# INVESTMENT POLICY STATEMENT ("IPS") EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND RHODE ISLAND EMPLOYEES RETIREMENT SYSTEMS POOLED TRUST

Adopted 12/6/2023 Effective as of 1/1/2024 Last updated 5/28/2025

#### **PURPOSE**

A robust state retirement system plays a critical role in recruiting and retaining the talented employees on whom the State of Rhode Island depends for quality public services, such as teaching in our schools, fixing our roads, protecting our environment, and policing our streets. Pension assets exist to fund future pension payments, both in the near and long term.

This document sets out investment objectives and policies for the Rhode Island State Investment Commission ("SIC") in investing the funds of the Employees' Retirement System of the State of Rhode Island ("ERSRI") as mandated by R.I. Gen. Laws §35-10-6(b): "The commission shall adopt a statement of investment objectives and policies consistent with the prudent person standard."

The SIC will seek to review the IPS at least once every three (3) years.

#### **LAWS AND ETHICS**

#### **Legal Authority**

ERSRI was established effective July 1, 1936. R.I. Gen. Laws §36-8-2.

#### **Fiduciary Responsibility**

The SIC must act in accordance with the "prudent person" standard. The "prudent person" standard requires SIC members to discharge their duties solely in the interests of ERSRI participants and their beneficiaries with such care, skill, prudence, and diligence under the circumstances then prevailing that a person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of like character and with like aims. In addition, the prudent person standard requires the SIC to diversify the investments of ERSRI so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so. *R.I. Gen. Laws §35-10-6(b)*.

ERSRI expects Investment Managers to minimize costs to the full extent possible without compromising net investment returns.

# **Ethics**

Members of the SIC and the Staff advising them are subject to the State's Code of Ethics. *R.I. Gen. Laws §36-14-1 et seq.* 

Members and employees of the SIC must not profit directly or indirectly from any investment transaction made by the SIC. R.I. Gen. Laws §35-10-7(b).

External Managers must sign Rhode Island's Investor Code of Conduct Pledge, Placement Agent Disclosure Certificate, and Transparency Certificate.

SIC members and Staff must disclose any material interests in financial institutions with which the SIC conducts business as well as any personal financial/investment positions that could be related to the performance of the Fund.

#### INVESTMENT GOALS AND OBJECTIVES

The SIC seeks to develop and implement an investment portfolio for ERSRI that:

- 1) On an annualized net-of-fee basis, meets or exceeds the assumed actuarial rate of return while exhibiting an appropriate level of volatility over a 30-year time horizon. As of the IPS adoption date, the plan's actuarial return assumption is 7.0%, as determined by the ERSRI Retirement Board.
- 2) Is constructed to mitigate the impact of a variety of risks, including extended equity market drawdowns, inflation, and market volatility.
- 3) Maintains sufficient liquidity required to sustain timely payment of benefits, capital calls, and other cash flow obligations in all market environments.

# **INVESTMENT BELIEFS**

The SIC's investment beliefs provide a foundational framework that guides the SIC's development of appropriate policies, procedures, and investment decisions for ERSRI assets.

- 1) Portfolio diversification plays a critical role in improving the investment portfolio's return per unit of risk and managing volatility while looking to achieve the ERSRI investment objectives. The ERSRI investment portfolio should be well-diversified by asset class, investment style, investment strategy, geography, and Manager.
- 2) Asset allocation is the primary determinant of portfolio return and volatility.
- 3) There is a return premium associated with risky assts. Given ERSRI's investment objectives and the plan's underfunding, the portfolio must take appropriate risks to achieve the actuarial return assumption over time. Risk is multi-dimensional and cannot be simplified into a precise measure.
- 4) Investment costs, if not managed appropriately, can significantly impact portfolio performance. Costs must be measured, monitored, and actively and prudently

managed whenever possible to maximize portfolio value. Investment actions and performance should be evaluated on a net of fee basis.

- 5) Charged with funding liabilities several decades into the future, investment decisions should reflect a long-term time horizon while balancing short-term cash requirements.
- 6) Advocating for responsible corporate governance practices, including the management of environmental, social and governance (ESG) risks, can positively impact investment returns and mitigate risks over the long-term.
- 7) Public equity markets are informationally efficient, limiting the opportunities for cost-effective Investment Manager outperformance. Public equity portfolios should primarily consist of passively or systematically managed strategies. Private markets, on the other hand, offer significant opportunities for asset mispricing and skilled Investment Manager outperformance, which ERSRI should proactively seek to capitalize on.
- 8) Investment strategies should be developed based on forward-looking insights, rather than simply on successful strategies of the past.

#### **CORPORATE GOVERNANCE**

The SIC views its governance rights as an asset of the pension fund and seeks to generate returns from its governance assets for the benefit of pension participants. Equity holdings give the pension fund ownership stakes in companies, and thus corporate governance rights. The primary methods for implementing corporate governance policy are voting proxies and engaging with corporate management teams. Equities directly held by ERSRI require Staff and Consultants to exercise corporate governance responsibilities in accordance with SIC priorities.

In seeking a return on its governance assets, the SIC focuses on four primary principles for generating long-term value:

# Increase corporate board member accountability to shareholders Lacking a mandate from shareholders, corporate boards often do not serve as a sufficient check on corporate senior executives and their overall decision-making. The SIC favors proposals that improve accountability of corporate directors to shareholders.

# 2) Improve corporate board effectiveness through independent and rigorous decisionmaking

Effective corporate board decisions require debate among directors with diverse, independent, and informed perspectives. The SIC favors proposals that encourage companies to look broadly when identifying candidates for corporate board seats. By incorporating varied perspectives and experiences and ensuring the majority of

directors are independent of the companies and executive teams they oversee, better decisions should follow.

# 3) Focus on long-term value creation

Long-term value creation requires effective management of three forms of capital: financial, physical and human. Shortcuts can create gains in the short run to the detriment of long-term earnings. By ignoring multi-year impacts, corporate management teams fail to create durable returns for ERSRI plan assets, since equities are valued based on expected cash flows over the long run. The SIC favors proposals that encourage corporate directors and leaders to measure and mitigate external risks and costs – environmental, social, regulatory, legal, geopolitical – that can destroy value in the long term.

# 4) Upgrade transparency

Equities are priced based on companies' long-term prospects. With better information, shareholder understanding of companies' strategies will improve, creating more patience with promising plans. Access to all appropriate data enhances the effectiveness of decision-making. Therefore, the SIC favors proposals that improve shareholders' access to information, including access to company employees, shareholders, equity analysts and other informed parties

#### Restrictions

The pension system shall not hold direct investments in companies that:

- (i) derive a majority of their revenue from the operation of for profit private prisons, jails, detention centers or correctional facilities, or from the provision of integral services to these types of facilities;
- (ii) manufacture for civilian use automatic and semi-automatic firearms that are designed and configured for rapid fire and combat use.

ERSRI acknowledges that it has no ability to restrict holdings within commingled fund vehicles and as a result these restrictions may not apply in those instances.

#### ROLES AND RESPONSIBILITIES

#### **State Investment Commission (SIC)**

The SIC was established within the office of the General Treasurer with the General Treasurer as its Chair R.I. Gen Laws §35-10-1. The SIC is charged with the investment of ERSRI's funds (collectively, the "Fund"). *R.I. Gen. Laws §35-10-2*. The SIC meets monthly, with the ability to add or cancel meetings as appropriate.

#### Primary Responsibilities

- Sets investment policy, asset allocation, investment managers, and investment guidelines.
- Maintains overall responsibility for financial management of the Fund assets.
- Oversees the Investment Office's day to day operation of the Fund.

- Reviews Fund performance and risk.
- Monitors and evaluates Investment Consultants, Investment Managers and the Custodian.
- Reports major accomplishments and Fund performance to the General Assembly through the Comprehensive Annual Financial Report (CAFR).

The SIC may delegate certain duties as appropriate.

#### **Investment Office**

The Investment Staff is led by the Chief Investment Officer; together, these functions constitute the Investment Office. The Investment Office carries out the administration of the Fund on behalf of the SIC.

# Primary Responsibilities

- Oversees the day-to-day operational activities of the Fund subject to policies established by the SIC.
- Formulates, evaluates, recommends, and implements SIC decisions on investment policies and procedures for all asset classes.
- Provides due diligence and investment recommendations regarding all investment portfolios with assistance from the respective Consultants.
- Evaluates and manages the relationships with Investment Managers, Consultants, Custodian Bank, and other third-party providers; and recommends the termination of these relationships if necessary.
- In coordination with Office of the General Treasurer, acts as signatory on investment accounts and executes such documents as may be necessary to invest the Fund.
- Monitors Investment Manager compliance with investment policies and procedures, and contractual guidelines with assistance from Consultants and Custodian.
- Has ability to reduce Fund investments by no more than 2% of the Fund assets, when urgency requires action before next SIC meeting.

# **Legal Counsel**

The State Investment Commission hires external counsel to serve as its legal adviser.

# Primary Responsibilities

- Advises the SIC on applicable laws including open meeting and access to public records laws.
- Works with the Investment Office and external Investment Consultants to negotiate and prepare agreements with Investment Managers and other third-party vendors.
- Reviews Investment Manager and Consultant documentation upon request.

#### **Bank Custodian**

Responsible for the safekeeping and custody of ERSRI's assets, the Custodian is hired by and responsible to the SIC.

Primary Responsibilities

- Provides safekeeping and custody of securities purchased by Managers on behalf of the Fund.
- Provides a monthly reconciliation of ERSRI assets from the Custodian bank's reports with each Investment Manager's statement.
- Provides valuations and monitors individual securities, including derivatives and the trades from which they emanate.
- Settles securities transactions in a timely manner.
- Collects dividends and interest on custodied assets.
- Maintains short-term investment vehicles for investment of cash not invested by Managers.
- Provides pricing for all securities at least on a monthly basis, preferably on a daily basis contingent on asset classes and types of securities.
- Provides data and reports directly to the SIC on a monthly basis, as well as on an ad hoc basis as needed.

#### **Investment Consultants**

The role of the Investment Consultants is to provide objective, independent third-party advice to the SIC and Investment Staff. Investment Consultants do not have discretionary decision-making authority on behalf of the SIC. Investment Consultants have a fiduciary responsibility for the quality of the service delivered.

#### Primary Responsibilities

- Recommend strategic procedures and processes.
- Prepare asset / liability or asset allocation studies upon the request of the SIC, recommending asset allocation policy.
- Assist with Manager due diligence, selection, monitoring and evaluation.
- Review the performance of the overall portfolio and/or its components.
- Provide continuing education to the SIC and Investment Staff.

#### **Investment Managers**

Given resource constraints, the SIC hires third-party Investment Managers to manage portions of the portfolio consistent with a mandate for that portion of the portfolio.

# Primary Responsibilities

- Acts as an investment specialist on behalf of the SIC.
- Manages, purchases, and sells assets and securities for the Fund in accordance with the assigned portfolio mandate.
- Communicates performance, performance drivers and major investments with the Investment Consultant and Investment Office.
- Notify Staff and Consultants in the event of any significant change in investment style, firm ownership, senior personnel, or the mandate's portfolio manager or relationship manager
- Serves as a fiduciary for assets under its management, as applicable

#### ASSET ALLOCATION

ERSRI's strategic asset allocation will reflect investments in asset classes and strategies whose collective risk and return profile are anticipated to help ERSRI achieve its long-term investment goals and objectives. The strategic asset allocation is determined through appropriate studies undertaken by the SIC with assistance from Investment Consultants and the Investment Office.

In determining the target mix of asset classes, the SIC considers:

- Expected rate of return for each asset class
- Expected variability of each asset class
- Expected correlations of each class's returns with those of other asset classes
- Expected performance of each asset class in response to different market environments
- Asset liquidity (ability to exit quickly at low cost)
- Actuarial rate of return assumption, investment objectives, funding status, cash flow profile, and risk constraints of the overall pension plan

	Long-Term Target	Target Range	Asset Class Benchmark
GROWTH	55.0%		
Public Growth	40.0%	+/- 2%	MSCI All Country World Index (Net Dividends)
Private Growth	15.0%	+/- 4%	
Private Equity	12.5%		Cambridge Associates Private Equity and Venture Capital Aggregated Index, 1Q Lag
Non-Core Real Estate	2.5%		Cambridge Associates Value Add Real Estate Index, 1Q Lag
INCOME	12.0%	+/- 2%	-
Equity Options	2.0%		CBOE Put-Write Index
Collateralized Loan Obligations (CLOs)	2.0%		JPM CLOIE BB Index
Liquid Credit	5.0%		Bank of America US HY Index
Private Credit	3.0%		Cambridge Associates Senior Debt Index, 1Q Lag
STABILITY	33.0%		-
Crisis Protection Class (CPC)	10.0%	+/- 2%	-
Systematic Trend Following	5.0%		Credit Suisse Managed Futures Index (18% Target Volatility)
Long Duration Treasuries	5.0%		Bloomberg Barclays Long Duration US Treasury Bond Index
Inflation Protection	8.0%	+/- 3%	-
Private Real Assets (ex- Real Estate)	4.0%		Cambridge Associates Private Infrastructure Index, 1Q Lag
Core Real Estate	4.0%		NFI-ODCE Index, 1Q Lag
Volatility Protection	15.0%	+/- 2%	-
Absolute Return	6.5%		HFRI Fund of Funds Index
Investment Grade Fixed Income (ex-Treasuries)	6.5%		50% Bloomberg Barclays US Corporate Bond Index + 50% Bloomberg Barclays Securitized MBS/ABS/CMBS Index
Strategic Cash	2.0%		Bank of America Merrill Lynch 0-1 Year U.S. Treasury Index

#### Liquidity

While ERSRI maintains a long-term investment horizon, short-term liquidity management is critical to ensure that pension obligations and other expenditures are fulfilled. As of the IPS adoption date, ERSRI pays more in benefits each year than it receives in contributions. Thus, the strategic asset allocation must be designed to maintain sufficient liquidity to sustain timely payment of these benefits, regardless of plan performance. The strategic asset allocation seeks to achieve a balance between pursuing returns (to reduce underfunding) and controlling risk (to meet annual cash flow needs and to minimize the negative impact of selling long-term assets in severely negative market environments). Investment Staff anticipates internal and external cashflow needs to efficiently manage transactions and mitigate the costs of ensuring sufficient liquidity.

## Rebalancing

As market values change over time, ERSRI's actual asset allocation may diverge from the target allocation weights established by the SIC. Material deviation from strategic target weights can impair the investment portfolio's ability to meet its goals and objectives. ERSRI rebalancing activity seeks to balance the risks associated with target allocation deviations with the costs of transacting.

Investment Staff will monitor ERSRI's actual asset allocation relative to targets and ranges. Rebalancing will not be required if actual allocations fall within the defined target ranges, but Investment Staff will consider deviations from target weights when instructing transactions to fund cash flows (e.g., for benefit payments or funding new investments). Investment Staff has discretion to partially or fully rebalance when actual allocations fall within the defined target ranges, where there is an opportunity to do so effectively. When broad asset class ranges are breached, Investment Staff, in consultation with the Investment Consultants, will develop a plan to bring the allocation as close as practicable to the policy target within a prudent timeframe. The SIC recognizes there are costs and practical limitations around maintaining ERSRI's target allocation. It allows for, and will monitor, latitude around its allocation targets.

Less liquid private asset class actual allocations can substantially diverge from the policy allocation in the short-term given infrequent and lagged valuations of these investments and episodic capital activity related thereto. Private asset exposures will be prudently managed towards their target allocations over time through strategic new investments that are guided by a pacing plan formulated by Investment Consultants in conjunction with the SIC and Investment Staff.

ERSRI may also engage an Overlay Manager that uses liquid derivatives to keep the portfolio more closely aligned with target exposures to reduce the number of necessary physical transactions and associated rebalancing costs. As previously stated, private asset exposures can substantially diverge from the policy allocation due to infrequent and lagged valuations. In times of elevated market volatility, and given the mechanics of the overly program, this could result in unintended under- or over- allocation to liquid assets (e.g., equities, fixed income). Given this dynamic, the SIC has granted Investment Staff the authority to adjust PE exposure for the purposes of calculating overlay targets,

provided such adjustments are reasonable and directionally consistent with relevant public market indices. Staff will collaborate with the Investment Consultants when making these determinations. Any such adjustment will be clearly detailed in the regular reporting materials provided to the SIC to ensure transparency and ongoing oversight.

#### INVESTMENT PORTFOLIO ASSET CLASSES

#### **Growth Bucket**

*Role*: The Growth Bucket is expected produce high levels of inflation-adjusted returns, net of all costs. The Bucket serves as the long-term driver of portfolio return and volatility.

*Structure*: The Growth Bucket consists of public and private investment strategies and assets that are largely exposed to changes in global economic growth and corporate profitability.

Asset Classes:

#### **Public Growth**

The Public Growth allocation accesses the strong, long-term returns of publicly traded equity markets. Through ownership stakes in publicly traded global companies, equities benefit from economic growth and corporate value creation. The Public Growth portfolio includes geographically diverse and liquid public equity strategies that are expected to generate attractive absolute returns in a relatively low-cost manner.

#### **Private Growth**

The Private Growth investments are almost exclusively held in illiquid closed-end funds. In addition to accepting the economic growth and corporate profitability risks found in the other equity segments, Private Growth investments are subject to risks associated with illiquidity, appraised valuations, leverage, and episodic performance. The Private Growth portfolio is expected to deliver large idiosyncratic positive returns over a full market cycle by accessing value creation that is not accessible in more informationally efficient public markets. The Private Growth portfolio is diversified across general partners, vintage years, strategies, industries, investment types and geographies.

# Private Equity

The Private Equity allocation primarily invests in the equity of unlisted companies and provides value-add services such as operational turnaround, product and sales optimization, management sourcing, and strategic guidance. Private Equity strategies may also invest in unlisted debt in circumstances when distress or special situations provide opportunities for equity-like investment outcomes.

#### Non-Core Real Estate

The Non-Core Real Estate allocation seeks to profit from real estate asset price appreciation through value creation activities such as property enhancements, tenant management, legal workouts, or opportunistic investments benefiting from mispricing or distress in the real estate capital markets.

#### Income Bucket

*Role*: Over a full market cycle, the Income Bucket seeks to achieve a meaningful yield premia over the investment grade fixed income market (Bloomberg Barclays Aggregate Index) and produce a stable income return stream to help mitigate the system's negative cashflow.

*Structure*: The Income Bucket Portfolio consists of high yielding public and private fixed income strategies and investments in derivatives that offer a yield or premium.

#### Asset Classes:

# Equity Options

Investments in the Equity Options portfolio collect stable income in the form of option premiums and seek to capitalize on a persistent volatility risk premium (compensation that investors earn for providing protection against unexpected market volatility). The strategies in the Equity Options portfolio are fully collateralized.

# Collateralized Loan Obligations ("CLOs")

The CLO allocation invests in structured securities that are backed by an industry-diverse pool of senior secured bank loans made to sub-investment grade businesses. CLO debt and equity securities are sold in tranches, where each CLO tranche has a different priority of claim on cash-flow distributions.

#### • Liquid Credit

Strategies included in the Liquid Credit allocation primarily invest in below-investment grade liquid corporate debt securities that offer a higher yield than investment grade corporate bonds. In addition to income generation, Liquid Credit investments may produce return through price appreciation that is driven by economic improvement and issuer performance.

#### • Private Credit

Private Credit invests in non-traded, non-control performing debt for which current interest income represents the majority of returns. The Private Credit allocation is anchored by strategies that make direct senior loans to smaller companies across sectors, supplemented by esoteric debt strategies such as specialty finance, hard asset-backed lending, and royalties, among others.

#### **Stability Bucket**

*Role*: The Stability Bucket aims to earn modest returns over the long term while providing the portfolio with resilience to three acute portfolio risks: extended equity market sell-offs, inflation surges, and asset price volatility spikes.

Structure: The Stability Bucket consists of public and private investment strategies and assets that combine to mitigate the impacts of equity drawdowns, high inflation, and pronounced volatility on the portfolio.

Asset Classes:

#### **Crisis Protection Class**

The Crisis Protection Class ("CPC") is expected to protect the portfolio during a significant and sustained equity market crisis by appreciating in value during extended periods of significant equity market declines. The CPC is designed to include assets that maintain liquidity during equity market drawdowns, enabling ERSRI to fund benefit payments with assets that have recently appreciated instead of selling depreciated equity investments. In addition to being negatively correlated with equity risk, the CPC is volatile enough to produce a meaningful positive return in response to the market drawdown period.

The CPC is designed to exhibit similar volatility to that of the Growth Bucket to allow for substantial returns during periods of significant stress in equity markets. Given this design, the CPC may experience short-term periods of negative returns on its own, especially during non-crisis periods. However, the allocation is expected to positively contribute to the long-term risk-adjusted return of the Total Plan.

The CPC targets an equal allocation between its two underlying asset classes, which will be rebalanced to a 50%/50% split if end-of-month (47.5%/52.5%) or intra-month (46.5%/53.5%) thresholds are breached.

#### Systematic Trend Following

Systematic Trend Following is a momentum based long-short strategy that seeks to capture both periodic appreciation and periodic depreciation trends that evolve and dissipate across a very wide array of liquid global markets. Systematic Trend Following strategies invest in liquid, exchange-traded futures and forwards across multiple markets including equity, fixed income, commodities and currencies.

# Long Duration Treasuries

Investments included in the Long Duration Treasury Portfolio are long-dated high-quality bonds (Treasuries and full faith and credit Government-backed Agency securities only). The purpose of the long duration U.S. Treasury portfolio is to smooth the volatility of the overall ERSRI portfolio in times of steep equity market decline, by capturing the "flight to quality" effect in an equity market crisis environment.

#### **Inflation Protection Class**

The Inflation Protection Class aims to protect against unanticipated spikes in inflation or long periods of inflation that can have a detrimental impact on the purchasing power of an asset portfolio. The Inflation Protection portfolio is also designed to provide diversification and an element of growth return.

# • Private Real Assets (ex-Real Estate)

The Private Real Assets (ex-Real Estate) portfolio primarily consists of privately listed infrastructure funds that invest in physical systems vital to the broad economy or certain essential sectors such as transportation, energy, water/wastewater, and telecommunication. These investments may be supplemented with smaller allocations to funds that invest in resource assets like farmland, mining, or timberland.

#### Core Real Estate

Core Real Estate seeks to earn returns through investments in substantially leased, income-producing properties located principally in economically diversified metropolitan areas. Core Real Estate properties generally demonstrate predictable income flows with a high proportion of anticipated total return from tenant rents. Core Real Estate typically has low leverage and limited operational risk relative to Non-Core Real Estate.

#### **Volatility Protection Class**

The purpose of the Volatility Protection Class is to protect against unanticipated spikes in volatility or long periods of volatility that can have a detrimental impact on the long-term performance of an asset portfolio. The Volatility Protection Class is designed to achieve return stability through exposure to assets that provide diversification to the total Portfolio due to low correlation with other classes.

#### Absolute Return

Absolute return investments seek to generate performance through active selection of securities and asset classes, with little-to-no consistent bias to broad markets (i.e. beta). Investing in a broad range of securities including equities, fixed income, commodities, currency, and derivatives, absolute return funds serve as diversifiers, seeking returns from active investment decisions, both long and short (i.e. alpha).

#### • Investment Grade Fixed Income (ex-Treasuries)

The Investment Grade Fixed Income (ex-Treasuries) allocation seeks to provide diversification through broad exposure to U.S. investment grade corporate fixed income securities, including but not limited to U.S. corporate bonds and U.S. Agency mortgage-backed securities. The allocation accepts lower expected returns in exchange for more consistent cash flows and generally more stable valuations.

# • Strategic Cash

The Strategic Cash portfolio seeks to obtain a level of current income while prioritizing the preservation of principal and liquidity via investments in high quality U.S. dollar-denominated money market and fixed income securities of domestic and foreign issuers, U.S. Government securities, and repurchase agreements.

# TOTAL FUND PERFORMANCE BENCHMARK

The Total Fund Performance Benchmark (Total Plan Benchmark) is a weighted average of ERSRI's individual assets class benchmarks, weighted in accordance with their target allocation weights. Total Plan Benchmark returns are calculated on a monthly basis, and weighted as follows:

TOTAL PLAN BENCHMARK	WEIGHT	
GROWTH		
Public Growth	40%	
MSCI All Country World Index (Net Dividends)	40.0%	
Private Growth	15%	
Cambridge Associates Private Equity and Venture Capital Aggregated Index, 1Q Lag	12.5%	
Cambridge Associates Value Add Real Estate Index, 1Q Lag	2.5%	
INCOME	12%	
CBOE Put-Write Index	2.0%	
JPM CLOIE BB Index	2.0%	
Bank of America US HY Index	5.0%	
Cambridge Associates Senior Debt Index, 1Q Lag	3.0%	
STABILITY		
Crisis Protection Class	10%	
Credit Suisse Managed Futures Index (18% Target Volatility)	5.0%	
Bloomberg Barclays Long Duration US Treasury Bond Index	5.0%	
Inflation Protection Class	8%	
Cambridge Associates Private Infrastructure Index, 1Q Lag	4.0%	
NFI-ODCE Index, 1Q Lag	4.0%	
Volatility Protection Class	15%	
HFRI Fund of Funds Index	6.5%	
50% Bloomberg Barclays US Corporate Bond Index + 50% Bloomberg Barclays Securitized MBS/ABS/CMBS Index	6.5%	
Bank of America Merrill Lynch 0-1 Year U.S. Treasury Index	2.0%	

Benchmarks for the Growth, Income, and Stability Buckets, as well as the Public Growth, Private Growth, Crisis Protection, Inflation Protection, and Volatility Protection Aggregate Asset Classes, are calculated as weighted averages of their underlying asset class benchmarks, weighted in accordance with their Total Plan Benchmark weights.