
General Investment Policies for the New York State Common Retirement Fund

PURPOSE AND DESIGN

These General Investment Policies are intended to provide a framework for the operation of the New York State Common Retirement Fund (CRF or Fund) and to reflect the strategies and principles adopted by the Comptroller, with the advice of the Chief Investment Officer, Staff, consultants, investment managers, the Investment Advisory Committee and the Real Estate Advisory Committee. The primary objective of the General Investment Policies is to create the foundation for a prudent, well diversified investment program that, in conjunction with employee contributions and actuarially required employer contributions, will be sufficient to fund the projected benefit obligations of the New York State and Local Retirement System (Retirement System) as they become due over time.

These General Investment Policies are not intended to represent an absolute limit on the type of investments that can be made by the Comptroller or considered by Staff. In many instances, investments that fall outside of the specific categories outlined herein may be appropriate for inclusion in one or more of the CRF's portfolios. The Comptroller may also authorize other legally allowable investments as he or she deems consistent with his or her responsibilities as a fiduciary.

ADMINISTRATIVE AND OPERATIONAL BACKGROUND

The Comptroller, as Trustee of the CRF and as Administrative Head of the Retirement System, is responsible for the investment of all CRF assets and is bound by prudent investing standards and the exclusive benefit provisions set out in the Retirement and Social Security Law (RSSL section 177[9]) and the Regulations of the New York State Department of Financial Services (DFS, formerly the Insurance Department) (11 NYCRR part 136-2). RSSL section 177(9)(b) states in part:

Such investments shall be for the exclusive benefit of the participants and beneficiaries, and the trustee or trustees of a fund shall make such investments with the care, skill, prudence and diligence under circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

The language of the fiduciary duty standards in the RSSL and the DFS Regulations is based upon well-developed common law principles of trust law and is similar to the language describing fiduciary duty standards in Section 404(a)(1) of the Employee Retirement Income Security Act of 1974 (ERISA). As a government plan, the Retirement System is not subject to ERISA. However, as a matter of policy, the CRF voluntarily looks for guidance to ERISA and the US Department of Labor interpretations provided thereunder, where relevant and appropriate. The CRF also may draw upon common law principles of trust and fiduciary duty in analyzing investments as well as current best practice in institutional fund management. Compliance with the “exclusive benefit” rule also assures the Retirement System’s continued status as a tax-exempt qualified plan under the Internal Revenue Code.

The Comptroller is expressly permitted to invest the assets of the CRF in specific types of investments enumerated in section 235 of the State Banking Law and several sections of the RSSL, including sections 13, 313, and 177. These statutory sections also contain limitations on the amount and quality of investments the CRF may hold in certain asset categories. These investments are the so-called “legal list” investments. In addition to the foregoing, section 177(9) of the RSSL contains a provision that currently provides that up to 25 percent of the CRF’s assets may be invested in investments not specifically authorized by any other statute (the “basket clause”). In making investments under Section 177(9), the Comptroller is subject to the specific prudent investing and exclusive benefit provisions noted above. Subject to these standards, basket clause investments made under section 177(9) must, to the extent reasonably possible, benefit the overall economic health of the State.

MISSION OF THE COMMON RETIREMENT FUND

The mission of the CRF is to provide Retirement System participants with a secure pension through prudent asset management.

VISION OF THE COMMON RETIREMENT FUND

The vision of the CRF is to be a high-performing organization with exceptional people and the highest standards of ethics and investment management.

ROLES OF COMPTROLLER, STAFF, CONSULTANTS, MANAGERS AND ADVISORS

The Comptroller, as Trustee of the CRF, is responsible for the investment of all CRF assets. The Comptroller adopts investment policies with advice from the Chief Investment Officer, Staff, in-house and outside counsel, consultants and managers, as well from the members of independent external advisory committees appointed by the Comptroller, including the Investment Advisory Committee and the Real Estate Advisory Committee.

The Comptroller appoints a Chief Investment Officer to oversee the operations of the Division of Pension Investment and Cash Management (PICM), manage Staff and supervise investments on a day-to-day basis. PICM functions as a Division within the Office of State Comptroller (OSC).

Advisory Committees

The Comptroller has appointed the following advisory committees:

- The Investment Advisory Committee (IAC), appointed by the Comptroller pursuant to RSSL section 423, advises the Comptroller on general investment issues. IAC reviews the investment policy statement and any amendments and it reviews and provides a recommendation to the Comptroller on the proposed asset allocation plan developed by the CIO after the completion of an asset liability study, which is performed by the CRF at least once every five years. The IAC also periodically reviews the strategic plan of each CRF asset class, and monitors the CRF's risk profile, investment activity and performance on a periodic basis.
- The Real Estate Advisory Committee (REAC) (formerly the Mortgage Advisory Committee), appointed by the Comptroller with the consent of the IAC pursuant to RSSL section 423, reviews proposed mortgage and real estate investments. In the event the REAC disapproves of a proposed mortgage or real estate investment, the investment will not be presented to the Comptroller and cannot be made by the CRF.
- The Actuarial Advisory Committee, appointed by the Comptroller pursuant to 11 NYCRR 136-2, reviews and advises the Comptroller on the actuarial soundness and financial condition of the Retirement System and the CRF, and annually reviews the proposed actuarial assumptions and employer contributions.
- The Advisory Council for the Retirement Systems, appointed by the Comptroller pursuant to regulations of the Comptroller (2 NYCRR Part 320), advises and makes recommendations to the Comptroller on the formulation of policies in relation to the administration and management of the Fund and the Retirement System. At the annual meetings of the Council, the Comptroller and senior staff also exchange information and insights with the Council to help stakeholders understand the status and challenges of the CRF and the Retirement System.
- The Audit Committee, appointed by the Comptroller pursuant to 11 NYCRR 136-2, reviews and reports to the Comptroller on the annual internal and external audit process related to the Retirement System and the CRF and on the Comprehensive Annual Financial Report.

Staff

Under the direction of the CIO, Investment Staff exercises fiduciary responsibilities in managing investments and in implementing investment policy. Staff also oversees and monitors Consultants and Investment Managers (as defined below).

Consultants

The Comptroller engages the services of external advisors and/or consultants (Consultants) for various purposes, including asset allocation studies, investment strategy development, Investment Manager selection, investment opportunity identification, evaluation and due diligence, performance reviews and specialized expertise.

Among the roles for Consultants is review of potential investments by the CRF. An independent recommendation of a Consultant is one of the requirements for approval of any investment or investment manager by the Comptroller. The Consultant's investment recommendation memorandum and the Investment Staff recommendation memorandum outline the material terms of the proposed investment, and such material terms must be included in the documents presented at closing.

Each Consultant functions under a written contract that defines its duties and responsibilities. Each Consultant must agree to act as a fiduciary to the CRF. Consultants are required to adhere to all the requirements detailed in their consulting agreements. Consultants providing investment advisory services are governed by the Policy Regarding the Independence of Consultants to the Common Retirement Fund.

CRF Staff recommend Consultants based on the Consultant's experience, specific knowledge of a potential investment, specific knowledge of an investment sector, amount of current activity, and other relevant factors.

In selecting and engaging Consultants, the CRF follows the procedures set forth in policies relating to the selection of Consultants.

Investment Managers

The CRF may retain external investment managers to invest assets in accordance with the investment objectives and policies set forth in these General Investment Policies (Investment Managers). Depending upon the circumstances, the CRF enters into "opportunistic investments," including one-off investments that are brought to the CRF Staff by an investment manager and can only be sourced through that investment manager, or it may follow a competitive process. Opportunistic investments are governed by the due diligence, documentation and approval criteria set out in the investment policies for the relevant asset class. The selection of Investment Managers through a competitive process is governed by the procedures set forth in policies relating to Retirement System Revolving Fund Procurements and the Selection of Asset Managers. In a competitive search, a Consultant generally will be used to help select external Investment Managers unless a Request for Proposals (RFP) or similar process is followed.

External Investment Managers are selected based upon investment performance, style and strategy, organizational strength and depth, and fit within the overall portfolio of CRF. Fees and other costs are also considered.

The duties, responsibilities and level of investment discretion of each Investment Manager will be defined under a written contract with the Investment Manager. Each Investment Manager must agree to act as a fiduciary to the CRF as set forth in the Department of Financial Services Regulations. In cases where Investment Managers are used, CRF Staff, with the assistance of its Consultant(s), is responsible for the oversight, goal setting and performance review of, and adherence to policies and procedures by, the Investment Managers.

Custodian

The major portion of the CRF's assets is held in a master custody relationship with a bank located in New York. The custodian is responsible for the safekeeping of assets, the settlement of investment transactions, the collection of income and associated record keeping and reporting. The CRF may also retain third parties to assist in related administrative matters.

AUDITS AND OTHER REVIEWS

The Retirement System and the CRF are audited yearly by an independent CPA firm and are subject to examination at least once every five years by the New York State Department of Financial Services. Pursuant to DFS regulations (11 NYCRR section 136-2.4(g)(6)), the CRF is subject to a fiduciary and conflict of interest review every three years by a qualified unaffiliated person. In addition, the CRF is subject to periodic reviews and audits conducted by the OSC Office of Internal Audit.

ETHICAL STANDARDS

Ethics Principles and Code of Ethics for Staff

The CRF is committed to the highest professional and ethical standards of conduct. This commitment is set forth in the Comptroller's Executive Order on Certain Ethics Principles, which governs all OSC officers and employees, including those working in PICM and in other OSC Divisions serving the CRF such as the Division of Legal Services and the Division of Retirement Services. In addition, CRF staff is covered by the Code of Ethics for State officers and employees set forth in the Public Officers Law. Mandatory ethics training is provided to all OSC employees, including PICM staff. Moreover, PICM staff receives additional ethics training customized specifically for PICM.

Code of Ethics for External Advisory Committees

The Comptroller has adopted a Code of Ethics setting forth standards of conduct applicable to members of the Advisory Council and Advisory Committees to the CRF appointed by the Comptroller. Committee members must acknowledge receipt of the Code and agree to be bound by its provisions. Committee members receive training on the Code, as well as on related ethics and fiduciary principles periodically. In addition, members of the two investment advisory committees, REAC and IAC, are covered by a Financial Disclosure Policy, and are required to file annually a statement of financial disclosure.

Code of Conduct for System and CRF

The Comptroller has issued an Executive Order adopting a Code of Conduct for the Retirement System and the CRF. The Code of Conduct establishes standards that apply to the conduct of the business of the Retirement System and the CRF. It applies to the Comptroller (as Administrative Head of the Retirement System and as Trustee of the CRF), the officers and employees of the OSC with responsibility for matters relating to the Retirement System or the CRF, the investment managers and consultants or advisors engaged by the CRF, and the members of the Advisory Council and Committees established by law, regulation or the Comptroller.

In addition to setting forth certain prohibited transactions, the Code of Conduct requires the Retirement System and the CRF to be managed in accordance with the highest ethical, professional and conflict of interest standards and to maintain a high level of operational transparency. It further requires the Retirement System and the CRF operate under a strong governance framework with a rigorous system of internal controls, and be managed in the most efficient and effective manner possible. All actions on behalf of the Retirement System and the CRF must be for the sole benefit of the Retirement System's members, retirees and beneficiaries.

Ban on Use of Placement Agents

To further preserve the independence and integrity of the CRF, the Comptroller has adopted Placement Agent Policies and Procedures designed to prevent conflicts of interest or the appearance of conflicts of interest in CRF's investment decision-making process. The Comptroller's Placement Agent Policy was codified in Section 424-a of the New York State Retirement and Social Security Law (RSSL). The Policy and Section 424-a prohibit the CRF directly or indirectly from engaging, hiring, investing with, or committing to, an outside Investment Manager that is using the services of a placement agent, registered lobbyist or other third-party intermediary to assist in obtaining investments by the CRF, or otherwise doing business with the CRF, whether compensated on a flat fee, a contingent fee, or any other basis. All Investment Managers must comply with the procedures set forth in the Policy.

Ban on Political Contributions

Securities and Exchange Commission (SEC) Rule 206 (4)-5 under the Investment Advisers Act of 1940 precludes an investment adviser from providing advisory services to the CRF for compensation, subject to stringent penalties if, among other things, it or certain of its employees has made an impermissible political contribution to the State Comptroller or to a candidate for State Comptroller within the previous two years. Prior to the enactment of Rule 206(4)-5, the Comptroller had effected a similar prohibition for the CRF pursuant to an "Executive Order and Interim Policy on Political Contributions". While the Executive Order and Interim Policy, by its terms, expired and was superseded by Rule 206(4)-5, the Comptroller still requires managers to certify their compliance with the Rule in connection with each investment.

Conflicts Disclosure by Managers, Consultants and Advisors

Pursuant to DFS regulations (11 NYCRR Section 136-2.4(c)(1)(i)), investment managers and consultants or advisors must promptly disclose to the Fund in writing any conflict of interest the investment manager or consultant or advisor may have which could reasonably be expected to impair the ability of an investment manager, consultant or advisor to render unbiased and objective advice. DFS regulations (11 NYCRR Section 136-2.4(c)(1)(ii)) further require investment managers and consultants to sign an acknowledgement annually with the CRF that confirms they are in compliance with this standard. This certification is part of the CRF Annual Compliance Questionnaire, which is required of managers, consultants and advisors.

Policy on Independence of Consultants Providing Investment Advice to CRF

It is the policy of the CRF that consultants providing investment advisory services to the CRF on a portfolio wide or asset class basis cannot seek to manage assets for the CRF, either directly or through affiliates, during the term of the consultant services contract, unless specifically requested by the CIO and subject to written procedures established by the CRF to manage potential conflicts in such situations. This policy is set out in the Policy Regarding the Independence of Consultants to the Common Retirement Fund.

Prevention of Insider Trading and Misuse of Confidential Information

CRF staff and the members of the investment-related advisory committees are covered by policies and procedures intended to prevent insider trading and the misuse of material non-public information and confidential information. Confidentiality extends beyond the concepts of material, nonpublic information and insider trading. The CRF requires that all nonpublic information obtained by covered employees while performing their duties or in the capacity of a client be treated confidentially

GENERAL INVESTMENT OBJECTIVES

The CRF's general investment objectives are as follows:

1. Provide the means, together with employee and employer contributions, to pay benefits, when due, to the Retirement System's members, retirees and beneficiaries.
2. Seek to optimize long-term risk-adjusted returns, consistent with liquidity and diversification parameters that are prudent under existing circumstances.
3. Invest according to an asset allocation that provides for the diversification of assets.
4. Invest assets efficiently, bearing in mind the impact of management and transaction costs on the return of the assets.
5. Exercise all investor responsibilities on behalf of CRF, including the voting of proxies, in the best long term interests of the CRF and in accordance with the applicable statutes and voting guidelines of the CRF.

ASSET ALLOCATION AND REBALANCING

Asset-Liability Analysis

The Retirement System is required to review and establish an actuarial investment rate of return assumption at least once every five years. The CRF is required to review and establish an asset allocation at least once every five years. To inform these decisions, the CRF engages in an asset-liability study at least once every five years. The study includes a review of asset classes, return-risk assumptions, and correlation of returns with applicable benchmarks and across asset classes. The study also includes a review of the liabilities of the Retirement System, the funded status of the Retirement System and projected "payout" ratios (i.e., expected benefit payments divided by projected market value of assets) over a 20 year period.

Asset Allocation

Based upon the results of the study, the CIO, Staff and Consultant(s) provide input and recommendations to the Comptroller in determining the asset allocation. The asset allocation is constrained by the statutory provisions establishing the so-called "legal list" for CRF investments (RSSL, sections 13, 313 and 177; Banking Law, section 235), which limit the quality and quantity of specific types of investments, and the so-called "basket clause" (RSSL, section 177[9]), which allows up to 25 percent of the CRF assets to be invested in investments not specifically authorized by other provision of law. The IAC reviews and provides a formal recommendation to the Comptroller regarding the proposed asset allocation policy. The Comptroller approves the final asset allocation.

The asset allocation policy provides for diversification of assets to maximize long-term investment return consistent with prudent credit, market and economic risk, in accordance with statutory guidelines, so as to achieve the CRF's goal of attaining and maintaining the funding needed to meet the Retirement System's current and future benefit obligations. The CRF may associate a benchmark or benchmarks for the different asset classes or sub-classes that describe, in general terms, the opportunity set and risk and return characteristics associated with the asset class or sub-class.

The asset allocation policy is intended to serve as a general guideline and to be broad enough to provide the flexibility needed to react to changes in the various investment, economic and funding factors. The Comptroller, CIO, Staff and the IAC, with the assistance of the Consultant(s), monitor the asset composition of the CRF in relation to the established asset allocation policy. Specific information about Asset Allocation and portfolio composition are contained in the Comprehensive Annual Financial Report, which is available on the Retirement System website.

Actuarial Investment Rate of Return Assumption

The Actuary for the Retirement System participates in the asset-liability study and the results of the study and the asset allocation are shared with the Actuary. Although the investment assumptions are based upon a shorter time frame than the pension funding horizon, information regarding the capital market assumptions and portfolio expectations of the CRF's professionals and consultants are fundamental in the Actuary's formulation of the actuarial investment rate of return assumption that is recommended to and approved by the Comptroller. The Comptroller approved an assumed rate of return of 6.8 per cent in August of 2019.

Rebalancing

Staff monitors the overall asset allocation on an ongoing basis. Activities in the capital markets and the CRF's cash flow requirements may result in the CRF deviating from its maximum allocation percentages at certain times. Staff may recommend a rebalancing at any time and the CIO may initiate a discretionary rebalancing at any time. At least annually, the IAC will review the CRF's current asset allocation. If rebalancing is initiated, a plan is developed whereby specific dollar amounts will be considered for movement based on the degree of the over/underweight in the various asset classes, liquidity characteristics and current market conditions.

The CRF's rebalancing procedures take into account and reflect the following considerations:

- Trading costs directly impact the overall performance. The CRF therefore controls the frequency of rebalancing and employs methods that keep trading costs to a minimum.
- Rebalancing on a periodic basis, with volatility-based trigger points, is the best choice for limiting tracking error caused by the variance between the CRF's actual and target asset allocation while minimizing trading-related transaction costs and disruption to the management of the CRF.

USE OF DERIVATIVES

CRF's Derivatives Investment Policy Statement (Policy), governs the use of derivatives (1) by separate account managers on behalf of the CRF and (2) by the investment staff of the CRF in connection with rebalancing activities. Subject to the criteria and limitations set forth in the Policy, such investment managers may use derivatives where such use is (a) expressly authorized in the investment manager's agreement with the CRF and (b) the CIO has specifically approved the use of derivatives by the manager. Investment staff of the CRF may use approved derivatives in connection with rebalancing activities as authorized by the CIO.

Derivatives may not be used for speculation.

Unless the applicable investment guidelines permit, the investment manager may not use borrowing leverage, may not use derivatives to increase exposure to assets or other financial variables beyond that which is allowed by the applicable investment guidelines and may not use commodity derivatives that are not cash settled.

For internally managed assets, the CRF may only use exchange traded equity index futures and interest rate futures to meet its rebalancing objectives for the portfolio.

PERFORMANCE MEASUREMENT

The performance of the CRF investment program is evaluated by the Comptroller, CIO, Staff and the IAC, with the assistance of the Consultant(s), on a regular basis.

Investment performance for the CRF, each asset class and component portfolios is compared with their respective benchmark indices over appropriate market cycles. In all respects and measures, the CRF expects to earn a return that compensates it for the risk taken.

Staff review fund, portfolio and benchmark returns at least monthly. At least quarterly, an investment performance analysis of the CRF's portfolio is presented to the IAC and the Comptroller. Performance reviews are conducted against benchmarks, as appropriate. It is understood that there are likely to be intermittent periods when portfolio performance deviates from market indices due to investment styles and strategies falling in and out of favor.

RISK MANAGEMENT

The CRF's enterprise-wide risk mandate is designed to capture a broad array of risks critical to its mission, including:

1. Investment Risk, defined as the risk that investments do not achieve the expected return necessary for the CRF to deliver its mission;
2. Strategic Risk, defined as the risk that the strategic objectives are incorrectly defined to achieve the CRF's overall mission, or that the investment and business strategies are insufficient to achieve its objectives;
3. Reputation Risk, defined as the risk that CRFs business practices, relationships, or its investment partners adversely affect the CRF's reputation, or cause stakeholders to lose confidence, impeding the CRF's ability to deliver its mission
4. Operational Risk, defined as the risk that inadequate or failed processes, people, systems, or external events produce losses that prevent the CRF from delivering its mission;
5. Governance Risk, defined as the risk that the governance structure impedes management's ability to deliver on the CRF's mission; and
6. Legal and Regulatory Risk, defined as the risk that non-compliance with regulatory obligations, policies and directives, or with professional and ethical standards and practices, results in loss that prevents the CRF from achieving its mission.

The responsibilities for effective enterprise risk management within the CRF are shared among the following groups: the Pension Risk Management program (PRM); the CIO; the Executive Deputy Comptroller for Retirement Services (EDCRS); Investments; Operations; Compliance and Legal.

The PRM is headed by the Chief Investment Risk Officer who reports to the EDCRS, with administrative reporting to the CIO. PRM with the support of the Risk Committee guided by the Risk Committee Charter and Risk Appetite Statement advises on investment risk and investment-related risk. Among other things, PRM is responsible for devising and implementing CRF risk frameworks, measuring and monitoring investment risks, providing investment risk control, and monitoring compliance with CRF risk appetite, as defined in the CRF Risk Appetite Statement. PRM facilitates risk dialogue, promotes risk awareness, and collaborates with other groups in mitigating investment and investment-related risks.

PORTFOLIO IMPLEMENTATION AND DESIGN

Consistent with the asset allocation approved by the Comptroller, the CIO formulates the overall investment strategy with the assistance of Investment Staff, the Risk Management team and relevant Consultants, and reviews it with the Comptroller. Investment Staff implements the approved investment strategy in evaluating and recommending investments to the CIO.

Each asset class head works with the asset class team to develop a strategic plan for the asset class with investment and implementation strategies that are consistent with the goals and objectives of the asset class. A Consultant may assist in the development of the plan. The strategic plan of each of the asset classes is reviewed by the IAC and, in the case of real estate, reviewed by the REAC, and presented to the Comptroller. Staff and a Consultant review the strategic plans on an as needed basis, but at least every time the asset allocation is revised. Material changes to the strategic plans are presented to the IAC and, in the case of real estate, the REAC, for their review.

INVESTMENT STRUCTURE

1. Portfolio Design

The CRF's investment portfolio consists of the following functional areas:

- a. Public Equity
 - i. Internally Managed Public Equity Investments
 - ii. Externally Managed Public Equity Investments
- b. Fixed Income
 - i. Internally Managed Core Fixed Income Investments
 - ii. Externally Managed Fixed Income Investments
- c. Private Equity Investments
- d. Real Estate Investments
- e. Absolute Return Strategies Investments
- f. Real Asset Investments
- g. Opportunistic Investments
- h. Credit Investments

The asset classes listed (c)-(h) may also be referred to collectively as "Alternative Investments".

2. Asset Class Description

a. Public Equity

The role of the Public Equity asset class is to provide the largest source of nominal returns in the CRF's portfolio over the long-term through diversified public equity market exposure. Public Equity assets are managed internally and externally.

i. Internally Managed Public Equity

The role of Internally Managed Public Equity is to provide low cost, efficient exposure to the returns of the US Equity markets through the use of internally managed Index Funds. The long-term performance goal for these Funds is to closely approximate the returns of the Indices.

Staff maintains a significant allocation to passive investing, with the objective of replicating the beta of the US equity market. Approximately eighty percent of the US equity portfolio will be passively managed.

ii. Externally Managed Public Equity

The role of Externally Managed Public Equity is to generate returns higher than those of the index benchmark by selectively allocating assets to external managers who will help the CRF obtain exposure to segments of the public markets that are considered relatively inefficient or too costly to replicate through internal management. The CRF may use external managers to obtain exposure to international equity markets and select segments of the Domestic Equity markets.

b. Fixed Income

The role of the Fixed Income asset class is to provide a diversified, stable income stream while preserving capital. Fixed Income assets are managed internally and externally.

i. Internally Managed Core Fixed Income Investments

The CRF invests assets in both Long and Short-Term Fixed Income securities. The role of Long-Term Fixed Income is to generate maximum income without adding significant risk, and to offset volatility in the equity markets. The role of Short-Term Fixed Income is to accommodate the disbursement and funding needs of the various investment divisions. The investment goals for the Short-Term portfolio are to obtain the maximum yield consistent with safety of principal and to develop a portfolio emphasizing quality, flexibility, diversity and marketability. The Internally Managed Core Fixed Income Portfolio consists primarily of investment grade, dollar denominated debt obligations.

ii. Externally Managed Fixed Income Investments

1. The role of the externally managed core fixed income investment program is to outperform the benchmark for the internally managed core fixed income program by selectively allocating assets to external managers who will help the CRF obtain exposure to segments of the markets that are considered relatively inefficient or too costly to replicate through internal management. The CRF may use external managers to obtain exposure to select segments of the fixed income markets.
2. The role of the externally managed non-core fixed income is to outperform the core fixed income mandate. This program is designed to earn enhanced income in return for higher risks and to take advantage of mispricing opportunities and inefficiencies caused by episodic market dislocations. Non-Core Fixed Income investments help to maintain liquidity in the overall portfolio and to offset volatility in the asset classes carrying investments in the basket portion of the portfolio. This program selectively allocates assets to external managers to help the CRF gain exposure to segments of the markets that are considered relatively inefficient or too costly to replicate through internal management. Non-Core Fixed Income is a relatively small percentage of the fixed income portfolio and the CRF may use external managers to obtain exposure to global fixed income and select illiquid segments of the fixed income market.

c. Private Equity Investments

The role of the Private Equity asset class is to help the CRF achieve its target rate of return by providing the highest returns of any asset class over the market cycle while maintaining prudent risk management. Private Equity is generally considered to possess a higher degree of risk with a higher return potential than traditional investments. Private Equity investments typically include investments in leveraged buyout, venture capital, growth equity, distressed debt, and other special situation limited partnerships, generally referred to as "Private Equity Partnerships."

d. Real Estate Investments

The role of the Real Estate asset class is to capture excess returns through non-core investments and provide a steady stream of cash-flows through core investments. Real Estate also offers portfolio diversification through its low correlation to other asset classes; historically, real estate has demonstrated negative correlation to other asset classes and, therefore, reduces CRF's total volatility. The CRF may invest in commingled or non-commingled real estate funds (open ended or closed ended), joint ventures, separate accounts and other real estate investment vehicles. The CRF may also invest in mortgages.

e. Absolute Return Strategy Investments

The role of the Absolute Return Strategies (ARS) asset class is to earn attractive risk-adjusted returns, enhance the CRF's portfolio diversification and preserve the CRF's capital in times of market stress. ARS investment strategy classes include relative value, event driven, tactical/directional, and equity long/short.

f. Real Asset Investments

The role of the Real Assets asset class is to provide the CRF with investments that have enhanced risk adjusted returns and provide a hedge against inflation with low correlation to other asset classes over time.

Real Assets investments are broadly defined as tangible investments used in global economic activity. Real Asset investment opportunities may include farmland, timber & forestry, infrastructure, metals, natural resources, energy, pipelines and telecommunication infrastructure.

g. Opportunistic Investments

The role of the Opportunistic Investments asset class is to provide the CRF with attractive risk-adjusted returns that are differentiated to other asset classes. The program seeks to accomplish this goal by (i) gaining exposure to a broad range of strategies that do not fit neatly into the definition of traditional asset classes or that share characteristics of multiple asset classes, (ii) taking advantage of medium term market dislocations and (iii) identifying external managers who can generate excess return in all market environments. These investments are typically episodic; that is, they often do not exist on an ongoing basis but, rather, as a result of a confluence of market factors or events. Opportunistic Investments portfolio strategies include: strategic investments; multi-asset; innovation/niche and risk mitigation.

h. Credit Investments

The Credit asset class's mandate is to significantly outperform CRF's actuarial return target while maintaining a relatively low correlation to other asset classes outside of the traditional Fixed Income markets. To accomplish this objective, investments will be made across the credit universe, seeking attractive risk-adjusted returns using a diverse set of strategies.

Sub asset class strategies include direct lending; mezzanine finance; distressed and special situations; specialty finance; structured credit; real assets credit; real estate credit; and liquid credit.

3. Environmental, Social and Governance Issues

The CRF considers environmental, social and governance (ESG) factors in its investment process because they can influence both risk and return. ESG issues impact the sustainability, value and performance of CRF's investments. The relevance of particular ESG issues may differ and vary in degree across companies, sectors, regions, asset classes and over time. Accordingly, consistent with the Comptroller's fiduciary responsibilities to act in the best interests of the members, retirees and beneficiaries of the Retirement System and with the CRF's role as a prudent long-term investor: (1) Staff votes the CRF's US shareholder proxies and maintains an active corporate governance program for the CRF's publicly traded equity investments with due consideration to ESG issues, and (2) Staff incorporates relevant ESG issues into CRF investment analyses and decision-making processes in investment programs. Investment recommendations in all asset classes will include information on and consideration of the manager's ESG policies and practices, focusing on the risks and standards relevant to the investment under consideration.

4. Emerging Manager Program and MWBE Strategy

The CRF Emerging Manager Program is designed to identify newer, smaller and more niche investment managers that have the potential to add value to the CRF investment portfolio in all asset classes. CRF's experience has shown that these investment management firms may generate superior performance returns because of the increased market flexibility associated with a smaller asset base. Emerging managers are defined as those with assets under management below certain specific thresholds for each asset class. The CRF applies the same fiduciary standards in identifying and selecting emerging managers as it does across the investment portfolio. While the CRF does not mandate a particular level of participation by business enterprises that are majority or substantially owned and/or operated by minorities or women (MWBE) in the Emerging Manager Program, the majority of emerging managers are MWBEs.

The CRF is also committed to certifying MWBE firms and reporting the number of such firms and the value of the assets those firms manage for the CRF across the entire portfolio. That effort is undertaken as part of the MWBE Strategy. The CRF annually prepares a report on the participation of MWBE asset managers and other professional service providers in investment and brokerage transactions.

Every year, the CRF sponsors an Emerging Managers and MWBE Conference to increase awareness of the MWBE Strategy and of opportunities for emerging managers under the Emerging Managers Program.

5. Sustainable Investments and Climate Solutions Program (SICS)

SICS is a thematic investment program designed to strengthen CRF's portfolio by capitalizing on investment opportunities that advance one or more CRF themes categorized in the areas of Resources & Environment, Human Rights & Social Inclusion, and Economic Development. The SICS themes are closely aligned to the United Nations Sustainable Development Goals (SDGs). Led by a Director reporting to the Chief Investment Officer, the SICS program works in conjunction with all asset classes to deploy capital. Like the Emerging Manager program, investments attributed to SICS will be subject to the same fiduciary and risk and return requirements applicable to investments in the subject asset class.

GENERAL APPROVAL REQUIREMENTS APPLICABLE TO INVESTMENTS IN ALL ASSET CLASSES

Prior to any investment and/or Investment Manager being recommended to the Comptroller, the following steps are required:

1. The Consultant will prepare and submit an independent final written recommendation outlining the material investment terms, strategy, investment merits and risks. The analysis will also include a statement to the effect that fees and any expenses are reasonable and consistent with relevant market practices.
2. A Staff recommendation will be prepared and signed by the investment officer responsible for the recommendation and the head of the asset class.
3. Recommendations for real estate and/or mortgage investments are subject to review and approval by the Real Estate Advisory Committee (REAC) and will be presented to the REAC for review. An investment that is not approved by the REAC will not be presented to the Comptroller and will not be undertaken by the CRF.
4. Subject to certain exceptions, non-Real Estate proposed investments and/or Investment Manager hiring not subject to REAC review and approval, will be reviewed by the CRF's Internal Investment Committee (IIC). The CIO will ensure that recommendations to the Comptroller are accompanied by minutes of the Committee meeting at which the investment proposal and/or Investment Manager hiring was presented, and that the final investment recommendation memorandum to the Comptroller contains a discussion of the risks of the proposed course of action as well as the factors mitigating risk, as raised and discussed at the Committee meeting.
5. The CIO will review the investment and/or Investment Manager selection with the Comptroller and make a recommendation. Such recommendation will state that the investment and/or Investment Manager selection complies with the procedures outlined in this section, or if it does not, will detail such noncompliance and request a waiver thereof.
6. If the Comptroller agrees with the CIO's recommendation, the Comptroller gives final written approval for the investment.
7. Subject to final negotiation and legal review of the investment documents, the CIO or other individual designated in writing by the Comptroller to execute investment documents on behalf of the CRF will execute the documents to make the investment on behalf of the CRF.

ASSET CLASS REPORTS TO CIO AND COMPTROLLER

Each of the asset classes will provide at least annual reports to the CIO and the Comptroller on the holdings and investment activity of the portfolio. Significant changes or developments impacting investment activity will be reported sooner as appropriate. Specific asset class performance results will be provided to the CIO and the Comptroller on a quarterly basis in conjunction with the quarterly total portfolio investment performance analysis.

POST CLOSING ACTIONS; AUTHORIZATION AND REQUIREMENTS

With respect to existing investments, the CIO may authorize the appropriate asset class director, the Deputy CIO or the Director of Operations to approve certain post-closing actions necessary to implement and manage those investments. Such post-closing actions may include, among other things, consents, amendments, business plans and actions proposed under approved business plans, most favored nation side letter elections, investor certificates and certifications, tax and alternative investment vehicle elections and documents, and other day-to-day actions.

The CIO's authorization will be effective only for such individuals for whom there is on file with the New York State Secretary of State a written designation of authority signed by the Comptroller authorizing the individual to sign documents on behalf of the CRF, either with specific reference to post-closing actions or in broader terms.

The CIO may also delegate to the Deputy CIO approval of vouchers for payments with respect to approved investments.

In no event may any post-closing authorization include or be read to include authority to initiate an investment not previously approved by the Comptroller or to increase the capital commitment, contribution or loan amounts previously approved by the Comptroller, and the REAC, if applicable.

CIO Authority with Respect to Continuation Commitments

In connection with the management of investments in private investment funds outside of the real estate asset class, the CIO may approve the CRF's continued participation in a private investment fund or a particular portfolio investment or investments of such fund, including through newly established vehicles, where such continued participation requires a subsequent commitment by the CRF; provided however, that such subsequent commitment by the CRF may in no circumstances exceed \$50 million per investment per fund or \$100 million in the aggregate per fund. Any such approval by the CIO, however, is subject to the following requirements:

1. A written recommendation to the CIO for approval will be prepared and signed by the investment officer responsible for the investment and the head of the asset class. The recommendation will outline the merits, risks and material terms of the CRF's continued participation (including the continuation period term), confirming that the material terms of the continued participation are no less favorable than the original terms, as applicable. In the event of a material term that does not satisfy the foregoing, Staff shall indicate such and seek a waiver from the CIO.
2. The Staff recommendation will be accompanied by a written concurrence from an independent CRF consultant confirming that any revised fees and expenses are reasonable and consistent with relevant market practices.
3. Prior to approving, the CIO should give due consideration to the Fund's ESG Strategy and whether an internal background investigation bring-down should be conducted by Compliance based on the length of time since the last completion of a background investigation of the manager.

4. Such continuation documentation shall be subject to legal review and confirmation that CRF's side letter in respect of such continuation fund has such terms as required by statute, regulation or CRF policy.

DELEGATION TO DEPUTY CIO; AUTHORIZATION AND REQUIREMENTS

Notwithstanding the preceding provisions of these Policies or the provisions of other CRF policies, the CIO may also delegate to the Deputy CIO the authority to review and approve proposed investments, including subsequent acquisitions within existing approved investment vehicles, redemptions, and permitted increases in capital commitments, contributions and loan amounts in place of the CIO at times where the CIO will be unable or unavailable to do so; provided, however, that any such delegation will be in writing and limited in duration and/or by transaction(s) or matters, and that the following individuals will be copied on the delegation: the Comptroller, Counsel to the Comptroller, General Counsel to the CRF, the Director of Operations and the Director of Compliance. Any transactions, acquisitions, redemptions, commitments, contributions or loan amounts reviewed and approved by the Deputy CIO pursuant to such delegation will be subject, in each case, to all provisions of these Policies and other CRF policies that would apply if they were reviewed and approved by the CIO.

OTHER POLICIES AND GUIDELINES

These General Investment Policies for the New York State Common Retirement Fund are intended to provide a framework for the operation and a general overview. The Comptroller has adopted additional policies and procedures with respect to each asset class and has also adopted guidelines with respect to other specific investment related issues including, but not limited to, securities lending, proxy voting, the emerging manager program and securities litigation.