

Defined Benefit Investment Policy Statement

(Adopted by the SIC 06/27/18)

(Updated as of 04/24/2019)

I. Employees' Retirement System of the State of Rhode Island: 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.

II. Investment Policy Statement: Purpose

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."

III. Adoption

The SIC adopted this policy on June 27, 2018 and will seek to review it at least once every three (3) years.

IV. Legal Authority

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

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.*

V. 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.

VI. 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 and 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. They must refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of the Fund.

VII. Investment Philosophy

Retirement security is the priority of the SIC in overseeing the pension investments. In constructing its investment policy, the SIC considers three primary factors: the expected rate of return mandated by the ERSRI Retirement Board, characteristics of the pension plan, and investment characteristics.

The ERSRI Retirement Board, with the assistance of consultants, determines the pension fund's actuarial rate-of-return assumption. In 2017, the ERSRI Retirement Board adopted a 7.0% actuarial return assumption for the plan. The SIC seeks to build the investment portfolio to achieve this expected return over the 30-year actuarial time horizon.

Additionally, the SIC considers other characteristics of the pension plan. At this writing, the fund's projected benefit obligation meaningfully exceeds the assets currently held by the fund. The retirement system pays out more in benefits each year than it receives in contributions. Consequently the fund's investment horizon needs to balance its long-term

obligations and shorter-term cash flow requirements. As such, investments must achieve a balance between seeking returns (to reduce the 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).

In directing the portfolio, the SIC also considers the characteristics of investments and current market conditions. Investments are inherently unpredictable over the short term, being subject to the returns and risk delivered by the capital markets in any given period. The SIC strives for a portfolio that balances expected return and risk across asset classes to achieve the assumed actuarial return over the long term and provide retirement security for pension participants. Diversification of risks is a powerful tool to improve the potential return per unit of risk when investing. Minimizing the volatility of returns harnesses the power of compounding and generates stronger returns over time.

Given these considerations, the SIC is guided by the following:

Investment Beliefs

To maintain, or better yet improve, the pension system's financial condition, the fund seeks to equal or exceed the actuarial rate of return assumption over the long term. Therefore, the fund must prudently invest in a combination of growth, income, and stability assets, seeking to use diversification to minimize risk while looking to attain the investment objective.

Asset allocation policy is the primary determinate of portfolio return and volatility. Making allocations across different asset classes and strategies is the fundamental focus of the SIC.

There is a return premium to risky assets. Given the investment objective and the plan's underfunding, the portfolio must take risk within its asset allocation to achieve the actuarial return assumption over time.

Numerous return drivers impact the plan including, but not limited to, funding uncertainty, contribution variability, liquidity premium (risk), capital markets return/risk, tail risk, and interest rate exposure. The SIC seeks to identify and measure return and risk drivers. However, many sources of risk/return are not fully measurable and can deviate from historical patterns. Quantitative risk measures often underestimate large negative market environments (tail risk) inherent in equity investments. The fund's monthly disbursements (payments exceed contributions) limit the portfolio's ability to weather downturns (can be forced to sell low to raise monthly cash outflow). Therefore, diversifying return and risk drivers is a primary factor in asset allocation.

Diversification among investment types is a powerful tool to enhance the strength and stability of the portfolio. By designing a diversified portfolio, the SIC seeks to achieve strong, long-term returns. In determining the target mix of assets, 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 (conditional correlation)
- 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

The SIC recognizes there are costs and practical limitations around maintaining its target allocation. It allows for, and will monitor, latitude around its allocation targets.

Where staff resources are constrained, external managers shall be selected to implement investments. The state's resources will focus on hiring the most capable investment managers, prioritizing expected long-term, net-of-fee returns. The SIC seeks value for fees paid over the life of its investments.

Good governance of companies, in which the plan invests, can help drive returns and should be managed accordingly

VIII. Corporate Governance Policies

a. Purpose

The SIC views its governance rights as an asset of the pension fund. By advocating for good governance practices and responsive corporate behavior, the fund expects to strengthen the long-term investment returns generated by the fund for its hardworking public employees and retirees.

b. Principles for creating long-term shareholder value

Charged with funding liabilities several decades into the future, the SIC has a mandate to generate performance over the long run. 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*
- *Improve corporate board effectiveness through independent and rigorous decision-making*

- *Focus on long-term value creation*
- *Upgrade transparency*

Increase corporate board member accountability to shareholders

Corporate Board members represent shareholders. Yet, many standard practices for selecting and electing corporate boards often make directors more accountable to a company's chief executive officer and current board members than 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.

Improve corporate board effectiveness through independent and rigorous decision-making

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.

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 participants, 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.

Upgrade transparency

For shareholders to evaluate the effectiveness of corporate boards and managements, they need information. Too often companies hide behind competitive concerns or worries of market "short-termism" to avoid communicating with their shareholders. However, 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 corporate directors' access to information, including access to company employees, shareholders, equity analysts and other informed parties.

c. Corporate governance philosophy

The SIC 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.

Given the plan's structure and the characteristics of investments, the SIC is guided by the following:

Corporate governance beliefs

Since the pension plan has broad equity holdings in low-turnover strategies, the SIC has a longer-term perspective than most corporate executives or fund managers, elevating the importance of corporate governance to the ERSRI plan.

The primary methods for implementing corporate governance policy are voting proxies and engaging with corporate management teams.

Exercise of the SIC's fiduciary duties depends on how the shares are held:

Equities directly held by ERSRI require staff and any corporate-governance consultants to exercise corporate governance responsibilities in accordance with SIC priorities.

For shares indirectly held through commingled funds, the third-party, commingled-fund manager has standing as the equity holder, and the duty to vote shares. The SIC's role is to oversee the fund managers' effectiveness in generating value from corporate governance, as well as more generally.

d. Corporate governance process

As part of the vetting process when selecting managers, the SIC may evaluate managers on their ability to extract value from their votes. Consultants and staff will incorporate an evaluation of managers' governance capabilities (where appropriate) into their due diligence and recommendations. A copy of this Corporate Governance Policy will also be sent to all new fund managers. While corporate governance is one important consideration, the SIC will assess all the attributes that a commingled fund brings to the ERSRI portfolio, with the ultimate goal to maximize long-term, risk-adjusted returns for the ERSRI participants.

Staff and consultants will review the corporate governance record of its passive fund managers (where there is no opportunity to avoid underperformers through active stock selection) on an annual basis, and report to the SIC. For active fund managers, consultants and staff will include corporate governance as part of the ongoing monitoring of managers.

IX. Roles and Responsibilities

a. State Investment Commission (SIC)

The SIC is responsible for strategic asset allocation and final investment decisions and oversees Staff's day-to-day running of the Fund, consistent with the authority granted under Rhode Island law. The SIC is a fiduciary for the Fund.

The SIC establishes and maintains broad policies and objectives for all aspects of Fund investments. It seeks appropriate and consistent investment results, net of fees, for ERSRI members and beneficiaries, balancing the actuarial return assumption, current market opportunities, and risk levels. The SIC may delegate certain of its duties as appropriate. It receives periodic reports and recommendations for asset management from the Investment Consultants and Managers.

The SIC is comprised of up to ten members, with nine voting members; the Rhode Island General Treasurer is the chair of the SIC. The SIC meets monthly, with the ability to add or cancel meetings as appropriate.

Each member of the SIC and each member of the SIC's Committees are fiduciaries to the Fund. The duties of each fiduciary shall be discharged:

- Solely in the interests of ERSRI participants and their beneficiaries.
- For the exclusive purpose of providing benefits to eligible participants and their beneficiaries and defraying reasonable expenses of administering the Fund.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity would use in the conduct of an enterprise of like character and with like aims.
- By diversifying the investments of the Fund so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.

Main Responsibilities

- Sets investment policy, asset allocation, Manager selection, and investment guidelines.
- Maintains overall responsibility for financial management of the Fund assets.

- Reviews Fund performance including risk monitoring.
- 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).

SIC members are encouraged to participate in educational forums as available.

b. Investment Office

The Investment Office carries out the administration of the Fund on behalf of the SIC, led by the Chief Investment Officer.

Main 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. Conducts ongoing review and maintains the SIC Investment Policy Statement.
- Develops and/or reviews recommendations for improvements in policies, practices and procedures.
- Implements long and short-term asset allocation strategic plans set by the SIC. Develops programs to implement asset allocation decisions efficiently, including securities trading and cash management. Sets tactical asset allocation based on SIC policy allocation and practicalities of vetting third-party Managers and diversifying vintage-year risk.
- Generates search criteria for Investment Consultants; participates in the evaluation and selection of Investment Consultants; negotiates fees and contracts; and recommends termination of Investment Consultants if necessary.
- Develops search criteria for new Investment Managers; participates in the evaluation and selection of Investment Managers; negotiates fees and contracts; and recommends the termination of Investment Managers if necessary. Has ability to reduce Fund investments by no more than 2% of the Fund assets, when urgency requires action before next SIC meeting.
- 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 and oversees the ERSRI external Investment Management firms, the internal investment portfolio, and Investment Consultants.

- Meets with Investment Managers to review performance and to monitor compliance with investment policies and procedures, and contractual guidelines.
- Monitors performance benchmarks, risk characteristics and performance attribution analysis for the Fund, asset classes and individual Investment Managers.
- Advises the SIC of cash flow requirements and the availability of funds for investment.
- Oversees investment education and training programs for SIC and Staff.

Chief Investment Officer (CIO)

As head of the Investment Office, the CIO:

- Reports to the Rhode Island General Treasurer.
- Directs the activities of the Investment Staff.
- Manages day-to-day oversight of the ERSRI investment portfolio, working with Investment Staff.
- Receives necessary training and education required to carry out duties on behalf of the SIC; is encouraged to attend industry conferences and educational forums as opportunities arise.

Investment Staff

The Investment Staff carries out the Investment Office activities to administer the Fund on behalf of the SIC and is directly responsible to the Chief Investment Officer.

- Works with the CIO to execute the Investment Office responsibilities.
- Receives necessary training and education required to carry out their duties on behalf of the SIC, and is encouraged to attend industry conferences and educational forums as opportunities arise.

c. Legal Counsel

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

Main Responsibilities

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

d. Bank Custodian

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

Main Responsibilities

- Provides safekeeping and custody of all 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.
- Values and monitors individual securities, including derivatives and the trades from which they emanate.
- Settles securities transactions in a timely manner.
- Maintains short-term investment vehicles for investment of cash not invested by Managers.
- Executes foreign currency transactions as needed by the Fund.
- Checks all Manager accounts daily to make sure that all available cash is invested.
- Collects interest, dividend and principal payments on a timely basis.
- Processes corporate actions.
- Files and monitors class action settlements on behalf of ERSRI.
- Prices 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.
- Provides continuing education programs for the SIC and Staff.

e. 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. The Investment Consultants provide research, evaluation, education, and due diligence for the SIC and Investment Staff. Investment Consultants have a fiduciary responsibility for the quality of the service delivered.

Main 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 structure, selection, monitoring and evaluation.
- Review the performance of the overall portfolio and/or its components.

- Execute special projects at the request of the SIC and CIO.
- Provide continuing education to the SIC and Investment Staff.

f. **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.

Main Responsibilities

- Acts as an investment specialist on behalf of the SIC.
- Executes on a portfolio strategy a) within the specific mandate that has been developed specifically for the Fund in the case of separate accounts, or b) that is consistent with the Fund's mandate in the case of commingled accounts.
- 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 Staff periodically (at least quarterly), and more frequently as needed.
- Monitors the Fund's formal agreements such as limited partnership agreements, subscription agreements, and side letters. Responsible for communicating any changes in these agreements with Investment Staff and Consultants.
- Serves as a fiduciary for assets under its management, as applicable

Asset Class Policies

Public Growth (Global Equity)

Within the larger equity allocation, the global equity allocation seeks to access the strong, long-term returns of publicly traded equity markets. Through ownership stakes in companies globally, equities benefit from economic growth and corporate value creation. Both capital appreciation and dividend yield are sources for equity returns. As the portfolio's largest allocation, global equity is generally the largest driver of portfolio performance.

Global equity is also the largest driver of portfolio risk given the size of the allocation and the characteristics of the asset class. Priced daily and participating in net profits only after all costs are paid, public equities have the highest observed volatility of the portfolio's asset classes. Shifts in sentiment about future earnings potential can have a dramatic impact on equity prices. To mitigate some of this volatility, the allocation is diversified globally and across different return drivers (a.k.a. betas or factors).

The benchmark for the global equity allocation is the MSCI All Country World index (net dividends). This broad, commonly referenced, index incorporates large-capitalization equities from both developed and emerging markets on a free-float capitalization-weighted basis.

SIC Investment Philosophy - Public Growth (Global Equity)

- The SIC is a long-term investor in global public equity, seeking strong returns over a full market cycle.
- Public equity plays the following roles for the total portfolio:
 - Return generation
 - Liquidity
- The SIC seeks to invest in global public equities in the most effective manner possible, balancing returns, risks and costs. Where equity exposure, a.k.a. equity betas, can be achieved more efficiently, passive strategies are used. Passive public equity strategies include:
 - **Capitalization-weighted indexes** -- Capture returns of equity markets globally, as measured by the MSCI All Country World index (net dividends). This allocation is composed of four sleeves that replicate the following market indices: Russell 3000 Index; MSCI EAFE Index, MSCI Canada Index and MSCI Emerging Markets Index. In the US, small-capitalization stocks are included

(Russell 3000) for the additional return typically achieved with small caps. Outside the US, only larger-capitalization stocks are held for liquidity reasons.

- **Factor-tilted index** – Captures additional return premia that exist due to investor biases or preferences. The allocation has more exposure to factors, such as quality, value and momentum factors than capitalization-weighted indexes, and is expected to provide some risk/return enhancement and diversification to the larger capitalization-weighted exposure. Managed to a 2.0% to 2.5% tracking-error constraint to the developed-market MSCI World Index (net dividends), its performance is expected to diverge only moderately from that index. Its performance is expected to diverge only moderately from the benchmark. For liquidity reasons, the allocation only includes large-capitalization, developed-market equities.

- By investing globally and avoiding home-country bias, the public equity allocation achieves the strongest, long-term risk-adjusted returns. Geographic diversification is expected to benefit the portfolio over time. Currency exposure, which does not have an inherent return, is unhedged.

- Rebalancing helps performance through buying low (adding to underperformers) and selling high (trimming outperformers). Allocations among the geographic indexes and strategies within highly liquid public equity are rebalanced regularly within the SIC-mandated constraint of +/-2% of target weight for each investment. Futures can also be used in the short term to achieve target weights.

As of September 28, 2016, the strategic policy allocation to Global Equity is 40%.

Asset Class Policies

Private Growth

The private growth allocation focuses primarily on return generation and is expected to be the overall portfolio's highest return generator over the long term. In addition to accepting the economic growth and corporate profitability risks found in the other equity segments, private investments are subject to risks associated with illiquidity, appraised valuations, leverage, and lumpy performance due to reliance on capital gains primarily.

Private investments achieve their returns through broad exposure to unlisted common and preferred stock, subordinated and senior debt of companies that are, in most instances, privately held, privately held real estate and debt backed by real estate. The SIC invests with general partners that, through limited partnership vehicles, pursue a variety of strategies suited to private situations.

Given the diversity of private markets and the idiosyncratic nature of performance, manager resources and skill are crucial; therefore, the private investments allocation is actively managed. Due to the closed-end nature of private-investment funds and defined investment periods (typically 3-7 years to invest a fund and an additional 3-5 years to harvest investments), new commitments are spread out across vintage years to diversify risks associated with underlying economic and market cycles.

Since private investment funds generally hold a limited number of investments, the SIC seeks a variety of approaches in its private investments portfolio. Exposures will vary based on market conditions and the timing of funds.

Private growth class strategic benchmarks:

<u>Asset</u>	<u>Benchmark</u>
Private Equity	ILPA All Funds Index 1Q Lag
Opportunistic Private Credit	ILPA Distressed Index 1Q Lag
Non-Core Real Estate	NFI-ODCE Index +2.5%

The Private Growth Class benchmark is a blend of the individual assets' benchmarks, weighted in accordance with the stated Total Plan benchmark component weights.

SIC Investment Philosophy - Private Growth

- The SIC is a long-term investor in private growth investments, seeking a large positive return over a full investment cycle, typically 10 years.

- Private investments play the following roles for the total portfolio:
 - Return generation
 - Idiosyncratic performance
 - Access to value creation not accessible in public markets
 - Capture of illiquidity premium
- The SIC seeks to invest in private investments in the most effective manner possible, balancing returns, risks, liquidity and costs. Almost exclusively held in closed-end funds, private investments are among the longest-term commitments that the SIC makes. As such, diversification across general partners, vintage years, strategies, industries, investment types and geographies is important when constructing the private investments portfolio.

The private growth asset classes are primarily comprised of primary fund commitments. However, up to 20% of the exposure of each asset class may be through the acquisition of secondary interests in LP fund commitments (secondaries).

Secondary transactions involving funds that are currently in the portfolio do not require SIC approval, as long as the SIC’s previously approved commitment vote included the capacity for future secondaries. All other secondary transactions must be approved by SIC vote.

The investment pace and type of secondary transactions will be opportunistic, but can be categorized into four types:

Type	Anticipated Exposure	Min Percent Funded
Existing portfolio funds	40% - 60%	no minimum
Existing GPs, but new funds	40% - 60%	25%
Access to high quality GPs	< 10%	25%
Opportunistic deep discount	20% - 40%	50%

- Min Percent Funded: the minimum of drawn capital divided by total committed capital of the fund at the time of transaction
- Existing portfolio funds – funds that are currently in the ERSRI portfolio
- Existing GPs, but new funds – GPs that ERSRI is currently invested with, but funds that ERSRI does not have exposure to
- Access to high quality funds – Many high quality funds are hard to access. If ERSRI is able to get into such a fund via a secondary transaction that can be an alternative way to gain such exposure. Additionally, GPs prefer to have consistent

investors across fund vintages so the secondary may provide access to new funds with the high quality GP on a primary basis

- Opportunistic deep discount – In a forced sale situation which may be caused by liquidity needs, over allocation to privates, change of investment staff or mandate, or market distress LPs may be forced to liquidate positions at deep discounts which ERSRI can capitalize on. These may not be funds ERSRI would commit to on a primary basis, but the discount on the current portfolio and potential upside of the unrealized investments is attractive enough to warrant investment
- Private investment funds are typically closed-end vehicles, meaning that the purchase and sale of investments typically happen within a limited period. Market conditions during those defined times can have a meaningful impact on the success of a fund and the years that elapse between commitment to a fund and its conclusion make it difficult to predict market conditions. As a result, the SIC seeks to invest in private investment funds in a consistent, steady manner, ensuring vintage-year diversification.
- Private investments, other than when they are bought and sold, do not have market-based valuations. Instead interim values are based on appraisals and other derived valuations that are typically smoother than public market valuations. As long-only investments, often carrying substantial debt, privates are among the riskiest of the SIC's investments, even if the valuation methodology makes the volatility difficult to observe.
- Given the inconsistent nature of private investments — opportunities to invest are episodic as are return of capital — portfolio weights can diverge substantially from the policy allocation. In these periods, allocations are often held in public equity, due to the asset class's liquidity and ease of access.
- The goal of the private investments portfolio is to maximize returns for the capital deployed. At times, the SIC may determine that the sale of a stake in a private investment fund, even at a discount to the stated valuation, achieves the goal of maximizing performance, particularly if the capital can be redeployed in investments with higher expected returns.

As of September 28, 2016, the strategic policy allocation to the private growth class is 15%.

Asset Class Policies

Inflation Protection Class

The purpose of the inflation protection class is to protect against unanticipated spikes in inflation or long periods of inflation that can have a detrimental impact on the long-term purchasing power of an asset portfolio. The inflation protection class is designed to provide exposure to assets with valuations that are sensitive to potential future rises in inflation through explicit (legal contract) or implicit adjustment of income to changes in inflation rates.

The inflation protection class seeks to achieve this goal through exposure to public and private debt and equity assets; including but not limited to Private Infrastructure/Agriculture/Timber, Private Core Real Estate, Global Inflation Linked Bonds (GILBS) or TIPS, and liquid natural resources. A diversified portfolio of these assets is expected to provide protection from rising inflation, diversification and an element of growth return.

Since there is no asset that is perfectly correlated with inflation, in shorter time periods market forces and asset correlations could overwhelm the impact of inflation on the inflation protection class portfolio. Therefore, the inflation protection class may deviate from its intended role in the short-term. Results will be judged over a rolling 5 year period.

The Inflation protection class is expected to produce ~3% real return across a full market cycle. The Inflation protection class may exhibit price volatility in certain environments. The total Inflation protection class should exhibit volatility lower than the publicly traded equity market.

Inflation protection class strategic policy:

Private Core Real Estate	30-60%
Private Infrastructure/Agriculture/Timber	15-45%
Public Inflation-Indexed Government Bonds	0-25%
Natural Resources (Liquid)	0-25%

The targeted maximum allocation to private assets is 80% within the Inflation Protection Class. The portfolio may deviate from the strategic policy as market conditions and funding conditions permit within the ranges above.

<u>Asset</u>	<u>Benchmark</u>
Private Core Real Estate	NFI-ODCE Index
Private Infrastructure*	CPI +4%, 1 Month Lag
Public Inflation-Indexed Government Bonds	Bloomberg Barclays 1-10 Year TIPs Index
Natural Resources	Bloomberg Commodity Index TR

*Includes agriculture/timber

The Inflation Protection Class benchmark is a blend of the individual assets' benchmarks, weighted in accordance with the stated Total Plan benchmark component weights.

The Private Infrastructure asset class investments are primarily comprised of primary fund commitments. However, up to 20% of the exposure within the asset class may be through the acquisition of secondary interests in LP fund commitments (secondaries).

Secondary transactions involving funds that are currently in the portfolio do not require SIC approval, as long as the SIC's previously approved commitment vote included the capacity for future secondaries. All other secondary transactions must be approved by SIC vote.

The investment pace and type of secondary transactions will be opportunistic, but can be categorized into four types:

<u>Type</u>	<u>Anticipated Exposure</u>	<u>Min Percent Funded</u>
Existing portfolio funds	40% - 60%	no minimum
Existing GPs, but new funds	40% - 60%	25%
Access to high quality GPs	< 10%	25%
Opportunistic deep discount	20% - 40%	50%

- Min Percent Funded: the minimum of drawn capital divided by total committed capital of the fund at the time of transaction
- Existing portfolio funds – funds that are currently in the ERSRI portfolio
- Existing GPs, but new funds – GPs that ERSRI is currently invested with, but funds that ERSRI does not have exposure to

- Access to high quality funds – Many high quality funds are hard to access. If ERSRI is able to get into such a fund via a secondary transaction that can be an alternative way to gain such exposure. Additionally, GPs prefer to have consistent investors across fund vintages so the secondary may provide access to new funds with the high quality GP on a primary basis
- Opportunistic deep discount – In a forced sale situation which may be caused by liquidity needs, over allocation to privates, change of investment staff or mandate, or market distress LPs may be forced to liquidate positions at deep discounts which ERSRI can capitalize on. These may not be funds ERSRI would commit to on a primary basis, but the discount on the current portfolio and potential upside of the unrealized investments is attractive enough to warrant investment

Risks that may impact the Inflation protection class include:

- Illiquidity risk (private assets)
- Growth risk
- Real interest rate risk
- Active management Risk

SIC Investment Philosophy – Inflation Protection Class Portfolio:

- The SIC expects the Inflation protection class to provide ~3% real return over rolling 5 year periods
- The Inflation protection class plays the following roles for the total fund:
 - inflation protection (primary goal)
 - diversification
 - principal appreciation

As of August 2017, the strategic policy allocation to the Inflation protection class is 8%

Asset Class Policies

Crisis Protection Class

The purpose of the Crisis Protection Class (CPC) is to protect the portfolio during a significant and sustained market crisis, by appreciating in value during periods of significant equity market declines, thus smoothing volatility of the overall ERSRI portfolio.

<u>Asset</u>	<u>Benchmark</u>
Systematic Trend	Credit Suisse Managed Futures Index™ (18% target volatility)
Long Duration U.S. Treasury	Bloomberg Barclays Long Duration U.S. Treasury Bond Index

The Crisis Protection Class benchmark is a blend of the individual asset class benchmarks, weighted in accordance with the stated Total Plan benchmark component weights.

Intra-Component Rebalancing Guidelines

Under normal market conditions the underlying strategies and managers will be rebalanced on a monthly basis (consistent with other plan assets), subject to rebalancing thresholds.

Long duration U.S. Treasury: 50% of CPC +/- 2.5% (47.5% to 52.5%) month end tolerance
Systematic Trend Following: 50% of CPC +/- 2.5% (47.5% to 52.5%) month end tolerance

However, the CPC portfolio will be rebalanced inter-month if certain absolute rebalancing thresholds are hit inter-month.

If inter-month the class hits a +/-3.5% deviation (46.5%, 53.5%), the allocation of the class will be rebalanced inter-month to the 50% / 50% target.

As of September 28, 2016, the strategic policy allocation to the CPC portfolio is 8%

Asset Class Policies

CPC Portfolio: Long Duration U.S. Treasury Portfolio

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. It seeks to achieve this goal through exposure to high quality, long duration government bonds that have historically performed well in this market environment.

Investments to be included in the Long Duration U.S. Treasury Portfolio are long-dated (maturities in excess of 10 years) high-quality bonds (Treasuries and full faith and credit Government-backed Agency securities only).

Due to the long duration of bonds in this portion of the portfolio, return volatility is expected of a similar magnitude as a publicly traded equity portfolio, but with low correlation to the public equity markets. It is accepted that the portfolio may produce negative returns at times, particularly during non-crisis investment environments.

Risk that may impact the long duration U.S. Treasury portfolio include:

- Interest Rate Risk
- Inflation Risk

The benchmark for the long duration U.S. Treasury Portfolio will be the Bloomberg Barclays Long Duration U.S. Treasury Bond index. The long duration index represents the high quality long maturity bond universe.

SIC Investment Philosophy – Long duration U.S. Treasury Portfolio

- The SIC expects that the long duration U.S. Treasury portfolio will produce strong positive returns in periods of financial market stress.
- The long duration U.S. Treasury Portfolio will play the following roles for the total portfolio:
 - Diversification of growth risks
 - Liquidity
- The allocation may employ a blend of modestly active management styles, but managers are expected to control risk relative to the benchmark within a 1% annual tracking error target.

As of December 31, 2016, the strategic policy allocation to the long duration U.S. Treasury portfolio is 4%.

Asset Class Policies

Crisis Protection Class – Systematic Trend Following Portfolio

Systematic trend following strategies (STF) represent 50% of the CPC portfolio.

The objective of the trend following allocation in the CPC portfolio is to capitalize on broad market trends in a systematic (rules-based) fashion, particularly during prolonged equity market downturns.

Systematic Trend Following is a long-standing investment strategy that involves buying (going long) markets that have been rising and selling (going short) markets that have been declining. Systematic trend following strategies invest in liquid, exchange-traded futures and forwards across multiple markets including equity, fixed income, commodities and currencies.

Risks that may impact the systematic trend following portfolio include:

Systematic trend following may exhibit high volatility, and may produce negative returns under certain periods that exhibit range-bound behavior with no discernible market trends.

However, trend following strategies are expected to positively impact the performance of the overall ERSRI portfolio over time by providing diversification during times of significant stress in the equity markets.

The benchmark for the systematic trend following portfolio will be the Credit Suisse Managed Futures Index™ (18% target volatility). The Credit Suisse Managed Futures Index™ is a systematic trend following strategy that trades multiple futures contracts, providing liquid and diversified exposure to market trends across asset classes, geographies and time horizons.

SIC Investment Philosophy – Systematic Trend Following Portfolio:

- The SIC expects the systematic trend following portfolio to protect the fund in periods of sustained equity market stress and expects the systematic trend following portfolio to produce a modest positive real compound return, with low correlation to the remainder of the ERSRI portfolio, over a full market cycle.

- The systematic trend following portfolio is to be viewed in the context of the broader CPC portfolio and its objectives.
- The CPC portfolio systematic trend following strategies play the following roles for the total fund:
 - Diversification of growth risk
 - Negative correlation to growth portfolio assets in times of significant growth market decline
 - Liquidity

. Systematic trend following strategies represent 50% of the CPC portfolio.

Total systematic trend following Portfolio: 4%

Asset Class Policies

Inflation Protection Class

The purpose of the inflation protection class is to protect against unanticipated spikes in inflation or long periods of inflation that can have a detrimental impact on the long-term purchasing power of an asset portfolio. The inflation protection class is designed to provide exposure to assets with valuations that are sensitive to potential future rises in inflation through explicit (legal contract) or implicit adjustment of income to changes in inflation rates.

The inflation protection class seeks to achieve this goal through exposure to public and private debt and equity assets; including but not limited to Private Infrastructure/Agriculture/Timber, Private Core Real Estate, Global Inflation Linked Bonds (GILBS) or TIPS, and liquid natural resources. A diversified portfolio of these assets is expected to provide protection from rising inflation, diversification and an element of growth return.

Since there is no asset that is perfectly correlated with inflation, in shorter time periods market forces and asset correlations could overwhelm the impact of inflation on the inflation protection class portfolio. Therefore, the inflation protection class may deviate from its intended role in the short-term. Results will be judged over a rolling 5 year period.

The Inflation protection class is expected to produce ~3% real return across a full market cycle. The Inflation protection class may exhibit price volatility in certain environments. The total Inflation protection class should exhibit volatility lower than the publicly traded equity market.

Inflation protection class strategic policy:

Private Core Real Estate	30-60%
Private Infrastructure/Agriculture/Timber	15-45%
Public Inflation-Indexed Government Bonds	0-25%
Natural Resources (Liquid)	0-25%

The targeted maximum allocation to private assets is 80% within the Inflation Protection Class. The portfolio may deviate from the strategic policy as market conditions and funding conditions permit within the ranges above.

<u>Asset</u>	<u>Benchmark</u>
Private Core Real Estate	NFI-ODCE Index
Private Infrastructure*	CPI +4%, 1 Month Lag
Public Inflation-Indexed Government Bonds	Bloomberg Barclays 1-10 Year TIPs Index
Natural Resources	Bloomberg Commodity Index TR

*Includes agriculture/timber

The Inflation Protection Class benchmark is a blend of the individual assets' benchmarks, weighted in accordance with the stated Total Plan benchmark component weights.

Risks that may impact the Inflation protection class include:

- Illiquidity risk (private assets)
- Growth risk
- Real interest rate risk
- Active management Risk

SIC Investment Philosophy – Inflation Protection Class Portfolio:

- The SIC expects the Inflation protection class to provide ~3% real return over rolling 5 year periods
- The Inflation protection class plays the following roles for the total fund:
 - inflation protection (primary goal)
 - diversification
 - principal appreciation

As of August 2017, the strategic policy allocation to the Inflation protection class is 8%

Asset Class Policies

Volatility Protection

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 are less volatility-sensitive.

The Volatility Protection Class seeks to achieve this goal through exposure to a variety of assets; including but not limited to Investment Grade Fixed Income, Absolute Return Managers, and Cash.

<u>Asset</u>	<u>Benchmark</u>
Core Fixed Income	Bloomberg Barclays Aggregate Bond Index
Absolute Return	HFRI Fund of Funds Index
Cash	Bank of America Merrill Lynch 0-1 Year US Treasury Index

The Volatility Protection Class benchmark is a blend of the individual assets' benchmarks, weighted in accordance with the stated Total Plan benchmark component weights.

As of September 28, 2016, the strategic policy allocation to the Volatility Protection Class is 21%

Asset Class Policies

Volatility Protection Class: Core Fixed Income

The purpose of the core fixed income allocation is to provide downside protection in adverse market environments. It seeks to achieve this goal through broad exposure to U.S. investment grade fixed income securities. As the overall portfolio's primary "risk off" asset, strong returns and outperformance are secondary considerations. The allocation accepts lower expected returns in exchange for more consistent cash flows and generally more stable valuations.

Given the structure of the investment grade bond market, the allocation is actively managed. Managers are given tight guidelines to ensure the allocation follows closely to the expected goal of providing safety.

The Barclays Aggregate Index is the benchmark for the core fixed income allocation. The Aggregate index parallels the investment-grade bond universe (bonds rated BBB- or higher), with roughly eighty percent of its weight in US Treasuries and US-backed agency (Fannie Mae,

Freddie Mac, etc.) securities. Backed by the US government, these bonds are generally the most stable among fixed income securities. The rest of the index consists primarily of corporate bonds and asset-backed securities.

SIC Investment Philosophy - Core Fixed Income:

- The SIC is a long-term investor in core fixed income securities, expecting a modest but positive nominal return over a full market cycle.
- Core fixed income plays the following roles for the total portfolio:
 - Diversification of growth risks
 - Capital preservation / low expected volatility
 - Liquidity
- The allocation is actively managed due to the structure of the U.S. investment grade fixed income market. Core fixed income managers may take modest risks in duration, prepayment and credit. The SIC expects managers to be adequately compensated for assuming these risks and the attendant volatility.
- To increase the likelihood of serving its portfolio purpose, the active management of the core fixed income allocation will be constrained. The portfolios are managed with low tracking error targets (± 150 basis points per year). In addition, duration of the overall investments will be limited to ± 1.0 year of the benchmark's duration.

As of September 28, 2016, the policy allocation to core fixed income is 11.5%,

Asset Class Policies

Volatility Protection Class: 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 (a.k.a. beta). Investing in a broad range of securities from equities and fixed income to commodities, convertibles, currency and derivatives, absolute return funds serve as diversifiers, seeking returns from active investment decisions, both long and short (a.k.a. alpha). Since returns are driven primarily by manager decisions, the allocation is actively managed.

Taking less consistent market risks, the allocation is expected to generate steadier and lower returns than other allocations, particularly those with exposure to the equity markets. With less

volatility, the absolute return allocation is expected to be more efficient (higher return per unit of return volatility).

The HFRI Fund of Funds index serves as the benchmark. Since the index has more equity market exposure (beta) than the SIC's portfolio, it is to be expected that the allocation will trail the benchmark when equity markets are strong and outperform when they are weak. Over the long term, the allocation is expected to match or outperform the HFRI Fund of Funds index.

SIC Investment Philosophy - Absolute Return

- The SIC is a long-term investor in absolute return funds, seeking solid returns and limited volatility over a full market cycle.
- Absolute return investments play the following roles for the total portfolio:
 - Return generation
 - Alpha capture
 - Risk mitigation
 - Moderate liquidity
- Accessing alpha, or idiosyncratic returns, from security selection is the role of the absolute return allocation. Absolute return funds have broad mandates and the SIC expects managers to take ownership of all decisions associated with its investments. Long-term, net-of-fees returns and future return potential are the metrics on which the SIC assesses absolute return investments.
- Since risk mitigation is a key role of the absolute return allocation and the overall portfolio's largest risk is equity market exposure, the SIC seeks to build a portfolio of absolute return funds with minimal equity beta (targeting <0.4 collectively across the absolute return allocation).
- The SIC seeks to invest in absolute return funds in the most effective manner possible, balancing returns, risks and costs. Since betas can be achieved more cheaply through long-only vehicles, the SIC selects a portfolio of absolute return funds whose performance is driven by active security-selection decisions. Successful active management, particularly for returns uncorrelated with broad markets, is rare and costly. The SIC seeks to hire the best managers and uses performance fee structures to incentivize them.
- Diversification among absolute return funds is particularly important, as idiosyncratic decisions drive returns. The SIC seeks to invest with managers that provide diversification to the broader portfolio and to one another. Though each fund will pursue

different strategies, many of the absolute return funds can be classified into basic strategies:

- **Credit long/short** – Generate returns through selection of individual securities, mostly corporate bonds, identifying and going long securities that are undervalued and putting on bearish positions in securities that are overvalued.
 - **Macro** – Generate returns through assessment of macroeconomic trends and selection of securities that will move, either up (long positions) or down (short positions) based on these trends. Using primarily broad-based instruments, such as equity indexes, government bonds, currencies, and others, macro funds will take varying directional positions to capitalize on their views.
 - **Multi-strategy** – Generate returns both through pursuing typical absolute return strategies and from actively allocating capital among those strategies. Multi-strategy funds give access to strategies, such as convertible arbitrage, that fluctuate in their attractiveness.
 - **Relative value** – Generate returns through capitalizing on small, usually temporary price discrepancies between similar securities. By pairing a long position in an undervalued security and a short in a related and overvalued security, relative value funds seek to generate modest, consistent returns that compound to meaningful performance over time.
 - **Trend-following** – Generate returns by capitalizing on markets' tendency to continue a price trend (auto-correlate) over the short to medium term.
 - **Equity long/short** – Generate returns through selection of individual securities (generally equities), identifying and going long securities that are undervalued and putting on short positions in securities that are overvalued.
 - **Event-driven** – Generate returns by anticipating mergers or other events that will produce a change in a security's value, and either going long or short securities that will benefit. With generally more concentrated exposures, event-driven strategies can be more volatile.
-
- With its absolute return investments, the SIC accepts longer lock-ups and less frequent opportunities to redeem. This moderate liquidity is expected to provide fund managers with a longer time horizon over which to execute their strategies. The idiosyncratic returns from security selection are expected over the long term to produce solid returns with less volatility and minimal correlation to global equity.

As of September 28, 2016 the policy allocation to Absolute Return is 6.5%.

Asset Class Policies

Volatility Protection Class: Cash Portfolio

The purpose of the Cash Portfolio is to effectively manage the total ERSRI cash holdings to meet the pension system's obligations – monthly benefit payments, private investment capital calls and other cash needs – while earning a stable cash market return.

The portfolio seeks to obtain a level of current income while prioritizing the preservation of principal and liquidity. The cash portfolio may seek to earn modestly superior risk-adjusted return relative to the benchmark primarily by taking modest duration and credit exposures consistent with the account guidelines.

Investments to be included in the Cash Portfolio include high quality U.S. dollar- denominated money market and fixed income securities of domestic and foreign issuers, U.S. Government securities, and repurchase agreements.

Eligible investments include;

- i. Obligations of the U.S. Government and foreign governments and their agencies or instrumentalities;
- ii. Supranational and other quasi-governmental organizations' debt obligations;
- iii. Obligations of banks and other financial services companies (including Yankee and Euro certificates of deposit, commercial paper, time deposits and bankers' acceptances);
- iv. Short-term corporate obligations, including commercial paper, notes, and bonds;
- v. Mortgage-backed securities and Asset-backed securities;
- vi. Overnight and term repurchase agreements and reverse repurchase agreements;
- vii. Municipal securities;
- viii. Variable and floating rate securities are permitted.
- ix. U.S. Treasury Separate Trading of Registered and Principal Securities ("STRIPS");
- x. Callable securities.

Credit Quality Guidelines

- Minimum Average Portfolio Quality: AA-
- Minimum Quality of any security at time of purchase: Investment Grade
- Minimum Quality of Short-Term issues: A2/P2
- No more than 15% of the portfolio will be invested in securities rated BBB or A2/P2.

Maturity and Concentration Guidelines

- i. The Cash Portfolio's assets will be managed to maintain a dollar-weighted average portfolio duration of 1-year or less.
- ii. The Investment Advisor will purchase only instruments with a remaining maturity of 3.08 years or less
- iii. MBS + ABS limited to 10% of portfolio
- iv. At the time of purchase, no more than 2% of the Portfolio's total assets will be invested in securities of any single issuer except that there is no limitation on the percentage of assets that may be invested in securities of the U.S. Government, its agencies or instrumentalities. Each repurchase agreement counterparty will be limited to 10% of the portfolio.
- v. No more than 25% of the total assets of the Portfolio may be invested in any one industry; except there is no limitation on the percentage of assets that may be invested in the financial services industry.
- vi. For securities that trade based on their weighted average maturity, the weighted average maturity will be used instead of the final maturity date for maturity and duration guideline purposes. For securities that have coupon reset dates and a weighted average life, the coupon reset date will be treated as the weighted average life for maturity guideline purposes. For securities that have coupon reset dates, the coupon reset date will be used for duration guideline purposes.

Risk that may impact the Cash Portfolio include:

- Interest Rate Risk
- Credit Risk

The benchmark for the Cash Portfolio will be the Bank of America Merrill Lynch 0-1 Year US Treasury Index.

It is accepted that the portfolio may produce negative monthly returns at times, particularly during periods of sharply rising interest rates or fixed income credit quality deterioration.

SIC Investment Philosophy – Cash Portfolio

- The SIC expects that the Cash Portfolio will produce stable returns that approximate the portfolio benchmark.
- The Cash Portfolio will play the following role for the total portfolio:
 - Liquidity
- Active management is permitted to the extent that liquidity and preservation of capital remain paramount.
 - The Manager is expected to control risk relative to the benchmark through adherence to the portfolio guidelines.

As of December 31, 2016, the strategic policy allocation to the Cash Portfolio is 3%.

Asset Class Policies
Total Plan Benchmark
(Implemented 10/01/17)

TOTAL PLAN BENCHMARK	WEIGHT	TARGET RANGE
GROWTH		
PUBLIC GROWTH (PUBLIC EQUITY)	40%	+/- 2%
MSCI All Country World Index (Net Dividends)	40.00%	
PRIVATE GROWTH	15%	+/- 4%
ILPA All Funds Index 1Q Lag	11.00%	
NFI-ODCE Index + 2.5%	2.50%	
ILPA Distressed Index 1Q Lag	1.50%	
INCOME		
	8%	+/- 2%
Alerian MLP Index	1.50%	
MSCI U.S. REIT Index	0.00%	
50% Bank of America US HY Index + 50% Credit Suisse Leveraged Loan Index	3.50%	
S&P/LSTA Leveraged Loan Index + 3%	3.00%	
STABILITY		
CRISIS PROTECTION CLASS	8%	+/- 2%
Bloomberg Barclays Long Duration U.S. Treasury Bond Index	4.00%	
Credit Suisse Managed Futures Index™ (18% target volatility)	4.00%	
INFLATION PROTECTION	8%	+/- 3%
NFI-ODCE Index	4.00%	
CPI + 4%, 1 Month Lag	2.00%	
Bloomberg Barclays 1-10 Year TIPS Index	1.00%	
Bloomberg Commodity Index TR	1.00%	
VOLATILITY PROTECTION	21%	+/- 2%
Bloomberg Barclays Aggregate Bond Index	11.50%	
HFRI Fund of Funds Index	6.50%	
Bank of America Merrill Lynch 0-1 Year U.S. Treasury Index	3.00%	