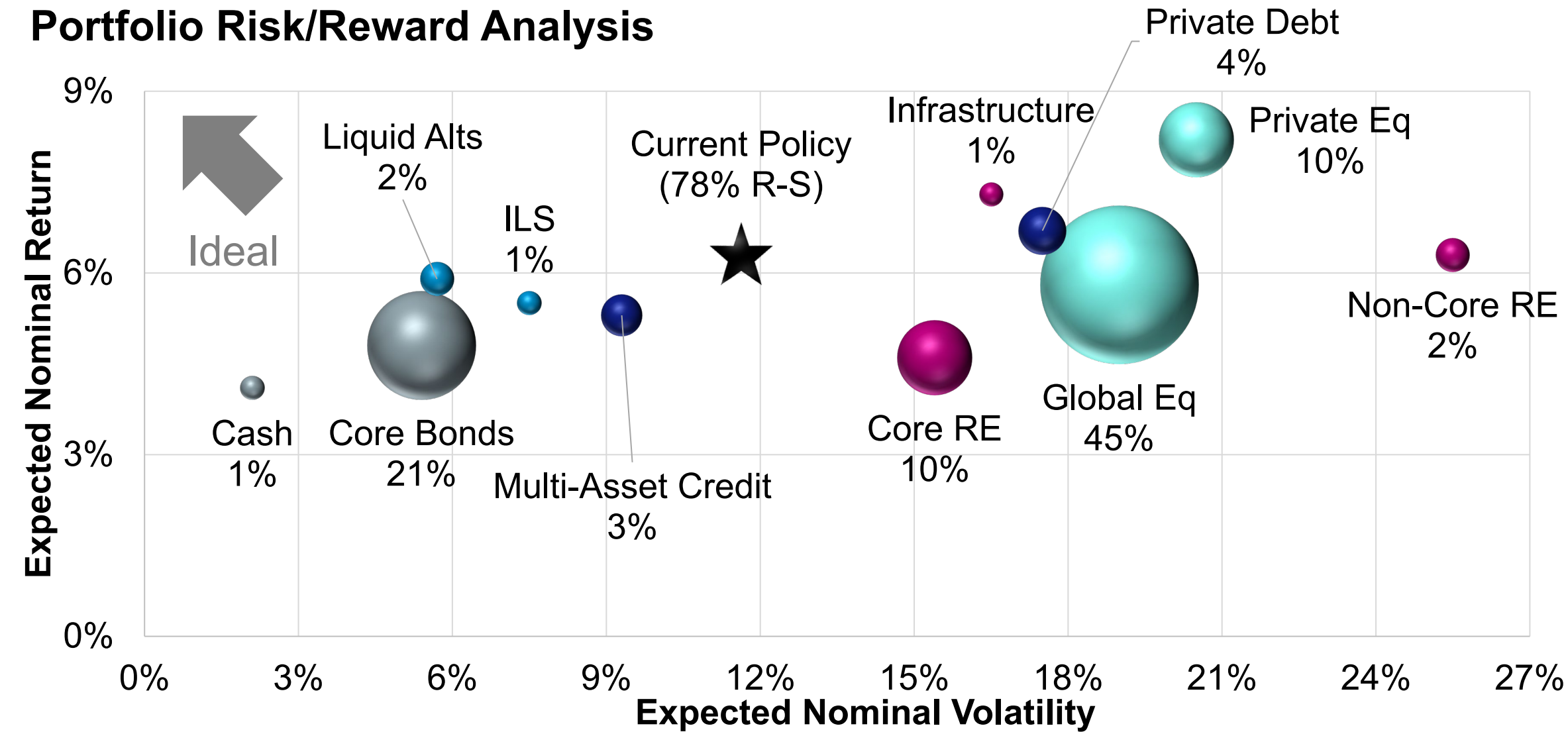
## Appendix



# SBA Portfolio Analysis – Current Portfolio

Current diversification results in an expected return of 6.32%<sup>1</sup>

## Portfolio Risk/Reward Analysis



### Legend:

Bubble size proportional to current asset allocation (i.e., larger bubbles = larger allocations); Asset classes are color coded:

- Equities (teal), Liquid Alternatives (blue), Return-Seeking Fixed Income (navy blue), Real Assets (purple), Safety (grey)

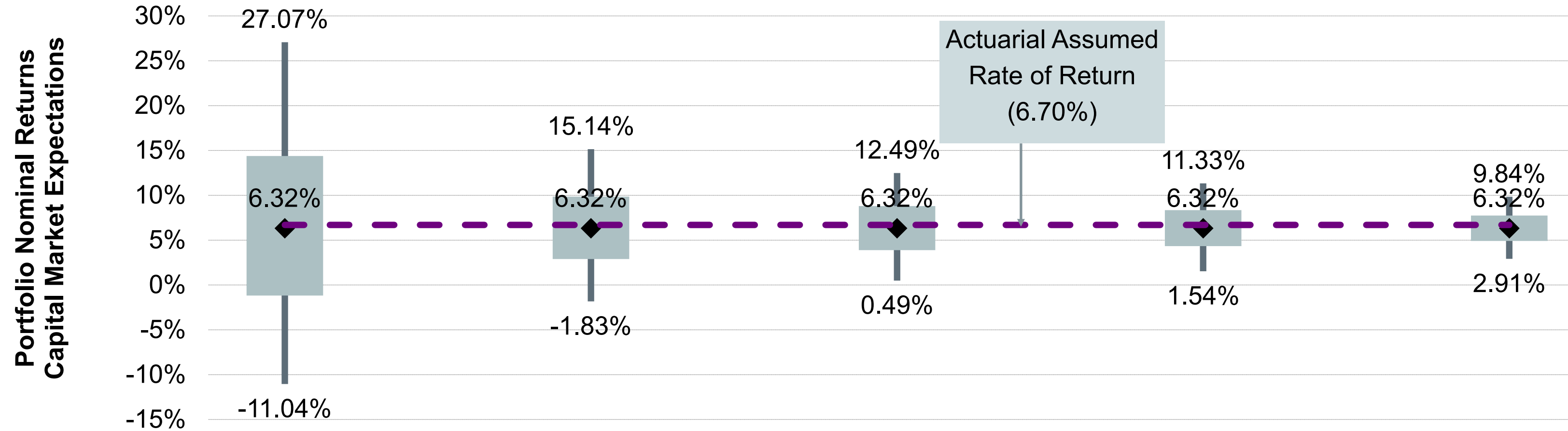
Asset Class – Target %	Expected Real Return <sup>1</sup>	Expected Nominal Return <sup>1</sup>	Expected Nominal Volatility
<b>Equity</b>			
Global Equity IMI – 45%	3.4%	5.8%	19.0%
<b>Fixed Income</b>			
Cash (Gov't) – 1%	1.8%	4.1%	2.1%
Core Fixed Income – 21%	2.4%	4.8%	5.4%
Multi-Asset Credit – 3%	2.9%	5.3%	9.3%
<b>Alternatives</b>			
Direct Hedge Funds <sup>2,3</sup> – 2%	3.5%	5.9%	5.7%
Core Real Estate – 10%	2.2%	4.6%	15.4%
Non-Core Real Estate – 2%	3.9%	6.3%	25.5%
Private Equity – 10%	5.8%	8.2%	20.5%
Infrastructure - 1%	4.9%	7.3%	16.5%
Private Debt – 4%	4.3%	6.7%	17.5%
Insurance Linked Securities – 1%	3.1%	5.5%	7.5%
<b>Portfolio Metrics (30-Year Assumptions)</b>			
<b>Total Fund<sup>1,2</sup></b>	<b>3.95%</b>	<b>6.32%</b>	<b>11.63%</b>

<sup>1</sup> Expected returns are using Aon's Q3 2024 10/30-Year Capital Market Assumptions (CMAs) as of June 30, 2024 adjusted for the delta in average Global Equity Risk Premium (ERP) among three investment advisors: Aon, Mercer, and Wilshire (-125bps adjustment), which are projections about the future returns of asset classes. For asset classes that can be implemented passively, which includes most public assets, alpha and active management fees are not included in the return expectations. For asset classes that can only be implemented actively, such as hedge funds and private assets, we assume alpha and higher active manager fees. Expected returns are geometric (long-term compounded). Expected returns presented are models and do not represent the returns of an actual client account. Your actual returns may differ from the model expected returns presented based on your plan's individual fees/expenses. AIUSA's advisory fees are described in Part 2A of AIUSA's Form ADV. Not a guarantee of future results. See appendix for capital market assumptions disclosure pages.

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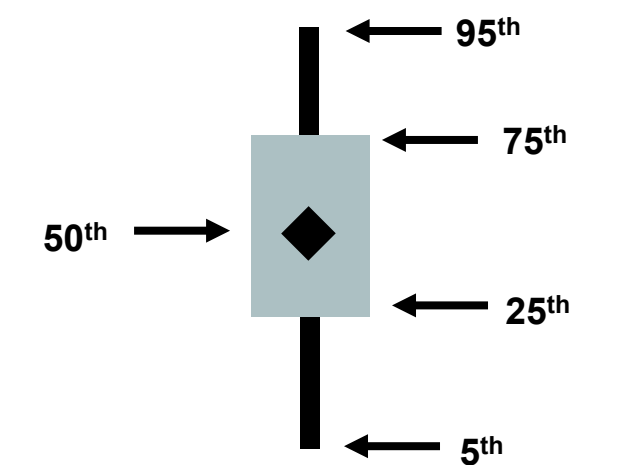
# SBA Portfolio Analysis

Range of nominal returns by time horizon<sup>1,2</sup>



	Current Policy					
Percentile	1-Year	5-Year	10-Year	15-Year	30-Year	
5 <sup>th</sup>	-11.04%	-1.83%	0.49%	1.54%	2.91%	
25 <sup>th</sup>	-1.18%	2.90%	3.89%	4.33%	4.91%	
50 <sup>th</sup>	6.32%	6.32%	6.32%	6.32%	6.32%	
75 <sup>th</sup>	14.38%	9.85%	8.81%	8.35%	7.75%	
95 <sup>th</sup>	27.07%	15.14%	12.49%	11.33%	9.84%	

Legend: Distribution of Outcomes



<sup>1</sup> Expected returns are using Aon's Q3 2024 10/30-Year Capital Market Assumptions (CMAs) as of June 30, 2024 adjusted for the delta in average Global Equity Risk Premium (ERP) among three investment advisors: Aon, Mercer, and Wilshire (-125bps adjustment), which are projections about the future returns of asset classes. For asset classes that can be implemented passively, which includes most public assets, alpha and active management fees are not included in the return expectations. For asset classes that can only be implemented actively, such as hedge funds and private assets, we assume alpha and higher active manager fees. Expected returns are geometric (long-term compounded). Expected returns presented are models and do not represent the returns of an actual client account. Your actual returns may differ from the model expected returns presented based on your plan's individual fees/expenses. AIUSA's advisory fees are described in Part 2A of AIUSA's Form ADV. Not a guarantee of future results. See appendix for capital market assumptions disclosure pages.

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# SBA Portfolio Analysis

## Rationale for diversification – variability in top performing asset classes

	Fiscal Year End														
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Global Equity</b>	15.2%	31.0%	-5.1%	18.6%	23.5%	1.9%	-3.1%	19.7%	11.6%	5.0%	2.1%	41.8%	-17.1%	16.5%	18.6%
<b>Private Equity</b>	21.5%	18.0%	6.8%	10.7%	19.9%	14.6%	6.2%	18.3%	17.3%	15.3%	3.4%	68.5%	24.2%	-5.6%	6.8%
<b>Strategic Investments</b>	28.9%	19.2%	3.7%	16.2%	13.2%	6.8%	1.8%	9.9%	7.8%	5.2%	0.0%	17.2%	7.8%	5.0%	8.1%
<b>Real Estate</b>	-10.2%	18.4%	12.8%	14.9%	14.9%	11.9%	12.7%	8.7%	7.2%	7.1%	1.6%	8.6%	22.4%	-2.1%	-5.7%
<b>Fixed Income</b>	14.9%	6.1%	7.8%	0.4%	3.8%	2.0%	4.3%	0.3%	-0.2%	6.8%	6.8%	0.9%	-8.0%	-0.3%	4.0%
<b>Cash</b>	2.0%	0.4%	0.3%	0.3%	0.2%	0.2%	0.3%	0.6%	1.4%	2.3%	1.5%	0.1%	0.2%	3.8%	5.4%
<b>Total Fund</b>	14.0%	22.1%	0.3%	13.1%	17.4%	3.7%	0.5%	13.8%	9.0%	6.3%	3.1%	29.5%	-6.3%	7.5%	10.5%

Note: Shaded area represents top performing asset class in a given fiscal year

**Past performance is no guarantee of future results.** Diversification does not ensure profit nor does it protect against loss of principal. Diversification among investment options and asset classes may help to reduce overall volatility.

# Asset-Liability Management Overview

What is an asset-liability study?

## What?

A comprehensive toolkit for making decisions on a **fund's asset allocation and investment risk that align with the liabilities** those funds support

## Why?

Aon believes optimal decisions regarding pension plan management are made when they are based on a **clear understanding of the assets and liabilities** and how they interact

## When?

Aon suggests conducting asset-liability studies every **3-5 years** depending on client specifics, or more frequently should circumstances dictate

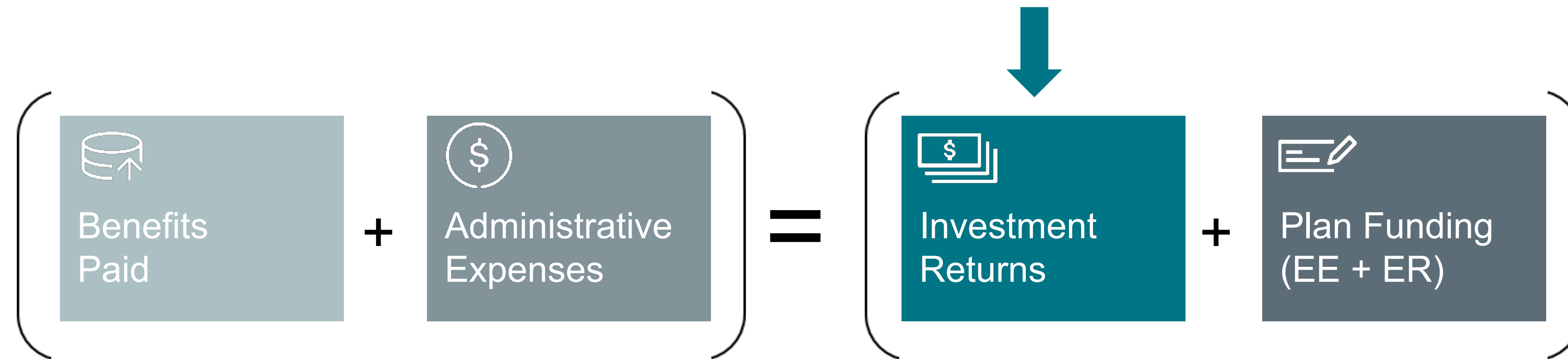
## How?

**Identify future trends** in the financial health of the fund based on economic uncertainties that may not be evident from an actuarial valuation

# Asset-Liability Management Overview

Ultimate retirement benefit cost equation

The cost ultimately borne by the Plan will be represented by the financing equation shown below:



**The asset-liability study will analyze the variability of future investment returns on the Plan financials**

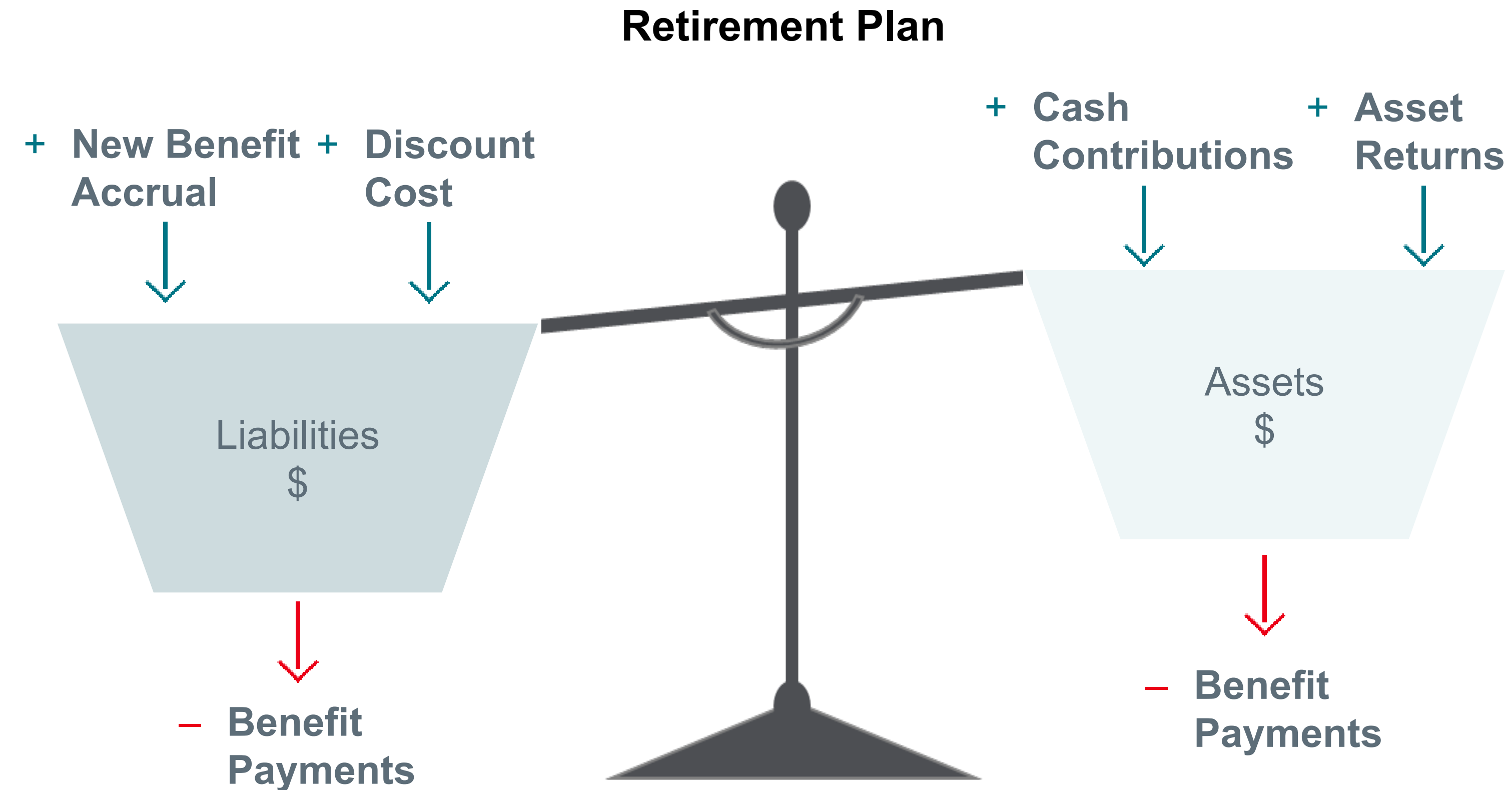
Higher than expected returns will result in lower future Plan costs

Lower than expected returns will result in higher future Plan costs



# Asset-Liability Management Overview

Balance of liabilities and assets



## Key Takeaways

Plan Liabilities will grow in two ways:

- New benefit accruals (or Normal Cost)
- One less year of interest discounting (or Discount Cost)

Assets will grow in two ways:

- Cash Contributions to the Plan
- Asset Returns

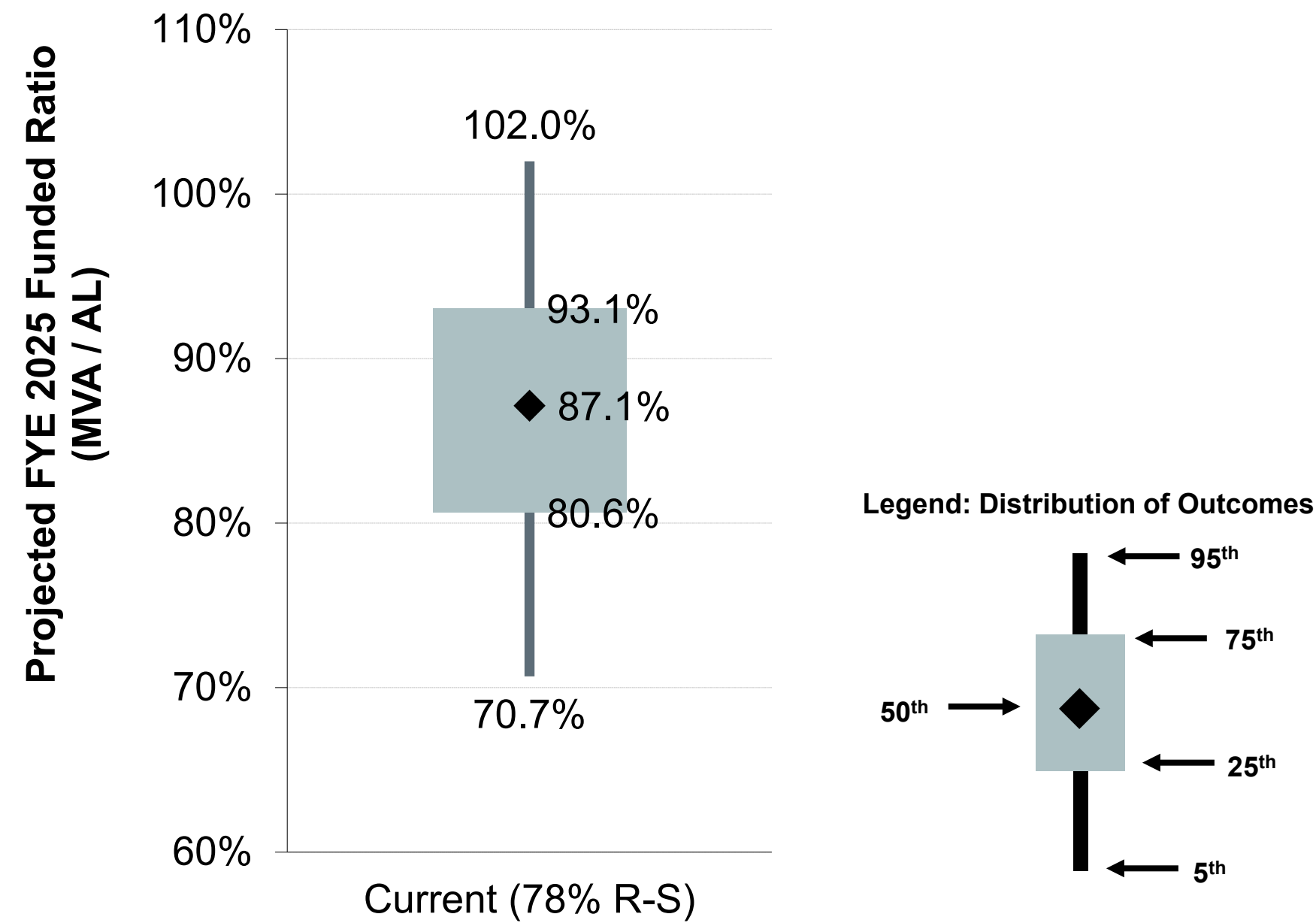
Both liabilities and assets will be reduced by benefits paid to participants

# Asset-Liability Projection Analysis

## Market value of assets/actuarial liability funded ratio

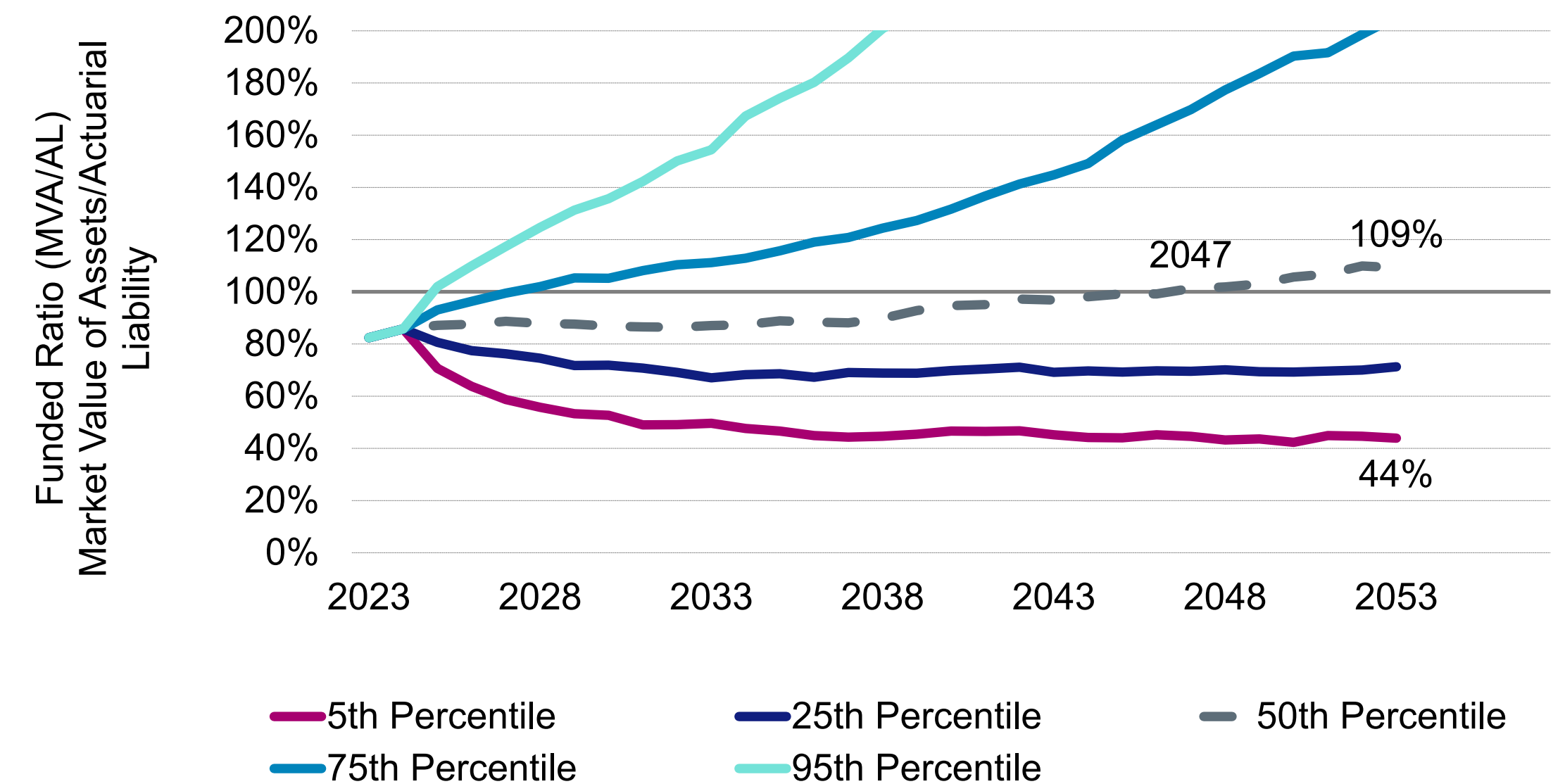
### Short-Term Analysis

- Over the short-term (1 year), there is a wide dispersion of funded ratio outcomes driven by asset performance



### Long-Term Analysis

- Under the Current Policy (78% R-S), the funded ratio is expected to increase over the projection period in the central expectation (50th percentile outcome), reaching full funding by FYE 2047
- Downside risk (5th percentile outcomes) illustrates a small likelihood of significant funded ratio deterioration over the projection period



\* Projections assume constant 6.70% discount rate for pension liabilities along with administrative expenses from the actuarial valuation report which are assumed to be inclusive of Aon's investment consulting fees.

# Aon's Capital Market Assumptions

## Background

- Long-term (10- and 30-year forecasts) forward-looking assumptions (asset class geometric return, volatility, and correlations)
- Building block approach, primarily based on consensus expectations and market-based inputs
- Best estimates of annualized returns (50/50 better or worse)
- Market returns: no active management value added (except for certain assets classes, such as hedge funds)
- Net of investment fees
- Updated quarterly



# Custom FRS Capital Market Assumptions

As of June 30, 2024

	10-Year CMAs				30-Year CMAs			
	Expected Real Return <sup>1</sup>	Expected Nominal Return <sup>1</sup>	Expected Nominal Volatility	Assumed Global Equity Beta	Expected Real Return <sup>1</sup>	Expected Nominal Return <sup>1</sup>	Expected Nominal Volatility	Assumed Global Equity Beta
<b>Equity</b>								
1 Global Equity IMI	3.3%	5.6%	18.5%	1.00	3.4%	5.8%	19.0%	1.00
<b>Fixed Income</b>								
2 Cash (Gov't)	2.1%	4.3%	1.4%	0.01	1.8%	4.1%	2.1%	0.01
3 Core Fixed Income	2.6%	4.9%	5.0%	0.00	2.4%	4.8%	5.4%	0.00
4 Multi-Asset Credit	3.0%	5.3%	8.9%	0.29	2.9%	5.3%	9.3%	0.30
<b>Alternatives</b>								
5 Direct Hedge Funds <sup>2,3</sup>	3.8%	6.1%	5.2%	0.21	3.5%	5.9%	5.7%	0.22
6 Core Real Estate	2.3%	4.6%	15.0%	0.29	2.2%	4.6%	15.4%	0.29
7 Non-Core Real Estate	4.2%	6.5%	25.0%	0.65	3.9%	6.3%	25.5%	0.64
8 Private Equity	5.6%	7.9%	20.0%	0.68	5.8%	8.2%	20.5%	0.68
9 Infrastructure	4.9%	7.2%	16.0%	0.31	4.9%	7.3%	16.5%	0.31
10 Private Debt	4.9%	7.2%	16.5%	0.33	4.3%	6.7%	17.5%	0.34
11 Insurance Linked Securities	3.8%	6.1%	5.5%	0.01	3.1%	5.5%	7.5%	0.01
<b>Inflation</b>								
12 Inflation	0.0%	2.2%	1.7%		0.0%	2.3%	1.7%	

<sup>1</sup> Expected returns are using Aon's Q3 2024 10/30-Year Capital Market Assumptions (CMAs) as of June 30, 2024 adjusted for the delta in average Global Equity Risk Premium (ERP) among three investment advisors: Aon, Mercer, and Wilshire (-125bps adjustment), which are projections about the future returns of asset classes. For asset classes that can be implemented passively, which includes most public assets, alpha and active management fees are not included in the return expectations. For asset classes that can only be implemented actively, such as hedge funds and private assets, we assume alpha and higher active manager fees. Expected returns are geometric (long-term compounded). Expected returns presented are models and do not represent the returns of an actual client account. Your actual returns may differ from the model expected returns presented based on your plan's individual fees/expenses. AIUSA's advisory fees are described in Part 2A of AIUSA's Form ADV. Not a guarantee of future results.

<sup>2</sup> Alpha incorporated in Expected Nominal Return

<sup>3</sup> Represents diversified portfolio of Direct hedge fund investments.

# Aon's Capital Market Assumptions

## As of June 30, 2024

Nominal Correlations	1	2	3	4	5	6	7	8	9	10	11	12
1 Global Equity IMI	<b>1.00</b>	0.09	-0.01	0.61	0.74	0.36	0.48	0.63	0.35	0.36	0.02	0.10
2 Cash (Gov't)	0.09	<b>1.00</b>	0.43	0.05	0.24	0.16	0.15	0.10	0.14	-0.23	0.28	0.42
3 Core Fixed Income	-0.01	0.43	<b>1.00</b>	0.20	0.15	0.05	0.04	0.01	0.04	-0.03	0.12	0.00
4 Multi-Asset Credit	0.61	0.05	0.20	<b>1.00</b>	0.63	0.21	0.28	0.37	0.21	0.69	0.01	0.09
5 Direct Hedge Funds	0.74	0.24	0.15	0.63	<b>1.00</b>	0.32	0.40	0.52	0.31	0.41	0.06	0.14
6 Core Real Estate	0.36	0.16	0.05	0.21	0.32	<b>1.00</b>	0.96	0.32	0.19	0.12	0.04	0.10
7 Non-Core Real Estate	0.48	0.15	0.04	0.28	0.40	0.96	<b>1.00</b>	0.38	0.22	0.16	0.04	0.10
8 Private Equity	0.63	0.10	0.01	0.37	0.52	0.32	0.38	<b>1.00</b>	0.33	0.27	0.03	0.08
9 Infrastructure	0.35	0.14	0.04	0.21	0.31	0.19	0.22	0.33	<b>1.00</b>	0.13	0.04	0.09
10 Private Debt	0.36	-0.23	-0.03	0.69	0.41	0.12	0.16	0.27	0.13	<b>1.00</b>	-0.06	0.00
11 Insurance Linked Securities	0.02	0.28	0.12	0.01	0.06	0.04	0.04	0.03	0.04	-0.06	<b>1.00</b>	0.12
12 Inflation	0.10	0.42	0.00	0.09	0.14	0.10	0.10	0.08	0.09	0.00	0.12	<b>1.00</b>

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