FOR THE

STATE OF CONNECTICUT RETIREMENT PLANS & TRUST FUNDS



DENISE L. NAPPIER TREASURER OF THE STATE OF CONNECTICUT

Adopted March 13, 2002



State of Connecticut Retirement Plans & Trust Funds

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PART I-TREASURER OVERVIEW



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Article I. Introduction

This policy sets forth the general principles that govern the investment of the State of Connecticut Retirement Plans & Trust Funds ("CRPTF") as established by the Treasurer of the State of Connecticut, and as approved by the Investment Advisory Council ("IAC"), in accordance with the provisions of subsection [c] of Section 3-13b of the Connecticut General Statutes. The CRPTF holds assets on behalf of the State Employees' Retirement Fund, Teachers' Retirement Fund, Municipal Employees' Retirement Fund, Probate Court Retirement Fund, Judges' Retirement Fund, State's Attorneys' Retirement Fund, Soldiers' Sailors' & Marines' Fund, Endowment for the Arts, Agricultural College Fund, Ida Eaton Cotton Fund, Andrew Clark Fund, School Fund, Hopemead Fund, and Police & Fireman's Survivors' Benefit Fund. Specifically, this document addresses the following issues with respect to each trust fund:

- Investment objectives;
- Asset allocation policy and risk tolerance;
- Asset class definitions, including specific types of permissible investments within
 each asset class and any specific limitations or other considerations governing the
 investment of any funds;
- Investment manager guidelines;
- Investment performance evaluation guidelines;
- Guidelines for the selection and termination of providers of investment-related services; and
- Guidelines for corporate citizenship and proxy voting.

This Investment Policy Statement ("IPS") is an outline of the CRPTF's long-term strategic plan based on the analysis of the capital markets and the CRPTF's financial condition. In formulating this policy, the Treasurer has sought to allow for sufficient flexibility to capture investment opportunities as they occur, while maintaining reasonable parameters to ensure that prudence and care are exercised in the execution of the CRPTF investment program. In the final analysis, the Treasurer must exercise her authority consistent within the principles of fiduciary law.

The Treasurer will review this policy statement on an annual basis with the IAC. Proposed changes to the IPS will be submitted to the IAC for review.





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Article II. Governing Authority, Duties, and Responsibilities

Pursuant to the Connecticut General Statutes, the Treasurer is the principal fiduciary of the CRPTF. Responsibilities in this regard are governed by fiduciary law and standards, and by the Constitution and laws of the State of Connecticut.

In this role, it is incumbent upon the Treasurer to discharge her responsibilities with respect to the CRPTF:

- In the interest of the participants and beneficiaries
- For the purpose of providing benefits to participants and beneficiaries and paying reasonable expenses of administering the system
- With the care, skill and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of like character and purpose
- Impartially, taking into account any differing interests of participants and beneficiaries
- Incurring only costs that are appropriate and reasonable
- In accordance with a good-faith interpretation of the law governing the retirement program and system¹
- Taking into consideration the Connecticut General Statutes that require elements of corporate citizenship and the implications of particular investments on foreign policies and the national interests of the United States be factored into investment decision-making.

In carrying out these responsibilities, and as an elected Constitutional Officer of the State of Connecticut, the Treasurer is responsible for the care and custody of all CRPTF assets, the investment of the assets of the CRPTF, and the selection of and contracting with all investment advisors. The IAC, however, has up to 45 days to review and comment upon any proposed contract for investment services prior to the execution of a contract by the Treasurer. The Treasurer shall, on a regular basis, report to the IAC regarding overall investment policy, as well as specific investment strategies and opportunities. The Treasurer shall review with the IAC, on an annual basis, the status of the asset allocation plan for the CRPTF, and shall report at each meeting of the IAC as to the status of the investments of the CRPTF.

¹Uniform Management of Public Employee Retirement Systems Act, Section 7 (1997).



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In addition, the Treasurer will seek recommendations from the Chief Investment Officer and outside investment professionals, and will seek approval from the IAC for:

- changes in investment policies, asset allocation, and asset allocation ranges;
- the inclusion of new asset classes in the investment policy;
- the development and implementation of new investment strategies; and
- the development of investment guidelines for each asset class.

The Treasurer may retain investment advisors (investment professional consultants) to assist in the management of the CRPTF and, in so doing, has the obligation to exercise prudence and care in selecting, instructing and supervising such consultants. As used in this IPS, "investment advisors" or "investment professional consultants" means external money managers, investment consultants, custodians, brokers, legal counsel, and other providers of investment and investment related services. As stated previously, and consistent with Section 3-13i of the Connecticut General Statutes, before the retention of any such investment advisors, the Treasurer will present a recommendation(s) to the IAC for its consideration. After such presentation, the IAC will have up to 45 days to review and comment upon any proposed contract for investment advisory services prior to the execution of a contract by the Treasurer.

In the event the preconditions described in Section 3-13d of the Connecticut General Statutes are met with respect to a "lame duck" period, the IAC shall assume the principal fiduciary authority of the Treasurer for investment decisions in the "Private Equity" and "Real Estate" asset classes until such time that a duly elected Treasurer is officially sworn into office.



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Article III. Investment Objectives

The primary objective of the CRPTF is to provide a secure source of retirement income for beneficiaries of the covered plans mentioned in Article I, paragraph 1. The financial objectives of the CRPTF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying plans' current and projected financial requirements. The Treasurer adheres to the principles of capital market theory, which maintains that over the long-term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The overall return of the CRPTF is measured against the total fund benchmark, a hybrid benchmark customized to reflect the CRPTF's asset allocation and performance objectives. This benchmark is comprised of 36% Russell 3000 Index; 18% International Stock Fund benchmark; 29% Mutual Fixed Income benchmark; 5% NCREIF Property Index; 11% Connecticut Private Equity/Venture Capital Index; and 1% Donoghue Money Fund Average. The International Stock Fund benchmark is comprised of 83% Salomon Smith Barney EPAC Broad Market 50% Hedged Index, and 17% MSCI Emerging Markets Free Index. The Mutual Fixed Income benchmark consists of 73% Lehman Brothers Aggregate Index, 17% Salomon High Yield Market Index, and 10% JPM Emerging Markets Bond Index. The Connecticut Private Equity/Venture Capital Index is made up of 50% Cambridge Associates Private Equity Index and 50% Cambridge Associates Venture Capital Index.

The investment objectives for the plans and trusts fully invested in all asset classes of the Combined Investment Fund are as follows:

- A nominal rate of return equal to or greater than the actuarially assumed investment return of 8.5% over the length of a market cycle (generally, a three- to five-year period);
- Achieving a real rate of return of 550 basis points over and above inflation as measured by the Consumer Price Index;
- Realizing returns consistent with or in excess of specific market benchmarks over the length of a market cycle at the individual asset class level; and
- Maximizing returns in order to minimize long-term contributions within reasonable and prudent levels of risk to the extent investment results can so impact contribution levels.

Note: As noted in Part II, some of the plans and trusts have investment limitations placed upon them and therefore the specific investment objectives related to any restricted plan or trust will be so noted.



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While there cannot be complete assurance that these objectives will be achieved, the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article V. The objectives address assets and liabilities, and are based on a long-term horizon. It is important to remember that interim fluctuations should be viewed with this perspective.



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Article IV. Asset Allocation

The CRPTF's asset mix is established by the Treasurer, with approval of the IAC, based on (1) capital market theory, (2) financial and fiduciary requirements, and (3) liquidity needs.

Numerous studies have shown that 90% of the variability in a fund's performance is the result of the strategic asset allocation decision. The strategic asset allocation decision, or how much to invest in any particular asset class, is arrived by undergoing an asset/liability study where the pension fund's liability characteristics are considered when developing the fund's asset allocation policy.

The following examination forms the rationale for the level of exposure to each asset class category for the various pension plans and trusts: A broad array of asset classes are considered for inclusion in potential asset mixes. Each asset class has its own distinct characteristics, as well as expectations for long term return and risk behavior. Mathematical modeling is used to determine which mix of assets classes maximizes return at each level of risk. Several alternative asset mixes are selected for further analysis, in addition to the asset allocation policy then in place. The liabilities are modeled, in detail, and projections are made based on the actuarial assumptions underlying each of the retirement plans. The behavior of both the asset classes and the liabilities are tested under different economic scenarios using sophisticated simulation software. The outcomes of these tests are examined to determine which asset mix offers a balanced risk/return tradeoff as measured by the impact on the liabilities over multiple time horizons.

Table 1 outlines asset class targets and permissible ranges for the allocation of assets for Connecticut State Employees Retirement Fund ("SERF"), the Teachers' Retirement Fund ("TERF"), and the Municipal Employees' Retirement Fund ("MERF"), as adopted by the Treasurer in consultation with the IAC. The targets were established as part of a comprehensive study of the CRPTF's assets and liabilities adopted in August 1999, and reaffirmed in January 2001. (As detailed in Part II of this IPS, the asset allocation policy of each of the pension plans and trusts will vary depending upon particular statutory or other limitations.) The ranges are intended to serve as boundaries for the CRPTF's individual asset classes as more particularly described in Article V of this Part. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes. The allocation policy and relative ranges for the SERF, TERF and MERF, as presented below, represent, in aggregate, more than 99% of the total liabilities of CRPTF and are identical to a significant portion of the other pension plans and trusts.



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The adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table # 1 State of Connecticut and TERF, SERF, MERF Asset Allocation Policy and Relative Ranges

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	<i>36%</i>	29%	43%
International Stock Fund	18%	14%	22%
Developed Markets Equity	15%	12%	18%
Emerging Markets Equity	3%	2%	4%
Mutual Fixed Income Fund	29%	25%	33%
Core Fixed Income	20%	18%	22%
Inflation Linked Bonds	1%	1%	1%
High Yield	5%	4%	6%
Emerging Market Debt	3%	2%	4%
Real Estate Fund	5%	4%	6%
Private Investment Fund	11%	6%	11%
CRA (Cash	1%	1%	1%
	100%		

Note: Publicly listed common stock investments including U.S. equity, non-U.S. developed markets equity, and emerging markets equity are subject to a statutory limit of 60% of the CRPTF's total portfolio.

Changes in long-term asset allocation targets are expected to occur infrequently. Revisions of these targets will be proposed only when it is clear that significant changes have occurred in the demographics of the participant group and/or in the capital markets such that assumptions upon which the present allocations have been made no longer appear reasonable. Any material changes necessary would be pursuant to the findings of a periodic asset/liability study of the CRPTF, as determined by the Treasurer in consultation with the IAC. Accordingly, the CRPTF managers should pursue a strategy of being fully invested in the market consistent with the foregoing guidelines and individual management contracts to ensure that cash-equivalent positions do not interfere with the asset allocation strategy. In addition, in order to meet the CRPTF's liquidity needs, the Treasurer may direct that dividends and interest income from the investment managers' accounts be swept into a cash reserve fund, or may establish a separate liquidity strategy depending upon the cash flow needs of the various plans and trusts.

Because different asset classes will perform at various rates, the Treasurer will monitor asset allocation on a monthly basis to determine what, if any, re-balancing is necessary.



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Article V. Asset Class Definitions

Broad definitions of the asset classes outlined in Article IV are as follows. More detailed descriptions of the asset classes, including the specific types of permissible investments within each asset class, and special limitations or other considerations governing the investment of any funds therein, are set forth in Part III of this policy statement.

A. Equities

- 1. Mutual Equity Fund (U.S. Equities): Investments in U.S. equities are defined as commitments to U.S. dollar denominated, publicly traded common stocks of U.S. domiciled companies and securities convertible into common stock. The aggregate U.S. equity portfolio ("Mutual Equity Fund") is expected to exhibit characteristics comparable to, but not necessarily equal to, that of the Russell 3000 index.
- 2. International Stock Fund: Investments in non-U.S. equities are defined as commitments to publicly traded common stocks and securities convertible into common stock issued by companies domiciled outside the U.S. Developed market equity is issued by companies domiciled in developed economies, as defined by The World Bank and included in the Salomon Smith Barney EPAC Broad Market Index ("SSB EPAC BMI"). Emerging market equity is issued by companies domiciled in developing economies as defined by The World Bank and included in the Morgan Stanley Capital International Emerging Markets Free Index ("MSCI EMF Index"). The aggregate International Stock Fund portfolio is expected to exhibit characteristics comparable to, but not necessarily equal to, that of a hybrid index comprised of 83% SSB EPAC BMI (half-hedged) Index and 17% MSCI EMF Index.
- **B. Mutual Fixed Income Fund:** Fixed income investments are defined as marketable securities, which may include, but are not necessarily limited to, U.S. Treasury, federal agency, U.S. Government guaranteed obligations, "quasi-Government" agencies and corporate issues (including convertibles). Mortgage pass-through securities, collateralized debt obligations, non-dollar denominated bonds and group annuity contracts may also be held in this fund. The overall average quality rating of this fund's domestic and international fixed income portfolio will be at least "A" rated by Standard & Poor's or Moody's. The Mutual Fixed Income Fund, in aggregate, shall have characteristics similar to, but not necessarily equal to, the hybrid benchmark consisting of 70% Lehman Brothers Aggregate Bond Index, 3% Lehman Brothers Inflation-Linked Bond Index, 17% Merrill Lynch High Yield Index, and 10% JP Morgan Emerging Market Bond Plus Index. The following represents definitions of the various component parts of the Mutual Fixed Income Fund:



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- 1. *Core Fixed Income* are debt instruments issued by the U.S. Government and its agencies, "quasi Government" agencies, U.S. corporations, Euro bonds and any other public or private U.S. regulated debt security. Domestic Bonds in aggregate shall have characteristics similar to, but not necessarily equal to, the Lehman Brothers Aggregate Bond Index.
- 2. *Inflation-Linked Bonds* ("ILBs") are bonds that provide a real return above inflation that is fixed. First issued by the U.S. Treasury in January 1997, ILBs pay semi-annual coupons that account for the real return while the inflation component of the return accrues to the bonds principal every year. Inflation-linked bonds in aggregate shall have characteristics similar to, but not necessarily equal to, the Lehman Brothers Inflation-Linked Bond Index.
- 3. *High Yield Bonds* are defined as debt instruments rated below "BBB-" by Standard & Poor's or "Baa3" by Moody's Investor Service. In aggregate, the high yield bond portfolio should have characteristics similar to but not necessarily equal to, the Merrill Lynch High Yield Index or other equivalent benchmark as determined by the Treasurer.
- 4. *Emerging Market Debt* represents bonds issued by government and companies operating in developing countries as defined by The World Bank. Emerging Market Debt holdings in aggregate should have characteristics similar to, but not necessarily equal to, the J.P. Morgan Emerging Markets Bonds Plus Index.
- C. Cash Reserve Account (Cash Equivalents): The case reserve account shall consist of cash instruments generally maturing in less than one year and having a quality rating, by at least one widely recognized rating agency, of A-1 or P-1. In aggregate, the Cash Reserve Account should have characteristics similar to, but not necessarily equal to, the International Business Communications ("IBC") First Tier Institutions-Only Rated Money Fund Report Index.

D. Other Asset Classes

1. *Real Estate Fund*: Real Estate investments are defined as indirect² ownership interests in professionally managed commercial properties and land. This definition includes, but is not limited to, retail, office, industrial, apartment, multifamily, hotel, timberland, and farmland properties and investments in Real Estate Investment Trusts ("REITs"). Real Estate holdings, taken together, should have characteristics similar to, but not necessarily equal to,

² At the time of the adoption of this IPS, there are a small number of direct real estate ownership interest investments. As these properties are sold or otherwise transferred out of the fund, no new additional direct real estate investments will be made.



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the National Council of Real Estate Investment Fiduciaries Property Index ("NCREIFP Index") A portion of this benchmark may be attributed to

National Association Real Estate Investment Trust, if REITs become a significant component of the Real Estate Fund.

- 2. Private Investment Fund: Private investments will be in externally managed separate accounts, limited liability companies or limited partnerships, which focus on private equity investments. Private equity investments include:
 - a. venture capital funds focusing on start-up, early and expansion stage companies;
 - b. mezzanine funds investing in equity and debt instruments of established companies;
 - c. buy-out and acquisition funds which make controlling and non-controlling investments in established companies; and
 - d. special situation funds, as defined in Part III of this IPS.
- 3. Commercial Mortgage Fund: These are indirect investments in mortgages backed by commercial real estate. Such investments may take the form of trusts or securities. These holdings are expected to earn a rate of return in excess of the Lehman Brothers Aggregate Bond Index ("LBA Index"), sufficient to justify the corresponding risk premium. This asset category is not a part of the asset allocation structure of the CRPTF, adopted in August, 1999, and the balance in the fund will be allowed to amortize and mature. No new investments will be added to this fund.



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Article VI. Use of Derivatives

Note: The following guidelines were approved by the IAC on December 10, 2003 and adopted by the Treasurer on December 10, 2003.

Derivative instruments may be used for any of the purposes listed below. Derivative instruments are defined as any contract or investment vehicle whose performance, risk characteristics, or value is based on a specific asset, interest rate, or index value.

- Market Exposure: To gain broad stock or bond market exposure in a manner that does not create the effect of leverage in the overall portfolio.
- To convert financial exposure in a given currency to that of another currency (e.g., to hedge Japanese Yen exposure back to the U.S. dollar). Any and all international managers may enter into foreign exchange contracts on currency provided that: a) such contracts are one year or less, and b) use of such contracts is limited solely and exclusively to hedging currency exposure existing within the manager's portfolio. There shall be no foreign currency speculation or any related investment activity, with the exception of currency hedging managers who will be guided by specific risk parameters in their contracts.
- To adjust the duration of a bond portfolio in a manner that is consistent with the accepted approach of the manager and other policies and guidelines provided to the manager.
- To make portfolio adjustments that are consistent with other elements of the CRPTF's investment policies and guidelines and that do not systematically increase risk or expected volatility of the rate-of-return of the total Fund.
- For trading purposes which are intended to enhance investment returns. This purpose is subject to the requirement that it be consistent with other elements of the CRPTF's investment policies and guidelines and that it does not systematically increase the risk or expected volatility of the rate of return of the total Fund.

All other uses of derivatives are prohibited unless specifically approved by the Treasurer, and reviewed by the IAC. Investment managers are expected to have internal risk management programs in place to ensure that derivatives-based strategies do not result in inappropriate risks to the portfolio.



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Article VII. Investment Diversification

Investments shall be diversified in order to minimize the risk of large losses. Consequently, the CRPTF will be constructed and maintained to provide prudent diversification among the asset classes in accordance with the asset allocation policy. Within each asset class, there shall be prudent diversification with regard to the concentration of holdings in individual issues, corporations, partnerships or industries. Investments shall comply with the provisions of the Connecticut General Statutes: Section 3-13d³; Section 3-13g⁴; Section 3-13h⁵. Part III, which describes each of the investment funds, specifically delineates investment guidelines and restrictions of investments in each fund.

³ Consideration of political implications of particular investments in relation to U.S. foreign policy and national interests.

⁴ Investments in corporations doing business in Iran.

⁵ Disinvestment of State funds invested in corporations doing business in Northern Ireland, which have not implemented the MacBride principles.



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Article VIII. Selection Criteria for Providers of Investment-Related Services

The Treasurer will prudently select investment managers and providers of other investment-related services (collectively, "investment advisors") based on their expertise relative to the investment mandate they seek to fulfill or the investment service they seek to provide. The due diligence process, which includes specific guidelines and criteria for the selection of investment managers, is addressed within each specific asset category in Part III of this IPS.

In general, the selection of investment advisors will entail the following processes:

- A competitive bidding process as defined by the State's procurement and purchasing laws, or, where appropriate and practicable, the use of a pre-determined uniform system for evaluating competing proposals and for otherwise determining the merits of an investment advisor within the industry. The standard by which any and all selection procedures are determined should not impede the CRPTF's ability to compete in the marketplace for high quality investment-related services; and
- A thorough due diligence process which establishes an understanding of and comfort level with the advisor's capabilities, organization, track record, public fund client expertise, and investment philosophy (where relevant).

Any potential investment advisor will be required to disclose any third party fees paid, as defined in Section 3-13j of the Connecticut General Statutes.

Before the retention of any investment manager, or provider of investment related services, the Treasurer will present a recommendation(s) to the IAC for their consideration. After such presentation, the IAC will have up to 45 days to review and comment upon any proposed contract for investment management services prior to the execution of a contract by the Treasurer.



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Article IX. Investment Manager Structure

The number of investment managers retained will be minimized subject to considerations regarding reasonable and prudent levels of risk and diversification. The guidelines used to construct the team of managers will include:

- 1. <u>Size of Portfolio</u> to minimize investment fees, portfolios (regardless of asset class) will generally be a minimum of \$100 million and should not constitute more than 20% of the manager's assets under management, provided that the Treasurer acting in consultation with the IAC may develop programs intended to encourage the development of investment managers who demonstrate the capacity to add value to the CRPTF, but may not have the requisite amount of assets under management.
- **2.** <u>Number of Portfolios</u> for diversification purposes, all asset classes representing more than 3% of the Fund will have at least two managers.
- **3.** <u>Style of Management</u> for any asset class with two or more managers, there will be diversification by investment style (e.g., growth vs. value).

The Treasurer will ensure that the CRPTF's assets include cash reserves sufficient to pay benefit obligations and Fund expenses. Investment managers will not be allowed to accumulate a significant cash position without prior approval of the Treasurer's office. In general, "significant" means an amount in excess of the manager's contractual maximum.

The criteria for the selection of managers in each asset category will vary, according to the needs of each mandate and asset category. Those criteria are described more fully within each article of Part III of this IPS.

It is the expressed intent of the CRPTF to afford opportunities for emerging, minority and women-owned, and Connecticut-based investment managers to compete for investment contracts so long as such managers are fully capable of providing investment management services consistent with investment strategy and fiduciary standards. The Treasurer, in consultation with the IAC, may develop specific programs within the several asset classes, to effectuate this opportunity.



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Article X. Liquidity

Based on such factors as investment strategy, cash flow and benefit payments, the Treasurer expects that the 1% allocation to cash equivalents in addition to the investment income should be sufficient to meet the pension plans and trusts' liquidity needs in the near term. Liquidity requirements of the fund will be reviewed regularly to ensure that the CRPTF's policies and practices will accommodate its changing liquidity needs.



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Article XI. Performance Evaluation

The Treasurer shall regularly monitor the investment performance of the CRPTF at the total fund, asset class, and individual manager levels. The Treasurer will analyze the CRPTF's overall results relative to the rates of return available over the market cycle. For performance evaluation purposes, rate of return objectives will be based on a time-weighted total return calculation. These return objectives will be long term based upon compounded and annualized market returns, adjusted for the manager's risk and style, and will be examined on a net-of-fees and expenses basis.

A report of the performance of the CRPTF and each individual manager will be prepared quarterly and submitted to the Treasurer for review and shall be reported to the IAC. It is expected that the CRPTF's custodian will confirm or reconcile its performance data with the investment managers of the CRPTF. On the asset class and individual manager levels, the Treasurer will use designated benchmarks and the investment guidelines as essential parts of the criteria to monitor investment performance. As mentioned previously, the specific guidelines unique to each manager will be developed cooperatively by the CRPTF and manager and incorporated into the investment management contract executed by the Treasurer and the manager. In the case of a conflict between a manager's specific guidelines and the general guidelines of the fund, the former shall prevail. The Treasurer, or a designee, will periodically hold meetings with individual managers to review fund performance. Managers will make presentations before the IAC, as requested by the Council.

Periodically, it may be necessary, in the best interests of the CRPTF, to place a Manager on a "Watch List." The following conditions can trigger placement on the Watch List:

- The manager significantly under-performs its benchmark for three consecutive quarters;
- The manager experiences turnover of key members of the investment professional staff;
- The CRPTF becomes aware of a significant event affecting the manager such as (but not limited to) change of control; a large quarterly loss; the disclosure of SEC or other federal investigations or inquiries into the manager's operations; or
- Any other event that could affect the manager's ability to perform its investment management responsibilities for the CRPTF.

Once an investment manager is placed on the Watch List, the situation triggering such placement will be reviewed by the Treasurer and/or the Chief Investment Officer. This review will entail a comprehensive analysis of the situation, through various means, such as site visits, conference calls, assessment of the likely impact of the situation, etc. If such analysis does not alleviate the concerns of the Treasurer, a decision will be made whether to (a) continue to monitor performance, or (b) terminate the manager.



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The Treasurer shall inform the IAC of any decision to place a manager on the "watch list," and thereafter shall report at each subsequent meeting of the IAC on the status of the issues that led to placement of the manager on the "watch list" or any action taken.



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Article XII. CRPTF's Guidelines for Corporate Citizenship and Proxy Voting

In accordance with State law, the Treasurer may consider elements of corporate citizenship when making investment decisions on behalf of the CRPTF. "Corporate citizenship" encompasses the principle that, in addition to the traditional corporate focus on profits and short-term performance, the business community must be responsible for "long-term sustainable development of people and communities." Corporate citizenship is an important criterion in the evaluation of companies the CRPTF invests in, as well as the companies the CRPTF contracts with to provide business services for the operation of the fund.

A. CRPTF Investments and Corporate Citizenship

Investments made or handled by the CRPTF should adhere to strict guidelines on fiduciary investment prudence, corporate citizenship, including corporate governance and equal employment opportunity, as set by the Treasurer and by State and federal law. Prudence and consideration of corporate citizenship are complimentary goals, as recognized by State law. Primary among considerations for the investment of the pension plans and trusts, is the prudent investment of these assets for the long-term economic benefit of the plan participants and beneficiaries. Prudence includes considerations of performance, risk and return. In addition to prudence, State law states that the Treasurer may consider the social, economic, and environmental implications of its investments, including the CRPTF investment in particular securities or types of securities (Section 3-13d (a) of the Connecticut General Statutes).

Section 3-13d (a) of the Connecticut General Statutes, also directs the Treasurer to consider the implications of particular investments on foreign policies and the national interests of the United States. Specifically, the Sections 3-13(g) and 3-13(h) of the statutes prohibit investments in companies that do not implement the McBride principles or companies that are doing business in Iran, which could be considered contrary to the foreign policy or national interests of the United States.

B. Treasurer's Policy on Vendors and Contractors as Corporate Citizens

The CRPTF requires a wide array of banking, asset management and consultative services, and the Treasurer seeks to do business with financial service providers that demonstrate evidence of corporate citizenship. Some of the key considerations include a commitment to Connecticut through the hiring of Connecticut employees or the procurement of corporate goods and services from Connecticut-based firms. Other considerations include reinvestment in local

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⁶ Investor Responsibility Research Center, Washington, D.C.



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communities, the extent of charitable giving and opportunities for students through scholarships or internships. The Treasurer will also consider the employment practices including the firm's hiring, promotion, and training of women and minority employees as well as general employee relations. Other concerns include the firm's policies on environmental compliance and consumer protections.

The Treasurer will require all vendors and contractors to submit annual reports on the firm's progress in implementing employment and corporate citizenship policies. Information on employment and corporate citizenship policies and activities will be included in all Requests for Services. All contracts with vendors and contractors shall incorporate reference to the various laws and executive orders of the State of Connecticut with respect to non-discrimination.

C. CRPTF Policy on Proxy Voting

Shareholder activity is among the fiduciary duties of the Treasurer in her role as trustee of the assets of the CRPTF. Plan fiduciaries have a responsibility to vote proxies on issues that may affect the value of the shares held in a portfolio since proxies are considered plan assets and have economic value.

Accordingly, the Treasurer may determine, where appropriate, that certain shareholder activities, such as the active monitoring and communication with corporate management, should be undertaken to enhance the economic value of the plan assets. Such circumstances for shareholder activity should be considered appropriate when investments are expected to be held on a long-term basis.

The Treasurer has developed proxy voting guidelines, which are included as an appendix to this IPS. Any delegation of proxy voting by the Treasurer, either to external investment managers or to a proxy voting service shall be consistent with the guidelines developed.



State of Connecticut Retirement Plans & Trust Funds
PART I – TREASURER OVERVIEW

Article XIII. Ongoing Supervision of Assets

It is the Treasurer's obligation and responsibility to carry out the day-to-day administration of the CRPTF. Consequently, the Treasurer is expected to establish written procedures for the CRPTF's operation consistent with this investment policy. Such procedures shall include a system of internal controls, which shall be documented in writing.

Review of Liabilities: As part of any comprehensive asset allocation/liability study conducted by the Treasurer, all major liability assumptions regarding number of participants, compensation, benefit levels, and actuarial assumptions will be reviewed based upon information provided by the plans' actuaries.

Review of Investment Objectives: Investment performance will be reviewed no less often than quarterly by the Treasurer to determine the continued feasibility of achieving the investment objectives and the appropriateness of this IPS for achieving those objectives.

It is not expected that this IPS will change frequently. In particular, short-term changes in the financial markets deemed to be temporary in nature should not require any adjustment to this policy.

Review of Investment Managers: Where appropriate, individual managers will be provided with written investment guidelines providing additional detail on investment strategies, clarification of permissible investments, investment restriction and performance evaluation criteria.

Investment managers will be reviewed annually unless they demonstrate poor performance or have material changes in personnel or their investment process, in which case more frequent reviews may be scheduled. (See Article XI for more information on conditions that would warrant placement of a manager on the "Watch List.") Additionally, with or without investment managers being present, the manager's investment results will be reviewed no less often than quarterly.

Performance reviews will generally include:

- Assurance that the fund adheres to this IPS and that investment managers adhere to their specific investment guidelines.
- Comparison of manager results to those of other similar managers in terms of style, diversification, volatility, and performance.
- Risk analysis of portfolio investment strategies versus comparable indices.
- Review of material changes in the manager's organization, investment philosophy, personnel, investment process, acquisition or losses of major accounts, etc.



State of Connecticut Retirement Plans & Trust Funds PART I – TREASURER OVERVIEW

• Analysis of the opportunities available in each manager's designated asset class.

Investment managers will be responsible for keeping the Treasurer advised of any material changes in personnel, investment strategy, or other pertinent information, which could potentially affect their performance or their relationship with the CRPTF.

Execution of Security Trades: The Treasurer expects the purchase and sale of securities to be made in a manner designed to receive the best combination of price, execution, commissions, and value added to the fund. The Treasurer has the responsibility to structure the brokerage program in a cost-effective manner, whether execution is undertaken by external managers or by the Treasury. In addition, it is the Treasurer's intention to structure any brokerage program in a way as to afford qualified Connecticut, emerging, minority and women owned firms the opportunity to compete for brokerage business, consistent with standards of best price, execution and quality of service.



State of Connecticut Retirement Plans & Trust Funds
PART I – TREASURER OVERVIEW

Article XIV. Other Policy Considerations

- Third party banks are primarily responsible for safekeeping of assets, holding CRPTF assets in custody, valuing plan investments, engaging in securities lending activities and maintaining accurate records of all investments and transactions. All such third party banks will take direction from the Treasurer or a designee.
- **Portfolio execution** is conducted through designated investment managers. Investment managers are responsible for implementing investment strategies, security selections and the timing of purchases and sales within the guidelines set forth in this IPS, the asset allocation plan and supplemental investment manager guidelines. Investment managers are also responsible for executing the directives of the Treasurer.
- Use of Investment Vehicles, in addition to investments in individual securities, such as commingled trusts, mutual funds and other pooled asset portfolios are acceptable investment vehicles, provided they conform to the guidelines and restrictions set forth in this IPS.
- Under-Served Urban and Rural Markets: While maintaining the principles of prudent investment standards and seeking market returns, the CRPTF may, as a matter of policy, channel a portion of its investments (as agreed to by the Treasurer in consultation with the IAC) into under-served urban and rural markets with a special interest in investment opportunity targeted in Connecticut, while at the same time achieving any necessary geographical diversification.
- **Deviations from Investment Policy:** It is recognized that new or unique investment opportunities, which are not specifically addressed in this IPS, may become available from time to time. As such, the Treasurer may deviate from this policy from time to time, after approval by the IAC; provided that she believes any and all such deviations will enhance the CRPTF's long-term performance and not jeopardize the standards of prudence for the CRPTF as a whole.



PART II - RETIREMENT PLANS AND TRUST FUNDS



State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article I. Teacher's Retirement Fund

Investment Authority

The Teacher's Retirement Fund ("TERF") was established by Public Act 78-208. Fund administration is overseen by The Teachers' Retirement Board, which is within the Office of the State Comptroller for administrative purposes only.

The funds of the TERF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

Public Act 78-208 established the TERF for the purposes of providing retirement and other benefits to teachers, their survivors and beneficiaries that have fulfilled the requirements as set forth in the TERF guidelines and Sections 10-160 to 10-180b of the Connecticut General Statutes.

Investment Objectives

The primary objective of the TERF is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the TERF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The TERF's asset mix is established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.



State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article II. State Employees' Retirement Fund

Investment Authority

The State Employees' Retirement Fund ("SERF") was authorized by Public Act 234 of the 1961 General Assembly, and is codified in Section 5-156 et seq. of the Connecticut General Statutes. Beginning in 1981, SERF terms and conditions have been the subject of collective bargaining between the State and a coalition of bargaining units representing state employees, commonly known as SEBAC. Fund administration is overseen by the Office of the State Comptroller and the State Employees Retirement Commission.

The funds of the SERF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

Public Act 61-234 re-stated the State Employees Retirement Act and reaffirmed the SERF as the entity that would provide retirement and other benefits to state employees, their survivors, and beneficiaries that have fulfilled the requirements as set forth in the SERF guidelines, and as negotiated with the coalition of state employee bargaining units, collectively known as SEBAC.

Investment Objectives

The primary objective of the SERF is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the SERF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The SERF's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.



Article III. Municipal Employees' Retirement Fund

Investment Authority

The Municipal Employees' Retirement Fund ("MERF") was established by Public Act 191(s. 2) of the 1969 General Assembly. Fund administration is overseen by the Office of the State Comptroller.

The funds of the MERF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

Public Act 69-191(s. 2) established the MERF for the purposes of providing retirement and other benefits to employees of participating municipal and local governmental units. The retirement plan permits municipalities with a small number of employees to get the benefit of the so-called law of averages by pooling their contributions with those of other municipalities. This pooling of retirement asset by participating municipalities reduces the risk of excessive cost to an individual municipality because of actuarial vagaries in that municipality. The fund also takes advantage of economies of scale in its investment strategies and assures that the benefits will be uniform among the participating municipalities.

Investment Objectives

The primary objective of the MERF is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the MERF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The MERF's asset mix is established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.



Article IV. Probate Court Retirement Fund

Investment Authority

The Probate Court Retirement Fund ("PROB") was established by Public Act 558(s. 40) of the 1967 General Assembly. Fund administration is through the State Employees Retirement Commission and the Office of the State Comptroller.

The funds of the PROB are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

Public Act 67-191(s. 40) established the PROB for the purposes of providing retirement and other benefits to Judges of Probate and Probate Court employees.

Investment Objectives

The primary objective of the PROB is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the PROB are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The PROB's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article V. State Judges Retirement Fund

Investment Authority

The State Judges Retirement Fund ("JURF") was established by Public Act 81-456(S, 5). Fund administration is through the State Employees Retirement Commission and the Office of the State Comptroller.

The funds of the JURF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The JURF was established for the purposes of providing retirement and other benefits to state judges, family support magistrates, and workers compensation commissioners that have fulfilled the requirements set forth in the JURF guidelines.

Investment Objectives

The primary objective of the JURF is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the JURF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying fund's current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The JURF's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.



Article VI. State's Attorneys' Retirement Fund

Investment Authority

The State's Attorneys' Retirement Fund ("SARF") was established by Public Act 84-399(S, 9,17). Fund administration is through the State Employees Retirement Commission and the Office of the State Comptroller.

The funds of the SARF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The SARF was established for the purposes of providing retirement and other benefits to certain states attorney's and certain public defenders that have fulfilled the requirements set forth in the SARF guidelines.

Investment Objectives

The primary objective of the SARF is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the SARF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The SARF's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs, as specified in Article IV of Part I of this IPS.



Article VII. Policemen And Firemen Survivors' Benefit Fund

Investment Authority

The Policemen And Firemen Survivors' Benefit Fund ("POFI") was established by Public Act 390(S, 1) of the 1963 General Assembly. Fund administration is through the State Employees Retirement Commission and the Office of the State Comptroller.

The funds of the POFI are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The POFI was established for the purposes of providing retirement and other benefits to participants and their beneficiaries that have fulfilled the requirements set forth in the POFI guidelines.

Investment Objectives

The primary objective of the POFI is to provide a secure source of retirement income for its beneficiaries. The financial objectives of the POFI are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying funds' current and projected financial requirements, as specified in Article III of Part I of this IPS.

Asset Allocation

The POFI's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements, and (3) its liquidity needs, as specified in Article IV of Part I of this IPS. Prior to May 27, 1999, the assets of the fund were required to be invested in group insurance policies or group annuity contracts. With the adoption of Public Act 99-70, the Treasurer was given the flexibility to take advantage of all the investment opportunities available through the CRPTF asset allocation plan.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article VIII. Agricultural College Fund

Investment Authority

The Agricultural College Fund ("AGRI") is described in Section 10a-115 and 3-40 of the Connecticut General Statutes.

The funds of the AGRI are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The AGRI dates back to 1862 when it was received as proceeds from the sale of federal land granted to the States from the federal government. The beneficiary of the congressional grant became the University of Connecticut School of Agriculture, with the income from the fund "inviolably appropriated for teaching; principally, the science of agriculture and the mechanical arts." The Treasurer annually transfers the net income earned by the fund to the University of Connecticut.

Investment Objectives

The primary objective of the AGRI is to provide a secure source of income from a principal amount that would last in perpetuity. The financial objectives of the AGRI are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a satisfactory current stream of income given current dollars invested;
- 2. Maintain the fund corpus by minimizing erosion of principal due to inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet the fund's distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The AGRI's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the AGRI's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1
State of Connecticut
Agricultural College Fund
Asset Allocation Policy and Relative Ranges

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	25%	20%	30%
Mutual Fixed Income Fund	<i>70%</i>	63%	<i>77%</i>
CRA (Cash)	5%	3%	7%
	100%		

Note: Publicly listed common stock investments in U.S. equity securities are subject to a statutory limit of 60% of the AGRI's total portfolio.

Additional Note: In a recent audit finding the State Auditors of Public Accounts opined that the "Agricultural College Fund limits possible investments to 'Federal, state or other safe bonds'." However, it has been the practice of the CRPTF to invest a small amount of the fund's assets in U.S. Equities for as far back as anyone can remember. And while an Attorney General Opinion (August 9, 1996) to former Treasurer Christopher Burnham points out the limitations imposed by the original Act of Congress, the Connecticut General Statutes, Section 3-40 et seq. appears to contemplate that the fund will have holdings in securities other than bonds. Further analysis will need to be done as to whether the current asset allocation (Table 1, above) needs to be changed.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article IX. Andrew C. Clark Fund

Investment Authority

The Andrew C. Clark Fund ("ACCF") was established by Public Act 261 of the Connecticut General Assembly, May 3, 1917.

The funds of ACCF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The State Treasurer was authorized by an act of the Connecticut General Assembly in 1917 to enter into an agreement with the executors of the will of Andrew C. Clark of New Milford, wherein certain proceeds of the estate bequeathed would be shared equally by the State and the Congregational Home Missionary Society of New York. In his will Andrew C. Clark bequeaths one half of his entire estate be held and invested, for the objects and purposes for which the School Fund was established, as described herein.

Investment Objectives

The primary objective of ACCF is to provide a secure source of income from a principal amount that would last in perpetuity. The financial objectives of the ACCF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long-term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a satisfactory current stream of income given current dollars invested;
- 2. Maintain the trust corpus by minimizing erosion of principal due to inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The ACCF's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the ACCF's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1
State of Connecticut
Andrew C. Clark Fund

	Target	Lower	${f Upper}$
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	25%	20%	30%
Mutual Fixed Income Fund	<i>70%</i>	<i>63%</i>	<i>77%</i>
CRA (Cash)	5%	3%	<i>7%</i>
	100%		
Accet Allocation De	olicy and Polativ	70 Pangas	

Note: Publicly listed common stock investments including U.S. equity securities are subject to a statutory limit of 60% of the ACCF's total portfolio.

Any material changes necessary would be pursuant to the findings of an asset allocation/liability study of the ACCF.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article X. Connecticut Arts Endowment Fund

Investment Authority

The Connecticut Arts Endowment Fund ("ARTS") is established in Section 10-3730 of the Connecticut General Statutes.

The funds of ARTS are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The ARTS was established under the provisions of Public Act 88-355 with the purpose of providing interest income from a principal amount that would last in perpetuity. These funds are distributed to the State Commission on the Arts annually and provide funds for participation in, promotion, development, acceptance and appreciation of artistic and cultural activities.

Investment Objectives

The primary objective of ARTS is to provide a secure source of income. The financial objectives of the ARTS are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected financial requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a current stream of income to maximize income distributions given current dollars invested;
- 2. Maintain the trust corpus by minimizing erosion of principal due to inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The ARTS's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets for the allocation of assets, as adopted by the Treasurer and the IAC. Emphasis on current income and cash flow has resulted in an investment allocation exclusively consisting of fixed income.

Table 1 State of Connecticut Arts Endowment Fund

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Fixed Income Fund	100%	N/A	N/A
	100%		
Asset Allocation	Policy and Relativ	e Ranges	

Any material changes necessary would be pursuant to the findings of an asset allocation/liability study of the ARTS.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article XI. Hopemead State Park Fund

Investment Authority

The Hopemead State Park Fund ("HOPE") is established in Section 3-40 of the Connecticut General Statutes.

The funds of the HOPE are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The HOPE was created pursuant to the August 14, 1964, Last Will and Testament of Charlotte Fuller Eastman of Norwich, CT. Upon the death of H. Louise Fuller in 1975, Mrs. Eastman's last surviving heir, the bequeathed Hopemead Fund (\$143,288.18) was paid to the Department of Environmental Protection, as the successor of the Connecticut State Park and Forest Commission. As mandated, these funds were to be used solely for the development and maintenance of the Hopemead State Park. On March 22, 1976, by mutual agreement of the parties these funds were transferred to the Office of the State Treasurer in order to invest the principal.

Investment Objectives

The primary objective of the HOPE is to provide a secure source of income. The financial objectives of the HOPE are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected financial requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

- 1. The investment objectives for the fund are as follows:
- 2. To provide a satisfactory current stream of income given current dollars invested;
- 3. Maintain the trust corpus by minimizing erosion of principal due to inflation;
- 4. To maximize returns within reasonable and prudent levels of risk; and
- 5. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The HOPE's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the HOPE's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1
State of Connecticut
Hopemead Fund

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	25%	20%	30%
Mutual Fixed Income Fund	<i>70%</i>	<i>63%</i>	<i>77%</i>
CRA (Cash)	5%	3%	7%
	100%		
Asset Allocation Po	olicy and Relativ	e Ranges	

Note: Publicly listed common stock investments including U.S. equity securities are subject to a statutory limit of 60% of the HOPE's total portfolio.

Any material changes necessary would be pursuant to the findings of an asset allocation/liability study of the HOPE.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article XII. Ida Eaton Cotton Fund

Description

The Ida Eaton Cotton Fund ("IDEA") is established under the provisions of Section 4-31a of the Connecticut General Statutes.

The funds of the IDAE are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The New Haven County Cotton Fund as originally established in 1963, mandates that interest income from the principal of the Ida Eaton Cotton Trust Fund bequest be expended to sponsor and encourage industry among the adult blind community. Thus, on behalf of IECF, funds are annually transferred to the General Fund for distribution to the Board of Education Services for the Blind for distribution within their guidelines.

Investment Objectives

The primary objective of the IDAE is to provide a secure source of income. The financial objectives of the IDAE are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying Trusts' current and projected financial requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a satisfactory current stream of income given current dollars invested;
- 2. Maintain the trust corpus by minimizing erosion of principal due to inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The IDAE's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the IDAE's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1
State of Connecticut
Ida Eaton Cotton Fund

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	25%	20%	30%
Mutual Fixed Income Fund	<i>70%</i>	<i>63%</i>	<i>77%</i>
CRA (Cash)	5%	3%	<i>7%</i>
	100%		
Asset Allocation Po	olicy and Relativ	e Ranges	

Note: Publicly listed common stock investments including U.S. equity securities are subject to a statutory limit of 60% of the IDAE's total portfolio.

Any material changes necessary would be pursuant to the findings of an asset allocation/liability study of the IDAE.



State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article XIII. School Fund

Investment Authority

The School Fund ("SCOL") is established under the provisions of Section 3-40 of the Connecticut General Statutes.

The funds of the SCOL are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The School Fund was established through an Act of Congress on July 2, 1862 (as was the Agricultural College Fund) by the proceeds of the sale of federal land, and approved by Special Session of the Connecticut General Assembly in December, 1862. The School Fund was originally under the jurisdiction of the Agricultural College of the University of Connecticut, but is now within the Department of Education. The earnings of the fund are transferred to the Department of Education for general use through the Office of Policy and Management's budget allocation process.

Investment Objectives

The primary objective of the SCOL is to provide a secure source of income. The financial objectives of the SCOL are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected financial requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a satisfactory current stream of income given current dollars invested;
- 2. Maintain the trust corpus by minimizing erosion of principal due to inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The SCOL's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the SCOL's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1 State of Connecticut School Fund

	Target	Lower	Upper
Asset Class	Allocation	Bound	Bound
Mutual Equity Fund (U.S. Equity)	25%	20%	30%
Mutual Fixed Income Fund	<i>70%</i>	<i>63%</i>	<i>77%</i>
CRA (Cash)	5%	3%	<i>7%</i>
	100%		
Asset Allocation Po	olicy and Relativ	e Ranges	

Note: Publicly listed common stock investments including U.S. equity securities are subject to a statutory limit of 60% of the SCOL's total portfolio.

Any material changes necessary would be pursuant to the findings of a asset allocation/liability study of the SCOL.

State of Connecticut Retirement Plans & Trust Funds
PART II – RETIREMENT PLANS AND TRUST FUNDS

Article XIV. Soldiers' Sailors' and Marines' Fund

Description

The Soldiers' Sailors' and Marines' Fund ("SSMF") is established under the provisions of Section 27-140 of the Connecticut General Statutes.

The funds of the SSMF are overseen by the State Treasurer as principal fiduciary of the CRPTF, and are invested in accordance with statutory requirements and fiduciary standards (See Sections 3-13c and 3-13d of the Connecticut General Statutes).

Statement of Purpose

The SSMF was established by an Act of the General Assembly in 1917, and through numerous revisions remains obligated to serve the interest of military personnel who were engaged in any of the wars waged by the United States, as specified by statute, who were honorably discharged, or to their spouses, survivors and dependents. The distribution of income derived is controlled and accounted for by the American Legion for the purposes of providing food, shelter, clothing and other subsistence payments to applicants under the provisions of Sections 27-138 and 27-140 of the Connecticut General Statutes.

Investment Objectives

The primary objective of the SSMF is to provide a secure source of income. The financial objectives of the SSMF are long-term in nature and have been established based on a comprehensive review of the capital markets and the underlying trusts' current and projected financial requirements.

The Treasurer adheres to the principles of capital market theory, which maintains that over the long term, prudent investment risk-taking is rewarded with incremental returns. Consequently, while capital preservation is regarded to be of paramount importance, the Treasurer regards prudent risk-taking as justifiable.

The investment objectives for the fund are as follows:

- 1. To provide a satisfactory current stream of income to fund necessary distributions given current dollars invested;
- 2. To preserve the trust corpus relative to the effects of inflation;
- 3. To maximize returns within reasonable and prudent levels of risk; and
- 4. To maintain adequate cash levels to meet trust distribution requirements.



State of Connecticut Retirement Plans & Trust Funds PART II – RETIREMENT PLANS AND TRUST FUNDS

While there cannot be complete assurance that these objectives will be achieved, it is believed that the probability of their realization is reasonably high based upon this IPS and expected performance of the asset classes discussed in Article IV of Part I of this IPS.

Asset Allocation

The SSMF's asset mix shall be established by the Treasurer and the IAC from time to time based on (1) capital market theory, (2) its financial requirements and (3) its liquidity needs. Table 1 outlines asset class targets and permissible ranges for the allocation of assets, as adopted by the Treasurer and the IAC. The ranges are intended to serve as boundaries for the SSMF's individual asset classes as more particularly described in Article V of Part I of this IPS. The ranges were established based on the relative volatility, transaction costs, and targets of the various asset classes. Emphasis on current income and cash flow has resulted in an investment allocation mostly consisting of fixed income with a modest allocation to equities providing the opportunity for capital appreciation.

The Treasurer believes that the adoption of these targets and ranges will provide an appropriate mechanism for maintaining the integrity of the asset allocation policy.

Table 1
State of Connecticut
Soldiers' Sailors' & Marines' Fund

Asset Class	Target Allocation	Lower Bound	Upper Bound
Mutual Equity Fund (U.S. Equity)	8%	4%	12%
Mutual Fixed Income Fund	90%	85%	95%
CRA (Cash)	2%	1%	3%
	100%		
Asset Allocation Po	olicy and Relativ	e Ranges	

Note: Publicly listed common stock investments including U.S. equity securities are subject to a statutory limit of 60% of the SSMF's total portfolio.

Any material changes necessary would be pursuant to the findings of an asset allocation/liability study of the SSMF.



PART III - COMBINED INVESTMENT FUNDS



State of Connecticut Retirement Plans & Trust Funds
PART III – COMBINED INVESTMENT FUNDS

Article I. Introduction

The Combined Investment Funds are separate legally defined funds, which have been created by the Treasurer of the State of Connecticut under the authority of Section 3-31b of the Connecticut General Statutes. The Funds are open-end portfolios consisting of the Mutual Equity Fund, Mutual Fixed Income Fund, International Stock Fund, Real Estate Fund, Commercial Mortgage Fund, the Private Investment Fund, and the Cash Reserve Fund. The Funds were established to provide a means for investing pension plans and other trust fund assets entrusted to the Treasurer in a variety of investment classes. The units of the Funds are owned by these pension plans and trust funds which include the Teachers' Retirement Fund, State Employees' Retirement Fund, Connecticut Municipal Employees' Retirement Fund, State Judges' Retirement Fund, Probate Court Retirement Fund, States' Attorney Retirement Fund, Soldiers' Sailors' & Marine's Fund, Police and Firemen Survivors' benefit Fund, Connecticut Arts Endowment Fund, School Fund, Ida Eaton Cotton Fund, Hopemead Fund, Andrew C. Clark Fund, and the Agricultural College Fund.

It is the policy of the CRPTF, as reflected in this IPS, that the investment of assets are to be broadly diversified so as to limit the impact of large losses in individual investments over the total portfolio. Index funds may be used as a cost-effective way to gain market exposure in asset classes where there is less promise to add value through active management. In less efficient market segments, active management will be utilized in order to enhance risk-adjusted performance relative to asset class benchmarks. Professional investment managers will be selected and monitored based on (1) conformity of investment style with the CRPTF's return objectives, (2) demonstrated ability to achieve above average results consistently and (3) continuity of senior personnel.

The overall return of the CRPTF is measured against the total fund benchmark, a hybrid benchmark customized to reflect the CRPTF's asset allocation and performance objectives. This benchmark is comprised of 36% Russell 3000 Index; 18% International Stock Fund benchmark; 29% Mutual Fixed Income benchmark; 5% NCREIF Property Index; 11% Connecticut Private Equity/Venture Capital Index; and 1% Donoghue Money Fund Average. The International Stock Fund benchmark is comprised of 83% Salomon Smith Barney EPAC Broad Market 50% Hedged Index, and 17% MSCI Emerging Markets Free Index. The Mutual Fixed Income benchmark consists of 73% Lehman Brothers Aggregate Index, 17% Salomon High Yield Market Index, and 10% JPM Emerging Markets Bond Index. The Connecticut Private Equity/Venture Capital Index is made up of 50% Cambridge Associates Private Equity Index and 50% Cambridge Associates Venture Capital Index.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

It is the current practice that the assets of CRPTF are externally managed. However, nothing in this policy statement prohibits the ability of the Treasurer, in consultation with the IAC, from establishing criteria, standards and guidelines for managing a portion of the overall CRPTF portfolio within the Treasury.

The specific guidelines unique to each external manager will be developed cooperatively by the Treasurer and manager and shall be incorporated into the Investment Management Contract executed by the Treasurer and the manager. Sector, investment selection, and decisions regarding the timing of purchases and sales of these investments are delegated to the manager, subject to restrictions established by the Treasurer. In the case of a conflict between a manager's specific guidelines and the general guidelines of the fund, the former shall prevail.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article II. Asset Class Guidelines-Mutual Equity Fund

Note: The following guidelines were adopted May 13, 1998. As part of the Asset Allocation Plan approved by the IAC in August, 1999 and reaffirmed in January, 2001, a comprehensive review of this asset class is scheduled for calendar 2002.

Statement of Purpose

The Mutual Equity Fund ("MEF") will primarily invest in the common stocks of U.S. corporations in order to meet the CRPTF asset allocation guidelines for Domestic Equities. In the overall asset allocation, MEF's goal is to achieve a long-term, real rate of return significantly above the inflation rate. While common stocks are volatile on a year-to-year basis, that volatility is diminished over longer periods. MEF is the foundation for providing above average returns, which will help meet the obligations of the plans and trusts investing in MEF.

Description of the Fund

As stated above, MEF will primarily invest in the common stocks of U.S. corporations. These investments will be made using external advisors. It is anticipated that a significant component of MEF's assets will be invested in a passive manner utilizing index funds. The Treasurer will determine the actual proportion of index funds used.

MEF assets shall be allocated across the U.S. stock market so that there is diversification by both market capitalization and by investment style, such as value and growth.

Performance Objectives

The objective of MEF is to achieve a net return, which exceeds the Russell 3000 Index by one percentage point per annum, over rolling three to five year periods. This objective may require the use of both enhanced index and active investment strategies.

Guidelines for Investment Advisors

Advisors are expected to add value with equity investments and shall remain fully invested at all times. "Fully invested" is defined as having at least 95% of the portfolio's market value invested in equity investments. In no event shall more than 5% of the portfolio's market value be invested in cash or cash equivalents without the prior written approval of the Treasurer. Advisors receiving new money contributions on the first business day of any month are expected to be fully invested within sixty calendar days except as otherwise permitted in accordance with the foregoing sentence.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

The following investment restrictions/limitations apply to all advisors unless authorized in the advisor's specific investment agreement:

- 1. Purchase no equities that are not readily marketable.
- 2. Make no short sales.
- 3. Make no use of leverage or margin purchasing.
- 4. The use of futures and options for hedging purposes is prohibited.
- 5. The purchase of foreign securities is permitted if they are securities of firms with substantial U.S. operations and the securities are actively traded in the U.S. securities markets in the form of American Depository Receipts ("ADRs"), or the securities are components of one or more U.S. stock indexes. However, the market value of foreign securities shall not exceed 15% of the market value of any portfolio.
- 6. Convertible bonds are prohibited.
- 7. Portfolio cash balances shall be invested in the Cash Reserve Account.
- 8. Advisors shall adhere to the specific investment and administrative guidelines established for their portfolios. The management style of the portfolio shall not be changed without the written consent of the Treasurer.
- 9. Investments shall adhere to all limitations imposed by Connecticut or federal law.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article III. Asset Class Guidelines-International Stock Fund

Note: The following guidelines were approved by the IAC on October 23, 2003 and adopted by the Treasurer on October 23, 2003.

Fund Benchmark

The International Stock Fund's ("ISF") Hybrid Benchmark is 83% SSB EPAC Broad Market Index half-hedged/17% MSCI Emerging Markets Free Index.

Description of the Fund

ISF shall consist of a series of externally managed equity portfolios which, in aggregate, are structured to achieve long-term performance consistent with the non-U.S. equity markets and add to the diversification of the CRPTF total portfolio. ISF will invest in a combination of developed and emerging markets with targets of 83% and 17%, respectively.

Investment Objectives

- Provide diversification benefits to the CRPTF performance. When combined with the MEF achieve a lower volatility of returns than the MEF alone.
- Outperform the Hybrid Benchmark (83% SSB EPAC Broad Market Index half-hedged/17% MSCI Emerging Markets Free Index) net of management fees by 100 basis points per annum over rolling five-year periods.
- Achieve cumulative performance results that rank in the top third of international equity managers over rolling periods.
- Generate strong risk-adjusted returns, as measured by the information ratio (excess return divided by tracking error). Generate an information ratio for the portfolio over rolling five-year periods of 0.50.
- Maintain volatility (standard deviation of returns) no greater than 50 basis points above the Hybrid Benchmark for rolling five-year periods.
- Maintain a volatility of excess returns no greater than 3% over rolling five-year periods.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Fund Structure

Given the investment objectives of the fund, the Treasurer's philosophy is to 1) manage risks to acceptable levels, 2) allocate risks where there is the greatest opportunity for enhanced return relative to a passive implementation, and 3) pursue a diverse set of risks.

In accordance with this philosophy, the table below outlines the policies with regard to the number, types, and allocation to specific managers defined as follows:

Passive - manager attempts to match an index return;

Risk Controlled - manager assumes only modest amount (< 3%) of active risk in its portfolio and typically will closely monitor and manage within active risk range;

Core - manager who is acutely aware of benchmark relative exposures and manages portfolio with constraints placed on certain exposures such as countries, industries, and market capitalization. Although core managers do not tightly manage risk in portfolios based on tracking error guidelines, active risk levels for these managers generally range from 2% to 4%;

Active/Specialist - managers who are generally bottom-up stock pickers and have little regard for benchmark relative exposures (active risk can vary but is generally in the 4%-8% range);

Small Cap - manager focused on small company stocks with market caps generally below \$2 billion; a number of styles from core to active/specialists are represented in the small cap manager universe.

Table A

	Policy	Lower Range	Upper Range	
	Target %	%	%	Benchmark
Developed Markets				
Passive	12.5	10.0	15.0	SSB PMI
Risk Controlled	12.5	10.0	15.0	SSB PMI
Core	25.0	20.0	30.0	SSB PMI
Active	23.0	18.0	28.0	SSB PMI
Small Cap	10.0	7.5	12.5	SSB EMI
Subtotal	83.0	75.0	90.0	SSB EPAC BMI Half-
				Hedged
Emerging				
Active	17	10	25	MSCI Emerging Markets
				Free
Subtotal	17	10	25	



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

As an investor in the international equity markets, the CRPTF is also an investor in the foreign currencies in which these stocks are denominated. Over the long term, returns of foreign currencies are expected to be zero. However, in the short and intermediate term, currency movements can have a meaningful impact on the returns of an international equity portfolio. As a result of the asset liability study in 1999, a strategic hedge ratio of 50% was adopted for the developed market portion of the ISF. This strategic hedge ratio represents the neutral stance or desired long-term exposure to currency for the ISF.

To implement this policy, currency specialists will manage the currency portfolio as an overlay strategy to the equity investment managers. These specialists may manage the portfolio passively or actively depending on opportunities in the marketplace. An active specialist(s) may be retained if the Treasurer believes this/these specialist(s) may add incremental value to the investment program.

Investment Guidelines

Investment managers will be given full discretion to manage their portion of the CRPTF as approved by the Treasurer consistent with the objectives and policies of the CRPTF and subject to the provisions of the CRPTF, the contractual arrangements governing the relationship between the CRPTF and its investment managers, and the investment guidelines outlined below.

The managers' discretion regarding the selection of investments shall be limited by the Treasurer's exercise of her duty to consider the consequences of such discretion in accordance with state laws and as may be addressed in the IPS.

Proxy Voting Guidelines

Proxy voting will be carried out in a manner, which is consistent with the approved CRPTF guidelines for such voting.

Eligible Investments

- Securities that may be held include:
 - Common and preferred stocks
 - Convertible securities and warrants
 - American Depository Receipts
 - European Depository Receipts
- Securities that may not be held include:
 - Private placement securities
 - Venture capital
 - Commodities
 - Real estate (excluding REITs)



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT

Portfolio Constraints

- The portfolio will be fully invested with less than 5% of assets invested in cash at any time.
- Individual country weights will not deviate from the respective country weight of the Hybrid Benchmark Index by more than the greater of 15% (5% for countries in the MSCI EMF Index) or 50% of the benchmark weight.
- The portfolio will not concentrate its holdings in any particular sector. Maximum deviations will be no more than the greater of 15% of the Benchmark Index or 50% of the industry weight relative to the Hybrid benchmark in any one sector as defined by the BARRA sector definitions (8 broad sectors including multi-industry, finance, services, consumer goods, capital equipment, materials, utilities, and energy).
- Securities of non-U.S. issuers represented by ADRs, European Depository Receipts ("EDRs"), convertible securities, preferred stock, and warrants may be held. At no time should the cumulative market value of these securities exceed 20% of the portfolio.
- Any use of futures and options must be established in written guidelines in advance.
 In no event, however, shall leverage be employed in the fund. In addition, futures
 and options cannot be used for speculative purposes under any circumstances. The
 fund may not sell short, lend securities, or buy securities on margin without written
 consent of Treasurer.

Diversification

- Diversification should be maintained at all times within the fund. Securities of a single issuer should generally not exceed 10% of the market value of the fund or, if greater, the capitalization weighting of that stock in the fund Hybrid Benchmark. No greater than 5% or the benchmark weight of the equity portion of the portfolio, based on the cost value at the time of purchase, shall be invested in the securities of any one issuing corporation.
- Broad regional diversification will be maintained at all times. These regions, defined as Asia ex-Japan Developed Markets, Europe ex-U.K., United Kingdom, Japan, Asian Emerging Markets, Europe/Middle East/African Emerging Markets and Latin America, will not have deviations from the Hybrid Benchmark weights of more than 20% (5% for emerging markets regions) of the Hybrid Benchmark's regional allocation.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT

Communications, Reporting, & Notification

- Any significant change in investment strategy by an external manager will be communicated to Treasurer.
- Any significant change in ownership or key personnel at an external manager will be communicated preferably in advance of such change and a formal notice of said change will be issued to the Treasurer within 24 hours of the official change.
- Performance results, portfolio listings and valuations must be provided on a quarterly basis.
- Portfolio accounting will be reconciled to the master custodian on a monthly basis, in a manner prescribed by the Treasurer.
- Proxy voting activities will be reported periodically, as determined by the Treasurer.





State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article IV. Asset Class Guidelines-Mutual Fixed Income Fund

Note: The following guidelines were approved by the IAC on January 10, 2003 and adopted by the Treasurer on January 10, 2003.

Fund Benchmark

The Mutual Fixed Income Fund's Hybrid Benchmark is 70% Lehman Brothers Aggregate Index ("LB Aggregate") / 3% Lehman Brothers U.S. Treasury Inflation-Protected Securities Index ("LB U.S. TIPS") / 17% Salomon Smith Barney High Yield Market Index ("SSB High Yield Market") / 10% J.P. Morgan Emerging Markets Bond Index+ ("J.P. Morgan EMBI+").

Description of the Fund

The Mutual Fixed Income Fund ("MFIF") consists of a series of externally managed fixed income portfolios which, in aggregate, are structured to achieve long-term performance consistent with the fixed income markets and add to the diversification of the CRPTF total portfolio. The MFIF will invest in the following target combination:

Target	Asset Classes ⁷
70%	Core Fixed Income
3%	Inflation-Linked Bonds
17%	High Yield
10%	Emerging Markets Debt

Investment Objectives

• Provide diversification benefits to the CRPTF performance in different economic environments.

- Outperform the Hybrid Benchmark (70% LB Aggregate/3% LB U.S. TIPS/17% SSB High Yield/10% J.P. Morgan EMBI+) net of management fees by 65-135 basis points per annum over rolling five-year periods.
- Achieve cumulative performance results that rank in the top third of fixed income managers universe over rolling five-year periods.
- Generate strong risk-adjusted returns, as measured by the information ratio (excess return divided by tracking error). Generate an information ratio for the MFIF over rolling five-year periods of 0.50.
- Maintain volatility (standard deviation of returns) no greater than 50 basis points above the Hybrid Benchmark for rolling five-year periods.

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⁷ These asset classes are defined in <u>Treasurer Overview (Part I)</u> - <u>Asset Class Definitions (Article V)</u> - <u>Section B</u> of this Investment Policy Statement.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

• Maintain a volatility of excess returns between 130-270 basis points over rolling fiveyear periods.

Fund Structure

Given the investment objectives of the fund, the Treasurer's philosophy is to 1) manage risks to acceptable levels, 2) allocate risks where there is the greatest opportunity for enhanced return relative to a passive implementation and 3) pursue a diverse set of risks. In accordance with this philosophy, the table below outlines the policies with regard to the types and allocation to specific managers defined as follows:

- Passive Core Fixed Income manager attempts to match the LB Aggregate index return.
- Active Core Fixed Income managers utilize active portfolio management within the core fixed income sectors. Managers shall have characteristics similar to, but not necessarily equal to, the LB Aggregate index. The target tracking error range is typically between 75-150 basis points.
- Inflation-Linked Bonds Managers focus on fixed income securities that provide a real return above inflation. Managers shall have characteristics similar to, but not necessarily equal to, the LB U.S. TIPS index.
- *High Yield* Managers focus on high yield securities. The target tracking error range is typically between 300-600 basis points.
- *Emerging Markets Debt* Managers focus on fixed income securities issued by emerging markets countries. The target tracking error range is typically between 400-900 basis points.

	Policy Target (%)	Lower Range (%)	Upper Range (%)	Benchmark
Core Fixed Income				
Passive	20.0	18.0	22.0	LB Aggregate
Active	50.0	45.0	55.0	LB Aggregate
Subtotal	70.0	63.0	77.0	LB Aggregate
Inflation-Linked Bonds	3.0	2.0	4.0	LB U.S. TIPS
High Yield	17.0	14.0	20.0	SSB High Yield
				Market
Emerging Markets Debt	10.0	7.0	13.0	J.P. Morgan EMBI+



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Investment Guidelines

Investment managers will be given full discretion to manage their portion of the CRPTF as approved by the Treasurer consistent with the objectives and policies of the CRPTF and subject to the provisions of the CRPTF, the contractual arrangements governing the relationship between the CRPTF and its investment managers, and the investment guidelines outlined below.

The managers' discretion regarding the selection of investments shall be limited by the Treasurer's exercise of her duty to consider the consequences of such discretion in accordance with state laws and as may be addressed in the IPS.

Permissible Investments

The following type of investment are permitted, however they are constrained by the limit set forth in the Portfolio Constraints section:

- U.S. Treasury Securities
- U.S. Agency Securities
- Municipal Securities
- Mortgage Backed Securities
- Asset Backed Securities
- U.S. Corporate/Credit Securities (Investment Grade & High Yield)
- Foreign Securities payable in U.S. dollar and other currencies (on a selective basis)
- Inflation-Linked Bonds
- Emerging Markets Debt

The following types of investment are not permitted unless otherwise authorized by the Treasurer in the manager's specific investment guidelines:

- Convertible Securities
- Private Placement Securities (including Rule 144a)
- Derivative Instruments including, but not limited to, futures contracts, forward contracts, options, etc.

Portfolio Constraints

- Advisors are expected to add value through exposure to the fixed income markets and remain fully invested at all time. Fully invested is defined as being at least 95% invested in fixed income securities with maturities of one year or longer unless written consent is obtained from the Treasurer.
- For the purpose of calculating compliance with the credit constraints, if split rated, the lowest rating will apply.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

- Each manager is chosen to manage assets according to its particular mandate. The mandate calls for the assets to be invested primarily in the manager's asset class with the following exceptions:
 - Core Fixed Income mandates are not permitted to invest in below investment grade securities (below BBB-/Baa3 ratings by S&P/Moody's). These managers are permitted to hold on to "fallen angels", securities downgraded from investment grade status to high yield status, for a reasonable time period in order to liquidate the position. However, at no time should the cumulative market value of high yield securities exceed 2% of the portfolio.
 - Core Fixed Income mandates are permitted to invest in foreign securities payable in U.S. dollar and other currencies on a selective basis. However, these securities are subject to the constraints set forth in the manager's specific guidelines.
 - Core Fixed Income mandates are permitted to invest in municipal securities on a selective basis. However, these securities are subject to the constraints set forth in the manager's specific guidelines.
 - High Yield mandates are not permitted to invest in investment grade securities (above and including BBB-/Baa3 ratings by S&P/Moody's). These managers are permitted to hold on to securities upgraded from high yield status to investment grade status for a reasonable time period in order to liquidate the position. The maximum allocation to investment grade securities is 2% on a market value basis.
- Managers may enter into repurchase agreements collateralized 102% with U.S. government securities. The maximum term of these agreements will be 90 days and the collateral must be marked-to-market daily. Repurchase agreements are permitted as a substitute for cash with a maximum allocation of 5%.
- Portfolio cash balances shall be invested in the Cash Reserve Account established by the master custodian bank unless specific written permission to invest elsewhere is granted by the Treasurer.

Diversification

• Diversification should be maintained at all times; with the exception of securities guaranteed by the U.S. federal government or its agencies, securities of a single issuer should not exceed 5% of the portfolio market value.

Communications, Reporting & Notification

• Any significant change in investment strategy of an external manager will be communicated to the Treasurer.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

- Any significant change in ownership or key personnel of an external manager will be communicated preferably in advance of such change and a formal notice of said change will be issued to the Treasurer within 24 hours of the official change.
- Performance results, portfolio listings, and valuations must be provided on a quarterly basis.
- Portfolio accounting will be reconciled to the master custodian on a monthly basis, in a manner prescribed by the Treasurer.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article V. Asset Class Guidelines-Commercial Mortgage Fund

Note: This asset class is not a part of the asset allocation structure of the CRPTF, adopted in August 1999, and the balance in the fund will be allowed to amortize and mature. No new investments will be added to this fund. The following represents the investment guidelines, which were adopted on May 13, 1998.

Statement of Purpose:

The Commercial Mortgage Fund ("CMF") provides an alternate source of domestic fixed income investment for the retirement funds. It is the vehicle for investing CRPTF's assets in mortgages on income-producing commercial property, which are expected to produce, yields superior to corporate and government (treasury) fixed income securities in exchange for reduced liquidity. These differences aside, commercial mortgages are expected to perform similarly to other domestic fixed income securities, which are driven by U.S. interest rate changes.

Description of the Fund:

CMF consists of a series of commercial mortgage portfolios, which are held in securitized trust or similar formats and are managed by external professional real estate investment management firms. Most of the loans in the portfolio will be conservative in nature with respect to loan underwriting standards.

Performance Objectives of the Fund:

Over a market cycle CMF is expected to generate a net total return of one percent (1%) in excess of the Lehman Brothers Aggregate Bond Index, and to exceed the rate of total return of MFIF.

Guidelines for Investment Advisors:

In order to carry out its mission and to achieve its investment objectives, CMF's guidelines shall include:

- 1. At the time of investment mortgage loans shall provide yields of at least 125 basis points in excess of comparable maturity treasury bonds.
- 2. Mortgage loans shall have the characteristics of fixed income securities and be responsive to changes in domestic interest rates.
- 3. Investment advisors shall screen and underwrite mortgage loan proposals before submitting them to the fund for approval.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

- 4. In order to ensure adequate diversification within CMF, loans may be made on commercial properties of any type or in any location within the United States. Portfolio securitization and other yield enhancement mechanisms may be employed to enhance yield, and loans may be designed to take advantage of market niches in order to increase yields.
- 5. Any statutory restriction referenced in part one of this document.





State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article VI. Asset Class Guidelines-Real Estate Fund⁸

Note: The following guidelines were approved by the IAC on September 12, 2003 and adopted by the Treasurer on September 12, 2003.

Fund Benchmark

The Real Estate Fund's ("REF" or the "Fund") portfolio performance shall be benchmarked against the total rate of return of the National Council of Real Estate Investment Fiduciaries Property Index ("NCREIF Property Index"). Additional criteria will be applied to the performance of individual managers, investments having a focus on a particular property sector or geographic location and for investments having higher risk strategies. Investments in publicly traded Real Estate Investment Trusts ("REIT"s) and real estate operating companies ("REOC"s) are expected to outperform the National Association of Real Estate Investment Trusts Composite Index").

Description of the Fund

The Fund is the vehicle by which the CRPTF makes investments in the real estate asset class. The Fund investments may consist of a number of different investment strategies and investment vehicles, including externally managed commingled funds, separate accounts and/or publicly traded real estate securities. These investments shall be primarily equity-orientated but may also include fixed income investments in real estate, such as mortgages.

All investments in real estate assets are expected to adhere to the standards of fiduciary obligation to the beneficiaries of the CRPTF, and shall be considered in the context of the relevant risk/reward factors of this asset class and consistent with the statutory requirements for consideration of investments by the Treasurer in accordance with Section 3-13d(a) of the Connecticut General Statutes. These investments will also adhere to the Responsible Contractor Policy included as an exhibit to this document. In the event the preconditions of Section 3-13d(d) of the Connecticut General Statutes are met with respect to a "lame duck" period, the IAC shall assume the principal fiduciary authority of the Treasurer for investment decisions for the Fund until such time as a duly elected Treasurer is officially sworn into office.

The Fund shall comply with the guidelines as approved by the IAC for CRPTF's asset allocation to the real estate asset class. The real estate allocation may be amended from time to time. If the Fund's actual allocation falls outside these policy allocation targets, the CRPTF will reallocate capital, as dictated by prudence, to come into compliance with

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⁸ These guidelines supersede PART I, Article V, Section D.1, the Asset Class Definition for the Real Estate Fund.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

the asset allocation guidelines. The Fund shall move tactically within the recommended allocation range for real estate in response to changes in market conditions, the Fund's return objectives and liquidity requirements, as well as other relevant factors.

From time-to-time, the actual allocation to the real estate asset class may not fall within the recommended range. In these instances, adjustments from actual to the prescribed allocation range shall be implemented over a reasonable time frame (within a one to three year period, unless otherwise specified) and with ample consideration given to preserving investment returns to the CRPTF.

Responsibilities and Delegations of Authority:

The investment of the Fund's assets shall be the primary responsibility of the Treasurer, and will be carried out in conjunction with the IAC, taking into account the overall CRPTF investment policy. The Treasurer shall have responsibility for the management and administration of the Fund's real estate investments.

Investment Objectives

The strategic objectives of the REF are the following:

- 1. To provide diversification to the overall CRPTF investment program.
- 2. To preserve investment capital and generate attractive risk-adjusted rates of return.
- 3. To provide consistent current income to the CRPTF.
- 4. To provide a hedge against inflation.

Expected returns for CRPTF's real estate investments shall be: (i) at minimum, CRPTF's actuarially determined assumed rate of return and (ii) competitive, on a risk-adjusted basis, with other asset classes in which the CRPTF invests. Expected returns for each of the CRPTF's real estate investments shall also be commensurate with the attendant risks associated with each investment.

The real estate asset class shall be managed to: (i) ensure a consistent flow of qualified investment opportunities that represent the most attractive investment vehicles currently available in the marketplace, (ii) produce a diversified and balanced portfolio of investments that are structured so that the risks inherent in these generally illiquid and long-lived assets may be minimized, and (iii) consider solely the interests of the CRPTF's participants and beneficiaries.



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Fund Structure ⁹

The REF shall be divided in four segments, the Core Portfolio, the Value-Added Portfolio, the Opportunistic Portfolio and the Publicly Traded Portfolio. Assignment of an investment to a particular portfolio shall be based on the investment's risk and return characteristics.

Strategic Objectives of the Core, Value-Added Opportunistic and Publicly Traded Portfolios:

Under this structure, the strategic objectives of the Core Portfolio are to: (i) produce stable current income and (ii) market level returns commensurate with a low to moderate level of risk. Hence, the performance of the Core Portfolio is expected to mirror the composite NCREIF Property Index, on a net-of-fee basis.

The Value-Added Portfolio is expected to produce higher returns than the Core Portfolio, subject to an incrementally greater amount of risk, thereby enhancing the overall performance of the REF. The Value-Added Portfolio is expected to provide solid income and greater levels of appreciation than anticipated in the Core Portfolio. The Value-Added Portfolio is expected to outpace the NCREIF Property Index by 200 basis points, on a net-of-fee basis.

The Opportunistic Portfolio is expected to enhance performance of the REF, and to provide additional diversification to the real estate portfolio. The Opportunistic Portfolio may offer limited current income and returns are often largely dependent on future appreciation. The Opportunistic Portfolio is expected to outpace the NCREIF Property Index by 500 basis points, on a net-of-fee basis.

The Publicly Traded Portfolio is intended to provide performance in excess of the NAREIT Composite Index. The Publicly Traded Portfolio is expected to enhance performance and liquidity to the REF as well as contribute to the portfolio's diversification. Furthermore, investments in publicly traded real estate investments can provide the REF with access to some property types in which exposure is difficult to obtain due to the nature or size of the individual assets (i.e. regional malls).

Allocation to the Core, Value-Added, Opportunistic, and Publicly Traded Portfolios: Allocations to the Core, Value-Added, Opportunistic and Publicly Traded Portfolios shall be made to maximize the total return to CRPTF while mitigating risk. As a moderate risk investor and given the CRPTF's current requirements for cash flow and liquidity, the REF's target allocations to the Core, Value-Added, Opportunistic and Publicly Traded Portfolios shall be:

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⁹ Including up to 5% of the REF for partnerships targeting underserved geographical areas and populations, with a focus on Connecticut.



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Portfolio Segment	Allocation Range	Target Allocation
Core	50% to 70%	60%
Value-Added	5% to 25%	15%
Opportunistic	5% to 25%	15%
Publicly Traded	0% to 20%	10%

From time-to-time, the actual allocation to the Core, Value-Added, Opportunistic, and Publicly Traded Portfolios may not fall within the recommended range. In these instances, adjustments from actual to the prescribed allocation range shall be implemented over a reasonable time frame (within a one to three year period, unless otherwise specified) and with ample consideration given to preserving investment returns to the CRPTF.

Characteristics of Core Portfolio Investments:

The Core Portfolio is expected to produce market level returns over time with a commensurate level or risk. Performance is expected to mirror the composite NCREIF Property Index, on a net-of-fee basis. Income is expected to make up the majority of the total return for the Core Portfolio.

To mitigate risk, the Core Portfolio shall be well diversified by property type, geography and, to the extent feasible, by manager. Usually, investments in the Core Portfolio shall be limited to office, retail, industrial and apartment properties. The Core Portfolio may also include limited investment in "other" property types that are generally considered non-core.

Typical Core Portfolio properties shall exhibit "institutional" qualities. Generally, they are well located within their local and regional markets, of high-quality design and construction and have significant occupancy levels. Leverage may be used in the Core Portfolio on a limited basis to enhance investment returns. Leverage within the Core Portfolio will have a targeted guideline of 30% or less of the aggregate net assets. Consideration shall be given to the impact of debt financing on the risk and return characteristics of the leveraged investments as well as the total Core Portfolio.

Characteristics of Value-Added Portfolio Investments:

The Value-Added Portfolio is expected to produce above market level returns over time. Performance is expected to exceed the NCREIF Property Index, on a net-of-fees basis, by 200 basis points. While income is expected to be a part of the total return for the Value-Added Portfolio, appreciation may be the source for much of the total return.

The Value-Added Portfolio contains investments with expected returns in excess of investments contained within the Core Portfolio in addition to commensurately higher



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risk. Value-Added Portfolio investments involve efforts to increase property value such as releasing, repositioning, redevelopment, or development, as well as higher levels of debt. Value-Added investments may include traditional and non-traditional property types (e.g. hotels, mini-storage, senior housing, timber, etc.).

Characteristics of the Opportunistic Portfolio:

The Opportunistic Portfolio is expected to produce above market level returns over time. Performance is expected to exceed the NCREIF Property Index, on a net-of-fees basis, by 500 basis points.

Opportunistic Portfolio investments are often in niche opportunities (e.g. distressed debt, mezzanine debt, hospitality, etc.) or exist because of inefficiencies in the real estate or capital markets. In addition, the Opportunistic Portfolio may contain investments in special purpose properties with a narrow user market (e.g., mobile home parks and parking structures). Investment strategies for the Opportunistic Portfolio are characteristically "tactical" in nature and are based on prevailing market conditions at the time of investment. International investments are also a part of the Opportunistic Portfolio.

Within the Opportunistic Portfolio, expected returns may vary considerably, based on differences in investment program strategies and structures, and the level of risk associated with each program, among other factors. As noted above, investments included in the Opportunistic Portfolio are likely to generate limited current income. The bulk of the return on these investments is expected to come from appreciation. Moderate to high levels of leverage may be also employed by some programs to augment investment performance.

Characteristics of the Publicly Traded Portfolio:

The Publicly Traded Portfolio is expected to deliver performance in excess of the NAREIT Composite Index. Publicly traded real estate investments are typically more volatile than their private market counterparts, however, liquidity is greater. The Publicly Traded Portfolio is expected to be well diversified and include a wide array of property types. Generally speaking, investments will be limited to publicly traded real estate investment trusts and real estate operating companies owning office, retail, industrial, apartment, healthcare, mobile homes, self storage, hotels and R&D properties.

Investment Guidelines

All investments will be managed as approved by the Treasurer consistent with the objectives and policies of the CRPTF and subject to the provisions of the CRPTF, the contractual arrangements governing the relationship between the CRPTF and its investment managers, and the investment guidelines outlined below.

To the extent possible, the Fund shall adhere to the following investment guidelines:



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Discretion:

The Fund may enter into discretionary separate account relationships with real estate investment managers, subject to pre-approved investment guidelines, whenever possible, or clearly defined investment strategies. This delineation is known in the real estate industry as "discretion in a box", which means the manager shall have the authority and discretion to execute a particular investment strategy only so long as each and every investment falls within the preapproved guidelines for that manager's portfolio. For this reason, investments shall be structured to facilitate alignment of interests between management and the Fund, management accountability, investment monitoring and ultimately, liquidity.

In these separate accounts, CRPTF shall have sole ownership of the assets or may joint venture with other institutional investors to acquire the asset. CRPTF will reserve the right to remove the real estate manager of any separate account, with or without cause, in a timely manner.

Alignment of Interests:

Preferred investments for the REF will be those that exhibit the highest degree of management accountability and the greatest alignment of interests. As a matter of policy, REF will seek, but will not be limited to, dedicated management teams that co-invest or have substantial ownership interest in the investment entity, controlling positions with provisions for liquidity, disclosure, as well as the mitigation of conflicts of interest.

Leverage:

The Fund shall employ leverage in the real estate portfolio in order to enhance investment returns. Such leverage may be at the portfolio, manager or investment level. In order to utilize debt in this manner, positive arbitrage should exist at the investment entity level. Because leverage also increases the volatility of the real estate portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, limitations on the amount of leverage at the individual asset or investment entity level as well as debt service coverage requirements will be negotiated or arranged wherever possible.

Leverage at the aggregate Fund level should be limited to 50%. To preserve the character of the asset class within CRPTF's composite investment portfolio, the aggregate asset class shall not be over leveraged. This shall be measured by comparing the principal amount of debt secured by real estate investments in the portfolio annually to the gross market value of the real estate portfolio. Specifically, leverage in the Core Portfolio will be targeted at 30% or less. In the Value-Added and Opportunistic Portfolios, certain investments may be highly leveraged, however, the leverage maximum shall be that amount which would cause the aggregate Fund leverage to exceed 50%. To the extent leverage in any portfolio exceeds the maximum, the Fund shall make all reasonable efforts to reduce the leverage ratio to below the maximum allowable amount within a reasonable time frame.



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Liquidity:

Real estate investments shall be structured to include clearly defined redemption provisions that offer investors liquidity. In addition, whenever possible, investments shall include features that enhance liquidity to investors such as, (i) shorter investment time horizons and holding periods, (ii) provisions for interim liquidation of investments, (iii) multiple exit strategies, (iv) alignment of interests between management and investors as well as management accountability and (v) a readily tradable market for investor holdings.

Valuations:

The Fund's separate account managers will be responsible for the ongoing valuations of each property or investment in their respective portfolios. Investment managers shall value all investments at least annually using internal valuations. Independent third-party valuations shall be obtained, at a minimum, every three years or on an as-needed basis in any CRPTF separate account portfolio. The third-party appraiser selection and engagement process will incorporate a competitive bidding process amongst qualified firms. An appraiser will not be utilized for more than three consecutive independent valuation engagements on a particular investment.

In commingled funds, CRPTF shall review the manager's proposed valuation policy and request that each investment be valued at least annually using internal valuations. Core and value-added funds may secure third party appraisals, but the opportunistic funds generally value investments using internal valuations.

Eligible Investment Vehicles

The selection of appropriate investment vehicles will focus on structural aspects that provide for (i) maximum liquidity and control, while mitigating risk and (ii) the highest level of accountability on the part of management and (iii) alignment of interests. Such criteria are critical to the Fund's ability to meet its objectives in the real estate asset class. For this reason, the following investment vehicles are allowable:

Commingled Vehicles:

To enable greater diversification and to reduce risk, investments in the real estate portfolio shall be made in participation with other institutional investors. Real estate investments shall be made in commingled vehicles including, but not limited to: (i) closed-end funds such as group trusts and limited partnerships, (ii) open-end funds (primarily bank and insurance company commingled accounts), (iii) private REITs and REOCs, and (iv) public REITs and REOCs.

Investments in closed-end commingled vehicles shall have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment and on an interim basis. The term of these investments shall also be limited to no more than seven to ten years and shall provide for a winding-up and orderly



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liquidation within this time period. Investment agreements for closed-end commingled vehicles shall include flexible provisions for removal of management by investors and interim liquidation of investor holdings.

Open-end commingled fund investment shall include flexible redemption provisions, though such provisions often do not provide investors with liquidity at times when it is most needed. Therefore, it is critically important that such investments be made with the most proactive of managers. In addition, to the extent possible, investments in closed and open-end commingled fund vehicles shall include an opportunity for investors to participate on advisory boards.

To ensure adequate diversification and to reduce risk, no more than 10% of the CRPTF real estate portfolio shall be allocated to any one individual commingled fund in which CRPTF does not exercise control over its capital. For the purpose of this document, control over its capital refers to the ability to (i) time the exit from an investment vehicle or (ii) terminate the manager of such vehicle.

Public and Private REITs and REOCs:

Public and private REITs and REOCs can provide the REF with greater access to property markets and assets as well as captive and focused management in a structure that includes corporate governance. These types of investments may offer additional benefits to the Fund in the way of opportunities to share in the operators' fee income and franchise value. Investments in private companies often offer multiple exit strategies that include a public listing, merger or portfolio sale. Though investments in publicly traded vehicles can offer the Fund greater liquidity over private market opportunities, they are more highly correlated with equities than private real estate investments. As such, the maximum allocation to publicly traded REITs or REOCs in the real estate portfolio shall be 20%. However, the actual allocation to publicly traded REITs or REOCs at any point in time could be substantially less than these amounts, or even zero. The balance of the real estate portfolio shall be invested in private market investments.

Investments in publicly traded REITs and REOCs shall be made through investment managers as part of a structured investment program [such programs may include both long and short positions (short positions not to exceed 30% of the respective portfolio) as well as options (for defensive positioning only)].

From time to time, the Fund may acquire investments in publicly traded REITs or REOCs by way of dissolution or restructuring of its private market investments. These investments shall be placed under the management of a suitable investment manager.

Investments that are deemed inappropriate for the Fund shall be liquidated in a reasonable time frame.

Investments in publicly traded REITs and REOCs will be monitored for compliance with the statutory cap on common stock.



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Separate Account Vehicles:

The REF may invest in separate account vehicles that allow the Fund 100% ownership and control of direct investments. However, such separate account vehicles shall not be the primary or preferred investment vehicle of the Fund (due to the current size of the Fund and the diversification difficulties associated with small separate accounts). Accordingly, prudent care shall be taken to ensure that diversification of such an account is not detrimental to the overall real estate portfolio.

Eligible Investment Types

Equity real estate investments may include direct or indirect equity investment in real estate (including all rights and interests incident thereto) such as: (i) interests in corporations, partnerships and other entities who primary business is the acquisition, development and operation of real property including publicly traded or private REITs and REOCs, (ii) participating or convertible participating mortgages or other debt instruments convertible to equity interest in real property based on investment terms (and not merely by foreclosure upon default), (iii) options to purchase real estate, leaseholds, and sale-leasebacks, (iv) all other real estate related securities such as lower or un-rated tranches of pre-existing securities or structured debt instruments, which have equity features.

Leveraged equity investments are permissible. Properties may also be acquired subject to ground leases and reversionary interests may be acquired in properties subject to ground leases.

International investments are permitted for the Opportunistic Portfolio given appropriate review of the experience and strength of potential investment management organizations, and the real estate and capital markets, practices and laws of countries considered for such investment, among other factors.

Management of the Fund

The Treasurer, in consultation with the IAC, shall select the advisors for the REF. In accordance with Section 3-13i of the Connecticut General Statutes, the IAC will have up to a forty-five day period following presentation of the investment opportunity in which to file a written review of the Treasurer's recommendation. While the IAC's response will be given full consideration, the ultimate decision to invest or not, resides with the Treasurer. The Treasurer and the IAC shall also review, at least quarterly, the activity and financial condition of the REF. In the event the preconditions described in Section 3-13d of the Connecticut General Statues are met with respect to a "lame duck" period, the IAC shall assume the principal fiduciary authority of the Treasurer for investment decisions in the real estate investment fund until such time that a duly elected Treasurer is officially sworn into office.



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Diversification

In portfolio theory, the principle of diversification is defined as the process of combining investment alternatives so that unique risk is reduced and the level of certainty associated with future expected returns is enhanced. This shall be accomplished in the real estate portfolio through the investment of capital among a number of different investment management organizations and in a variety of investment strategies and structures, property types and geographic regions, among other factors.

Diversification by Investment Advisor:

To reduce risk, the REF shall be diversified by investment management organization. No single investment management organization shall manage more than 40% of the market value of the REF allocation.

Diversification by Geography:

To reduce risk, investments in the real estate portfolio shall be (i) well diversified by geography and (ii) primarily located in the United States. The allocation ranges for real estate located in the United States versus overseas shall be 80% to 100% to the United States and 0% to 20% to real estate markets abroad.

Based on the geographic classification system used in the NCREIF Property Index, the target allocation ranges for regions within the United States shall be as follows:

Region_	Allocation Range
West	25% - 45%
Midwest	5% - 25%
East	20% - 40%
South	20% - 40%

It should be noted that these target geographic region allocation ranges are based on the NCREIF Property Index (as of March 31, 2002) and may change over time as the composition of the NCREIF Property Index changes. As such, periodic adjustments to these target ranges may need to be made based on changes in the benchmark.

The distribution of states by region as included in the NCREIF Property Index is in Appendix I of the Guidelines.

While there are no specific guidelines for diversification based on exposure to geographies having similar economic profiles and/ or industry concentrations, the real estate portfolio shall be prudently diversified and monitored with regard to this aspect.

Diversification by Property Type:

To reduce risk, the real estate portfolio shall be well diversified by property type and primarily invested in apartment, industrial, office and retail assets. The target allocation ranges for the four basic property types as well as "other" property types to be included in the Core Portfolio are as follows:



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Property Type	Allocation Range
Apartment	10% - 30%
Industrial	10% - 30%
Office	30% - 45%
Retail	10% - 30%
Hotel	0% - 10%

It should be noted that these target property type allocation ranges are based on the NCREIF Property Index (as of March 31, 2002) and may change over time as the composition of the NCREIF Property Index changes. As such, periodic adjustments to these target ranges may need to be made based on changes in the benchmark.

Diversification by Investment Life Cycle:

The basic phases of a property's life cycle include predevelopment, development, initial leasing, operating and redevelopment, as defined in Appendix. In general, properties in the earlier stages of their respective life cycles and redevelopments possess greater risks and thus should offer the Fund incrementally higher expected returns.

To reduce risk, the real estate portfolio shall be appropriately diversified according to life cycle with the Core Portfolio having a majority of investments in operating properties that are substantially leased. The Opportunistic Portfolio may contain a higher concentration of investments undergoing redevelopment or development.

Diversification by Investment Size:

To mitigate risk within the real estate portfolio, the following standards shall apply. First, with regard to publicly traded real estate securities, the Fund's holdings of any single publicly traded real estate security shall be limited to no more than 5% of the Fund. Second, with regard to private market real estate investments, the Fund's holdings of any private market commingled real estate investment shall be limited to no more than 10% the of outstanding equity capitalization of the vehicle at the time of investment. This may increase to no more than 20% of the outstanding equity capitalization of the vehicle over the life of the investment. Larger holdings may be deemed appropriate if the Fund receives commensurate control premiums associated with the investment. In these circumstances, a limit on Fund holdings shall be established on a case-by-case basis.

Diversification by Currency:

There are no specific guidelines regarding currency diversification. However, in accordance with the Fund's overall investment objectives of safety and convertibility, the investments in the real estate portfolio shall provide adequate currency diversification and, to the extent possible, shall be readily and fully convertible to U.S. dollars.

To this end, investments in markets which either restrict, limit or control the conversion of local currency into U.S. dollars shall be avoided or, whenever possible, U.S. dollar



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denominated. In addition, careful attention shall be given to the overall strength and stability of currencies at the time of investment in a local economy and ongoing basis.

Due consideration shall be given to the positives and negatives of currency protection programs including the potential to add incremental risk. For example, high amounts of leverage are often used to provide an element of currency protection for foreign investors and to shelter current income from local taxes. To the extent sheltering techniques are employed, expected returns for such investments shall take into account the risks associated with the financial overlay.

Dollar Cost Averaging:

To reduce market risk, the Fund shall employ dollar cost averaging, or buying into investments over a period of time rather than all at once. More specifically, with regard to higher risk investments such as Value-Added and Opportunistic investments, the Fund shall endeavor to own Value-Added and Opportunistic investments that are diversified by vintage year.

Guidelines for Selection, Monitoring, Evaluation and Termination of Managers

The selection of real estate investments shall be guided by the "prudent expert" standard, embracing the prudent decision making process typically employed by experts in the areas of real estate acquisition, development, operation, disposition, and portfolio management.

Selection Procedures:

The selection process for real estate investments and management organizations will be established by the Treasurer in consultation with and subject to the approval of the IAC. The investment selection process is included herein as an exhibit to this document.

Selection of Investment Management Organizations:

The Fund seeks to retain investment management organizations that possess superior capabilities in the selection and management of real estate assets. With this objective in mind, prospective investment management organizations shall be evaluated for selection based on criteria including, but not limited to: (i) the suitability of the organization's investment offerings relative to the Fund's investment guidelines and objectives; (ii) the quality, stability, integrity and experience of the management team; (iii) the ability and willingness of the organization to dedicate sufficient resources and personnel to optimally manage the Fund's investments; (iv) the reasonableness of investment terms and conditions including provisions to align interests of management and CRPTF; (v) the appropriateness of management controls and reporting systems, among other factors; and (vi) commitment to responsible contracting policies, workplace diversity and community involvement.

The Fund will give preference to Connecticut-based, minority and women-owned or emerging organizations and to funds that will invest in under-served urban areas,



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provided such firms and funds will be subject to the selection criteria noted above. In the case of emerging firms, the longevity of the organization's management team will, by definition, be de-emphasized.

Monitoring, Evaluation and Termination of Investment Management Organizations:

The Fund's investment management organizations shall be monitored and evaluated on an on going basis based on their performance relative to stated objectives and benchmarks, and relative to the performance of firms managing similar investments in the marketplace. In addition, investment management organizations shall be monitored for compliance with investment guidelines, policies and procedures of the Fund and other contractual provisions. Manager performance should be evaluated over meaningful time intervals to ensure that performance is indicative of management's efforts. The performance of the Core and Publicly Traded Portfolio investments should be evaluated on a three year trailing performance basis, while the performance of the Value-Added and Opportunistic Portfolio investments should be evaluated on a three to five year trailing performance basis.

Consideration shall also be given to the financial strength of the investment management organization, the level of client service given CRPTF as well as changes within the management organization such as the continuity of personnel assigned to the Fund's investments, among other items. The Fund shall seek to liquidate investments with management organizations found to be deficient relative to the Fund's standards.

Contracts with General Partner

The CRPTF will seek to negotiate partnership agreements that include language to ensure (i) accountability, alignment of interests between general partners and the limited partners, (ii) complete disclosure of all actions taken that affect or have the potential to affect the limited partners, (iii) no conflicts of interests, (iv) provisions that allow the CRPTF to sell its limited partnership interest, (v) provision is made for a "no fault divorce clause" and protections for the limited partners in the event of changes within the general partnership, (vi) the existence of an advisory board and language that describes how any conflicts would be handled, (vii) specific language on valuation standards for investments, (viii) provisions that limit the general partner's ability to concentrate investments of the partnership in one company or enterprise, and (ix) the ability for the CRPTF to have co-investment rights in any underlying investment of the partnership. CRPTF will seek to obtain all of the above provisions, but recognizes that each provision may not be obtainable in each and every partnership. When or if there are deviations from this policy, the rationale for deviating from the policy shall be documented and submitted to the Treasurer for approval.

Communications, Reporting, Notification

A comprehensive performance measurement report for the real estate portfolio shall be prepared on a quarterly basis ("Performance Report").



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The Performance Report shall include a market valuation of and historical returns for each of the Fund's investments. The valuations and returns shall be presented on a U.S. dollar basis and aggregated, along with information on investment attributes, on a portfolio basis. In addition, comparisons shall be made of actual results to benchmarks, investment parameters and other guidelines or objectives contained herein. The Performance Report shall also contain information on significant events impacting the real estate portfolio and updated information on the status of global real estate markets.

The Pension Funds Management Staff ("Staff") shall endeavor to insure that investment valuations and returns which are prepared by investment managers and included in the Performance Report are calculated in accordance with guidelines established by the Association for Investment Management and Research ("AIMR") and the National Council of Real Estate Investment Fiduciaries ("NCREIF"), the Pension Real Estate Association ("PREA") and the National Association of Real Estate Investment Managers ("NAREIM") as included in the most recent editions of the Real Estate Information Standards and the NCREIF Market Value Accounting Policy Manual. To the extent that managers do not report on the Fund's investments in a manner consistent with the Fund's guidelines, Staff shall work with these managers to obtain the most appropriate information. The Fund's managers shall be notified at the inception of their contracts that the failure or inability of the manager to provide accurate and timely financial reporting including performance results computed in a manner consistent with AIMR guidelines may constitute grounds for termination.

Review and Modification of Real Estate Investment and Management Guidelines

The guidelines contained herein shall be reviewed periodically to determine if modifications are necessary or desirable. Any changes shall be subject to the approval of the IAC.



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Appendix I

Distribution of States by NCREIF Regions and Sub-regions

West Region	Midwest Region	East Region	South Region
<u>Mountain</u>	East North	Northeast	Southeast
Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming	Central Illinois Indiana Michigan Ohio Wisconsin	Connecticut Maine Massachusetts New Hampshire New Jersey New York Pennsylvania Rhode Island Vermont	Alabama Florida Georgia Mississippi Tennessee
Pacific	West North	MidEast	Southwest
Alaska California	Central Iowa Kansas	Delaware District of Columbia	Arkansas Louisiana
Hawaii Oregon Washington	Minnesota Missouri Nebraska North Dakota South Dakota	Kentucky Maryland North Carolina South Carolina Virginia West Virginia	Oklahoma Texas

Note: Information above based on NCREIF Property Index as of March 31, 2002.



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Appendix II

Definitions

Appreciation Return is the percentage change in the market value of a property or portfolio adjusted for capital improvements and partial sales, over a period of analysis.

Convertible Participating Mortgage is an investment structure wherein the lender's (CRPTF) return consists of mortgage interest plus potential contingent interest expressed as a percentage of property operating cash flow and/or property appreciation upon sale or refinancing and where the lender has an option to convert a portion or all of the loan balance into a percentage of equity.

Income Return is the component of return derived from property or portfolio operations during a period of analysis, expressed as a percentage of property market value.

Leverage is the use of fixed-cost funds (or debt) to acquire or develop an incomeproducing property.

Leveraged Equity Investment refers to investments in real estate in which the investor (CRPTF) has an equity interest and the purchase or ownership of the investment is or partially financed with debt.

Life Cycle Definitions:

- **Pre Development** refers to raw land.
- **Development** refers to properties under construction, including the preparation and installation of infrastructure.
- **Initial Leasing** is completed construction that is less than 60% leased, and that has been available for occupancy for one year or less.
- **Operating** are properties that have achieved 60% leased status since construction, or that have been available for occupancy for more than one year.
- **Redevelopment** refers to properties that are undergoing substantial expansion or retenanting, rehabilitation or remodeling.

Participating Mortgage is an investment structure wherein the lender's (CRPTF) return consists of mortgage interest plus potential contingent interest expressed as a percentage of property operating cash flow and/or property appreciation upon sale or refinancing.

Real Estate Investment Trust ("REIT") refers to a private or publicly traded company which typically invests in income producing properties and which qualifies as a REIT under Sections 856-860 of the Internal Revenue Code of 1986. As a REIT, a company must distribute to its shareholders at least 95% of its taxable income and is not subject to



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federal (and typically state) income tax to the extent income is distributed, among other requirements.

Risk-Adjusted Rate of Return is the Total Return adjusted for volatility of returns over time. That is, for two investments having an equal Total Return over an investment period, that investment which experiences the least volatility of returns has the higher risk-adjusted rate of return. The standard calculation of risk-adjusted rate of return is the "Sharpe Ratio" defined as the difference between the investment return and the average U.S. Treasury Bill rate over the same period, divided by the standard deviation of the investment return over the period.

Total Return is the sum of the Appreciation Return and Income Return.

Unleveraged Equity Investment refers to real estate investments in which the investor (CRPTF) has an ownership interest and the purchase or ownership of the investment is financed without the use of debt. The term "equity investment" in real estate is generally used in contrast with conventional mortgage investments.



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EXHIBIT 1 STATE OF CONNECTICUT RETIREMENT PLANS & TRUST FUNDS RESPONSIBLE CONTRACTOR POLICY – REAL ESTATE FUND

I. INTRODUCTION

The State of Connecticut Retirement Plans & Trust Funds ("CRPTF" or "the Plan") has a deep interest in the condition of workers employed by the Plan and its advisors. The Plan, through the Responsible Contractor Policy ("Policy") described below, supports and encourages fair wages and fair benefits for workers employed by its contractors and subcontractors, subject to fiduciary principles concerning duties of loyalty and prudence, both of which further require competitive returns on the Plan's real estate investments. The Plan endorses small business development, market competition, and control of operating costs. CRPTF supports many of the ideals espoused by labor unions and encourages participation by labor unions and their signatory contractors in the development and management of the Plan's real estate investments. The Plan believes that an adequately compensated and trained worker delivers a higher quality product and service.

II. DEFINITION OF A RESPONSIBLE CONTRACTOR

A Responsible Contractor, as used in this Policy, is a contractor or subcontractor who pays workers a fair wage and a fair benefit as evidenced by payroll and employee records. "Fair benefits" are defined as including, but are not limited to, employer-paid family health care coverage, pension benefits, and apprenticeship programs. What constitutes a "fair wage" and "fair benefit" depends on the wages and benefits paid on comparable real estate projects, based upon local market factors, that include the nature of the project (e.g., residential or commercial; public or private), comparable job or trade classifications, and the scope and complexity of services provided.

III. INITIAL REQUIREMENTS OF THE RESPONSIBLE CONTRACTING POLICY

- A. <u>Duty of Loyalty</u>: Notwithstanding any other considerations, assets shall be managed for the exclusive benefit of the participants and the beneficiaries of CRPTF. CRPTF's as well as its advisors', duty to the participants and their beneficiaries shall take precedence over any other duty.
- B. <u>Prudence</u>: CRPTF's IAC, Treasurer, staff and advisors are charged with the fiduciary duty to exercise the care, skill, prudence and diligence appropriate to the task.



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- C. <u>Competitive Return</u>: To comply with duties of loyalty and prudence, all investments and services must be made and managed in a manner that produces a competitive risk-adjusted return.
- D. <u>Competitive Bidding</u>: Contractors and their subcontractors for construction, maintenance, and services shall be selected through a competitive bidding and selection process. The purpose of this provision is to encourage fair competition and to actively seek bids from all qualified sources within an area, particularly those identified as Responsible Contractors. Advisors and their subcontractors shall create a bidding process that includes notification and invitations to bid, distributed to a broad spectrum of potential bidders, particularly those identified as Responsible Contractors. The review of the bids shall include consideration of loyalty, prudence, and competitive risk-adjusted returns (factors to be considered include experience, reputation for honesty, integrity, timeliness, dependability, fees, safety record, and the adherence to the Responsible Contracting Policy.)
- E. <u>Local, State and National Laws</u>: All advisors, property managers, contractors, and their subcontractors shall observe all local, state, and national laws (including, by way of illustration, those pertaining to insurance, withholding taxes, minimum wage, labor relations, health, and occupational safety).

IV. SELECTION PREFERENCE OF A RESPONSIBLE CONTRACTOR

If Initial Requirements A through D (see Section III. above) are satisfied, CRPTF expresses a strong preference that Responsible Contractors be hired.

V. TRANSITION, ENFORCEMENT, MONITORING, AND ADMINISTRATION

A. <u>Applicable Investments and Phasing</u>: This Policy shall apply to all applicable real estate advisors. The Policy shall not apply to investments such as hybrid debt, joint ventures, opportunity funds and other real estate investments where CRPTF does not have 100% ownership and/or full control of the investment. However, in those instances where CRPTF does not have 100% ownership and/or full control of the investment, staff will make reasonable attempts to encourage partners to comply with the spirit and practice of Responsible Contracting. In addition, reasonable efforts will be made to include fund managers that have adopted responsible contractor policies and to seek out investment opportunities that have responsible contractor policies in place for investment consideration.



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- B. <u>Notification</u>: CRPTF shall provide all applicable current and prospective real estate advisors with a copy of this Policy, including investments where CRPTF does not have 100% ownership and/or full control of the investment.
- C. <u>Solicitation Documents</u>: All requests for proposal and invitations to bid covered by this Policy shall include the terms of this Policy. Responses by bidders shall include information to assist the staff in evaluating a bid.
- D. <u>Contracts and Renewals</u>: All contracts entered into after the effective date of this Policy and pertaining to applicable real estate investments, including renewals of such contracts, shall include the terms of this Policy.
- E. <u>Responsibilities</u>: The responsibilities of CRPTF's staff, advisors, property managers, contractors, and unions are defined as follows:
 - 1. <u>Staff</u>: CRPTF staff shall have the following responsibilities:
 - a. Review the advisors' annual certification statement regarding compliance with the Policy.
 - b. Develop and maintain contact lists for all CRPTF's properties and provide a copy to inquiring parties.
 - c. Insert appropriate contract language where applicable.
 - d. In those instances where CRPTF does not have 100% ownership and/or full control of an investment, make reasonable attempts to encourage partners to comply with the spirit and practice of Responsible Contracting.
 - 2. <u>Advisors</u>: Advisors' responsibilities shall include:
 - a. Communicate the Policy to all property managers.
 - b. Review a contract listing for each property prepared by each property manager.
 - Maintain a simplified bid summary for each applicable contract. The summary should include identifying contract, successful bidder, and bidder's status as Responsible Contractor.
 - d. Maintain an annual report in their home office, describing their own efforts as well as those by property managers and their subcontractors.
 - e. Monitor and enforce the Policy including investigation of potential violations.



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- f. Annually, the signatory to the CRPTF contract will file a certification statement that their firm complied with the Responsible Contractor Policy for the preceding year and upon request will provide written substantiation of such compliance. This provision will be subject to periodic audits.
- 3. <u>Property Managers</u>: Property managers will have responsibility for the following:
 - a. Communicate in bid documents the Responsible Contractor Program Policy to contractors seeking to secure construction or building service contracts.
 - b. Communicate the Policy to any interested party.
 - c. Ensure there is a competitive bidding process that is inclusive of potentially eligible Responsible Contractors.
 - d. Require bidders to provide to property manager a Responsible Contractor self-certification on a form approved by CRPTF.
 - e. Prepare and send to advisors a contract listing for applicable service contracts for each property under management. The building trades and service trades and other potential bidders will have access to this list.
 - f. Provide advisors with a simplified bid summary for each contract.
 - g. Provide property level annual report information to advisor.
 - h. Maintain documentation for successful bidders.
 - i. Seek from trade unions/service unions input in the development of Responsible Contractor lists.
 - j. Maintain list of any interested Responsible Contractors (names, addresses and telephone numbers).
- 4. <u>Contractors</u>: Contractors will have the responsibility for the following:
 - a. Submit to property manager a Responsible Contractor selfcertification on a form approved by CRPTF.
 - b. Communicate to subcontractors the Responsible Contractor Program Policy.



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- c. Provide to property manager Responsible Contractor documentation.
- 5. <u>Unions</u>: Trade unions/service unions shall be asked to perform the following tasks:
 - a. Deliver to the property manager or advisor lists of names and phone numbers of Responsible Contractors.
 - b. Refer interested and qualified Responsible Contractors to the property manager.
 - c. Continually monitor the local labor markets to update the lists.
 - d. Provide technical input as appropriate.
- F. Outreach: CRPTF's staff will develop and maintain a list of all CRPTF 100% owned and/or fully controlled properties. The list will include the property name, address, advisor and property manager, and phone number of the property manager and real estate advisors. The CRPTF's staff will provide this list to anyone who requests a copy. Actual contract expiration inquiries will be referred to the property level. Property managers shall provide solicitation documents to any potential contractor who has, in writing, expressed an interest in bidding for the relevant contract.
- G. <u>Minimum Contract Size</u>: The Policy shall absolutely apply to all contracts of a minimum size of \$25,000, individually or annually as applicable. Minimum contract size refers to the total project value of the work being contracted for and not to any disaggregation by trade or task. For example, a \$25,000 contract to paint two buildings in a single office complex would not be treated as two \$12,500 contracts, each less than the minimum contract size. Disaggregation designed to evade the requirements of the Policy is not permitted.
- H. <u>Applicable Expenditures Categories</u>: The Policy shall apply to tenant improvements, capital expenditures, and operational service contracts (such as cleaning).
- I. <u>Fair Wage, Fair Benefits, Training</u>: The Policy avoids a narrow definition of "fair wage", "fair benefits", and "training" that might not be practical in all markets. Furthermore, the Policy does not require a "prevailing wage", as defined by government surveys. Instead, the Policy looks to local practices with regard to type of trade and type of project. The Policy recognizes that practices and labor market conditions vary across the country and that flexibility in its implementation is very important.



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In determining "fair wages" and "fair benefits" with regard to a specific contract in a specific market, items that may be considered include local wage practices, state laws, prevailing wages, labor market conditions, and other items.

In place of a prevailing wage standard, the Policy requires a broad outreach and competitive bidding program, as described in Section III.D, and V.F and J. This program is premised upon the availability of a list of Responsible Contractors in every market in which CRPTF directly owns a property. While advisors and their property managers and contractors are responsible for gathering and analyzing information relevant to identifying and hiring a Responsible Contractor, compilation of this list does not depend solely on the advisors, property managers, or contractor. This Policy instead invites the various local trades to suggest contractors, which in their view qualify as Responsible Contractors. Sources of information include local building and service trade councils, builders association, and governments.

J. <u>Competitive Bidding</u>: Property managers and contractors should give notice for applicable bids in local trade publications, bulletins, IAC's and union building trades councils. Property managers should seek input from building trades councils to develop lists of Responsible Contractors for inclusion in the bidding process.

Property managers may choose from the list of Responsible Contractors a reasonable number of contractors to be invited to bid. Given the time and expense required to solicit and evaluate bids, it is not essential that advisors, property managers, and contractors invite all potential bidders.

The property manager must ensure that there is a competitive bidding process, which is inclusive of potentially eligible Responsible Contractors. Inclusion is not necessarily assured by large numbers of bidders. Care must be taken that bidders include potentially eligible Responsible Contractors.

Although the Policy does not require hiring union workers, the trade unions will be invited to (1) deliver to the property manager or advisor lists of names and phone numbers of Responsible Contractors including those Responsible Contractors who have expressed any interest in bidding, and (2) continually monitor the local markets to update the lists, Property managers shall maintain these lists supplied by the trade unions.

K. <u>Neutrality</u>: CRPTF recognizes the rights of employees to representation, and supports and strongly encourages a position of neutrality, in the event there is a legitimate attempt by a labor organization to organize workers





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employed in the construction, maintenance, operation, and services at a CRPTF owned property.

Resolution of any inter-jurisdictional trade disputes will be the responsibility of the trades and the various state and national building trades councils. This Policy does not call for any involvement by the advisors, property managers, or contractors in inter-jurisdictional trade disputes.

L. <u>Enforcement</u>: If Staff becomes aware of non-compliance, this Plan will place a non-complying advisor or property manager on a probation watch list. If the advisor or property manager does not modify this pattern of conduct even after discussions with CRPTF's staff, the Plan will consider this pattern of conduct along with other information when it reviews the advisor or property manager contract for possible renewal. The key indicator is a pattern of conduct that is inconsistent with the provisions of the Policy.



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EXHIBIT 2

STATE OF CONNECTICUT RETIREMENT PLANS & TRUST FUNDS (CRPTF) INVESTMENT SELECTION PROCESS -REAL ESTATE FUND

Part 1: For Investments <u>not</u> subject to RFI, RFP/or RFQ INVESTMENT SELECTION PROCEDURES

Step	Time Frame	Process Step	Consultant/Other Involvement	Staff Involvement	Executive Office Involvement	IAC Involvement
1.	In process.	Guidelines.	Consultant provides input/advice on development of appropriate Asset Class Guidelines-Real Estate Fund (the "Guidelines"). Along with the "Real Estate Fund Due Diligence Process", these Guidelines detail CRPTF's real estate strategy and procedures.	Staff develops Guidelines, based on consultant's input, taking into account CRPTF's legal constraints and fiduciary responsibilities.	Treasurer will review, modify, and ultimately adopt Guidelines for presentation to IAC. The Guidelines will be presented to the IAC as a draft and again in adopted form.	IAC reviews the Guidelines, offers comment and votes on whether to accept the Treasurer's adopted Guidelines.
2.	Pending.	Log.	New Real Estate Fund offerings (private placement memoranda, or "PPM's") are sent to consultant for review.	Any PPM's received directly by Staff will be forwarded to outside consultant for review.	Any PPM's received directly by Executive Office may be referred to Staff, who will convey them to the consultant.	Any PPM's or inquiries received by IAC members will be referred to Staff, who will convey them to the consultant.
3.	Pending.	Review.	Periodically, consultant prepares a "deal log" of all offerings received.	Deal log is received and reviewed for offerings from existing CRPTF general partners ("GP")	A copy of the deal log is sent to the Treasurer.	None.
4.	Pending.	Screen.	For each PPM from an existing GP and for each PPM of interest from a GP with which CRPTF does not have an existing relationship, consultant prepares a brief (approximately 4-5 page) analysis/assessment and recommendation on whether to proceed with full due diligence.	Analysis is reviewed and recommendation is either seconded or an alternate opinion is offered.	Consultant's written assessment and Staff comments are sent to Treasurer for either authorization to proceed with full due diligence or decision to pass.	None.
5.	After completion of Step 4. (All parts of this step may take 6- 8 weeks).	Due Diligence and Recommendation.	Consultant proceeds with full due diligence on the offering, as outlined in "Real Estate Due Diligence Process". This step includes a meeting with the prospective GP. Full report is sent to Staff. Staff makes recommendation on whether to invest and, if so, size of commitment.	Staff may participate in some portion of the due diligence process. Report is reviewed and cover memo with recommendation is prepared for Treasurer's review.	Treasurer reviews report and recommendations and may elect to meet with the GP. Treasurer then makes a decision to either (1) proceed with a recommendation to the IAC or (2) decline the opportunity. If Treasurer decides to proceed, then process step 6 is taken.	None.
6.	Prior to next IAC meeting.	Notice to IAC.	None.	None.	Treasurer notifies IAC of recommendation to invest.	Informational materials regarding the Treasurer's recommendation to invest are included in the IAC agenda package.



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PART III – COMBINED INVESTMENT FUNDS

Part 1: For Investments <u>not</u> subject to RFI, RFP/or RFQ INVESTMENT SELECTION PROCEDURES

Step	Time Frame	Process Step	Consultant/Other Involvement	Staff Involvement	Executive Office Involvement	IAC Involvement
7.	Next IAC meeting.	Presentation of recommendation/ candidate interview.	None.	None.	Treasurer presents the investment opportunity and may make formal recommendation to the IAC. Candidate makes presentation of the fund's merits to IAC.	IAC reviews the investment and evaluates the recommendation.
8.	Within 45 days of Step 7.	IAC review and comment.	None.	None.	None.	IAC may file a written review of the Treasurer's recommendation with the Office of the Treasurer, where it will be available for public inspection.
9.	After receipt of IAC review and comment.	Decision.	None.	None.	Treasurer makes determination on whether to invest in the fund. If decision is to proceed, then process step 10 is taken.	Informed.
10.	Next several weeks	Contract negotiation.	Treasurer's General Counsel, in concert with the Attorney General's office, directs the engagement of outside legal counsel. Consultant and Staff receive and review documentation. Consultant assists with negotiation of terms and conditions as needed.	Staff analyzes/reviews documentation, provides advice, participates in negotiation.	Treasurer reviews key deal issues and makes final decisions on all major deal points.	Informed
11.	After completion of Step 10.	Closing.	Closing date is set. Deal is signed and funded.	Documents are finalized.	Treasurer signs partnership agreement.	Informed.



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EXHIBIT 2

STATE OF CONNECTICUT RETIREMENT PLANS & TRUST FUNDS (CRPTF) INVESTMENT SELECTION PROCESS -REAL ESTATE FUND

Part 2: For Investments subject to RFI, RFP/or RFQ
INVESTMENT SELECTION PROCEDURES

Step	Time Frame	Process Step	Consultant/Other Involvement	Staff Involvement	Executive Office Involvement	IAC Involvement
1.	Subsequent to adoption of REF IPS.	Determine investment types for which RFI, RFP and RFQ are to be utilized.	Consultant to provide recommendations consistent with Guidelines.	Staff to provide review, analysis and advice to Treasurer.	Treasurer makes decision regarding the issuance of RFI, RFP or RFQ.	Treasurer announces these processes to IAC.
2.	Subsequent to Treasurer's decision to issue RFI/RFP/RFQ.	Determine the target range of investment dollars to be allocated to these investment types.	Consultant to provide recommendation and supporting analysis.	Staff to provide review, analysis and provide advice to Treasurer.	Treasurer makes final decision regarding the specific parameters of the proposed RFI, RFP or RFQ.	Treasurer announces these processes to IAC.
3.	Subsequent to decision regarding the specific parameters of the proposed RFI/RFP/RFQ.	Development of RFI/RFP/RFQ.	Consultant to recommend selection process and criteria as well as the requisite qualifications.	Staff to review the selection process and criteria as well as the requisite qualifications and provide advice to Treasurer.	Treasurer to determine selection process and criteria as well as the requisite qualifications and present to IAC for approval.	Consider recommendation of Treasurer regarding the selection process and criteria.
4.	Subsequent to the determination of the selection process and criteria as well as the requisite qualifications.	Issuance of RFI/RFP/RFQ.	Consultant to recommend content of RFI/RFP/RFQ.	Staff to review the content of RFI/RFP/RFQ, provide advice to Treasurer and place RFI/RFP/RFQ.	Treasurer reviews RFI/RFP/RFQ and makes changes at her discretion	Informed.
5.	45 days after RFI/RFP/RFQ issuance.	Response deadline/Receipt of responses.	Consultant to receive and categorize by type. Summary/updates provided to Staff.	Staff to review summaries.	None.	None.



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Part 2: For Investments subject to RFI, RFP/or RFQ INVESTMENT SELECTION PROCEDURES

Step	Time Frame	Process Step	Consultant/Other Involvement	Staff Involvement	Executive Office Involvement	IAC Involvement
6.	30 days after response deadline.	Screening of responses.	Consultant to report on responses and rankings of respondents.	Staff to review consultant reporting. Consultant reporting and Staff comments forwarded to Treasurer.	Treasurer to review consultant reporting and Staff comments.	None
7.	45 days after response deadline.	Selection of respondents for interview.	Consultant to review and comment on all qualifying respondents and recommend those to be interviewed.	Staff to review Consultant recommendations. Consultant recommendation and Staff comments forwarded to Treasurer.	Treasurer to review consultant reporting and Staff comments	None
8.	Between 60 and 90 days after response deadline.	Scheduling of respondent interviews.	Consultant to arrange and serve as lead participant in interviews.	Staff to assist with logistical support and participate in interviews.	Participate in interviews.	Participate in interviews.
9.	After completion of Step 8. (All parts of this step may take 6-8 weeks).	Due Diligence and recommendation.	Consultant proceeds with full due diligence, as outlined in "Real Estate Due Diligence Process." This step includes a meeting with the prospective GP/investment advisor candidate. Full report is sent to staff.	Staff may participate in some portion of the due diligence process. Report is reviewed and cover memo with recommendation on whether to invest, with whom and the size of the recommended commitment is prepared for Treasurer's review.	Treasurer reviews report and recommendation and may elect to meet with the prospective GP/investment advisor candidate. She then makes a decision to either (1) proceed with a recommendation of finalist(s) to the IAC or (2) declines to make such a recommendation. If she decides to proceed, then process step 10 is taken.	Informed.
10.	Prior to next IAC meeting.	Notice to IAC.	None.	None.	Treasurer notifies IAC of intent to present finalist(s).	Informational materials regarding the Treasurer's recommendation are included in the IAC agenda package.



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Part 2: For Investments subject to RFI, RFP/or RFQ INVESTMENT SELECTION PROCEDURES

Step	Time Frame	Process Step	Consultant/Other Involvement	Staff Involvement	Executive Office Involvement	IAC Involvement
11.	Next IAC meeting.	Presentation of finalist(s) interview.	None.	None.	Treasurer presents the finalist(s) and may make a formal recommendation to the IAC. Finalist(s) makes presentation to IAC.	IAC reviews the finalist(s) and evaluates the recommendation.
12.	Within 45 days of Step 11.	IAC review and comment.	None.	None.	None.	IAC may file a written review of the Treasurer's recommendation with the Office of the Treasurer, where it will be available for public inspection.
13.	After receipt of IAC review and comment.	Decision.	None.	None.	Treasurer makes determination on whether to invest with finalist(s). If decision is to proceed, then process step 14 is taken.	Informed.
14.	Next several weeks.	Contract negotiation.	Treasurer's General Counsel, in concert with the Attorney General's office, directs the engagement of outside legal counsel. Consultant and Staff receive and review documentation. Consultant assists with negotiation of terms and conditions as needed.	Staff analyzes/reviews documentation, provides advice, participates in negotiation.	Treasurer reviews key deal issues and makes final decisions on all major deal points.	Informed.
15.	After completion of Step 14.	Closing.	Closing date is set. Deal is signed and funded.	Documents are finalized.	Treasurer signs partnership agreement.	Informed.



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Article VII. Asset Class Guidelines-Private Investment Fund

Preamble

One of the concerns that led to the adoption of Public Act 00-43, which requires the formal adoption on an IPS was the decision-making process engaged in by former Treasurer Silvester in this particular asset class.

It is also the case that private equity investments have increasingly become an important part of the asset mix of large institutional investors. However, at the same time this is an asset class in which standards of accountability, industry contract terms and conditions, alignment of interests between general and limited partners, conflicts of interest standards, and the role of advisory boards are still evolving.

Unfortunately, the CRPTF has learned too many of these lessons because appropriate standards were not in place during the Silvester Administration. The criteria, guidelines and process for the conduct of due diligence in this section of the IPS represent Treasurer Denise L. Nappier's and the entire IAC's commitment to specific, clear and transparent procedures for investment decisions in the private equity asset class.

Fund Benchmark

The Private Investment Fund's ("PIF") Benchmark is Venture Economics All Private Equity.

Description of the Fund

The PIF investments will be in externally managed separate accounts or limited partnerships that focus on private equity investments. Private equity investments include the following: venture capital funds (focusing on start-ups, early and expansion stage); mezzanine funds (investing in equity and debt instruments of established companies; buy-out and acquisition funds (which make controlling and non-controlling investments in established companies); special situation funds; and specialized or special purpose fund of funds focusing on, for example, venture capital partnerships too small to be otherwise appropriate for PIF.

All investments in private equity partnerships shall adhere to standards of fiduciary obligation to the beneficiaries of the CRPTF, and shall be considered in the context of the relevant risk/reward factors of this asset class and consistent with the statutory requirements for consideration of investments by the Treasurer in accordance with Section 3-13d(a) of the Connecticut General Statutes. In the event the preconditions described in Section 3-13d of the Connecticut General Statutes are met with respect to a "lame duck" period, the IAC shall assume the principal fiduciary authority of the Treasurer for investment decisions in the PIF until such time that a duly elected Treasurer is officially sworn into office.



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Investment Objectives

The role of PIF in the long-range asset allocation strategy is to earn returns in excess of the public equity markets through investments in private companies. PIF is expected to earn total returns in excess of the inflation rate and reduce the impact of market volatility by diversifying the total asset base. The PIF provides diversification benefits to the CRPTF portfolio, as this asset class has historically low correlation to other asset classes, resulting in lower volatility of the total portfolio.

The primary objective of the PIF is to invest in PIF which offer the potential of generating annual returns, over a protracted period, which are five percentage points above the Standard & Poor 500 ten-year rolling average.

Private equity investments often do not report a positive return until the third through fifth year of operation; therefore, monitoring of new separate accounts or limited partnerships will initially be limited to how funds are committed. However, by the end of the fifth year each separate account or limited partnership is expected to be profitable and by the end of the tenth year the annualized rate of return of each separate account or limited partnership is expected to exceed the Standard & Poor 500 Index rate of return by five percentage points for the same period of time.

Fund Structure 10

Given the long-term investment objectives of the fund, the Treasurer's philosophy is to 1) manage risks to acceptable levels, 2) allocate risks where there is the greatest opportunity for enhanced return relative to a passive implementation and 3) avoid concentrated levels of risk to the extent possible. In accordance with this philosophy, the table below outlines the policy target weightings (to be achieved over time) with regard to the variety of private equity funds:

	Policy	Lower	Upper
	Target %	Range %	Range %
Buyout	30	25	40
Venture Capital	30	25	40
Special Situation	20	5	30
Fund of Funds	10	0	15
Mezzanine	5	0	10
International ⁸	5	0	10

The volatility of the rate of return from a single investment in an underlying portfolio company is expected to be greater than that of publicly traded securities. However, the development of a portfolio of 40 to 50 private equity partnerships that comprises 500 to

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 $^{^{10}}$ Including up to 3% for partnerships targeting under-served geographical areas and populations, with a focus on Connecticut.



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700 portfolio companies should have the effect of reducing the overall volatility of the PIF over time. Furthermore, the perpetual nature of the PIF makes this risk acceptable. Diversification among the various types of private equity opportunities as well as by sector, geographically and across time (vintage year), further lessens the risk associated with a single investment. Lastly, the inclusion of this asset class, which has historically shown a low co-variance with public market returns, broadens the diversification of the CRPTF's total portfolio and should reduce the over all risk profile.

The level of the PIF's commitment is limited to:

- No more than 10% of the CRPTF's total private equity program should be invested in any one fund; and,
- The CRPTF's commitment should be no more than 20% of the total amount committed to a single fund, provided that in the case of an investment with a partnership targeting under served geographical areas and populations with a focus on Connecticut, this restriction may be specifically waived.

Investment Guidelines

All investments will be managed as approved by the Treasurer consistent with the objectives and policies of the CRPTF and subject to the provisions of the CRPTF, the contractual arrangements governing the relationship between the CRPTF and its investment managers, and the investment guidelines outlined below.

The managers' discretion regarding the selection of investments shall be limited by the Treasurer's exercise of her duty to consider the consequences of such discretion in accordance with state laws and as may be addressed in the IPS. Within that context, the Treasurer recognizes that private equity is an intensively managed asset class; therefore, investments will be made within the framework of the following process:

- Development of strategic asset allocation targets for private equity.
- Development of criteria and procedures to be utilized for the selection of new private equity partnership commitments.
- Development of the performance measurement standards for private equity.
- Monitoring and evaluation of fund managers' performance on an on-going basis.
- Screening of potential private equity partnerships and reporting to the Treasurer.
- Conducting due diligence as directed by the Treasurer.
- Review by the IAC of any proposal to enter into a contract.
- Reviewing of partnership terms and conditions with recommendations for CRPTF final negotiations.
- Ensuring that any contract entered into includes language to establish an alignment of interest between the general partner and the CRPTF as a limited partner.
- Management of securities distributions to achieve as close to the distribution price as possible within a reasonable period of time.



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Eligible Investments

The following private equity strategies and investment types will be considered eligible for CRPTF's portfolio:

- Venture Capital Early Stage: Seed or start-up equity investments in private companies.
- Venture Capital Later Stage: Investments in more mature companies to provide funding for growth and expansion prior to IPO or acquisition.
- Venture Capital Multi-Stage: Partnerships that employ a balanced strategy.
- Mezzanine Investments in debt or debt with equity instruments of established companies.
- Buyouts Partnerships that provide funding to acquire majority or controlling interests in a business or product lines from either a public or a private company.
- Special Situations Partnerships with investment strategies that have merit, but where specific opportunities do not justify a separate long-term strategic allocation. Specifically, Special Situations shall include, but not be limited to, distressed debt, turnaround funds, partnerships whose underlying characteristics bridge both buyouts and venture capital, and investments intended to provide capital to under served geographical areas and access to capital for small businesses, particularly those businesses owned by women and minorities.
- Fund of Funds Investments in partnerships, which, due to size, strategy or other factors, are not appropriate direct investments for PIF. Specifically, Funds of Funds shall include, but not be limited to, investments intended to provide capital to under served geographical areas and access to capital for small businesses, particularly those businesses owned by women and minorities.

Management of the Fund

The Treasurer, in consultation with the IAC, shall decide on the selection of advisors for PIF. In the case of new managed account or partnership relationships, the IAC will have up to a 45-day period following presentation of the investment opportunity in which to file a written review of the Treasurer's recommendation. In the case of subsequent partnerships being raised by groups with which CRPTF has an existing relationship, the 45-day period of review and comment also applies. However, in either case the review period may be reduced, by agreement of the IAC, to meet a partnership closing. In all cases, while the IAC's response will be given full consideration, the ultimate decision to invest, or not, resides with the Treasurer. The Treasurer and the IAC shall also review at least quarterly the activity and financial condition of PIF.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Diversification

The PIF portfolio will be diversified with respect to time of investment commitment, geography, industry, strategy and stage focus. The private equity industry goes through cycles much like all the other investment asset classes. Given the illiquid nature of private equity investments, attempting to "time the market" is not a realistic alternative. Most sophisticated investors dollar cost average into the market with new commitments on a steady, annual basis.

The remaining diversification factors – strategy, geography, industry and stage – also provide hedges within the private equity marketplace to take advantage of timely opportunities and to dampen any negative effects of trends and natural cycles. Venture capital and buyouts, and the various components of special situations, all have independent market cycles, as do industries and geographic appeal. Appropriate diversification works to dampen the impact of any one of these factors on the overall program.

To provide adequate diversification in geography, stage and industry, CRPTF and its Advisor have recommended the following guidelines for the private equity portfolio.

Geographical Diversification

One measure of diversification is by geographical location of the underlying portfolio companies. Over the long term, CRPTF's PIF portfolio should seek portfolio diversification with regard to major regional areas both domestically (e.g., West Coast, Southwest, Midwest, Southeast, Mid-Atlantic, Northeast) and internationally. However, in certain situations, a geographically targeted fund or fund of funds may be appropriate for the portfolio.

Allocation to international private equity investments should be considered within the context of the total portfolio's international allocation and should be limited to 15% or less of the PIF.

Industry Sector Diversification

CRPTF's PIF portfolio will also seek to diversify by industry sector. The majority of the selected partnerships will have an opportunistic and/or diversified industry focus, since the approach has historically been the most successful. However, with the continually increasing technological sophistication in today's more competitive business environment, some specialized funds focusing on specific industries may be appropriate.

Stage Sector Diversification

CRPTF's PIF should be well diversified by stage, with a good balance of early stage (seed + start up + early stage), expansion and buyouts/acquisitions of established businesses.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Timing Diversification

Commitment to partnerships will be staged over time. This policy will have the effect of dollar cost averaging Connecticut's portfolio over business cycles and will help insulate the portfolio from event risk.

In summary, these diversification guidelines will provide the maximum return and safety of principal for the private equity portfolio over time.

Guidelines for the selection of managers

New Portfolio Investments

All private equity investments and the method by which they are sourced and added to the CRPTF portfolio shall be in compliance with Connecticut State laws and statutes. Additionally, all new investments to PIF will be appropriately documented and such documentation shall meet the standards set by the Treasurer.

Partnership selection shall entail a comprehensive, thorough process of due diligence and investigation of the critical factors on which an investment decision is to be based, including quantitative and qualitative analysis of the general partner, its professionals and their ability to successfully implement their stated investment strategy within the context of current and prospective market environments. The partnership's relative investment worthiness will be assessed within this context. To the extent necessary and feasible a site visit will be conducted as part of this process.

CRPTF seeks to prudently invest in partnerships with the following characteristics:

- General partners with experience as principals relevant to their investment strategy, and evidence of stability among the general partnership team;
- An attractive track record showing the following:
 - > Ability to develop a successful portfolio,
 - An acceptable rate of return on investment for investors;
 - For established general partnerships, track record of top two quartile performance when compared to their peer group by *Venture Economics*;
 - ➤ Ability to realize profits with successful exits;
 - ➤ Well defined and realistic strategies for the future;
 - Experience investing institutional funds;
 - Evidence of good communications and strong relationships with prior investors.
 - ➤ Long-term dedication to the partnership;
 - > Special skills or industry expertise; and
 - Alignment of interests between the general partners and the limited partners (for example, as may demonstrated by CRPTF's representation on advisory boards, % equity participation of the general partner, conflict of interest provisions, coinvesting criteria, limitations on the percentage of capital of a fund that can be committed to a single investment, etc.)



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Additional Venture Capital Partnership Selection Criteria:

- Proven value-added from the general partners;
- Proven ability to find and participate in successful investments; and
- Strong relationships with other investors and entrepreneurs.

Additional Buyout and Special Situations Selection Criteria:

- Strong pricing disciplines;
- Ability to find and structure attractive investments;
- Ability to attract appropriate senior financing; and
- Ability to add value with revitalizations or acquisitions.

Additional criteria for the consideration of first time and/or "spin-out" funds:

- Professional experience relevant to their investment strategy;
- Ability to find and participate in successful investments;
- Well-defined and realistic strategies for the future and a clearly defined mission for the fund;
- Background check of the general partners with colleagues, peers and subordinates, the public record and any other source that might provide relevant information in the investment decision-making process; and
- Special skills or industry expertise.

Contracts with General Partners

The CRPTF will seek to negotiate partnership agreements that ensure accountability, alignment of interests between the general partners and the limited partners, complete disclosure of all actions taken that affect or have the potential to affect the limited partners, language that ensures no conflicts of interests, provisions that allow the CRPTF to sell its limited partnership interest, a "no-fault divorce clause" and protections for the limited partners in the event of changes within the general partnership, the existence of an advisory board and language that describes how any conflicts would be handled, specific language on valuation standards for investments, provisions that limit the general partners ability to concentrate investments of the partnership in one company or enterprise, and the ability for the CRPTF to have co-investment rights in any underlying investment of the partnership.

Communications, Reporting, & Notification

• The PIF requires monthly reports containing data on activity, as well as various accounting reports. At the end of each quarter, the monthly report is also expected to contain comments on the portfolio's results and expectations, as well as various accounting reports. The Fund will seek transparency across all its partnerships to ensure uniform accounting and reporting.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

- Performance results, portfolio listings and valuations must be provided on a quarterly basis. Quarterly performance will be evaluated to test progress toward the attainment of longer-term targets.
- The fund will require annual independent audits of each partnership.



State of Connecticut Retirement Plans & Trust Funds PART III – COMBINED INVESTMENT FUNDS

Article VIII. Asset Class Guidelines-Cash Reserve Account

Note: The following guidelines were adopted May 13, 1998. As part of the Asset Allocation Plan approved by the IAC in August 1999 and reaffirmed in January 2001, a comprehensive review of this asset class is scheduled for calendar 2002.

Statement of Purpose

The Cash Reserve Account ("CRA") serves as a low cost and convenient cash management vehicle for the CRPTF and the various managers of the pension fund assets as well as a separate asset class of the pension fund.

Description of the Fund

CRA is a money market fund, which may be managed internally, investing primarily in highly liquid money market securities.

Performance Objectives

A yield in excess of the International Business Communications ("IBC") First Tier Institutions-Only Rated Money Fund Report Index is the basic performance objective of this fund. There is no preference for either current income or capital gains though, as with most money market funds, current income will constitute the bulk of the return. In addition, the CRA must have enough liquidity to fund all cash needs of participants and advisors. CRA shall maintain a market value close to cost.

Guidelines for Investment Advisors

- 1. Maturity Restrictions are five year final for any single security and one year average life for the entire Fund. The next reset period of a variable rate security is used <u>only</u> for the calculation of the average life of the entire Fund.
- 2. Advisors shall adhere to the specific investment and administrative guidelines established for their portfolios. The management style of the portfolio shall not be changed without the written consent of the Treasurer.

Securities Qualifying for Investment

- 1. U. S. Government & Federal Agency securities.
- 2. Certificates of deposit of commercial banks in the United States whose short-term debt is rated at least A-1 by Standard & Poor's or TBW-1 (by Thompson Bank Watch) and whose long-term debt is rated at least A- by Standard & Poor's and C by Thompson Bank Watch.
- 3. Certificates of deposit of U.S. Branches of foreign banks with long-term debt ratings of at least A-1 by Standard & Poor's or B/C by Thompson Bank Watch.
- 4. Bankers' Acceptances of those banks meeting the criteria in 2 and 3 above.
- 5. Repurchase Agreements with primary dealers as designated by the Federal Reserve or Connecticut banks, which meet the criteria of item 2.



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- 6. Commercial paper of companies that meet at least one of the following criteria:
 - a. short-term debt rated either: Moody's P-1, S&P A-1
 - b. long-term debt rated not less than: Moody's Aa3, S&P AA-
 - c. Commercial paper in foreign Financial Institutions denominated in US dollars rated not less than B/C by Keefe Bruyette.
- 7. Asset backed or insured commercial paper rated either: Moody's P-1, S&P A-1, or Duff & Phelps D-1
- 8. The purchase of foreign securities payable in foreign currencies is prohibited.
- 9. Short corporate bonds including asset backed securities rated not less than (by at least two): Moody's Aa2, S&P AA, Duff & Phelps AA.