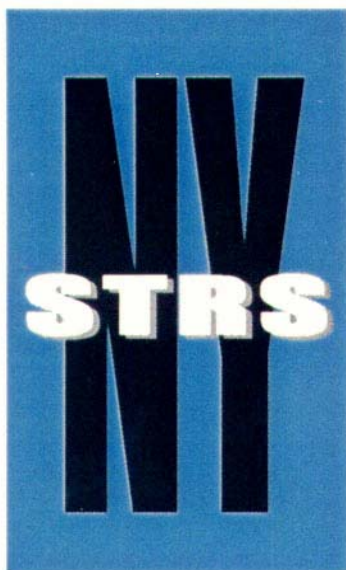


**NEW YORK STATE
TEACHERS' RETIREMENT SYSTEM**



**INVESTMENT
POLICY
MANUAL**

OCTOBER 2006

(Reflecting Changes Approved Through the July 2006 Board Meeting)



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

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Statement of Investment Policy

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Statement of Investment Policy

I. Introduction

The New York State Teachers' Retirement System ("System") exists solely to provide present and future retirement, disability and survivor benefits to members and their beneficiaries, as defined by the laws of New York, and to cover reasonable expenses incurred to provide such benefits.

The System was established in 1921 by an enactment of the New York State Legislature and is governed by Article 11 of the Education Law.

This Investment Policy Manual ("Manual") is consistent with the laws of New York. It complements the laws, documents, principles and standards that guide the management of the System. The Executive Director shall administer this Manual pursuant to the investment policies of the Retirement Board. This document is intended to be binding upon all persons with authority over the System's assets, including external investment managers/advisors, custodians, consultants, brokers/dealers, and staff.

The Manual is the end result of the System's careful and prudent study. The Manual includes the System's Statement of Investment Policy ("Policy") and sub-policies, which taken together present the Retirement Board's conclusions as to the most suitable combination of investments, within the legal requirements, which will satisfy the System's ongoing obligations for members and their beneficiaries.

II. Purpose of This Manual

The purpose of this Manual is to:

- A. Set forth the investment policies, objectives, and guidelines the Retirement Board judges to be appropriate, prudent, and in consideration of the System's needs, to comply with current laws, and to direct the System's assets.
- B. Establish criteria to evaluate the System's investment performance.
- C. Communicate investment policies, objectives, guidelines, and performance criteria to the staff, external investment managers/advisors, consultants, custodians, and all other interested parties.
- D. Serve as a review document to guide ongoing oversight of the System's investments for compliance with the laws of New York.
- E. Demonstrate the Retirement Board's fulfillment of its responsibilities to manage the investments of the System solely in the interest of members and their beneficiaries.
- F. Document the Retirement Board's fulfillment of its overall fiduciary responsibilities.

III. Responsible Parties and Their Duties

- A. The System was established by an act of the New York State Legislature. The Legislature may modify the System's structures through amendment of the laws from time to time. The laws also specify requirements for the System's investments.



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- B. The Retirement Board is a body of persons whose role is to oversee all aspects of the operation of the System. Members of the Retirement Board are fiduciaries and their responsibilities with respect to the System's assets include completing each of the duties below as a prudent expert:
1. Set the policies, objectives, and guidelines for investment of the System's assets and evaluate compliance with investment policy and the laws of New York.
 2. Study thoroughly each issue affecting the System's investments to make educated and prudent decisions.
 3. Select qualified professionals to assist in implementing the investment policies.
 4. Evaluate total fund performance as well as all of its distinct components.
 5. Oversee procedures to manage risk for all aspects of the System.
- C. Pursuant to § 136.6(c) of Title 11 of the Codes, Rules and Regulations of the State of New York (the Regulations of the New York State Insurance Department), the Retirement Board, may, consistently with its fiduciary duties, delegate its powers of investment to a committee or agent within well-defined guidelines, subject to review by the Retirement Board.
- D. The System's staff are employees of the System. Their duties are to administer the System consistent with the policies and decisions of the Retirement Board and the provisions of the laws of New York, and to provide input for the Retirement Board so issues can be studied fully prior to any Retirement Board decision. In addition, staff are responsible for interacting with the Legislature, serving the needs of the System's members, and managing the System's relationships with outside professionals and other constituencies.

The System's management is responsible for the accuracy of published information, as well as for the maintenance of appropriate internal controls needed to safeguard assets and facilitate the efficient operation of the System.

The responsibilities of executives or managers that are directly involved in the investment process are briefly described below:

1. The Executive Director, or his designee, shall allocate the available funds to the various investment classes and coordinate the activities of the Securities and Real Estate Investment Officers.
2. The Securities Investment Officer, with the assistance of investment consultants as the Securities Officer deems necessary, shall oversee the selection of external investment managers and manage the investment of funds in equities, fixed income instruments and other investment vehicles as required by the Executive Director.
3. The Real Estate Investment Officer, with the assistance of investment consultants as the Real Estate Investment Officer deems necessary, shall manage the investment of funds in real estate, mortgages and other investment vehicles as required by the Executive Director.
4. The Manager of the Finance Department shall maintain the official general ledger of the System, which is supported by various investment sub-ledgers, and provide the System's financial statements.



Statement of Investment Policy

5. The Manager of the Investment Information Department shall maintain the official investment accounting sub-ledgers and provide investment related reports.
 6. The General Counsel shall provide legal advice regarding compliance with legal investment criteria and other legal issues and, together with the Investment and Real Estate Departments, review and approve investment contracts.
 7. The Actuary shall, in conjunction with investment performance consultants, monitor investment performance and the performance of the external investment managers. The Actuary will assist in the selection of external investment managers.
 8. The Manager of Internal Audit shall provide broad audit coverage of investment areas to provide management with information about the adequacy and effectiveness of internal controls and the quality of performance.
- E. The Investment and Real Estate Advisory Committees are made up of industry professionals with appropriate experience and background, appointed by the Retirement Board, to provide advice to the Board on investment matters.
- F. An External Investment Manager/Advisor is a corporation, bank, insurance company or other entity or firm retained to manage a portion of the System's assets under specified guidelines. An external manager may be engaged to invest in funds directly or may be engaged to hire other external investment managers operating as a fund-of-funds. Securities investment managers must be registered as Investment Advisors under the Investment Advisors Act of 1940, unless exempted from registration (e.g. banks, insurance companies and affiliates). External investment managers/advisors may have discretion and authority within the parameters established by the Retirement Board and staff for determining and implementing investment strategy.
- G. Broker/Dealers are firms that act as intermediaries in the purchase or sale of securities for internally or externally managed portfolios. As brokers, such firms facilitate trades by bringing together buyers and sellers of securities (in an agency capacity). As dealers, they act as the actual buyer or seller on the other side of the trade (in a principal capacity).
- H. The Statutory Custodian is head of the Division of the Treasury in the Department of Taxation and Finance and is designated by law as the Custodian of the System's assets except for loans to System members. All disbursements of System funds must be processed by the Statutory Custodian.
- I. The Custodial Bank is responsible for the safekeeping of securities and the accurate and timely reporting of the securities to the System in coordination with the Statutory Custodian.
- J. Consultants are persons or firms who are retained by the Retirement Board to provide professional advice to the System. In particular, the Retirement Board retains investment consultants for the following purposes:
1. Make recommendations regarding changes in the current asset allocation policy, including recommending asset allocation targets, ranges, benchmarks and additional investment classes.
 2. Assist in performing investment manager searches and recommend potential firms.
 3. Provide a qualitative and quantitative review of the performance of the external managers, and make retention recommendations.
 4. Provide educational assistance to the Retirement Board regarding investment matters and fiduciary duties.



IV. Controlling Statutes and Regulations

The Banking Law (§235), the Education Law (Article 11, §508), the Retirement and Social Security Law (Article 4-A, §§176 - 179) and such other laws which from time to time may be enacted, authorize or control investments by public retirement systems. Under such laws, the System may invest in issues of the United States Treasury and instrumentalities of the United States Government; high-grade corporate bonds; mortgage-backed securities; municipal securities of New York State and its political subdivisions or authorities; bonds of the Commonwealth of Canada and its political subdivisions or authorities; preferred shares; common stocks; deposits in savings banks; equity real estate; mortgage loans; foreign equities and other permitted investments itemized in the laws of New York. These parameters, among other things, may specify limitations on the percentage of assets which may be invested by the System in various classes of assets.

In recent years, rules and policies were modified to enable writing of covered call options, venture capital investing, securities lending, and purchase of securities not registered under the Securities Act of 1933, provided such transactions are consistent with fiduciary responsibilities and requirements of the laws under which the System operates. Furthermore, the policies permit investment in limited partnerships, joint ventures, real estate investment trusts, real estate operating companies, group trusts, common trust funds, collective investment funds, investment companies (as defined under the Investment Company Act of 1940), life insurance separate accounts, and other vehicles established primarily for the purpose of investing in capital assets.

Under §177(9) of the Retirement and Social Security Law and subject to guidelines adopted by the Retirement Board, up to 25% of assets may be invested in types of assets not otherwise specifically authorized, provided the Retirement Board is satisfied such investments are in accordance with the "prudent expert" rule. Additionally, Education Law §508(18) permits the Retirement Board to delegate its authority to invest to external investment managers/advisors pursuant to this Manual.

All assets will be valued at market to determine compliance with legal limits. Descriptions of the legal limits applied to each asset class are included in the sub-policy for those investments.

Pursuant to §508(3) of the Education Law, no member or employee of the Retirement Board may have any interest, direct or indirect, in the gains or profits of the System's investment portfolio. Nor may any such person receive, directly or indirectly, any pay or emolument (except, of course, for his/her normal salary) for any services rendered in connection with any of the System's investments.

Additionally, pursuant to §136.6 of the Codes, Rules and Regulations of the State of New York, the Retirement Board, as "administrative head" of the System, is a fiduciary. The Board shall act solely in the interests of the members and beneficiaries of the System and shall perform its responsibilities in a manner consistent with those of a reasonably prudent person exercising care, skill and caution.

The Retirement Board and staff are subject to a Code of Ethics adopted by the System. Management staff, professional positions in the Real Estate and Investment Departments, Associate Accountants in the Procurement or Investment sections, and the Retirement Board are required to submit an annual disclosure statement.

**V. Objectives**

All investment transactions undertaken on behalf of the System will be for the sole benefit of the members and their beneficiaries, for the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses.

The System's long-term objective is to earn an average rate of return greater than the rate of return of representative indices for individual asset classes but no less than the actuarial assumption rate (currently 8.0% per annum). The indices are identified in Section VI. Asset Allocation Policy. Rates of return are net of fees and other expenses. Volatility of returns, or risk, for the System, as measured by standard deviation of investment returns, should be commensurate with the level of returns expected to be achieved over a long period of time.

VI. Asset Allocation Policy

Asset allocation is the definition of allowable asset classes and the distribution of assets among those asset classes. As fiduciaries, the Retirement Board has a duty to diversify the investments of the fund to reduce risk, while maximizing the investment return. Approximately 90% of the long-term total return of a fund is expected to be attributable to the asset allocation decision. The remaining 10% is expected to be attributable to either selection of individual assets or timing. Accordingly, asset allocation is one of the most important fiduciary decisions.

The asset allocation chart, which follows, contains guideline percentages, at market value, of the System's assets to be invested in various asset classes. The target allocations may not be attained at any specific point in time as actual asset allocation will be dictated by current and anticipated market conditions as well as independent actions of the Retirement Board.

**Statement of Investment Policy****Asset Allocation Targets**

<u>Asset Class</u>	<u>Representative Index</u> ¹	<u>Allowable Range</u>	<u>Target Percentage</u>
Domestic Equity	S&P Super Composite 1500	41% - 61%	51%
International Equity	MSCI EAFE Stock Index	6% - 14%	10%
Domestic Fixed Income	Lehman Bros. Aggregate Bond Index	11% - 25%	18%
Real Estate	National Council of Real Estate Investment Fiduciaries Properties Index	5% - 11%	8%
Mortgages	U.S. Treasury Rate + Market Derived Spread ²	5% - 11%	8%
Alternative Investments	S&P 500 Stock Index (Plus 5%)	2% - 8%	5%
Short Term Investments (Cash Equivalents)	iMoneyNet™ Fund Averages / All Taxable	0% - 5%	0%
			<hr/> 100%

¹ Special benchmarks may be established for specialized products. For example, the benchmark for real estate investment trust managers is the Wilshire REIT Index and the NAREIT Equity Index, while the benchmark for the externally managed CMBS program is the Lehman Investment Grade CMBS Index.

² Mortgage interest rates are priced by adding a market-derived spread to the U.S. Treasury rate for a maturity similar to the proposed mortgage. This mortgage interest rate is then compared to portfolio-wide return requirements as established by the System from time to time for suitability.

**Statement of Investment Policy**

- A. **Domestic Equity:** Within the domestic equity asset class, up to 100% can be invested in passively managed funds and up to 20% can be actively managed by external managers. Of the passively managed investment target, 80% is targeted to the S&P 1500 Stock Index and 20% is targeted to be managed against styled indices or tilts. The passively managed investments are internally managed and the actively managed investments are externally managed.
- B. **International Equity:** Within the international equity asset class, 35% is targeted to passive/enhanced investments, 30% is targeted to core active investments and 35% is targeted to benchmark agnostic investments. Passive managers passively manage country, currency and security selection to simulate the returns and characteristics of the MSCI EAFE Stock Index. The objective of the enhanced managers is to enhance the return 50-100 basis points (net) above the MSCI EAFE Stock Index. Active core managers actively manage country, currency and security selection. Benchmark agnostic managers actively manage country, currency and security selection, much like that of a core manager. However, the variations from the benchmark may be wider with a benchmark agnostic manager, thus creating the potential for greater returns than a core active manager with greater volatility of returns.
- C. **Other Assets:** All other assets are actively managed.
- D. **Reporting:** A quarterly report showing the current asset allocation status within the major asset classes, the status of the sub-allocations, and a summary of the principal funding initiatives is submitted quarterly to the Retirement Board by the Actuarial Department.
- E. **Annual Review:** The Retirement Board annually reviews the asset allocation relative to recent and historical investment experience and considers new developments. This includes a review and revision, where appropriate, of the long-term capital market assumptions regarding expected investment returns, standard deviations, and correlations.
- F. **Cash Flow:** The Retirement Board is responsible for allocating cash flow to externally managed investments, while the Executive Director is responsible for allocating cash flow to internally managed investments.

VII. Use of Derivatives

Derivatives may only be used to modify risk/return characteristics of the portfolio, implement asset allocation changes in a cost-effective manner, or reduce transaction costs or taxes. Derivatives may not be used for speculation or leverage (borrowing).

- A. **Internally Managed Portfolios:** The use of derivatives is currently limited to the Covered Call Option Program. This program is used in the System's internally managed passive domestic equity portfolios. The purpose of this program is to modestly supplement System income by writing calls on securities intended for sale. See the Domestic Equity Securities subpolicy Appendix A for Covered Call Option Guidelines.
- B. **Externally Managed Portfolios:** The System's International Equity managers currently have authorization for a broader use of derivatives.

Contracts with separate account managers will identify the types of derivatives that may be used, consistent with this subpolicy and prudent discretion. Managers must notify the System of modifications in the types of derivatives used and obtain System approval of such modifications.

Investments in commingled funds are open to other investors; therefore, it is not possible for the System to insist that the managers of such funds abide by System policy regarding the use of



derivatives. The Securities Investment Officer will review a manager's use of derivatives on an ongoing basis to determine whether continued investment in a fund is prudent.

VIII. Use of Commingled Funds

External investment managers/advisors retained by the Retirement Board may invest System assets in commingled funds, provided:

- A. Such investments in commingled funds (including bank collective investment trusts) are consistent with the guidelines established herein.
- B. Assets held in commingled funds are permissible investments for the System.
- C. Notification is given to the System describing the commingled vehicles utilized.

IX. Guidelines for Custodians

Timely and accurate completion of custodial functions is necessary for effective investment management and accurate record keeping. The following are responsibilities of the custodian(s) for the segments of the System's assets for which each custodian is responsible:

- A. Provide complete custody and depository service for the designated accounts.
- B. Implement in a timely and effective manner the investment actions as directed by the staff and external investment manager(s)/advisors.
- C. Collect all income and principal and properly report on the periodic statements.
- D. Provide periodic statements of holdings including all transactions and daily activity reports for the System.
- E. Provide daily reporting on cash activity and balances.
- F. Provide assistance to the staff to complete such activities as the annual audit and transaction verification.
- G. Indemnify the System for any non-market losses of stocks and securities held on behalf of the System.

X. Other

A. Performance Measurement

The Retirement Board will review, at least semi-annually, the performance of the System's internally managed funds, and each external investment manager's/advisor's portfolio relative to the objectives and guidelines described herein. Such a review will include organizational and technical capabilities and quarterly performance analysis relative to the appropriate benchmark.

B. Review and Modification of Policy

The Executive Director shall administer this Manual pursuant to the investment policies of the Retirement Board, and shall review the Manual periodically to determine if modifications are necessary or desirable. Modifications shall be promptly communicated to all external investment managers/advisors and other responsible parties, as appropriate.

**XI. Glossary of Common Investment Types**

Investment in any particular instrument or security remains subject to applicable law and circumstances then prevailing. Notwithstanding, the most common investments are cited below:

- A. Alternative Investments are nontraditional investments, not covered by another investment class (e.g. private equity and venture capital).
- B. American Depositary Receipts (ADR's) are receipts for the shares of a foreign-based corporation, held in the vault of a U.S. bank and entitling the shareholder to all dividends and capital gains. These are traded on various U.S.-based exchanges and are available for hundreds of stocks from numerous countries.
- C. Commercial Mortgage Backed Securities are multi-class bonds backed by pools of commercial mortgages.
- D. Commercial Mortgage Lending investments are notes and bonds secured by a mortgage or deed of trust providing a first lien on real estate.
- E. Derivatives are financial instruments such as forwards, futures, options, or other instruments whose values are "derived" from another financial instrument.
- F. Domestic Equity Securities for System purposes typically consist of corporate common stock. These stocks must be registered on a national securities exchange or must be otherwise registered as provided in the Securities Exchange Act of 1934 as amended, with price quotations furnished through a nationwide automated quotations system approved by the National Association of Securities Dealers, Inc. (NASD). Domestic Equity Securities also include stock in corporate real estate investment trusts (REITs), which are traded on a national exchange and acquired by the Investment Department as part of an internally managed index fund or by one of the System's domestic equity managers.
- G. Domestic Fixed Income Securities are U.S. Treasury or Government agency obligations; equipment trust certificates; corporate, industrial, or utility bonds; U.S. dollar denominated Euro or Yankee bonds, including Canadian obligations payable in U.S. dollars; mortgage-backed securities; and pass-through certificates. For System purposes, domestic fixed income securities primarily consist of instruments with maturities in excess of 12 months at time of purchase.
- H. Emerging Market Equities are common or preferred corporate stocks and investment shares which are registered on recognized exchanges outside the U.S. Emerging market countries are the developing international countries which have a relatively low per capita Gross National Product. There is wide variety of economic, regulatory and market development among the emerging countries.
- I. Equity Real Estate Investments are any investments in real property, either made directly or through the use of pooled vehicles such as limited partnerships, open or closed-end commingled funds, REITs or REOCs acquired through the System's Real Estate Department.
- J. International Equity Securities are common or preferred corporate stocks and investment trust shares. Only stocks registered on recognized exchanges outside the U.S. are to be considered International Equity Securities.
- K. Real Estate Mezzanine Funds are investments in funds or partnerships whose portfolios consist of junior loans secured by real estate or partnership interests in real estate ownership.
- L. Repurchase Agreements are agreements between a seller and a buyer, whereby the seller agrees to repurchase the securities at an agreed upon price and, usually, at a stated time.

**Statement of Investment Policy**

- M. Securities Lending occurs when the System transfers a security to a borrower for cash or non-cash collateral pursuant to an agreement to return the collateral for an identical security in the future.
- N. Short Term Investments (Cash Equivalents) include, but are not limited to, interest bearing or discount instruments such as money market funds; U.S. Treasury Bills; corporate-issued commercial paper; bank-issued Certificates of Deposit; bankers' acceptances; and fully collateralized repurchase agreements. For System purposes, short-term investments consist primarily of instruments maturing in 12 months or less at time of purchase.

XII. Glossary of Indices Used by the Retirement System

- A. The iMoneyNet™ Fund Averages / All Taxable measures the total return of all major taxable money market funds and includes government, institutional and special purpose funds.
- B. The National Council of Real Estate Investment Fiduciaries Property Index (NPI) measures income and capital appreciation changes as well as the total return of the weighted individual existing properties tracked in the NPI database. The index is calculated on an unleveraged basis from the performance returns of properties that have been acquired on behalf of tax-exempt institutions and held in a fiduciary environment. **Property types include apartment, industrial, office, retail and hotel.**
- C. The Lehman Brothers Aggregate Bond Index measures the total return of publicly issued, nonconvertible, dollar-denominated debt of the U.S. Government or any agency thereof, corporate securities, mortgage pass-through securities, Yankees, commercial mortgage backed securities, and asset-backed securities. Index returns are reported at full market value weight. The index was created in 1986 with history built back to January 1976.
- D. The MSCI EAFE Stock Index (unhedged) measures the total return of securities listed on the world's principal stock exchanges, including those in Europe, Australia and New Zealand, Southeast Asia, and the Far East. The inception date was January 1, 1970.
- E. The S&P ADR Index measures the total return of eligible securities listed in non-U.S. regions which include Europe, Japan, Canada, Asia Pacific and Latin America. The index is market capitalization weighted and only includes securities that can be traded and settled in the U.S.
- F. The S&P SuperComposite 1500 Index measures the total return of 1500 actively traded U.S. securities. The index is a combination of the S&P 500, S&P Midcap 400, and the S&P Smallcap 600 indices. The index is capitalization weighted, and its members are U.S. companies.
- G. The Russell 1000 Index is made up of the highest ranking 1000 stocks by capitalization, of the Russell 3000 Index. These large capitalization stocks are further divided into Growth and Value components.
- H. S&P 500 Stock Index measures the total return of 500 large capitalization common stocks. The index tracks industrial, transportation, financial, and utility stocks and is capitalization-weighted.
- I. U.S. Treasury Rate measures the total return of negotiable debt obligations of the U.S. government, secured by its full faith and credit and issued at various schedules and maturities. For purposes of the System's commercial mortgage lending portfolio, mortgage interest rates are priced by adding a market-derived spread to the U.S. Treasury rate for a maturity similar to the proposed mortgage. This mortgage interest rate is then compared to portfolio-wide return requirements as established by the System from time to time for suitability.



XIII. Glossary of Acronyms and Other Terms

A. Acronyms:

1. AIMR: Association for Investment Management and Research (organizational name changed to CFA Institute effective May 9, 2004)
2. BL: Banking Law
3. EL: Education Law
4. ERISA: Employee Retirement Income Security Act of 1974
5. NASD: National Association of Securities Dealers
6. NYCRR: Codes, Rules and Regulations of the State of New York
7. REAC: Real Estate Advisory Committee
8. RFP: Request for Proposal
9. RSSL: Retirement and Social Security Law
10. SEC: Securities and Exchange Commission
11. STIF: Short Term Investment Fund

B. Brokerage Terms

1. Directed Brokerage: refers to an arrangement where a certain dollar amount or percentage of trades are directed to designated broker/dealers. Negotiated brokerage, external commission recapture, and soft dollar arrangements are all forms of directed brokerage.
 - a. Negotiated Brokerage: refers to trades that are charged a negotiated commission rate resulting in lower up-front trading costs.
 - b. External Commission Recapture: an arrangement between the System, broker(s), and external manager(s), whereby, the manager(s) agree to direct a portion of commissions paid to broker(s) designated by the System, who agree to refund a portion of the commissions they receive from trading directly to the System. Receipt of these refunds can improve overall System returns through reduced costs.
 - c. Soft Dollar Arrangements: brokers establish an account for the Plan sponsor or its managers and pay certain Plan expenses or buy research services for the Plan or its manager directly from the commission activity in this account. Allows the Plan or its manager access to services and lowers direct cash expense since the Plan or its manager does not actually pay the service providers directly.
2. Recapture Rate: percentage of each commission dollar in a recapture program which is returned to the System. For a 1.5:1 recapture rate, the percentage of commission returned to the System would be 67%.



Statement of Investment Policy

C. Covered Call Option Terms

1. Covered Call Option: A contract allowing, but not requiring, the option holder to buy from the System a given number of shares of stock at a given price on or before a specific date. Once an option is written by the System, the underlying securities will be placed in an escrow account to “cover” the transaction. As evident by this definition, a particular call option will be characterized by two features:
 - a. Underlying Security: The stock which the option holder may buy.
 - b. Contract: Each option allows the option holder to buy 100 shares of the underlying security.
2. Exercise Price: The price at which the stock can be purchased by the option holder at any time up to the option’s expiration date. Sometimes referred to as strike price.
3. Expiration Date: The last day an option can be exercised. Contracts are usually traded in three-, six-, or nine-month contracts and expire on the first Saturday after the third Friday of its expiration month.
4. Intrinsic Value: The amount by which the stock price exceeds the strike price.
5. Premium: Value of the option or the market price that a buyer of an option pays the writer for rights conveyed by the option. The writer is entitled to retain this amount whether or not the buyer exercises the option. The premium is composed of two values, the intrinsic value and the time value.
6. Time Value: The excess of the option premium over the intrinsic value.

D. Risk Types

1. Credit Risk: The risk of default of any party owing cash to the System as the result of a transaction. These parties may include, but are not limited to, the counterparty and the issuer. Counterparty credit risk is negligible to the System for transactions cleared on a delivery versus payment (DVP) basis.
2. Liquidity Risk: There are two types of liquidity risk: market liquidity risk and funding liquidity risk. Market liquidity risk is the risk of being unable to purchase or liquidate a security quickly enough (or in requisite quantities) at a fair price. Market liquidity risk differs from market risk. Market liquidity risk only reflects realized price changes, while market risk reflects both realized and unrealized price changes. Funding liquidity risk relates to the relative ease of the organization to meet its cash flow needs as they come due.
3. Market Risk: The risk of unexpected change in market price (amount or direction). Price changes in securities can result from movements in equity markets, interest rates, and currency exchange rates. Market risk incorporates both realized and unrealized price changes.
4. Operational Risk: The risk of inadequate controls against fraud, incorrect market valuation, failure to record or settle a deal, settlement with the wrong counterparty, failure to collect amounts due, failure of the computer system, or enforceability of contracts. The implications of operational risk include both financial loss and loss of reputation.
5. Geo-Political Risk: The risk of the occurrence of an unanticipated international and/or domestic incident such as war, assassination, terrorism or energy shock that adversely affects global and capital markets resulting in the re-pricing of securities.
6. Political Risk: The risk of nationalization or other unfavorable government action.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Broker Selection

THIS SECTION CONTAINS TWO POLICIES:

- Selection and Evaluation of Brokers Executing Transactions for Internally Managed Portfolios
- Directed Brokerage



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
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**Selection and Evaluation of Brokers
Executing Transactions for Internally Managed Portfolios**

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**Selection and Evaluation of Brokers
Executing Transactions for Internally Managed Portfolios**

I. Purpose

This statement of broker selection and evaluation policy documents the principles and standards that guide the selection, evaluation, and monitoring of brokerage firms in the trading of securities for the internally managed portfolios at the System. This policy is intended to be binding on all relevant persons who have responsibilities and authority with respect to management of these portfolios.

The purpose of this policy:

- A. State the objectives the Retirement Board judges to be appropriate and prudent for the selection of brokerage firms for trading securities for the System.
- B. Establish procedures and criteria that may be considered reasonable and prudent for the System.
- C. State the process for periodic evaluation and monitoring of brokerage firms utilized by the System for the trading of securities.
- D. Communicate these policies, objectives and criteria to all interested parties including the Retirement Board, staff, brokers, consultants, and custodians.
- E. Operate as a review document.

II. Objectives

Principal objectives for establishing guidelines for the selection, evaluation and monitoring of brokerage firms in the trading of securities of the System's internally managed portfolios have been formulated with respect to the following considerations:

- A. To state criteria which can be used objectively for the selection of brokerage firms.
- B. To state procedures for evaluating brokerage firms periodically.

III. Procedures and Criteria

All brokerage firms instructed to trade for the System's internally managed portfolios shall meet the requirements set forth below:

- A. Procedures for brokerage firm selection:
 - 1. Brokerage firms wishing to trade securities for the System on a regular basis must complete a questionnaire regarding their organizational structure, experience, resources, services, trading, level of compliance with the Broker-Dealer Investment Protection Principles (Appendix A), and client servicing capabilities. The information will be maintained by staff and updated and reviewed periodically. This survey will be reissued to and collected from all existing relationships at least every five years. An abbreviated survey ascertaining compliance with criteria outlined in Item 2 of "Criteria for Approval" will be issued and collected annually.



**Selection and Evaluation of Brokers
Executing Transactions for Internally Managed Portfolios**

2. Staff will be responsible for maintaining an approved list of brokerage firms meeting the criteria stated herein.
3. Firms will be selected for their execution and the competitiveness of their fees. A firm's research capabilities will be considered where needed by the System.
4. Women/minority/disabled-owned brokerage firms are encouraged to apply for consideration.
5. Staff will have discretion to select among approved brokerage firms at the time of transaction.
6. Staff may prudently select another brokerage firm at the time of transaction, if the circumstances then prevailing warrant use of that firm.
7. The approved list of brokerage firms which meet the criteria stated herein will be periodically reviewed and modified by staff. Brokerage firms not meeting standards of performance or conduct as described in the evaluation and review procedures of this policy herein may be suspended or be eliminated from the approved list.

B. Criteria for Approval

Brokerage firms must meet the following minimum qualifications:

1. Maintain good financial standing.
2. Demonstrate appropriate regulatory controls over trades and business practices that are consistent with SEC and other applicable laws, and level of compliance with the Broker-Dealer Investment Protection Principles (Appendix A). Gross negligence, proven criminal activities, or sanctions and fines issued by a regulatory agency to the brokerage firm will result in review and suspension of trading activity and may result in permanent exclusion from conducting trades with the System.
3. Maintain acceptable standards of record-keeping to include timely and accurate confirmation of trades and proper use of the institutional delivery system of the Depository Trust Company.
4. Maintain acceptable record of timely delivery and payment on trades.
5. Possess trading experience for the types of securities to be traded.
6. Be willing to make a market in fixed income obligations they have sold to the System.



IV. Evaluation and Review Procedures

The following steps shall be taken by staff:

- A. Periodic Reports: Staff will obtain periodic reports which supply critical information, such as the amount of trading activity per broker, market impact, commission rates and commission amounts. The reports will be examined to ascertain whether brokers are delivering best execution and competitive fees.
- B. Trading Activity Measurement: The staff will review annually with the Retirement Board the aggregate trading activity of the securities portfolio managed by staff.
- C. Meetings and Reports: Brokerage firms which transact significant volume on behalf of the System and consultant(s) are expected to be available to meet with staff as required to review trading activity.
- D. Review and Modification: Modifications to this policy shall be promptly communicated to brokers, consultants and other relevant parties.
- E. Significant Events: Brokerage firms shall advise staff immediately if any of the following events occur within their organization:
 - 1. Any event which will have a material impact on the management, professionalism, integrity or financial position of the brokerage firm;
 - 2. A loss of one or more key people;
 - 3. A new trader(s) or client service representative(s) on the System's account;
 - 4. A change in ownership or control (whether through acquisition, disposition, spin-off, merger, consolidation, or otherwise) of the brokerage firm;
 - 5. All instances of enforcement proceedings by the SEC, NASD or other regulatory bodies against the brokerage firm.



APPENDIX A

Broker-Dealer Protection Principles

Broker-dealers retained or utilized by the New York State Teachers' Retirement System (NYSTRS) should adopt the Broker-Dealer Protection Principles as summarized below. In retaining and evaluating any such financial organization, NYSTRS will give significant consideration to whether such organization has adopted the Protection Principles.

The Broker-Dealer Protection Principles are:

1. There should not be a link between compensation for analysts and investment banking;
2. The investment banking side of the business entity, if one exists, should not have input into analyst compensation;
3. A person or committee, in addition to the research analyst recommending the security, should review all research recommendations;
4. In the normal course of business, upon discontinuation of research coverage of a company, the termination of coverage and rationale for such termination should be disclosed;
5. For covered companies, the firm must disclose if the firm has knowledge of any material conflict of interest or has received, or is entitled to receive, any compensation from such company over the past twelve months; and
6. There should be a monitoring process to ensure compliance with the principles, and provide details of compliance, as requested.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Directed Brokerage

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Directed Brokerage

I. Introduction

Directed brokerage occurs when the System directs its money manager(s) (internal and/or external) to trade a certain dollar or percentage amount of the System's investment transactions through designated broker/dealers. Directed brokerage may include negotiated commissions, commission recapture, and soft dollar arrangements.

II. Purpose

The purpose of this policy is to allow for the use of certain forms of directed brokerage as a way of minimizing commission costs without adversely affecting execution.

III. Objectives

All security trading will be placed with the aim of obtaining the best execution at the best price.

IV. Management Structure

- A. Commission levels for internally managed domestic equity portfolios are negotiated by staff.
- B. Soft dollar arrangements are not used for internally managed domestic equity portfolios.
- C. A commission recapture program for externally managed domestic equity portfolios is overseen by staff. Staff negotiates the targeted percentage of commissions to be subject to the program with external managers and negotiates the recapture rate with the brokers. Actual broker payments may differ from the negotiated targets.
- D. Investment managers/advisors shall use professional judgment in the selection of broker/dealers, the level of commissions paid, and the value of other services provided by the broker/dealers to the managers for the benefit of the System and its beneficiaries.
- E. Investment managers/advisors are required as necessary to provide evidence that their trades are being executed with the lowest possible transaction costs.

V. Relevant Legal Authority

ERISA Technical Release No. 86-1 addresses the use of commission dollars by ERISA plans and supports the implementation of a directed brokerage program by pension plan fiduciaries.



VI. Risk Management

A. Market Risk

Market risk is the risk that negotiated commissions and/or commission recapture will adversely impact execution. This risk is controlled by periodically comparing transaction costs by manager and/or broker with similar industry trades.

B. Operational Risk

The Communications and Procedures & Controls section delineates the measures implemented to control operational risks.

VII. Communications

A. Retirement Board Reporting

The Investment Information Department will provide a quarterly report of recaptured commissions.

B. External Investment Manager/Broker Reporting

Each investment manager and broker participating in the commission recapture program will provide the Investment Information Department with a monthly summary of commission recapture activity.

**Directed Brokerage****VIII. Procedures & Controls**

NEGOTIATED COMMISSIONS	
Responsible Party	Action
Investment Department	1. Periodically negotiate commissions for internally managed portfolios with brokers.

COMMISSION RECAPTURE	
Responsible Party	Action
Investment Department	1. Determine the mix of brokers. Negotiate the percentage of commissions to be subject to the program and the recapture rate.
Participating External Investment Managers	2. Direct trades to participating brokers. 3. Report monthly on directed trades.
Participating Brokers	4. Report monthly on directed trades. 5. Remit monthly recapture amount.
Investment Information Department	6. Prepare monthly reports showing trades by participating managers and brokers. Reconcile reports with the reports from the managers and brokers. Investigate any exceptions. 7. Calculate the percentage of directed trades by broker and the percentage of recaptured commissions.
Investment Department	8. Contact managers if recapture percentage targets are not satisfied.
Investment Information Department	9. Post amounts due, process payments from brokers, and follow-up on any past-due amounts. 10. Prepare quarterly summary of commission recapture activity.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

**Selection, Monitoring and Termination of
External Securities Managers**

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I. Introduction

In 1982, the Education Law was amended to give the Retirement Board the authority to delegate the investment of System funds to external investment managers. Since that time, the Retirement Board has delegated investment management to external managers who specialize in managing equities, bonds, and alternative investments. An external investment manager is hired with the expectation that the manager will, over the long run, add value, relative to an appropriate benchmark, to the assets under management and help diversify the System's portfolio. Potential external investment managers must pass an extremely rigorous selection process designed to select those who are the most appropriate, based upon established criteria.

An external investment manager may be engaged to invest funds directly or may be engaged to further hire other external investment managers operating as a fund-of-funds.

II. Selection

The selection process will typically involve the use of a specific investment consultant to assist in the selection. The investment consultant maintains a manager database, which contains questionnaire responses regarding the organization, investment products and investment performance. In addition, the database contains media reports, as well as in-house meeting notes, regarding the organization.

The selection process continues as follows:

A. Determination of Screening Criteria

Screening criteria may include, but is not limited to: investment processes; investment products; dollar value and composition of assets under management; historical performance; Association for Investment Management and Research (AIMR) compliance; years of experience, growth of firm, other client relationships (including experience with large public funds); ownership; the number and depth of investment professionals, research capabilities; structure of the proposed investment (limited partnership, general partnership, separate account, commingled account, etc.); level of compliance to Money Manager Investment Protection Principles (Appendix A); contract provisions and internal controls. Other criteria may be added for any given search.

B. Preliminary Screening

1. The investment consultant conducts a search of its database and identifies a preliminary list of firms which meet an initial set of quantifiable criteria. Included in this preliminary list are any firms which have been suggested to the investment consultant by members of the Retirement Board and staff, as potentially meeting the established criteria.
2. Staff and/or the investment consultant contacts each firm on an initial list to obtain the most current information and any additional information, as required. Follow-up telephone calls, interviews, or on-site visits are made where necessary.
3. Based upon the established criteria, the investment consultant narrows the list to quarter finalists. The number of quarter finalists depends on the type of search.



C. Quarter Finalists

1. The investment consultant and/or staff conducts a more in-depth interview with each quarter finalist. The interview allows for the interaction with and evaluation of the person or persons who will actually be investing the System's assets. Interview topics include:
 - a. Investment process.
 - b. Enthusiasm of the firm's representative.
 - c. Communication with the firm.
 - d. Employee compensation.
 - e. Availability of the contact person and portfolio manager to meet with the Retirement Board and staff, and responsiveness to Board and staff concerns.
 - f. Validation of performance continuation of key individuals who will be responsible for fulfilling assignment.
 - g. Accommodation of the System's priorities.
 - h. Potential areas of conflict (Retirement Board policy, statutory, custodial, etc.).
 - i. Fee discussions.
2. As a result of the interviews, the investment consultant and/or staff selects the semi-finalists, who will be interviewed by the System's senior staff.

D. Semi-Finalists

1. The System's senior staff and the investment consultant meet in Albany to conduct an in-depth interview with each of the semi-finalists.
2. As a result of the interviews, the System's senior staff and investment consultant select the finalists, who will be interviewed by the Retirement Board.

E. Retirement Board Interviews of Finalists

1. Interview with the Finance Committee
 - a. Each finalist submits an informational package, which is mailed to the Retirement Board prior to the interview.
 - b. Each finalist makes a presentation to the Finance Committee of the Retirement Board.
 - c. A question and answer period follows each presentation.
 - d. The Finance Committee makes a recommendation to the Retirement Board regarding each finalist.
2. The Retirement Board selects the finalist(s) to be retained by the System.



III. Contract Review

Once an external investment manager is selected, a written investment management agreement is executed appointing the manager. Care is taken to ensure the terms of the contract accurately reflect the terms and conditions of the Retirement Board's authorization. The process may involve highly specialized contract provisions and protracted negotiations. In such cases, staff may retain outside counsel which specializes in the particular investment.

IV. Monitoring

The staff monitors each external investment manager to ensure investment policy guidelines are being followed. In addition, staff monitors specific objective criteria, such as investment performance, trading activity, diversification ratios, industry mix, and rating of fixed income assets, as well as various subjective criteria, such as the impact of key resignations or firm acquisitions/mergers. The general focus of the review is to determine if the System continues to be confident with the external investment manager's ability, using the stated style, to add value relative to an appropriate benchmark to the assets under management.

The objective criteria for scrutinizing an external investment manager's progress are agreed upon at hire, and may be specified in the contract between the external investment manager and the System.

The System engages an investment consultant to aid in the review of external investment managers, other than fund-of-funds managers. This consultant submits periodic reports and also provides advice regarding the impact of various changes at the external investment manager's firm.

The review consists of the following:

A. Monthly Performance Review

Staff reviews the external investment manager's performance monthly, relative to the appropriate benchmark. The external investment manager is responsible for submitting monthly portfolio appraisals, including positions and valuations. Changes in style, personnel, or organizational structure or size are noted:

1. A summary of the performance calculation is sent monthly to each (equity and fixed income) external investment manager for their review and reconciliation.
2. Personnel changes include changes in responsibility, as well as individuals joining or leaving the external investment manager's firm.
3. Changes in the organizational structure, including mergers and acquisitions.
4. Changes in the assets under management: An external investment manager is hired with a proven track record at a particular level of invested assets. Subsequent relationship losses may increase the pressure on the external investment manager not to lose the System as an account. Alternatively, the gain of a significant number of accounts may overburden the investment personnel, force the external investment manager to alter the investment style, or decrease the importance of the System as an account, to the point where communication or performance suffers. Any change in the investment process should be reported.



B. Quarterly External Consultant Review

The consultant/manager prepares a quarterly report summarizing the investment performance for each external investment manager, other than fund-of-funds managers. The consultant may review this report with either the Finance Committee or the Investment Advisory Committee. Changes in style, personnel, or organizational structure are discussed.

A fund-of-funds manager reports on the investment activity and performance for the managers within the fund.

C. Periodic Review

On a rotating basis, the manager makes a presentation to the Investment Advisory Committee. The minutes of the Investment Advisory Committee meeting are distributed to the entire Retirement Board. The presentation includes an economic projection, a review of the investment strategy, and a summary of assets under management.

D. Annual Contract Renewal

The investment consultant submits a formal recommendation regarding the renewal of the contract. Staff reviews the recommendation and presents it to the Retirement Board. The Manager must attest to the level of compliance to the Money Managers Investment Protection Principles (Appendix A).

E. Special Review As Needed

Staff and the investment consultant review information as it becomes available, and meet with the external investment manager as required. Each external investment manager has the responsibility to inform the Retirement System, quickly and accurately, about any event that may adversely impact to a significant degree the management, professionalism, integrity or financial position of the external investment manager, such as:

1. Loss of one or more key professionals.
2. Significant change in investment philosophy.
3. New portfolio manager(s) on the System's account.
4. Change in ownership or control (whether through acquisition, disposition, spin-off, merger, consolidated, or otherwise) of the external investment manager.
5. Other developments having a significant impact such as litigation or regulatory inquiries.

The investment consultant serves as an additional source for this information.

F. Meetings and Reports

External investment managers are expected to meet with the Retirement Board (or the Investment Advisory Committee) and the staff, upon request. Minutes of official/formal meetings with the Retirement Board and Investment Advisory Committee will be kept, reflecting the investment matters reviewed.



V. Watchlist

The System maintains a watchlist of those managers for whom the Retirement Board has concerns about their ability to add value to assets under management. The managers on the watchlist are subject to more intense scrutiny.

The Retirement Board may place an external investment manager on the watchlist as a result of any of the following concerns:

- A. Underperformance is monitored to determine if the external investment manager will be unable to meet the long-term performance goals.
- B. Investment risk is monitored to alert the System to a manager assuming more risk than appropriate, in an attempt to achieve a higher short-term return.
- C. Key personnel changes or structural changes are monitored to examine if they will impact the client relationship.
- D. Investment style is monitored to alert the System of a change in the risk composition, in accordance with the overall asset allocation policy.
- E. Investment process is monitored to alert the System of any changes.
- F. Any other circumstances creating a concern over the external investment manager's ability to meet the System's objectives are monitored as needed.

The Retirement Board may remove an external investment manager from the watchlist at any time, if the concerns have been resolved and the Retirement Board has confidence the external investment manager will add value to the assets under management.

VI. Termination of External Investment Managers

External investment managers serve at the pleasure of the Retirement Board. The Retirement Board retains the right to dismiss a manager with 30 days written notice. The Retirement Board evaluates the performance of the external investment manager annually, or more frequently when necessary.

A. Annual Evaluation

The decision to retain or terminate an external investment manager is part of the annual contract renewal process. As part of this process, the System's investment consultant will make a formal recommendation, including the rationale upon which the recommendation is made. The recommendation is reviewed by staff and presented to the Retirement Board. The recommendation will be part of the permanent record.

B. Special Evaluation

A dramatic loss of confidence during the contract year could result in a contract termination by the Retirement Board with 30 days written notice.



APPENDIX A

Money Manager Protection Principles

NYSTRS will give significant consideration in retaining, evaluating and renewing equity managers as to whether such managers conform to the following:

The Money Manager Protection Principles are:

1. Money management firms must disclose any client relationship, including management of corporate 401 (k) plans, where the money manager could invest NYSTRS' assets in the securities of the client. Disclosure should be made in such a way as to not violate any confidentiality agreement.
2. Money management firms must disclose annually the manner in which their portfolio managers and research analysts are compensated and have safeguards in place to ensure that such compensation programs do not influence investment decisions.
3. Money management firms shall report annually the percentage of commissions paid, relating to NYSTRS' assets, to broker-dealers that have adopted the Broker-Dealer Protection Principles.
4. Money management firms affiliated with banks, investment banks, insurance companies or other financial service corporations shall have safeguards in place to ensure that the client relationships of any affiliate company do not influence investment decisions of the money management firm, provide NYSTRS with a copy of the safeguard plan and certify annually that such plan is being fully enforced.
5. In making active investment decisions, money management firms must consider the quality and integrity of the accounting and financial data and the corporate governance policies and practices of the subject company, as well as whether the company's outside auditor also provides consulting or other services to the company.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Selection, Monitoring and Termination of Real Estate Advisors

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Selection, Monitoring and Termination of Real Estate Advisors

I. Introduction

The goals and objectives contained in the System's Equity Real Estate Policy Manual¹ (dated 10/99) outline an investment approach which is one of active participation by the System in the investment decision process while accessing third-party professional real estate expertise. An external real estate advisor ("Advisor") is hired with the expectation that they will, over the long term, add value to the assets under management. Potential Advisors must pass an extremely rigorous selection process designed to select those which are the most appropriate, based upon established criteria. This policy shall apply to the selection of new Advisors only, and is not applicable to the allocation of additional business to an existing Advisor.

II. Selection

The procedure for selecting an advisor begins with a decision by staff to hire an advisor, typically to pursue a specific investment strategy so as to further diversify the System's portfolio.

At the time the staff decides to begin the selection process, it may utilize the existing real estate consultant to assist in the selection. The consultant maintains a database, which contains information regarding the organization, investment products and investment performance of potential advisors.

The selection process continues as follows:

A. Determination of Screening Criteria

Screening criteria includes, but is not necessarily limited to: investment products; assets under management; historical performance; growth of the firm; other client relationships; ownership; the number and depth of investment professionals; research capabilities and internal controls.

B. Preliminary Screening

1. If utilized, the consultant conducts a search of its database and identifies a preliminary list of advisors which meet an initial set of criteria. Included in this search are any firms which have been suggested by members of the Retirement Board and staff, as potentially meeting the established criteria.

Initial screening criteria may involve those items outlined in Section II A.

2. Based upon the established criteria, staff and the consultant (if utilized) select the most qualified for further analysis, which may include issuing a Request for Proposal ("RFP").

C. Second Stage

The staff reviews the material submitted by respondents and selects the most qualified respondents for interviews.

¹ Reproduced in this Investment Policy Manual as the Equity Real Estate Investments subpolicy.



Selection, Monitoring and Termination of Real Estate Advisors

D. Third Stage

1. An in-depth interview is conducted with each of the finalists. The interview allows for interaction with and evaluation of the person(s) who will actually be investing the Retirement System's assets. Topics include responses to specific questions in the RFP, as well as the following:
 - a. Investment process.
 - b. Enthusiasm of the firm's representative.
 - c. Communication with the firm.
 - d. Availability of the contact person and portfolio manager to meet with the Retirement Board and staff.
 - e. Accommodation of System priorities.
 - f. Potential areas of conflict.
2. As a result of the interviews, the staff selects the firm which is most qualified to perform the desired function.

E. Final Selection

1. Staff and (if necessary) the consultant, will make a presentation of the finalist's credentials to the Real Estate Advisory Committee ("REAC") for their review. The finalist may be asked to appear before the REAC to make their own presentation.
2. The REAC will make a recommendation to the Retirement Board if it is satisfied with staff's selection of the Advisor.

III. Monitoring

The staff monitors the advisor with respect to specific objective criteria, such as investment performance, as well as various subjective criteria, including the impact of key personnel moves. The general focus of the review is to determine if the System is confident with the Advisor's continuing ability, using the stated style, to add value to the investments under management.

The System may utilize its real estate consultant to aid in the review of the Advisor. This consultant submits reports as necessary and also provides advice regarding the impact of various changes at the Advisor's firm.

The review consists of the following:

A. Performance Review

The Advisor is responsible for submitting monthly and quarterly reports as specified in the Equity Real Estate Policy Manual.



Selection, Monitoring and Termination of Real Estate Advisors

B. Special Review As Needed

Staff reviews information as it becomes available and meets with the advisor and the System's consultant as required. Each advisor has the responsibility to inform the System quickly and accurately about any information which impacts its relationship with the System. The consultant serves as an additional source for this information.

C. Meetings and Reports

Advisors are expected to meet with the Retirement Board (or the Real Estate Advisory Committee) and staff, upon request. Minutes of official/formal meetings with the Retirement Board and Real Estate Advisory Committee, reflecting the investment matters reviewed, will be kept.

IV. Watchlist

The System maintains a Watchlist which includes those advisors about whom the Retirement Board or staff has concerns over their ability to add value to assets under management. Advisors on the Watchlist are subject to more intense scrutiny.

An advisor may be included on the Watchlist as a result of any of the following concerns:

- A. Underperformance.
- B. Key personnel changes or structural changes.

C. Illegal activity.

The Retirement Board may remove an Advisor from the Watchlist at any time when the concerns have been resolved.

V. Termination

Advisors serve at the pleasure of the Retirement Board. The Retirement Board retains the right to dismiss an Advisor with 30 days written notice, or as contractually agreed.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Stock Proxy Voting

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I. Introduction

A proxy is the written power of attorney given by shareholders of a corporation, authorizing a specific vote on their behalf, at corporate meetings. Such proxies normally pertain to election of the Board of Directors, or to various resolutions submitted for shareholders' approval.

II. Purpose

The System's Stock Proxy Voting policy has been established to protect the System's long-term investment interests and to promote responsible corporate policies and activities which enhance a corporation's financial prospects.

III. Management Structure

The Stock Proxy Voting policy is managed internally by Investment Department staff, in accordance with these guidelines. Information regarding the proxy issues to be voted is received from the company in the form of a proxy statement and from an independent analytical service, currently Institutional Shareholder Services.

Each issue is reviewed by staff to determine whether it conforms to the general policy statement approved by the Retirement Board. Issues which fall within established policy guidelines are voted accordingly. Those which do not fall within the guidelines, or which may require a modification of the guidelines, are submitted to the System's Internal Proxy Committee chaired by the Executive Director. Should a sensitive issue arise which is not included in the established guidelines, the Internal Proxy Committee is authorized to exercise its best judgment in voting such issue and shall submit its decision to the Retirement Board at the Board's next meeting.

IV. Proxy Voting Guidelines/Definitions

When voting proxies, the System generally supports management if management's position appears reasonable, is not detrimental to the long range economic prospects of the company, and does not tend to diminish or truncate the rights or prerogatives of shareholders. When new issues arise, a decision from the Proxy Committee of the Retirement Board is requested.

Proxy proposals are divided into the following general categories: management issues, shareholder rights, anti-takeover measures, and social issues.

A. Management Issues: Management issues which involve routine corporate operational and administrative issues are generally voted with management. The Corporate Compensation issue is not considered routine and is discussed more fully under Executive Compensation and Stock Option Plans below.

1. Auditors/CPA: Companies are not legally required to allow shareholders to ratify the selection of auditors. However, even if not required, many companies seek shareholder ratification of auditors. The most important issue relating to auditors selection is the independence of the auditing process. The auditor's independence from the firm being audited reduces the potential for abuse. The SEC has defined "independent" as an accountant's ability to act with integrity and objectivity. The regulations explain that an auditor "must act in an unbiased and objective manner and he must be free of any financial or other interest which would create the perception that he may not be independent".



Stock Proxy Voting

2. Annual Meetings: Issues relative to the general logistics of annual meetings such as location, time frequency, selection of firms to count ballots, etc., are reviewed on a case-by-case basis.
3. Corporate Contributions: The System supports the concept of corporate philanthropy, when such philanthropy is in the best interests of the corporation and general public.
4. Board Related Matters: Requirements for Board membership are, within reason, considered a management prerogative and the System generally supports management's candidates for Board membership. The System believes an independent Board of Directors with members selected outside of management is beneficial to the overall effectiveness of corporate operations and supports proposals calling for outside directors. Votes on nominees should be made on a case-by-case basis. Votes should be withheld from directors who:
 - attend less than 75 percent of the board and committee meetings without a valid excuse for the absences
 - implement or renew a dead-hand or modified dead-hand poison pill. A dead-hand poison pill prohibits any directors other than continuing directors from removing the pill, thus disenfranchising future directors
 - ignore a shareholder proposal that is approved by a majority of the votes cast for two consecutive years
 - have failed to act on takeover offers where the majority of the shareholders have tendered their shares
 - are insiders and sit on the audit, compensation, stock option, or nominating committee

While the System does not feel ownership of stock in a corporation is necessary for Board membership, the System does support reasonable stock ownership plans for directors.

The System generally recommends for shareholder proposals asking that the Chairman of the Board and CEO positions be separate; unless the company has strong countervailing governance structure, such as, a designated lead director elected by and from the independent Board members with clearly delineated duties.

5. Shareholder Request for Reports: The System opposes these requests if such information is readily available to the shareholders or is too costly to provide.
6. Stakeholder Proposals: Stakeholder proposals permit directors, when taking action, to weigh the interest of constituencies other than shareholders in the process of corporate decision making. These proposals allow directors to consider nearly any factor they deem relevant in discharging their duties.

The System does not support "stakeholder proposals" which give corporations broad discretion when considering business propositions. "Stakeholder proposals" can easily result in the replacement of shareholder rights by the interests of other constituencies and the System believes the interests of the shareholder should normally override those of other constituencies.

7. Preemptive Rights: The System generally does not favor the maintenance or restoration of preemptive rights. Preemptive rights require a corporation to offer rights to existing shareholders when new shares are issued, so as to allow these shareholders to retain the same percentage ownership in the company as held prior to the new offering. The System feels, in an era of high capitalization, little purpose is served by preemptive rights, and providing such rights is costly to the companies.



8. Linked Proposals: The System does not support proposals which link unrelated issues. Usually one is to the benefit of the shareholder and the other is not.
9. Limiting of Liability and Increasing Indemnification: The System favors management's right to limit the liability of, and to increase indemnification for, its directors.
10. Executive Compensation: The System generally supports management's right to provide compensation plans intended to motivate management, unless a shareholder resolution is submitted to correct an obvious abuse in executive compensation. The System opposes unusually favorable compensation structures established in advance of the sale of a company.

In reviewing any compensation plan, the first question to consider is whether the plan is necessary at all. For example, is the existing compensation package competitive in terms of incentives for superior performance on an absolute basis and relative to industry peers, or will the plan participants receive any added incentive by receiving new awards under the proposed plan?

Under the Omnibus Budget Reconciliation Act of 1993, publicly held corporations can no longer deduct compensation paid to their top officers in excess of \$1 million annually, unless the payment relates to the attainment of productivity goals. To keep this deduction, a corporation must submit its executive compensation plan to shareholders in a proxy proposal which includes the plan's terms, eligibility and performance goals. The plan must be approved by a majority vote of the shareholders.

In voting these proxies, the System supports those programs which are tied to objective performance measures.

11. Increased Authorized Common Stock: The System reviews requests for additional common stock on a case-by-case basis. The System will support authorization for additional common stock when required for financing or other legitimate corporate purposes. Generally, the System opposes increases of more than 100% of the authorized shares.
12. Stock Option Plans: The System believes stock option plans should be used solely for the purpose of motivating corporate personnel. In all cases, stock option plans are reviewed on a case-by-case basis. The following are various types of stock option plans and the System's position on each.
 - a. The System generally supports reasonable incentive stock option plans predicated on individual performance.
 - b. The System supports reasonable stock options to outside directors.
 - c. The System generally supports employee stock option plans available to all employees offered at no less than 85% of market price.
 - d. A plan with a 4% shareholder dilution, or less, is usually supported. In excess of this percentage, an allowable dilution cap is adjusted for company size, performance and cash pay to executives.
 - e. The System does not support option plans to key personnel offered at below market price.



Stock Proxy Voting

- f. The System does not support corporate loans to key personnel to purchase stock options.
 - g. The System does not support omnibus stock option plans. In these plans, broad authority is given to a company's Compensation Committee to grant incentive programs. This broad authority usually bypasses shareholder approval.
 - h. The System supports certain stock option plans which offer stock appreciation rights. Those plans allow individuals to receive the difference between the option and the market price without acquiring ownership of the stock.
 - i. The System does not support stock options which allow pyramiding. Pyramiding is a form of cashless exercise, similar to stock appreciation rights. It involves repeated simultaneous exchanges of an individual's existing appreciated shares for a larger number of new shares under the option plan.
 - j. The System does not support a compensation plan that permits the repricing of underwater stock options without seeking shareholder approval.
- B. Shareholder Rights: The System does not support management proposals which tend to limit or diminish the System's rights as a shareholder.
- 1. Confidential Voting: The System supports shareholder resolutions calling for secret ballots.
 - 2. Cumulative Voting: The System votes for shareholder resolutions to establish cumulative voting for directors and against management proposals to end existing cumulative voting plans.

Most corporations provide that shareholders are entitled to cast one vote for each director for each share owned, the so-called "one share, one vote" standard. Cumulative voting for directors permits shareholders to distribute the total number of votes in any manner when electing directors.
 - 3. Unequal Voting Rights Plan: The System opposes any proposal to establish unequal voting rights plans since they tend to reduce the voting power of public shareholders and enhance the control of management.
 - 4. Bylaw Amendments: Generally, shareholders have the right to propose amendments to a company's bylaws unless prohibited by the charter. Some companies have adopted provisions to limit or eliminate the right of shareholders to propose bylaw amendments. The System opposes any proposal to limit or eliminate shareholder rights to propose bylaw amendments.
 - 5. Charter/Certificate of Incorporation: The System does not support proposals by management to change the state of incorporation in order to take advantage of laws more favorable to management interests as opposed to shareholder interests.
 - 6. Access to Management's Proxy: The System generally supports proposals which ask management to allow large shareholders equal access to management's proxy in order to discuss and evaluate management's director nominees and/or nominate and discuss shareholders nominees to the board. The System is generally in favor of resolutions that reform access, provides disclosures to identify sponsors of shareholder resolutions and especially efforts on behalf of shareholders with the SEC to achieve access to management proxies.



C. Anti-Takeover Measures:

1. Classified Boards: A classified board is one in which the directors are divided into separate classes, with one class of directors elected each year, thus providing for staggered terms. The only real motive for board classification is to make it more difficult to change control of the board.

The System opposes the creation of staggered or classified boards, and votes against management efforts to create them and in favor of shareholder proposals to abolish them.

2. Fair Price Provisions: Fair price provisions prevent two-tier offers in which a buyer offers a premium price for only enough shares to obtain a controlling interest of a company. The common requirement of a "fair price" is to pay minority shareholders at least as much per share as the offerer paid to gain a controlling position of the company.

The System supports fair price provisions provided no other anti-takeover provision is included. Quite often, fair price provisions require a supermajority vote to circumvent the pricing guidelines. The System will vote against the provisions with supermajorities proposed by management and for shareholder resolutions to reduce supermajority percentages.

3. Golden Parachutes: Golden parachutes are compensation arrangements that pay corporate managers after they leave their positions. The System reviews golden parachutes on a case-by-case basis.
4. Greenmail: When a company's management buys back a block of the company's stock held by a shareholder deemed to be a "threat" to the company (or to management's tenure) the transaction is often called the payment of greenmail. The System opposes the payment of greenmail and supports shareholder resolutions to end this practice.
5. Poison Pills (Shareholder Rights Plans): Poison pills are a wide variety of provisions adopted by boards, without shareholder approval, to make it financially unattractive for a shareholder to purchase more than a small percentage of the company's stock. The System:
 - a. Supports shareholder resolutions calling for corporations to submit Poison Pills to shareholder votes.
 - b. Generally supports shareholder resolutions calling for corporations to rescind Poison Pills.
 - c. Opposes management proposals to create Poison Pills, when submitted to a vote.
 - d. Will review company proposals to determine if they might benefit shareholders over the long run, especially for chewable pills.
6. Stock Authorization Increasing Authorized Common or Preferred Shares: The System does not support such increases when the increased stock is issued in a private placement as an anti-takeover measure. The System also opposes any type of increase in blank check preferred stock.



D. Social Issues:

1. Animal Testing: The System votes against shareholder resolutions to restrict use of animals in product testing.
2. Economic Conversion: The System does not support shareholder resolutions asking companies to report on plans to diversify or convert to the production of civilian goods and services in lieu of military production. We believe this should be a management decision.
3. Environmental Issues: The System supports shareholder requests for information when the information requested is reasonable, is not otherwise readily available to the shareholder, can be obtained by the corporation without excessive expense, and will not subject the corporation to liability. The System does not support shareholder proposals when the information requested is available in other forms. The CERES Principles will be voted on a case-by-case basis. The System is concerned about the environment and will express that concern when appropriate.
4. Work Place Standards: Votes are made on a case by case basis. The System will support a reasonable request for corporate accountability of human rights standards in the workplace.
5. Northern Ireland: The System supports shareholder resolutions relating to the corporate activities in Northern Ireland with regard to the MacBride Principles.
6. Tobacco: Public pension funds are facing increasing pressure to divest their portfolios of tobacco stocks. The System supports and will vote in favor of reasonable proxy proposals directed at spinning off non-tobacco related components. The System also supports shareholder proposals aimed at advertising, labeling, diversifying and anti-smoking campaigns. The Retirement Board is concerned about the sale and use of tobacco products; however, its action must be consistent with overriding fiduciary responsibilities and consideration of the economic impact of the vote.
7. Sudan: Public pension funds are facing increasing pressure to divest their portfolios of companies doing business in Sudan. The Retirement Board is deeply concerned with atrocities and human rights violations that have been occurring in Sudan. The System supports efforts which urge the government of the United States to compile and publish a list of companies with business dealings or operations in Sudan which might be supporting the atrocities and human rights violations in that region. The System will support and vote in favor of reasonable proxy proposals relating to aiding the victims in that region; however, its actions must be consistent with the overriding fiduciary responsibilities and consideration of the economic impact of the vote.

V. **Risk Management**

- A. Market Risk: Most domestic equity positions held by the System are significant in size, and occasionally corporate governance activity reflected in proxy voting has the ability to influence the market price of the respective corporations' securities. Therefore, the System makes every attempt possible to maintain a low profile.
- B. Operational Risk: The Stock Proxy Voting policy is a tool used by the System to uphold its fiduciary responsibility. Proxies are voted with a focus on maximizing long-term earnings. For this reason, economic issues override social or political issues except where significant social or political questions exist and more specific policy determinations have been made.

**Stock Proxy Voting**

The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.

VI. CommunicationsRetirement Board Reporting:

- A. The Investment Department will provide a report to the Retirement Board annually, showing the number of proxies voted, by category; how the System voted (for or against); and the result of the vote.
- B. The Internal Proxy Committee shall report to the Retirement Board at the quarterly meeting following any decisions required of this committee.

VII. Procedures & Controls

Responsible Party	Action
Investment Department	<ol style="list-style-type: none">1. Receives Proxy Statement from company and proxy materials from proxy service.2. Reviews proxy materials.3. If the issue is sensitive, requests guidance from the Internal Proxy Committee, chaired by the Executive Director.4. If the issue is not clearly defined in the proxy guidelines, requests guidance from the Proxy Committee of the Board.5. Votes proxies according to guidelines, and obtains advice when needed, from the Internal and the Board Proxy Committees.6. Prepares proxy report for the Board, annually.7. Updates proxy voting guidelines (contained within this policy) for Board approval annually.
Retirement Board	<ol style="list-style-type: none">8. Reviews annual proxy report received from the Investment Department.9. Reviews proxy voting guidelines annually.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Short-Term Investments (Cash Equivalents)

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I. Introduction

The short-term portfolio provides for the temporary investment of the System's cash flow and consists primarily of instruments maturing in 12 months or less at the time of purchase.

II. Purpose

- A. To provide liquidity for the timely payment of benefits and/or fees and expenses.
- B. To enhance the System's income.
- C. To provide for the temporary investment of System funds until investment in other targeted vehicles is made.

III. Performance Objective

The objective of the management of the short-term investment portfolio is to maximize yield consistent with the safety of principal. The benchmark is iMoneyNet™ Average/ All Taxable.

IV. Management Structure

The portfolio is managed internally. The Investment Department and Investment Information Department shall, on a regular basis, discuss current market conditions and foreseeable cash flow to formulate a strategy for the investment of funds. The Investment Department is responsible for implementing the strategy within the guidelines described herein.

The Investment Department must be aware of all major sources of day-to-day cash receipts and disbursements generated by normal operations. The Investment Information Department transmits current transaction information to the Investment Department on a daily basis and provides approaching cash inflow and disbursement data in a monthly cash flow forecast. The monthly cash flow forecast is prepared in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This report identifies cash available to invest in consideration of planned program investments and targeted asset allocations. Information gathered includes projected cash flows for real estate transactions, purchases and sales of fixed income and equity securities, alternative investments and externally managed investments. The Investment Department receives all this information and is responsible for projecting, as far as possible into the future, the System's cash needs and making investments accordingly.

Custodial Relationship

- A. All short-term investments are maintained in the custody and safekeeping of the System's bank custodian. This is accomplished pursuant to a contractual agreement among (i) the NYS Treasurer, as statutory custodian, (ii) the actual bank custodian, and (iii) the System.
- B. Pursuant to said Agreement, settlement instructions are communicated by the System to the bank custodian for execution.



V. Legally Permissible Investments

Subject to determination by the Securities Investment Officer that an investment is prudent, the following investment vehicles are statutorily permissible and may be considered for the System's funds:

- A. Obligations of the U.S., or those for which the faith of the United States is pledged to provide for the payment of the interest and principal. [Banking Law (BL) 235(1)].
- B. Obligations of any federal home loan bank or banks, or of the Tennessee Valley Authority, and obligations of, or instruments issued by or fully guaranteed as to principal and interest by, the Federal National Mortgage Association (Fannie Mae), or Federal Home Loan Mortgage Corporation (Freddie Mac), and notes, bonds, debentures, mortgages and other evidences of indebtedness of the United States Postal Service. [BL 235(15)].
- C. N.Y.S. obligations, issued pursuant to the authority of any law of the state, or those for which the faith of this state is pledged to provide for the payment of the interest and principal. [BL 235(2)].
- D. Obligations of or those for which the faith of any city, county, town, village, school district, water district, sewer district or fire district in this state is pledged to provide for the payment of principal and interest, provided that they were issued pursuant to law and the faith and credit of the issuing municipal corporation or district is pledged for their payment. [BL 235(4)].
- E. Bonds and debentures or other obligations of any public authority or commission or similar body created or approved by the State of New York having assets of not less than \$50 million. [BL 235(4)].
- F. Certificates of deposit issued by a bank, trust company or national bank whose principal office is located in this state or a banking corporation organized under the laws of the U.S. or of any state thereof whose deposits are insured by an agency of the U.S., or an agency or branch located within the U.S. of a foreign banking corporation with total worldwide bank assets in excess of one billion dollars, subject to such regulations as the banking board may impose. Additionally, certificates must be payable in U.S. dollars at an office of a banking institution located in the U.S. [BL 235(12-a); 3 Codes, Rules and Regulations of the State of New York (NYCRR) Part 72].
- G. Bankers' acceptances which are eligible for purchase in the open market by federal reserve banks and which have been accepted by a bank, a trust company, a private banker or an investment company, or by a banking corporation which is organized under the laws of the U.S. or of any state thereof and which is a member of the federal reserve system. The aggregate investment for acceptances shall not exceed 5% of the System's assets. [BL 235(12)].
- H. Commercial paper, including short-term obligations of industrial companies, finance companies, insurance companies, utilities and banks which meet the legal investment standards for these individual instruments.



- I. Obligations payable in U.S. funds which at the time of investment are rated investment grade by two nationally recognized rating services or by one nationally recognized rating service in the event that only one such service rates such obligations, provided that the aggregate amount invested in the obligations of any single issuer may not exceed 2% of the assets of the System or 5% of the direct liabilities of the issuer unless the obligations are issued by the U.S. or are those for which the faith of the U.S. is pledged to provide payment of the interest and principal. [Retirement and Social Security Law (RSSL) §177(1-a)].
- J. Agreements for the repurchase of securities and commitments to invest System funds provided the underlying securities are eligible investments and the custodian requirements of RSSL §178-a are satisfied.
- K. Other securities meeting legal investment criteria.

VI. Risk Management

A. Market Risk:

- 1. Diversification: The short-term portfolio is expected to contribute to the diversification of the overall portfolio in a limited manner, since its asset allocation target is 0% with an allowable range of 0-5%. Within the short-term portfolio itself, diversification is ensured by:
 - a. At the time of investment, limiting the total holdings in any one issuer of Certificates of Deposits, Bankers Acceptances, and Commercial Paper to no more than 10% of the short-term portfolio or \$50 million, whichever is greater.
 - b. Staggering maturities.
- 2. Credit Rating Restrictions: In order to safeguard principal from undue risk by investing only in instruments of the highest quality, the following restrictions shall apply:
 - a. Any short-term obligation acquired for the short-term portfolio shall be rated no lower than A-1 by Standard & Poor's or P-1 by Moody's Investor Service.
 - b. The senior debt of the issuer, if any, shall be rated no lower than A by either service.
 - c. In the case of bank obligations, the issuer of the purchased obligation shall have a Moody's Bank Financial Strength rating no lower than B.
- 3. Maximum Maturity: The maximum maturity of any short-term obligation shall not exceed 13 months (unless floating rate securities are purchased, in which case their maximum final maturity shall be 3 years with a 3 month maximum reset period).

B. Liquidity Risk:

- 1. Funding liquidity risk is controlled by staggering maturities within the short-term portfolio.
- 2. Market liquidity risk is controlled by the techniques addressed above under Market Risk.



C. Credit Risk:

1. All short-term securities are settled on a delivery versus payment basis.
2. Repurchase Agreements with any one dealer may not exceed 10% of the short-term portfolio or \$200 million, whichever is greater.
3. Credit rating restrictions (as described under the Market Risk section) are intended to reduce the likelihood of issuer default.

D. Operational Risk:

1. Investments in Repurchase Agreements shall be made pursuant to an agreement or agreements between the System and an external investment manager or managers. Such agreements must be reviewed and approved by both the Investment and Legal Departments. Appropriate restrictions on the type of collateral, pricing, substitution and monitoring value will be imposed on these investments.
2. The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.

- E. Additional risk control techniques may be considered for other securities meeting the legal investment criteria.

VII. Communications

Retirement Board Reporting:

- A. The Investment Information Department reports all short-term investment purchases and sales on a monthly basis for quarterly Board ratification.
- B. The Investment Information Department provides a quarterly listing of the short-term investment position, at the end of each quarter, for inclusion in the minutes of the Finance Committee of the Retirement Board.
- C. Each quarter, the Actuarial Department provides a summary of performance.



VIII. Procedures & Controls

Responsible Party	Action
Investment Information Department	1. Determines dollar amount of funds available for short-term investing, each business day; informs Investment Department.
Investment Department	2. Determines maturity requirements. 3. Documents market prices and data obtained from a third party information provider. Using this market information solicits competitive prices from Broker / Dealers who meet the criteria outlined in the System's Broker Selection policy. 4. Selects investments and executes trades that comply with law and policy and meets current System needs. 5. Approves all transactions. 6. Communicates transaction details to Investment Information Department.
Investment Information Department	7. Communicates trade information to Custodian Bank. Verifies correct securities were received or delivered; resolves any discrepancies. 8. Performs all investment accounting and reporting, applying appropriate accounting controls.
Executive	9. Approves warrants to disburse funds.
Finance Department	10. Receives signed warrant from Executive and forwards to NYS Treasurer.
NYS Treasurer	11. Records payment.



VIII. Procedures & Controls (continued)

Responsible Party	Action
Finance Department	12. Posts warrant to General Ledger and retains executed copy.
Custodian Bank	13. Settles trades and pays or receives funds only after trade settles. Payment of funds will only be made against actual receipt of securities purchased. Settles maturities and credits account at maturity.
Investment Information Department	14. Reconciles System holdings to custodial position monthly. 15. Provides copy of this reconciliation to NYS Treasurer.
Retirement Board	16. Ratifies purchase and sale transactions.
Actuarial Department	17. Calculates and reviews performance, monthly.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Domestic Fixed Income Securities

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**Domestic Fixed Income Securities**

I. Introduction

The System's domestic fixed income portfolio invests primarily in instruments having a maturity greater than 12 months. A fixed income security normally pays a fixed rate of return over a defined period of time. The System's fixed income portfolio is intended to invest in those fixed income securities which will provide predictable long term cash flows from interest payments and maturities.

II. Purpose

- A. To obtain maximum investment return while protecting capital.
- B. To make investments which will support the retired liability of the System, consistent with current economic and market conditions.

III. Performance Objective

- A. Internally Managed Portfolios: The portfolio is to earn, over one or more market cycles, an average annual total rate of return that meets or exceeds that of the Lehman Brothers Aggregate Bond Index.
- B. Externally Managed Portfolios: The System has engaged outside managers to invest in Commercial Mortgage Backed Securities (CMBS). The investment guidelines will allow the managers to invest in U.S. Treasuries and Agencies to manage the portfolio's duration. The objective of the externally managed funds is to exceed the Lehman Investment Grade CMBS Index.

IV. Management Structure

- A. Internally Managed Portfolios: The core domestic fixed income portfolio is managed internally. The Securities Investment Officer and the Manager of Fixed Income shall discuss, on a regular basis, market conditions, the levels of nominal interest rates, the real rates of return, the shape of the yield curve, the relative value of various market sectors, issuance of new debt, secondary market supply, and long-term retired liability cash flow requirements, along with other variables, in an effort to determine the most attractive strategy for committing funds consistent with this policy.
- B. Externally Managed Portfolios: The external CMBS managers are limited to investment grade tranches and operate under guidelines contained in their respective management agreements. The mandate is based on a modified total return concept which involves limited position trades. This strategy is reviewed regularly with the managers. Hiring of external managers is covered under a separate policy.

Custodial Relationship

- A. All domestic fixed income securities are maintained in the custody and safekeeping of the System's custodian bank. This is accomplished pursuant to a contractual agreement among (i) the NYS Treasurer, as statutory custodian, (ii) the actual bank custodian, and (iii) the System.

**Domestic Fixed Income Securities**

- B. Pursuant to said Agreement, settlement instructions are communicated by the System to the bank custodian for execution.

V. Legally Permissible Investments

Subject to determination by the Securities Investment Officer that an investment is prudent, the following investment vehicles are statutorily permissible and may be considered for the System's funds:

- A. Obligations payable in U.S. funds which at the time of investment are rated investment grade by two nationally recognized rating services or by one nationally recognized rating service in the event that only one such service rates such obligations, provided that the aggregate amount invested in the obligations of any single issuer may not exceed 2% of the assets of the System or 5% of the direct liabilities of the issuer unless the obligations are issued by the U.S. or are those for which the faith of the U.S. is pledged to provide payment of the interest and principal. [Retirement and Social Security Law (RSSL) §177(1-a)].
- B. Notwithstanding the 2% limitation stated above, the System may invest not more than 2.5% of its assets in the obligations of any one railroad or industrial corporation, or any one corporation engaged directly and primarily in the production, transportation, distribution or sale of electricity or gas or the operations of telephone and telegraph systems or waterworks or in some combination thereof. [RSSL §177(1)(e)].
- C. In no event, may more than 30% of the System's assets be invested in bonds of electric and gas corporations, as defined in §235(13) of the Banking Law. [RSSL §177(1)(f)].
- D. Equipment trust certificates, subject to the provisions of the Banking Law, and not to exceed 5% of the assets of the System. [RSSL §177(1)(d)].
- E. Obligations of the Dominion of Canada, of any province of the Dominion of Canada, and of any city of the Dominion of Canada, payable in U.S. funds, provided that the aggregate unpaid principal amount of all such obligations at any time held by the System shall not exceed 5% of the System's assets. [RSSL §177(1)(c)].
- F. Obligations of the United States and New York State without limitation. Zero coupon bonds, which are the direct and sole obligations of the United States of America and enforceable by the holder thereof against the United States, are also legal investments. [Banking Law (BL) §235(1)&(2)].
- G. Bonds of the Savings and Loan Bank of the State of New York, Federal Land Bank, Federal Intermediate Credit Banks, and Banks for Cooperatives. [BL §235(10)&(11)].
- H. Bonds of the Federal Home Loan Mortgage Corporation (Freddie Mac), Federal Home Loan Banks, Tennessee Valley Authority, Federal National Mortgage Association (Fannie Mae), and the United States Postal Service. [BL §235(15)].
- I. Obligations issued or guaranteed by the International Bank for Reconstruction and Development, provided the aggregate unpaid principal amount of such obligations at any time held by the System shall not exceed 5% of the System's assets. [BL §235(24); RSSL §177(1)(b)].
- J. Obligations issued or guaranteed by the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, and obligations guaranteed by the Youth Facilities Project Guarantee Fund and participations therein. [BL §235 (24-a), (24-b), (24-c) & (24-d)].

**Domestic Fixed Income Securities**

- K. Bonds and notes of any bank, trust company, savings bank or savings and loan association organized under the laws of New York State having a net worth of at least \$10 million, which are validly secured at all times to the extent of 110% of the unpaid principal amount of such bonds and notes by mortgages upon real estate insured by the federal housing administrator or any of his successors in office and guaranteed by the United States under the provisions of the National Housing Act, as amended or supplemented, and to the extent of 133 1/3 % of the unpaid principal amount of such bonds and notes by conventional mortgages, the valuation of which must be based upon the unpaid principal amount thereof upon the date of the pledge, assignment or transfer thereof to the System or its trustee or trustees as security for such bonds and notes, such bonds and notes to be amortized in substantially equal annual or semiannual payments of principal and interest over a period not in excess of 25 years, provided the aggregate unpaid principal amount of bonds and notes secured by conventional mortgages shall not exceed 5% of the assets of the System. [RSSL §177(4)].
- L. Mortgage pass-through certificates, provided the certificates evidence ownership of undivided interests in pools or mortgage loans secured by first mortgages on real property located in New York State improved by one-to-four family residential dwellings, and, provided further, that (i) such mortgage loans are originated on or after January 1, 1980, by any bank, trust company, national banking association, savings bank, federal mutual savings bank, savings and loan association, federal savings and loan association, credit union, or federal credit union authorized to do business in NYS or by any lender approved by the Secretary of Housing and Urban Development for participation in any mortgage insurance program under the National Housing Act, (ii) such mortgage loans are assigned to a bank, trust company, federal mutual savings bank or federal savings and loan association as trustee for the benefit of the holders of such certificates, and (iii) such certificates are rated within the three highest grades by an independent rating service designated by the banking board. The aggregate unpaid principal on conventional mortgages securing mortgage pass-through certificates cannot exceed 10% of the assets of the System nor can the total unpaid principal on any single pool of conventional mortgages securing mortgage pass-through certificates exceed 1% of the assets of the System. [RSSL §177-c].
- M. Collateralized Mortgage Obligations which meet the requirements of Subparagraph A hereof.
- N. Private placements, where the purchase of unrated obligations is authorized by the Banking Law or the Retirement and Social Security Law, governing fixed income obligations; if not so provided, private placements as well as other domestic fixed income securities not otherwise provided for may be purchased under the Leeway Clause, RSSL §177(9).
- O. Other investments meeting legal investment criteria.

VI. Risk Management**A. Market Risk:**

1. Diversification: The domestic fixed income portfolio contributes to the diversification of the overall portfolio. The asset allocation target is 18% with an allowable range of 11-25%. This range may be exceeded to reflect any shortfall in the allocation to the mortgage asset class, subject to statutory limitations. Within the domestic fixed income sector, diversification is achieved by:



Domestic Fixed Income Securities

- a. Exposure to many sectors of the domestic fixed income market including: U.S. Treasuries and agency obligations, corporate bonds, and mortgage backed securities.
 - b. Selection of securities taking into consideration the sector, maturity, yield, quality, call protection, liquidity and effect on the diversification of the portfolio.
2. Credit Rating Restrictions: The System may only invest in securities rated investment grade or better by two nationally recognized rating services (or by one nationally recognized rating service in the event only one such service rates such obligations).
- B. Funding Liquidity Risk: Funding liquidity risk is controlled by monitoring the degree to which cash flows generated by the bond flow match the retired liability schedule. Matching considerations are incorporated into portfolio management to the extent possible without compromising performance relative to the benchmark.
- C. Credit Risk:
1. All domestic fixed income security transactions are settled on a delivery versus payment basis.
 2. Custody of the securities is strictly maintained by the custodial bank. Thus, external investment managers do not have physical possession of System securities.
- D. Operational Risk: The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.

VII. Communications

- A. Retirement Board Reporting:
1. The Investment Information Department shall report all long-term investment purchases and sales on a monthly basis for quarterly Board ratification.
 2. The Investment Information Department will provide a quarterly report of quality, distribution, and duration for inclusion in the minutes of the Finance Committee of the Retirement Board.
 3. The Actuarial Department shall provide a summary of performance, quarterly.
 4. The Investment Information and Actuarial Departments will provide a long-term cash flow projection of retired lives liabilities and income as part of the annual asset allocation review.

**Domestic Fixed Income Securities****VIII. Procedures & Controls**

Responsible Party	Action
Actuarial/Investment Information Departments	1. Prepare long-term retired lives liability and income projection.
Investment Information Department	2. Prepares a monthly cash flow forecast in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This forecast coordinates cash available to invest with planned program investments and targeted asset allocations.
Investment Department	3. Reviews the cash flow forecast and coordinates it with asset allocation analysis to determine whether the program will incorporate net buying, selling, or status quo. This analysis is coordinated with Actuary and the Executive Director. 4. Continuously assesses goals for portfolio characteristics taking into consideration the following: the benchmark; the duration of the retired lives; distribution of maturity, yield, quality, call protection; diversification among sectors; the yield curve; and compliance with law, policy and System needs. 5. Executes trades designed to accomplish strategic and asset allocation goals. 6. Approves all transactions. 7. Communicates transaction details to Investment Information Department, including description details for new securities.
External Investment Managers	8. Based on a stated style and full investment discretion executes trades with brokers and reports to the Investment Information Department or Custodian Bank as directed by NYSTRS. 9. Reconciles portfolio activity and holdings with System and Custodian Bank.
Real Estate Investment Officer	10. Acts as liaison between external CMBS program managers and the System.
Real Estate Department	11. Continuously assesses goals for CMBS portfolios taking into consideration the following: the benchmark; the duration of retired lives; distribution of maturity, yield, quality, diversification among sectors; compliance with law, policy, program investment guidelines and System needs. 12. Reviews the cash flow forecast and coordinates it with asset allocation analysis to determine whether the program will incorporate net buying, selling, or status quo. This analysis is coordinated with Actuary, Securities Investment Officer, and Executive Director.

**Domestic Fixed Income Securities****VIII. Procedures & Controls (continued)**

Responsible Party	Action
Investment Information Department	13. Communicates trade information to custodian bank. Verifies correct securities were received or disposed of; resolves any discrepancies. Prepares warrant and sale letters. 14. Performs all investment accounting and reporting, applying appropriate accounting controls. 15. Determines that portfolio holdings comply with statutory limitations.
Executive	16. Approves warrant to disburse funds.
Finance Department	17. Receives signed warrant from executive and forwards to NYS Treasurer.
NYS Treasurer	18. Records payment.
Finance Dept.	19. Posts warrant to General Ledger and retains executed copy.
Custodian Bank	20. Settles trades and pays or receives funds only after trade settles. Settles maturities and credits account at maturity.
Investment Information Department	21. Reconciles System holdings to custodial position, monthly. 22. Provides copy of this reconciliation to NYS Treasurer.
Retirement Board	23. Ratifies purchase and sale transactions.
Actuarial Department	24. Calculates and reviews performance, monthly.

Additional Procedures & Controls for Mortgage Pass-Throughs

Responsible Party	Action
Investment Information Department	25. Reviews reported information for accuracy (e.g. interest, fees, and ending balances).



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Domestic Equity Securities

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**Domestic Equity Securities**

I. Introduction

Domestic equities, for System purposes, typically consist of corporate common stock. These stocks must be registered on a national securities exchange or must be otherwise registered as provided in the Securities Exchange Act of 1934 as amended, with price quotations furnished through a nationwide automated quotations system approved by the National Association of Securities Dealers, Inc. (NASD). The Retirement Board has authorized limited writing of covered call options with the internally managed portfolios. External investment managers are not authorized to trade in options.

II. Purpose

To maximize long-term total return within acceptable risk parameters.

III. Performance Objectives

- A. Passively Managed Funds: The System maintains seven passively managed Index Funds - the NYSTRS S&P 1500 Index Fund, the NYSTRS Russell 1000 Value Fund, the NYSTRS S&P 1500 Value Tilt Fund, the NYSTRS S&P 1500 Growth Tilt Fund, the NYSTRS Small Cap Fund, the NYSTRS Composite Fund, and the Equal Weight S&P 500 Fund. The objective of the NYSTRS S&P 1500 Index Fund is to match, as closely as possible, the performance of the S&P 1500 Stock Index, while the objective of the NYSTRS Russell 1000 Value Fund is to match, as closely as possible, the performance of the Russell 1000 Value Index, at similar levels of risk. The NYSTRS S&P 1500 Value Tilt Fund follows the S&P 1500 Stock Index, while tilting the portfolio to value related stocks. The S&P 1500 Growth Tilt Fund tilts towards growth stocks. The NYSTRS Small Cap Fund follows the small capitalization equities of the S&P 1500 Index. The NYSTRS Composite Fund follows the S&P 1500 Index with tilts and alphas toward value. The Equal Weight S&P 500 Fund matches, as closely as possible, the performance of the S&P 500 Equal Weight Index. All seven funds are managed internally by the Investment Department. The objective of the System's covered call option program is to achieve an incremental return on System stocks earmarked for disposition.
- B. Actively Managed Funds: The objective of the externally managed funds is to exceed: the S&P 500 Stock Index, in the case of large cap managers; and the Russell 2000 Stock Index, for small cap managers. (For a discussion of small cap vs. large cap, see ¶ IV.B of this policy.)

IV. Management Structure

- A. Up to 100% of the System's domestic equities can be internally managed by the Investment Department in passive index funds.
- B. The System's external investment managers are of two general types: "large cap" and "small cap". Large cap managers trade primarily in domestic equities of corporations with large market capitalization, while small cap managers trade primarily in domestic equities of corporations whose market capitalizations are generally under \$1 billion.

**Domestic Equity Securities**

C. External investment managers may be engaged to operate as a fund-of-funds, hiring other external investment managers. (See the requirements for external investment managers retained by the System's domestic equity fund-of-fund managers, attached hereto as Appendix B.)

D. Internal Portfolios:

1. **Index Funds:** The System currently uses the Barra Optimization Model in constructing and maintaining its in-house index funds. Essentially, the Barra technique is used to achieve a minimal tracking error in matching performance of the index fund with the Russell 1000 Value, the S&P 1500 Stock Index, and the Equal Weight S&P 500 Index, while maintaining transaction, other costs, and risk at an acceptable level. Due to transaction costs, the System does not attempt to maintain an exact replica of the indices. Rather, a sampling of each of the aforementioned index funds is acquired and then optimized to track the Russell Indices using the Barra models as stated above. The objective of the NYSTRS 1500 Value and Growth Tilt Funds is to enhance returns by including additional value and growth stocks. The objective of the NYSTRS S&P 1500 Composite Fund is to add additional alpha to the System's portfolio. The Equal Weight S&P 500 Fund will diversify the portfolio from large capitalization stocks. The NYSTRS Small Cap Fund will provide additional exposure to small capitalization companies in the S&P 1500 Index.
2. **Covered Call Options:** Covered call options are written solely on securities which are earmarked to be sold as part of rebalancing the portfolio. Any such options must be traded on one of the national exchanges. (See section V.C., and Covered Call Option Guidelines attached hereto as Appendix A).

E. Custodial Relationship:

1. All domestic equities, whether under internal or external management, are maintained in the custody and safekeeping of the System's bank custodian. This is accomplished pursuant to a contractual agreement among (i) the NYS Treasurer, as statutory custodian, (ii) the actual bank custodian, and (iii) the System.
2. Pursuant to said Agreement, settlement instructions are communicated by the System to the bank custodian for execution.

V. Legally Permissible Investments

- A. Subject to a determination by the Securities Investment Officer, the Retirement Board or an external manager, as appropriate, that an investment is prudent, the System may invest in domestic equity securities and interest-bearing obligations payable in U.S. funds which are convertible into equity securities of any corporation created or existing under the laws of the U.S., any state of the U.S., District of Columbia, and Commonwealth of Puerto Rico or any investment company, as defined by, and which is registered under, an act of Congress of the United States, entitled the "Investment Company Act of 1940", approved August twenty-second, nineteen hundred forty, as amended. [Retirement and Social Security Law (RSSL) §177(2)]



Domestic Equity Securities

- B. Each of the foregoing investment vehicles is subject to the following limitations:
1. The equity securities must be registered on a national securities exchange or otherwise registered pursuant to the Securities Exchange Act of 1934 and, if so otherwise registered, price quotations for such equity securities are furnished through a nationwide automated quotations system approved by the National Association of Securities Dealers, Inc. [RSSL §177(2)(d)].
 2. The maximum invested by the System in such equity securities shall not exceed: (a) in any one year 15% of the assets of the System; or (b) 70% in the aggregate (domestic equities must share the 15% and 70% limitations with foreign equities acquired pursuant to RSSL §177(8)); (c) provided, further, however, that more than 15% of such domestic equities, but not more than 20% thereof, may be so invested in any one year but only to the extent that the per centum of such investments over all prior years from July 1991, when added to the per centum of such investments during that year, does not exceed an average of 15% of the assets of the System over all prior years and the year in which the investment is being made [RSSL §177(2)(a)].
 3. Not more than 2% of the assets of the System shall be invested in the equity securities of any one corporation and subsidiary or subsidiaries thereof [RSSL §177(2)(b)].
 4. Not more than 5% of the total issued and outstanding equity securities of any one corporation shall be owned by the System. [RSSL §177(2)(c)].
 5. Pursuant to RSSL §178-a, the statutory custodian (NYS Treasurer) has authorized domestic equities to be maintained in the custody of the System's custodian.
 6. Notwithstanding the foregoing percentage limitations, the leeway clause [RSSL §177(9)] may be utilized to legally exceed the foregoing percentages, so long as such assets are prudent investments, and fall within the percentage limitation currently applicable to the leeway clause.
- C. In addition, the System is authorized to write covered call options traded on a national exchange pursuant to the Covered Call Option Guidelines (see section IV.D.2, and Appendix A). The Banking Department has issued a determination that a prudently maintained covered call option program is permissible under BL §235 so long as the options are traded on a national exchange.

VI. Risk Management

A. Market Risk:

Diversification: The domestic equity portfolios contribute to the diversification of the overall portfolio. The asset allocation target is 51% with an allowable range of 41-61%. This range may be exceeded to reflect any shortfall in the allocation to real estate or alternative investments as long as statutory constraints are not exceeded. Within the domestic equity sector, diversification is achieved by:

1. Use of the in-house Russell 1000 Value, S&P 1500 Stock Index Funds, and the Equal Weight S&P 500 Index Funds to help to ensure broad diversity among a large universe of stocks and industries.



Domestic Equity Securities

2. Careful selection of external investment managers with varying investment styles. Two primary styles are growth and value. A growth style focuses on companies expected to grow faster than the market in general, while a value style seeks stocks whose prices are low relative to their inherent value. External investment managers are not permitted to deviate from the style for which they were hired. An investment consultant shall be retained to monitor the managers', other than fund-of-funds managers', adherence to stated style. Significant deviation may result in termination of the management contract. Fund-of-fund managers report on the investment activity of the managers within the fund. (See the Selection, Monitoring and Termination of External Securities and Alternative Investment Managers subpolicy.)

B. Credit Risk:

1. All domestic equity security transactions are settled on a delivery versus payment basis.
2. Custody of the equity securities is strictly maintained by the custodial bank. Thus, external investment managers do not have physical possession of System equities.

C. Operational Risk: The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.

VII. Communications

A. Retirement Board Reporting:

1. The Investment Information Department reports all internally generated equity purchases and sales on a monthly basis for quarterly Retirement Board ratification. External investment manager trades are reported in summary form and do not require ratification.
2. The Investment Information Department provides a report of the principal holdings and changes within the past quarter for inclusion in the minutes of the Finance Committee of the Retirement Board.
3. The Investment Information Department provides a report of covered call option activity each quarter, for inclusion in the minutes of the Finance Committee of the Retirement Board.
4. The Actuarial Department provides a summary of performance, quarterly.
5. The performance monitoring consultant presents a detailed performance attribution analysis for the actively managed external funds, other than fund-of-funds, quarterly.

B. External Investment Manager Reporting:

1. External investment managers provide monthly reports of their holdings and market values which the System reconciles to its records.
2. External investment managers report to the Investment Advisory Committee upon request.

**Domestic Equity Securities****VIII. Procedures & Controls**

Responsible Party	Action
Investment Information Department	1. Prepares a monthly cash flow forecast in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This forecast coordinates cash available to invest with planned program investments and targeted asset allocations.
Investment Department	2. Reviews the cash flow forecast and coordinates it with asset allocation analysis to determine whether the rebalancing program will incorporate a buy, sell or status quo program. This analysis is coordinated with Actuary and the Executive Director. 3. Works with the Investment Information Department and the Barra Optimization Model to develop the optimal rebalancing program. The result of this process is a recommended buy and sell list. 4. Reviews overall trade recommendations with Securities Investment Officer or designee and obtains approval. 5. Determines investments comply with law and policy. 6. Places buy and sell orders with brokers. 7. Communicates trade details to the Investment Information Department. 8. Oversees qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Securities and Alternative Investment Managers sub policy.)
External Investment Managers	9. Based on a stated style, and full investment discretion, executes trades with brokers, and reports trades to the Investment Information Department.
Securities Investment Officer	10. Acts as liaison between external equity managers and the System.
Investment Department	11. Forwards inter-fund trades to Investment Information Department.

**Domestic Equity Securities****VIII. Procedures & Controls (continued)**

Responsible Party	Action
Investment Information Department	12. Communicates trade information to DTC or custodian bank. Prepares warrants. 13. Performs all investment related accounting and reporting, applying appropriate accounting controls.
Executive	14. Approves warrants to disburse funds.
Finance Department	15. Receives signed warrant from executive and forwards to NYS Treasurer.
NYS Treasurer	16. Records payment.
Finance Department	17. Posts warrant to General Ledger and retains executed copy.
Investment Information Department	18. Verifies trades have been settled correctly, and resolves any discrepancies. 19. Reconciles System holdings to custodial position monthly. Reconciles shares and market values per external managers' reports to System's records, monthly. 20. Provides copy of this reconciliation to NYS Treasurer. 21. Determines that portfolio holdings comply with statutory limitations. 22. Maintains reports, reconciliations and related correspondence.
Custodian Bank	23. Settles trades and pays or receives funds in accordance with the customary or established securities trading or securities processing practices and procedures in the jurisdiction or market in which the trade occurs.

**VIII. Procedures & Controls (continued)**

Responsible Party	Action
Retirement Board	24. Ratifies trades made by System staff, quarterly.
Actuarial Department	25. Calculates and reviews performance, monthly. 26. Coordinates reports from security investment performance consultant.
Legal Department	27. Reviews contracts with external managers and advisors. 28. Provides legal advice regarding compliance with legal investment criteria and other legal issues.



APPENDIX A

Covered Call Option Guidelines

1. Covered call options (options) may be written only on issues which the portfolio optimization process identifies as needed to be sold to rebalance the internally managed passive portfolios.
2. Options may be written when the annualized rate of return (excluding dividends) is greater than 1% above the current 90-day Treasury Bill rate. The annualized rate of return for this purpose is defined as follows:

% Annualized Rate of Return =

$$\frac{\text{Minimum of Stock Price or Strike Price}}{\text{(Market Price of Stock at Time of Writing} \\ \text{- Premium Received from Option)}}^{-1} \times \frac{360}{\text{No. of Days Remaining}}$$

3. An option shall be written only if the premium is greater than \$0.50 per share.
4. An open option may be closed out (i.e., repurchased) when the premium for such call has dropped to a level making the repurchase appropriate.
5. The underlying market value of stocks covered by outstanding options shall not exceed \$1 billion at any one time.
6. Options on an individual issue shall not exceed the maximum position limit prescribed by the Options Clearing Corporation.
7. All transactions shall be approved by the Finance Committee of the Retirement Board in the same manner as stock transactions.



APPENDIX B

**Requirements for External Investment Managers Retained
By Domestic Equity Fund-of-Funds Managers**

1. Key professionals are majority owners of the firm.
2. Key professionals have relevant experience (analysts, portfolio managers).
3. Key professionals have at least five years industry experience and have worked together for at least three years.
4. Low client/professional ratio.
5. Limited number of individual clients based on discretionary assets under management.
6. Each firm should have more than \$10 million and less than \$2 billion of assets under management.
7. The System's allocation will not represent more than 50% of each firm's total assets under management.



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**I. Introduction**

The System's international equity portfolio consists of one internally managed fund, NYSTRS S&P ADR Index Fund, and participation units in collective investment vehicles. The units in collective investment trusts have been established to invest directly, or indirectly through American Depositary Receipts (ADRs) or other collective investment vehicles, in common and preferred stocks of companies not domiciled in the U.S. and denominated in various currencies. NYSTRS' S&P ADR Index Fund is an enhanced index fund which invests only in ADR's. Most of the securities in the international equity portfolios are those of developed countries, and a portion are from emerging countries. All units in the collective investment trusts of the System's international equity investments are externally managed in commingled funds.

II. Purpose

To maximize long term total return within acceptable risk parameters while diversifying the overall portfolio.

III. Performance Objective

All of the System's external international equity portfolio managers are measured against the unhedged MSCI (Morgan Stanley Capital International) EAFE (Europe, Australasia, and the Far East) Stock Index.

NYSTRS' S&P ADR Index Fund, which is managed internally by the Investment Department, is measured against the S&P (Standard & Poor's) ADR (American Depositary Receipt) Index. The goal of the passive portfolios is to achieve minimal tracking error against the benchmark, the goal of the enhanced portfolios is to enhance the return relative to the benchmark, and the goal of the core active and benchmark agnostic portfolios is to exceed the benchmark.

IV. Management Structure

Pursuant to the Retirement Board's direction, (based upon the investment consultant's recommendation), the target allocations for international equities are: Passive & Enhanced Passive 35%; Core Active 30%; Benchmark Agnostic 35%, as defined below:

1. Passive/Enhanced Passive:
 - a. Passive: managers passively manage country, currency and security selection.
 - b. Enhanced Passive: managers attempt to add 50 – 100 basis points (net) above the MSCI EAFE Stock Index return, with a very risk-controlled portfolio structure.
2. Core Active: managers actively manage country, currency and security selection.
3. Benchmark Agnostic: managers actively manage country, currency and security selection, much like that of a Core Active Manager. However, the variations from the benchmark may be wider, thus creating the potential for greater returns than Core Active with greater volatility of returns.



International Equity Securities

A. External Management

1. All of the System's externally managed international equity portfolios are in commingled accounts.
2. The System may invest in commingled funds that lend securities on a prudent basis.
3. All externally managed international equity securities are maintained in the custody and safekeeping of the commingled funds' custodial banks, which may appoint one or more foreign entities as their agent to hold and register foreign securities.
4. The System's Executive Director is authorized, at his discretion, to contract with the System's external, core active and benchmark agnostic, international equity managers regarding their permitted exposure to emerging markets equities within the portfolio of assets under management provided, however, that such exposure may not exceed 20% of the assets under management.

B. Internal Management

1. The system maintains one internal enhanced fund, NYSTRS S&P ADR Index Fund, managed by the Systems' Investment Department.
2. The System currently uses BARRA to construct and maintain the NYSTRS S&P ADR Index Fund. BARRA optimization is used to enhance returns while controlling risk. The NYSTRS S&P ADR Index Fund provides exposure to international companies, but has the advantages that they are traded on U.S. exchanges and the System has custody of those assets. The eligible ADR's have met rigorous screening criteria from S&P.
3. Securities within NYSTRS' S&P ADR Index Fund are maintained in the custody and safekeeping of the System's bank custodian. This is accomplished pursuant to a contractual agreement among (i) the NYS Treasurer, as statutory custodian, (ii) the actual bank custodian, and (iii) the System.

V. Legally Permissible Investments

Subject to determination by the Securities Investment Officer, the Retirement Board or an external investment manager, as appropriate, that a particular investment is prudent, investment in international equity securities is permitted under Retirement and Social Security Law (RSSL) §177(8).

- A. Pursuant to RSSL §177(8), no more than 10% of the System's assets may be invested in international equity securities, including emerging market equity securities. Investments in international equities must be included with the System's domestic equities for the purpose of the 70% overall limitation and the 15% per year limitation contained in RSSL §177(2). In addition, under RSSL §177(8), an international equity may only be acquired if:
 1. The security is registered:
 - a. on a national exchange under the Securities and Exchange Act of 1934 or otherwise registered pursuant to said act, and, if the security is so otherwise registered, price quotations must be furnished through a NASD approved nationwide quotation system; or
 - b. on a foreign exchange organized and regulated under the jurisdiction of such exchange, and



International Equity Securities

2. The issuing corporation shall have (a) averaged at least \$1 billion in annual sales during the three years immediately preceding the investment, or (b) a market capitalization of at least \$1 billion at the time of investment.
- B. Otherwise, the security may be acquired under the Leeway Clause (RSSL §177(9)) if prudent.

VI. Risk Management

A. Market Risk:

1. Diversification: The international equity portfolios contribute to the diversification of the overall portfolio. The asset allocation target is 10% with an allowable range of 6-14%. Within the international equity sector, diversification is achieved by:
 - a. Investments that are generally based on the EAFE universe, including up to 20% in emerging markets, helps diversify among a large universe of countries, currencies, stocks and industries.
 - b. The System may invest in commingled funds that manage currencies as an integral part of the investment process.
 2. Careful selection of external investment managers: An investment consultant shall be retained to provide advice regarding the impact of various changes at the external international equity manager's firm. (See Selection, Monitoring and Termination of External Securities and Alternative Investment Managers subpolicy.)
- B. Political Risk: The System is exposed to the risk of nationalization or other unfavorable government action in the foreign countries in which it invests. This risk is mitigated to the extent possible by maintaining a well-diversified country exposure.
- C. Operational Risk: The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.

VII. Communications

A. Retirement Board Reporting:

1. The Actuarial Department will provide a summary of performance quarterly.
2. The performance monitoring consultant shall provide a detailed performance attribution analysis of the international equity managers.

B. External Investment Manager Reporting:

1. External investment managers shall provide monthly reports about the System's participation units, market values and income.
2. External investment managers will report to the Investment Advisory Committee upon request.





International Equity Securities

VIII. Procedures & Controls

Responsible Party	Action
<p><u>PROGRAM FUNDING:</u> Investment Information Department</p>	<p>1. Prepares a monthly cash flow forecast in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This forecast coordinates cash available to invest with planned program investments and targeted asset allocations.</p>
<p>Investment Department</p>	<p>2. Reviews the cash flow forecast and coordinates it with asset allocation analysis to determine whether the rebalancing program will incorporate further funding, status quo, or a sell program. This analysis is coordinated with Actuary and the Executive Director. 3. Instructs the Investment Information Department to disburse funds to the investment manager.</p>
<p>Investment Information Department</p>	<p>4. Prepares warrant and submits to Internal Audit.</p>
<p>Internal Audit</p>	<p>5. Pre-audits warrant and submits to Executive.</p>
<p>Executive</p>	<p>6. Approves warrants for funding.</p>
<p>Finance Dept.</p>	<p>7. Receives signed warrant from Executive and forwards to NYS Treasurer.</p>
<p>NYS Treasurer</p>	<p>8. Records payment.</p>
<p>Finance Dept.</p>	<p>9. Posts warrant to General Ledger and retains executed copy.</p>
<p><u>INVESTMENT PROCESS (External Management):</u> External Investment Managers</p>	<p>10. As fiduciaries for the System, and in compliance with System policies and governing agreements, manage the international equity commingled funds on a day-to-day basis using full discretion. This includes, but is not limited to, selecting country and securities, executing trades with brokers and trading currencies.</p>
<p>Securities Investment Officer</p>	<p>11. Acts as liaison between international equity managers and the System.</p>



International Equity Securities

Responsible Party	Action
<p><u>INVESTMENT PROCESS (Internal Management):</u> Investment Department</p>	<p>12. Works with the Investment Information Department and the BARRA to develop the optimal rebalancing program. The result of this process is a recommended buy and sell list.</p> <p>13. Reviews overall trade recommendations with Securities Investment Officer or designee and obtains approval.</p> <p>14. Places buy and sell orders with brokers</p> <p>15. Communicates trade details to the Investment Information Department</p>
<p><u>Investment Information Department</u></p>	<p>16. Communicates internally managed trade information to DTC or custodian bank. Prepares warrants.</p> <p>17. Verifies internally managed trades have been settled correctly, and resolves any discrepancies.</p>
<p>Custodian Bank</p>	<p>18. Settles trades and pays or receives funds in accordance with the customary or established securities trading or securities processing practices and procedures in the jurisdiction or market in which the trade occurs.</p>
<p>Retirement Board</p>	<p>19. Ratifies trades made by System staff, quarterly.</p>
<p><u>MONITORING:</u> Investment Department</p>	<p>20. Oversees qualitative aspects of the program such as strategy and process. (See Selection, Monitoring and Termination of External Securities and Alternative Investment Managers subpolicy)</p> <p>21. Maintains reports and correspondence files.</p>
<p>Investment Information Department (External Management)</p>	<p>22. Receives monthly reports from each external manager and prepares journal entries to account for current period activity.</p> <p>23. Receives commingled fund audited financial statements annually and ensures audited statements reconcile to external manager financial reports used to record the System's portion of investment holdings.</p> <p>24. Determines that portfolio holdings comply with statutory limitations.</p> <p>25. Maintains reports, reconciliations and related correspondence.</p>

**International Equity Securities**

Responsible Party	Action
Investment Information Department <i>(Internal Management)</i>	<ul style="list-style-type: none">26. Reconciles System holdings to custodial position monthly.27. Provides copy of this reconciliation to NYS Treasurer.28. Determines that portfolio holdings comply with statutory limitations.29. Performs all investment related accounting and reporting, applying appropriate accounting controls.30. In conjunction with custodian bank, ensure all required documentation is completed and filed to reduce or eliminate the amount of foreign taxes withheld and to enable us to reclaim the maximum allowable when taxes are withheld.31. Record foreign taxes withheld on ADR dividends and track tax reclaims receivable.32. Perform monthly reconciliation of tax reclaims receivable with custodian bank.33. Maintains reports, reconciliations and related correspondence
Actuarial Department	<ul style="list-style-type: none">34. Calculates and reviews performance monthly.35. Coordinates reports from performance monitoring consultant.
Legal Department	<ul style="list-style-type: none">36. Reviews contracts with external managers and advisors.37. Renders advice on various legal questions, as needed.



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Commercial Mortgage Lending

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**Commercial Mortgage Lending**

I. Introduction

Mortgage investments are debt instruments (notes or bonds) secured by a mortgage or deed of trust which provides a lien on real estate. These investments include conventional (non-insured) mortgages, construction loans, Commercial Mortgage Backed Securities, and junior loans. Junior loans would include second mortgages and Mezzanine Loans. Real Estate Mezzanine Loans are not secured by a lien on the real estate and therefore not technically a mortgage. The security for a Mezzanine Loan is the pledge of the ownership interest in the real estate asset.

The policy of the System is to make mortgage loans secured by a first lien on real estate improved by income producing property, or Mezzanine Loans secured by an owner's interest in real estate. **These investments are either originated directly by the System or by another lender acceptable to NYSTRS.** Underwriting responsibility remains with the System or under a contractual arrangement whereby another party underwrites a transaction, co-invests in it alongside the System and accepts fiduciary responsibility for its activities on behalf of the System. Construction loans are made much in the same fashion, however, they are used largely as a competitive advantage to allow the System to secure a desirable mortgage. The CMBS and the bulk of the Mezzanine investments are made through outside fiduciaries and involve diversified portfolios within commingled funds. The System's ability to directly originate junior mortgage loans and mezzanine loans will be limited to positions where the System holds all the senior loan interests. Such junior financing shall be conditioned upon: (i) there being sufficient cash flow to provide acceptable debt service coverage for the total financing; (ii) the loan-to-value ratio for the total financing being no greater than 75% of the appraised value of the security; (iii) the junior financing having a maturity date which is co-terminus with, or earlier than, the maturity date of the senior financing; and (iv) the junior financing being due and payable upon the sale of the property securing the financing or the prepayment of the senior financing.

II. Purpose

The purpose of the Commercial Mortgage Lending portfolio is to:

- A. Make investments which will support the retired liability of the System, consistent with current economic and market conditions;
- B. Provide diversification to the System's overall investment program within the parameters of the fund's asset allocation level;
- C. Provide a stable and predictable income stream; and,
- D. Obtain maximum investment return while maintaining preservation of capital.

III. Performance Objective

Mortgage interest rates are priced by adding a market derived spread to the U.S. Treasury rate for a maturity similar to the proposed mortgage. This mortgage interest rate is then compared to portfolio-wide return requirements as established by the System from time to time for suitability. The CMBS component of the mortgage portfolio will be limited to investment grade securities and performance will be compared with a Lehman CMBS index.

**IV. Management Structure**

The commercial mortgage portfolio is managed internally within the Real Estate Department and is overseen by the Real Estate Investment Officer or his designee. Under the direction of the Chief Investment Officer, the Real Estate Investment Officer is responsible for the formulation and implementation of the mortgage investment program.

V. Legally Permissible Investments

Subject to determination of the Real Estate Investment Officer or his designee that a mortgage investment is prudent, the System may invest in conventional mortgages constituting a first lien upon real property located in the U.S. pursuant to Retirement and Social Security Law (RSSL) §§176(2), 177, 177-a, and 178, and Banking Law (BL) §235. Some of the major provisions are:

- A. The loan amount must be no more than 75% of the appraised value of property improved by a building or buildings, the major portion of which is used or, in the case of a building under construction, to be used for residential, business, manufacturing or agricultural purposes [RSSL §177(1)(a)(i)].
- B. The aggregate unpaid principal amount for all conventional mortgages shall not exceed 30% of the System's assets [RSSL §177(1)(a)(i)].
- C. Not more than 5% of the System's assets can be invested in any one conventional mortgage [RSSL §177(1)(a)(i)].
- D. The minimum dollar amount for conventional mortgages is \$250,000 [RSSL §178].
- E. The System may invest in conventional mortgages guaranteed by a state bank or trust company having a net worth in excess of \$500 million, provided, however, that no more than 10% of the System's assets shall be invested in any mortgage so guaranteed [RSSL §177(3)].
- F. The System may participate or co-invest in any conventional mortgage or insured mortgage or in any whole or part interest in any such mortgage which mortgage is held for the benefit of the holder or holders of a whole interest or part interests therein, subject to the limitations set forth in (A) (B) (C) and (D) above [RSSL §177(5)].
- G. The System may make or acquire a mortgage loan on a leasehold estate, provided that such leasehold estate has an unexpired term of not less than 21 years. Additionally, no mortgage loan upon a leasehold estate may be made or acquired unless the terms thereof shall provide for payments to be made by the borrower on the principal thereof at least once in each year in an amount which would be sufficient to completely amortize a loan whose period extended for four-fifths of the unexpired term of the lease. For these purposes, the unexpired term shall include any period covered under an option to renew the ground lease which can be exercised at the unilateral discretion of the System. The limitations set forth in (A) above apply to System investments in leasehold mortgages [BL §235(6)(i)].
- H. The System may invest in any mortgage insured by the federal housing commissioner, or for which a commitment to insure has been made by the federal housing commissioner [BL §235(20)(a)].



Commercial Mortgage Lending

- I. Obligations payable in U.S. funds which at the time of investment are rated investment grade by two nationally recognized rating services or by one nationally recognized rating service in the event that only one such service rates such obligations, provided that the aggregate amount invested in the obligations of any single issuer may not exceed 2% of the assets of the System or 5% of the direct liabilities of the issuer unless the obligations are issued by the U.S. or are those for which the faith of the U.S. is pledged to provide payment of the interest and principal. [Retirement and Social Security Law (RSSL) §177(1-a)].
- J. The mortgage investment may be acquired under the Leeway Clause [RSSL §177(9)] if prudent.

VI. Risk Management

- A. The Retirement Board has adopted a target allocation of 8% for investment of System assets in commercial mortgages, with an allowable range of 5-11%.
- B. Risk management is accomplished through the investment underwriting process and by portfolio diversification. In the underwriting process, System staff and a team of “due diligence” professionals (including lawyers, appraisers, engineers and environmental specialists) coordinated by the System, evaluate the factors likely to influence the performance of the asset pledged as collateral. The parameters of the financing are then styled to deal with any items of material concern. Risk to investment performance caused by broader economic phenomena which may influence a regional economy or an industry sector is mitigated by diversifying the mortgage portfolio both geographically and by property type. After an investment is made, long term investment performance is enhanced by an active mortgage servicing program which includes regular review of project financial statements and property inspections, which provide an early warning system that enables the System to deal with controllable issues pro-actively.
- C. Risk is also managed through the investment approval process which requires Real Estate Advisory Committee recommendations and Retirement Board approval for mortgage lending programs and each conventional mortgage originated by the System. Risk is further managed by statute which, among other things, places limits on maximum loan to value ratios and loan amount; and, by other policies and procedures established for the operation of the Real Estate Department and the System.
- D. The selection of appraisers will follow the guidelines established in the Equity Real Estate Investments section.
- E. The following two sections titled, “Communications” and “Procedures & Controls”, will delineate the measures implemented to control operational risks.

VII. Communications

Retirement Board Reporting:

- A. The following mortgage investment activity is reported quarterly to the Finance Committee of the Retirement Board by the Real Estate Department: mortgage commitments signed; mortgages acquired; mortgages assigned, discharged or satisfied; and mortgages in default.
- B. Financial parameters of the mortgage portfolio, including size, and performance are reported quarterly to the Retirement Board by the Real Estate Department.
- C. Each quarter, the Actuarial Department provides a summary of performance.

**Commercial Mortgage Lending****VIII. Procedures & Controls**

Responsible Party	Action
Retirement Board	1. Approves mortgage investment programs and conventional mortgage investments originated by the System.
Investment Information Department	2. Prepares a monthly cash flow forecast in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This forecast coordinates cash available to invest with planned program investments and targeted asset allocations.
Real Estate Department	3. Identifies and develops sources of potential mortgage investments. 4. Underwrites, negotiates and closes mortgage investments pursuant to statutory and other legal requirements. 5. Secures Real Estate Advisory Committee recommendations and Board approval as necessary to authorize investment. 6. Reports investment activity to Board as required. 7. Services mortgage investments to maximize System return. 8. Instructs the Investment Information Department to disburse funds to the borrower. 9. Prepares warrant and submits to Finance for control log.
Finance	10. Logs warrant and forwards warrant to Internal Audit for pre-audit.
Internal Audit	11. Pre-audits warrant and submits to Executive.
Executive	12. Approves warrants for disbursements of funds.
Investment Information Department	13. Sends wire to disburse funds as instructed.
Finance Department	14. Receives signed warrant from Executive and forwards to NYS Treasurer.
NYS Treasurer	15. Serves as custodian for original mortgage documents and securities or other instruments pledged as collateral. 16. Records warrants.
Finance Department	17. Posts warrants to General Ledger and retains executed copy.
Investment Information Department	18. Each business day receives and posts mortgage financial activity and adjustments to mortgage receivable files.



VIII. Procedures & Controls (continued)

Responsible Party	Action
Investment Information Department	19. Communicates funding authorization to System's bank for new fundings. 20. Performs all investment related accounting and reporting.
Actuarial Department	21. Calculates and reviews performance, quarterly.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Real Estate Investment

THIS SECTION CONTAINS THREE POLICIES:

- Equity Real Estate Investments
- Real Estate Department General Authorization
- Timberland Investments



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I. STATEMENT OF PURPOSE

The purpose of the New York State Teachers' Retirement System's ("NYSTRS" or the "System's") Equity Real Estate Policy Manual ("Policy") is to provide general guidelines and specific requirements which will allow the Finance Committee of the Board ("Finance Committee"), the Real Estate Advisory Committee ("REAC"), NYSTRS' staff, and external real estate professionals to fulfill the goals and objectives set forth herein for NYSTRS' real estate investment program.

The Policy is designed to enable NYSTRS' equity real estate portfolio to maintain the highest possible risk-adjusted returns. Recognizing that real estate and capital markets change over time, this document will be periodically reviewed and updated, as necessary, to reflect these changes.

II. DEFINITIONS

The following definitions for frequently used terms in this Policy are provided in order to clarify their usage in the formulation and implementation of the real estate investment program for NYSTRS. Definitions for terms used less frequently and specific to one section of the Policy are provided at the beginning of that section.

The term "**Manager**" (i.e., **Discretionary Manager**) shall be deemed to mean any company or entity which, by contractual agreement, assumes discretion over a specified amount of NYSTRS' real estate capital, invests the capital in numerous properties via the commingled fund investment structure, provides asset management services and periodically reports to NYSTRS. By virtue of the contractual agreement, NYSTRS shall not retain ultimate investment authority as to the buying, holding or selling of the individual property investments of the commingled fund.

The term "**Advisor**" shall be deemed to mean any company or individual which, by contractual agreement, provides property investment opportunities to NYSTRS, provides property asset management services to NYSTRS or provides a combination of the foregoing to NYSTRS on a non-discretionary basis. Unless otherwise stipulated, NYSTRS will retain the authority to approve the acquisition or disposition of the property investments generated and/or managed by such company or individuals.

The term "**Asset Manager**" shall be deemed to mean any company or individual which may be retained by NYSTRS to recommend, implement and supervise NYSTRS' asset management policies and procedures for either all or a specified number of NYSTRS' individual real estate property investments. Discretionary Managers and Advisors may be Asset Managers.

The term "**Consultant**" shall be deemed to mean any company or individual which provides any of the following services to NYSTRS: (1) definition, modification and monitoring of real estate investment policy and program; (2) individual property review; (3) recommendations that relate to establishment or termination of relationships with Discretionary Managers, Advisors, Asset Managers and/or other business partners; and (4) monitoring of and reporting on real estate investment performance and portfolio composition characteristics.



III. REAL ESTATE GOALS AND OBJECTIVES

The underlying goal of the real estate program is to invest in real property in a prudent manner. This program is designed to create a real estate portfolio of high quality property assets which will enhance long-term investment performance, diversify the asset base and reduce the volatility of returns for the entire NYSTRS investment portfolio. Ultimate objectives are to preserve capital and increase cash returns and portfolio value.

Meeting these objectives requires a flexible investment strategy so that, as real estate and capital market conditions change, NYSTRS may take advantage of emerging opportunities. The NYSTRS investment approach is one of active participation in the investment decision process and NYSTRS will retain certain levels of control over major investment and management decisions. This approach provides for the involvement of NYSTRS' staff while accessing third-party professional real estate expertise.

A. DIVERSIFICATION

An objective of the real estate investment program is to prudently diversify NYSTRS' real estate portfolio by investment structure, investment method, property type, property life cycle stage and economic region in order to avoid undue concentration in any category. In addition, consideration will be given to minimizing the potential impact of cyclical changes in the economy, financial and/or real estate markets.

Staff and the Consultant will prepare and periodically update a Strategic Plan for Real Estate, outlining the proposed diversification targets for NYSTRS' real estate portfolio. This strategic plan should be used as a guide when considering new investment opportunities and their impact on the aggregate real estate portfolio.

B. LEGALLY PERMISSIBLE INVESTMENTS

The value of all real property held by the System shall not exceed five percent of its assets and the cost of each parcel of real property shall not exceed two percent of the System's assets. [Retirement and Social Security Law (RSSL) §177(6)(e)]

Some of the investments addressed in this subpolicy fall under other legal limitations, such as Domestic Equities for some REITS, and the basket clause for investments not authorized by RSSL §177(6)(e).

C. RISK MANAGEMENT

Since there are inherent risks with every real estate investment, and the potential for maximum rewards is typically related to the amount of potential risk, the NYSTRS real estate investment program will emphasize the evaluation of risk and return. This approach allows the creation of maximum risk-adjusted yields.

Risk is managed by the creation of managerial, advisory, asset management and consulting relationships which will provide an information flow to NYSTRS which enables NYSTRS to effectively analyze market conditions, investment opportunities and asset management techniques. A major component of risk management is the monitoring of portfolio performance and composition so that active strategies may be implemented from time to time to improve the overall risk-adjusted performance of the portfolio.



D. ASSET MANAGEMENT

NYSTRS will generally retain Asset Managers to manage its investments. NYSTRS will direct Asset Managers to prepare detailed business plans for each property investment. These plans will be updated on an annual basis with the objective of maximizing risk-adjusted returns.

E. CORE PORTFOLIO

An objective of NYSTRS' real estate investment program is to maintain a "core" portfolio that limits undue risk, includes diversification and provides relatively predictable initial yields and internal rates of return. This component of the portfolio will consist primarily of completed and substantially leased, multi-tenant properties with an established performance history. These core property types will consist of office, retail, industrial and multi-family residential.

NYSTRS may also invest in "non-core" assets as a supplement to the core investment program. The non-core assets may include non-traditional property types and/or properties that involve development, redevelopment or leasing risks and may require specialized acquisition or management expertise to enhance the value of the investment. The holding period for the non-core investments will generally be less than that of the core portfolio and each non-core investment must include a thorough and well-defined exit strategy.

F. ASSET ALLOCATION

The System's allocation to equity real estate investments is 8% with a range of 5-11% (as measured by net asset value). This target may be adjusted by NYSTRS' Board in response to changing capital markets. The actual time frame for achievement of the allocation target will depend on the ability to access high-quality investment opportunities meeting the requirements of this Policy.

G. RETURN GUIDELINES

Underlying considerations for NYSTRS' identification of acceptable yields and internal rates of return are as follows:

1. NYSTRS' real estate capital will be invested only as high-quality property, commingled fund and other real estate investment opportunities arise. There will be no dollar/time relationship required for the investment of allocated funds.
2. Current cash-on-cash yields will typically be more heavily weighted than the potential for appreciation. Weightings may be modified for investments which are made outside of the core portfolio strategy.
3. Internal rate of return projections will generally be based on 8-12 year anticipated holding periods. The expected holding periods will be used to calculate potential returns, but will not determine actual disposition dates. Shorter holding periods may be used as appropriate.
4. Approved internal rate of return ranges assume adoption of "disposition strategies" for each property asset so that any asset may be sold when its investment value has peaked and/or when such a sale is justified based on maximizing overall yields of the NYSTRS real estate portfolio. Each annual business plan will include a hold/sell analysis.



5. The real estate portfolio will be expected to achieve a minimum, long-term real rate of return of five percent. The objective return for the real estate portfolio may change as directed by the Board. NYSTRS will maintain the flexibility to approve and fund investments which may not specifically comply with the individual yield and return "targets", but which offer competitive risk-adjusted profit levels.

IV. REAL ESTATE INVESTMENT CRITERIA

A. INTRODUCTION

Real estate investment criteria provide investment guidelines and identify types of equity real estate investments that will be considered by NYSTRS. While the investment criteria specified herein apply most directly to specified individual property investments, they will also be used by NYSTRS and its Consultant(s) to review and evaluate the underlying characteristics and strategies of commingled funds to which NYSTRS may allocate capital. In addition, NYSTRS has established specific criteria for certain of its separate account investment programs. These criteria, which in general are more focused than those found in the Policy, are described in the Appendices to the Policy.

Each section of the "Real Estate Investment Criteria" will be used in conjunction with all other sections so that any potential investment must meet a wide range of requirements in order to qualify for consideration by NYSTRS.

B. DISCRETION

NYSTRS will retain discretion over the decision to invest after detailed analysis of the original due diligence and underwriting of the Investment Proposal Source and/or Advisor and will retain discretion, in direct proportion to its ownership interest, over the adoption and maintenance of individual property management and operating policies. NYSTRS' Board may delegate discretion to staff and/or Advisors as deemed appropriate and necessary for certain investment programs.

C. INVESTMENT STRUCTURES

NYSTRS will give first priority to investing in specified properties where NYSTRS will be the sole investor or in which it can obtain a controlling interest. Exceptions may be made in the case of extremely large transactions or transactions which may involve a portfolio of properties or where justified by the expected risk-adjusted return, or where the market dictates having a partner such as a REIT (ie., Retail).

D. OWNERSHIP STRUCTURES

NYSTRS may utilize the following ownership structures in its equity real estate program:

1. Unleveraged Acquisitions

Since emphasis is placed on the degree of equity orientation and minimization of financial risk, NYSTRS has a preference for acquiring properties not encumbered by debt.

2. Leveraged Acquisitions

NYSTRS may only make such leveraged acquisitions as are permitted by statute. NYSTRS will typically not acquire a property on a leveraged basis unless the property is encumbered by well-margined, traditional debt providing positive leverage.



Equity Real Estate Investments

3. Equity-Oriented Debt

Properly structured participating or participating/convertible debt investments are investment methods which may be considered. Any mortgage financing will normally be senior to all other debt or lease on any property. Loan structuring features shall typically include a pay rate equal to the contract interest rate, or a partial interest accrual, acceptable debt service coverage by actual cash flow from the property, satisfactory participation levels in annual and residual income and value, a proper conversion option, and creditworthy borrowers.

4. Equity/Debt Combinations

Equity/debt combination investment opportunities will principally be underwritten according to NYSTRS' requirements for both ownership and mortgage loan investments. Emphasis will typically be placed on equity/debt combination transactions involving the purchase of the ground beneath an income-producing property and the granting of a participating leasehold loan on the improvements.

5. Joint Venture/Partnerships

NYSTRS may consider joint venture or partnership investments defined as any asset of which less than 100% is owned by NYSTRS. This includes leveraged and unleveraged properties. The underwriting of such an investment will include an analysis of the joint venture partner(s) in addition to the normal underwriting.

6. Real Estate Investment Trusts ("REITs")

REITs and Real Estate Operating Companies ("REOCs") are two types of real estate securities which may be considered for investment by both NYSTRS' real estate securities fund managers as part of a diversified, actively managed portfolio and NYSTRS directly, as concentrated strategic investments. Investment criteria for real estate securities investments are described in Appendix C. In addition, REITs and REOCs (both public and private) are two forms of ownership structures that may be utilized from time to time for separate account investments for strategic or tactical reasons.

E. PROPERTY STATUS

NYSTRS may invest in the following stages of a property's investment life cycle.

1. Stabilized

Investments will generally focus on operating properties. Stabilized properties have a physical and financial record and are 80% or more leased. Such properties have typically experienced at least one full leasing cycle and have a relatively mature tenant mix.

2. Leasing

NYSTRS may consider properties in the leasing stage of the investment life cycle. Properties in the leasing stage are defined as being fully completed and ready for occupancy but less than 80% leased. Acceptance of a relative degree of risk inherent in these properties should be offset by overall yield potential and fulfillment of other portfolio objectives.



Equity Real Estate Investments

3. Developmental

NYSTRS may consider developmental properties, defined as those under construction or in a pre-construction phase. Appropriate structures will be required to avoid or minimize development and/or leasing risk.

4. Re-Developmental

NYSTRS may consider rehabilitative or redevelopment properties, defined as those typically having functional and/or economic obsolescence to the extent that correction of these conditions can create a meaningful economic improvement to the property.

5. Opportunistic

Appropriate for inclusion in NYSTRS' investment criteria are opportunistic properties which may not fall into the foregoing property status categories. Such properties are defined as those whose current financial condition and value may be substantially enhanced by innovative asset management and/or financial structuring techniques.

For developmental, re-developmental and opportunistic properties, NYSTRS may consider the issuance of forward purchase or funding letters. Such commitment letters may be subject to stringent completion and occupancy requirements and require funding within a specific time period (typically one year) from the date of the issuance of the commitment letter.

F. TENANT MIX

A reasonable mix of national credit tenants, regional or local credit tenants and other local tenants is considered desirable for all property types except multi-family residential, lodging, and land.

Investment in single-tenant properties may be considered; however, such properties must generate competitive immediate cash yields. Emphasis will be placed on properties with a design and location conducive to conversion to multiple tenant use at the time of lease expiration.

G. PROPERTY LOCATIONS

NYSTRS' real estate investments will be diversified across geographic and economic regions to allow for competitive portfolio performance in the event of a temporary weakness in any one region and to allow for differing urban and suburban market trends within any region.

Primary market selection factors include:

1. Broad-based local economy with growth potential;
2. Supply constraints for the subject property type;
3. Proven demand for the subject property type;
4. Proximity to complementary, synergistic land uses; and
5. Availability of necessary infrastructure.



H. PROPERTY TYPES

NYSTRS may invest in the following property types:

1. Office

Acceptable subcategories within the office property type include garden, or low-rise buildings, business/technological parks, mid-rise and high-rise properties. Necessary office building design and physical characteristics must be considered on a property-by-property basis within the context of individual location, site, plottage, intended use and tenant mix. NYSTRS shall primarily pursue office properties located in central business districts, suburbs of major urban areas and infill sites.

2. Retail

Shopping centers acceptable for investment include regional malls, power centers, community centers, neighborhood centers, and lifestyle centers.

3. Industrial

Industrial properties acceptable for investment include industrial parks and individual buildings or groups of buildings located in an industrial park. Freestanding buildings will be selectively considered. Uses may include: distribution; warehouse; light manufacturing; research and development; incubator space; and showroom.

NYSTRS has developed an industrial investment program that focuses on the acquisition of industrial properties or portfolios with gross property values ranging from \$3.0 million to \$50.0 million in gross market value. Investment criteria for this program are described in Appendix A. Acquisitions of industrial properties in excess of \$50.0 million are acceptable, but are not part of the program described in Appendix A. To the extent the transaction does not meet this criteria, the approval/closing process for other separate account acquisitions covered by this Policy Manual should be used.

4. Residential

NYSTRS has developed a residential investment program that focuses on the acquisition of apartment projects with gross property values ranging from \$5.0 million to \$50.0 million in gross market value. Investment criteria for this program are described in Appendix B. Acquisitions of apartment projects in excess of \$50.0 million are acceptable, but are not part of the program described in Appendix B. To the extent the transaction does not meet this criteria, the approval/closing process for other separate account acquisitions covered by this Policy Manual should be used.

5. Lodging

Hotel properties are included in NYSTRS' investment criteria. However, only well-established hotel properties with experienced management companies will be considered for investment by NYSTRS. NYSTRS will prefer larger hotels (in excess of 100 rooms) and priority will be given to proven, urban and suburban properties which are specifically designed for targeted types of guests. NYSTRS will avoid properties facing competition from saturated markets and specialty lodging units such as converted apartments.



Equity Real Estate Investments

6. Land

Two primary categories of land are included in NYSTRS' investment criteria. Of first priority is land under existing, income-producing improvements. NYSTRS will prefer ground leases which call for participation in the income of the improvements. Preference will also be given to situations where the owner of the leasehold is required to repurchase the fee (land) in the event of non-performance or other circumstances at some point in the future, or, alternatively, where NYSTRS reserves an option or first right of refusal to purchase the improvements.

The second category of acceptable land is land in the pre-development stage, but only under a stringent set of conditions:

- a. Zoned to its current highest and best use, or potential for rezoning to a higher use in the future;
- b. In the path of economic growth;
- c. Access to major transportation arteries; and
- d. Proximity to complementary and synergistic land uses.

7. Mixed-use

Mixed-use properties are used for more than one purpose. Their uses are generally complementary, and of greater overall value in combination than individually. An example would be an office tower with a hotel that caters to the business traveler. The underwriting of these properties will incorporate the investment criteria set out in this Policy for each component, with proper consideration given to the synergy and increased value created by the mixed-use nature of the investment.

I. TRANSACTION SIZE

1. Specified Property Investments

Individually committed, specified properties shall generally be at least \$10 million in investment size. Due to the smaller size of multi-family and industrial properties, exceptions may be made for these property types. In the event portfolios are acquired, individual property sizes shall generally be a minimum size of \$5 million; however they may be smaller if all of the properties are located at the same site.

No individual investment shall typically exceed one percent (1%) of the total NYSTRS investment portfolio.

2. Commingled Fund Investments

The acceptable transaction size for each fund will depend on the asset size or contributed capital of the fund and the investment orientation of the Discretionary Manager. NYSTRS' investments in commingled funds shall generally not exceed twenty percent (20%) of the total asset size (current market value) of the fund.



J. ENVIRONMENTAL HAZARDS

NYSTRS gives first priority to investments in properties which comply fully with all local, state and federal government regulations regarding environmental hazards. NYSTRS may consider properties that are affected by environmental hazards, but only after a satisfactory, systematic evaluation by qualified professionals. Major pre-investment considerations include the potential risks, liabilities and costs associated with the presence and management of the environmental hazards. Quantification of the potential liability must be made prior to investment.

V. **REAL ESTATE TRANSACTION REVIEW AND CLOSING PROCESS**

A. DEFINITIONS

The term "Investment Proposal Source" means any entity which submits a real estate investment proposal to NYSTRS. The Investment Proposal Source will typically be one of NYSTRS' contractual Advisors. In this section Investment Proposal Source and Advisor are used interchangeably. The term "Transaction Reviewer" means any NYSTRS staff member responsible for the review and/or closing activities of an investment opportunity.

B. SPECIFIED PROPERTY INVESTMENTS

1. Registration Process

Investment proposals will come primarily from NYSTRS' contractual Advisors, although other sources may be considered. All valid written proposals submitted to NYSTRS will be entered into an Activity Log ("Log") maintained in NYSTRS' office. No verbal proposal will be entered into the Log. A transaction is eligible for review by a Transaction Reviewer once it is entered into the Log.

In order to register a potential transaction, Advisors must prepare information on the proposed transaction in a format acceptable to NYSTRS. Additional information may be provided at the Advisor's discretion. The information should be provided to NYSTRS and, as determined by NYSTRS, its Real Estate Consultant.

2. Review Process

NYSTRS will review the proposed transaction. Upon request of NYSTRS, a Consultant will assist with the review. Within fifteen (15) business days, NYSTRS will discuss its interest in the transaction with the Advisor.

Whenever requested by NYSTRS, following the registration of a proposed transaction, the Advisor will provide NYSTRS (and its Consultant as appropriate) with a written update, identifying each transaction that the Advisor is pursuing and a brief statement as to its status. NYSTRS reserves the right, at its sole discretion, to cancel a registration at any time up to the point the Advisor presents a letter of intent executed by the seller and, in summary form, its analysis supporting the terms embodied in the letter of intent.



Whenever requested by NYSTRS, the Advisor will provide NYSTRS with evidence (e.g., cash flow projections or written proposals/communications to the seller) sufficient to demonstrate that the Advisor is making a good faith effort to acquire the property.

Upon completion of its review of the investment, the Advisor should provide NYSTRS (and its Consultant as appropriate) with a formal investment analysis on the proposed investment.

The investment analysis shall contain as many of the general categories of information found in NYSTRS Standard Investment Package Checklist ("Checklist") as are available to the Advisor at this stage of the review and are deemed appropriate by NYSTRS.

Upon preliminary approval of the transaction, the property and its market area shall be inspected by senior management of the Investment Proposal Source and, as deemed appropriate, by NYSTRS and/or the Consultant.

In the event that the Advisor has executed a Letter of Intent on behalf of NYSTRS, a copy should be sent to NYSTRS as soon as possible. The Letter of Intent will state that NYSTRS' commitment is contingent upon NYSTRS' approval of the completed investment analysis. The Letter of Intent shall generally describe NYSTRS' due diligence, approval and closing processes and expected timing of the transaction.

After the Letter of Intent has been signed, the Transaction Reviewer will devise a time schedule for receipt, review, and action by NYSTRS of all required documentation, including an estimated closing date. In general, the timing of the submission must allow NYSTRS a minimum of 20 working days for review prior to its distribution to the Real Estate Advisory Committee ("REAC"). The Advisor will identify potential conflicts of interest in the investment analysis.

3. Environmental Hazard Review

Of primary importance to the proper assessment and management of environmental risks is a documented, detailed level of inquiry during the investment analysis process to detect any potential hazard (including those from hazardous waste, toxic waste, radon, asbestos, mold or unknown origin). A Phase I environmental review of direct property investment pursued by NYSTRS will be required to include, as applicable:

- a. Assessment of all applicable federal, state and local environmental regulations;
- b. A physical inspection of the property and its site to determine if any environmental hazards (including asbestos and mold) are present;
- c. A survey of the property, its site and adjacent properties and sites to identify any materials or wastes which may be present as surface or subsurface contamination, including sources of potential contamination;
- d. A review of the property lease agreements to ascertain the actual or potential use of environmental hazards by tenants, and tenant and landlord responsibilities regarding same.

The outcome of studies conducted during the investment analysis stage is intended to enable NYSTRS to quantify the extent of environmental hazard liabilities of a prospective property investment and to identify alternative means for addressing such liabilities. If any environmental hazards are found, such quantification by NYSTRS includes:



Equity Real Estate Investments

- a. The establishment of an operations and management program for controlling or abating any environmental hazard;
- b. Negotiation of a purchase or investment agreement to account for the costs involved for the operation and management program and/or to provide for recourse against the seller (or borrower) for any present or future environmental hazard liabilities;
- c. The review and renegotiation of lease agreements, including indemnification clauses, to transfer the responsibility and liability for the disposal or treatment of hazardous substances to a property's tenants.

The intent of the foregoing requirements of this Policy is to enable NYSTRS to understand and control environmental hazard liabilities associated with real estate investments and to allow NYSTRS the ability to consider investment in properties so affected.

No acquisition of a property shall be consummated by NYSTRS without proper legal advice regarding quantification and minimization of legal liability issues associated with asbestos, or potential asbestos hazardous situations or with any other material environmental issues affecting the property. The rendering of such legal opinions shall include the responsibilities, as appropriate on a case-by-case basis, of a property seller or borrower and NYSTRS to tenants, workers, employees, lenders and potential buyers. Internal or external legal advice to NYSTRS shall include potential NYSTRS liability and remedies of the above personnel classifications from NYSTRS.

NYSTRS shall require, to the extent possible, that a property seller or borrower and other entities shown in a property's "chain of title" warrant to NYSTRS that the property is not in violation of any federal, state or local law, ordinance, regulation or order relating to industrial hygiene or to environmental conditions on or about the property. For each potential property acquisition NYSTRS, through assistance of its Advisors, shall explore the potential for insuring against environmental problems.

4. Approval Process

Other than investments made pursuant to Appendix A and Appendix B of this policy, proposed investments will be scheduled as an agenda item at the next REAC meeting upon concurrence of the validity of the equity investment opportunity by the Real Estate Investment Officer and other designated NYSTRS staff. If a favorable recommendation is received from the REAC, the proposed investment will be presented to the Finance Committee for approval.

5. Closing Process

Upon approval by staff, REAC and the Finance Committee (as appropriate), the Advisor and designated NYSTRS staff will schedule the closing process and prepare a Closing Checklist. The Closing Checklist shall indicate responsible parties for approving each checklist item (Advisor, legal counsel, staff, Real Estate Investment Officer, etc.) Along with this Closing Checklist will be a budget for cost items to be incurred during the closing process with specification as to who is to incur each cost.

Compliance with all Closing Checklist items is the responsibility of the Advisor. The Advisor shall hire outside professionals (civil engineers, structural engineers, architects, appraisers, etc.) necessary to provide proper due diligence on behalf of NYSTRS for each property transaction. The hiring and scope of work of such professionals is subject to



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NYSTRS' consent. In addition, NYSTRS, at its sole option, may choose to directly hire such professionals.

Outside counsel shall be selected and will typically be required to review and/or prepare as necessary the investment contracts and any other pertinent documents related to the transaction for compliance with state statutes and other matters related to the transaction.

At the time the Closing Checklist is prepared, the Advisor will specify an anticipated closing date. This date, the funding requirements, and the amount of funds required at closing will be specified so that the appropriate funds may be set aside for the acquisition and bank accounts can be opened. A time and place of closing will also be specified.

After the due diligence review and upon completion of the generation, review, and approval of the Closing Checklist items, a final recommendation shall be issued by the Advisor. The recommendation shall include an attestation to the sufficiency of all Closing Checklist items stating the following:

- a. All conditions to closing checklist items have been met (or list all outstanding items and their status); and
- b. To the best of the Advisor's knowledge, verification that there have been no material changes since the Advisor's initial review of the investment opportunity of any physical property, market area, or economic factors that would cause the investment to be of lower quality than that which has been reviewed by the Advisor.

Prior to closing, the Advisor will submit to NYSTRS (and its Consultant as appropriate) the recommendation letter and a full and complete investment package in a format specified by NYSTRS.

No closing will occur without the formal sign off of the closing report by the Real Estate Investment Officer or his designee (and NYSTRS' Consultant as appropriate).

As soon as practicable after the closing (generally within 30 working days), the Advisor will provide NYSTRS with a Closing Binder. The Closing Binder will hold all pertinent original documentation pertaining to the transaction review, approval and closing processes, approved initial business plan, and various exhibits demonstrating performance and operational monitoring and reporting systems. An additional copy of the Closing Binder shall be provided in electronic form to the extent possible.

Based on agreements made during the closing process, NYSTRS may accept certified copies of certain documents in lieu of originals. In this event, NYSTRS must approve the location of original documents, and the holder of the original documents shall be required to obtain written approval from NYSTRS before moving these documents.

Immediately after the closing, the Advisor must prepare and submit to the Real Estate Investment Officer a reconciliation detailing the specific use of all amounts funded by NYSTRS. Any excess funds should be returned to NYSTRS immediately and the reconciliation must explain the intended use of any funds which were not returned.



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C. COMMINGLED FUND INVESTMENTS

1. Review Process

NYSTRS staff will regularly review commingled fund investment opportunities which are accepting new or additional real estate capital. These investments will be reviewed based on the investment criteria defined in this Policy. Those which satisfy these criteria will be further evaluated. The evaluation will include, but not be limited to, the following critical review areas:

- I. Fund Structure
 - A. Type
 - 1. Closed-end
 - 2. Open-end
 - 3. Other including REITs and specified property pools
 - B. Asset Size
 - 1. Closed-end: Minimum/Maximum subscription level
 - 2. Open-end: Current total asset size
 - 3. Other: Projected offering size/total capitalization and percentage of capital held in non-real estate assets
 - C. Term
 - 1. Open-end: In perpetuity
 - 2. Closed-end: Targeted closing date for new subscriptions; and anticipated termination
 - 3. Other: Finite/infinite
 - D. Investor Rights and Remedies
 - 1. Compliance with applicable statutes
 - 2. Withdrawal provisions
 - E. Legal Form
 - 1. Compatibility of Fund documents with NYSTRS' tax-exempt status
 - 2. Allowance of appropriate degree of NYSTRS influence or control
- II. Potential Orientation
 - A. Investment Methods
 - B. Property Status
 - C. Property Locations
 - D. Property Types
 - E. Individual Transaction Sizes
 - F. Property Life Cycle Stages
- III. Qualifications of Manager
 - A. Historical Performance (nominal/real, gross/net and risk adjusted)
 - B. Investment Orientation and Strategy
- IV. Stability/Strength of Manager
 - A. Organizational Structure
 - 1. Acquisitions
 - 2. Asset/property management
 - 3. Dispositions
 - B. Consistency of Key Professionals
 - C. Asset/Property Management Policies and Procedures
 - D. Reporting Capabilities



2. Approval Process

Based on an evaluation in conformance with the above-described criteria, the Consultant may submit a written recommendation for investment in a commingled fund to NYSTRS. In the case of follow-on investments with existing fund sponsors/general partners, the review may be completed by NYSTRS' staff for approval by the Real Estate Investment Officer. With the approval by the Real Estate Investment Officer, a new investment will be scheduled as an agenda item at the next Finance Committee meeting. All commingled fund investments require Finance Committee approval. Such approval may be obtained by a mail canvas of the Finance Committee as approved by the Executive Director.

3. Closing Process

Upon Finance Committee approval, a designated staff member or the Consultant shall request the Sponsor of the commingled fund investment to submit its contract to NYSTRS. NYSTRS will have its Counsel review the contract for compliance with appropriate statutes, and may have the Consultant review it for compliance with the terms upon which it was approved.

Following execution of the contract by NYSTRS, a designated staff member will file all pertinent original documentation, including the contract, offering memorandum, recommendations of the Real Estate Investment Officer and Consultant as applicable, and the approval of the Finance Committee.

VI. ASSET MANAGEMENT POLICIES AND PROCEDURES

A. INTRODUCTION

The term "asset management" as it pertains to NYSTRS' real estate investment program encompasses all activities relating to the operations of the real estate investments in commingled funds and specified properties owned by NYSTRS and the timely and accurate reporting of the results of those operations.

While the asset management policies and procedures may not apply uniformly in all detail to NYSTRS' commingled fund investments, the Discretionary Managers of the funds shall be required to have well defined asset management policies and procedures in substantial conformance with the requirements of this section.

B. RESPONSIBILITY

Asset Managers shall:

1. Recommend annual operating and capital budgets for property assets.
2. Execute property-level contracts with service providers.
3. Recommend or select special project professionals such as environmental, engineering, appraisers and property managers.
4. Negotiate proper insurance coverage and submit to NYSTRS' insurance consultant for review and approval.



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5. Ensure that all property-level taxes and assessments are paid on a timely basis.
6. Approve and execute contracts for capital improvements on any property which are in accordance with a budget previously approved by NYSTRS.
7. Approve and execute leases that are consistent with the leasing guidelines contained in the annual business plan.
8. Recommend property disposition strategies and opportunities for properties under their management.
9. Provide property-level operational and economic information as required by NYSTRS to facilitate appraisal, audit and reporting practices.
10. Protect and defend NYSTRS' interests in any property as may be warranted by any event of an emergency or extenuating nature.
11. Approve contracts for capital improvements on properties under their management, as negotiated, in amounts not in excess of 5% of the market value of each asset.
12. Attend partnership meetings and/or represent NYSTRS at all meetings relating to the asset management policies and procedures for the assets under their management, unless otherwise specified by the Real Estate Investment Officer or his designee.
13. Provide prompt notification to the REIO or his designee of any pending legal action or any material fact which may adversely affect the operations of the property.

With respect to all real property assets either owned outright, owned as an interest therein or as a security interest therein such as a deed of trust or mortgage, NYSTRS shall either have final authority for or in the case of co-investments, the investment instruments shall provide parameters controlling: (1) the sale or refinancing of all or any fractional ownership interest and, (2) substantive changes to ownership or security interests.

For investments which are solely owned by NYSTRS as well as co-investments, to the extent deemed necessary to protect NYSTRS' interests, the Real Estate Investment Officer or his designee shall:

1. Review and authorize annual operating and capital budgets for all property assets within parameters specified in the Permanent Policies and Procedures subsection;
2. Approve expenditures for capital improvements, including lease related tenant improvements, as negotiated and recommended by the Asset Managers;
3. Approve for execution all management agreements, changes, authorizations, and amendments, with approval of legal counsel, if applicable;
4. Select special professionals such as engineers and appraisers or approve same as may be recommended by NYSTRS' external real estate professionals;
5. As deemed appropriate, attend and represent NYSTRS at meetings pertaining to asset management policies and procedures for the assets managed by Asset Managers;
6. Take all other reasonable actions necessary for preservation of the assets;



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7. Report to the Real Estate Advisory Committee and/or Finance Committee on actions taken under these and other delegations of authority which have a significant effect on the value of any real estate asset and/or the real estate portfolio;
8. Monitor the execution of the delegations of authority granted to the Asset Managers;
9. Ensure that appropriate types and levels of insurance are in force at all properties including, but not be limited to, multi-peril, general liability and rental income recovery, that Asset Managers have in force appropriate levels of Errors and Omissions Insurance, and that all property managers have in force reasonable levels of liability insurance evidenced by a certificate of coverage on file in the appropriate asset management files maintained with the Asset Manager;
10. Recommend property disposition strategies and disposition opportunities;
11. Ensure that all property level taxes and assessments are paid on a timely basis on each property investment, with copies of payment receipts on file in the appropriate asset management files maintained with the Asset Manager.

C. PRELIMINARY POLICIES AND PROCEDURES

Advisors shall prepare preliminary asset management policy statements during the transaction review and closing process for approval by NYSTRS prior to funding.

A preliminary asset management policy and procedures statement will include, when applicable:

1. Identification of property managers and leasing agents.
2. Initial leasing goals and objectives and lease structures.
3. Environmental risk management plan.
4. Market positioning related to competitive properties and other market influences.
5. Reporting timing procedures and methodology.
6. Preliminary disposition strategies.

D. PERMANENT POLICIES AND PROCEDURES

Permanent asset management policies and procedures shall be defined and adopted in accordance with the following requirements:

1. Annual Business Plan

a. Purpose

The purpose of the annual business plan is to describe the operating plan for the property over the short and long term. The annual business plan also defines the limits within which the Asset Manager can operate.



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b. Timing

An initial business plan will be submitted by the Asset Manager for approval by the Real Estate Investment Officer not later than forty-five (45) days after the funding of the investment. The plan must be updated by the Asset Manager and submitted to NYSTRS thirty (30) days before the beginning of the fiscal year. NYSTRS will schedule annual meetings with the Asset Managers to review the plan.

In subsequent years, the annual business plan will be prepared and submitted to NYSTRS no later than thirty (30) days prior to the beginning of the fiscal year.

c. Information Requirements

Asset managers shall prepare initial and subsequent business plans that satisfy the information requirements as specified by NYSTRS. The Real Estate Investment Officer or his designee is responsible for reviewing and authorizing each business plan, and when required, prepare the corporate resolution adopting the plan.

2. Reporting

a. Annual Business Plans

The requirements and timing for the annual business plans are discussed in the subsection "Annual Business Plan."

b. Monthly Reports

Asset Managers shall require monthly financial and operating reports from Property Managers and Leasing Agents. Such reports will be in accordance with NYSTRS' established asset management policies and procedures. It is important that the Property Manager provide the Asset Manager with a statement of the physical vacancy factors for each month and a comparison of said factors to the monthly and year-to-date budgeted vacancy factors. The property manager shall also provide to the Asset Manager a list of material tenant complaints regarding physical and operational items and a schedule of corrective measures, including the cost of same. The Leasing Agent shall provide to the Asset Manager a leasing status report. The report should address present lease negotiations and status of existing vacancy and upcoming expirations. Required monthly reports shall be delivered by the Property Manager and Leasing Agent to the Asset Manager within fifteen (15) working days after the end of each month.

Asset Managers shall reconcile these reports to NYSTRS' cash received, budgets, approved leasing and operating policies and accounting procedures and shall submit a monthly report to the NYSTRS Real Estate Investment Officer or his designee. The monthly report will contain information as specified by NYSTRS. The monthly reports shall be delivered to NYSTRS by the Asset Managers within thirty (30) working days after the end of each month.



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c. Quarterly Reports

Each calendar quarter, the Asset Managers shall prepare on a fair market value basis an operating and status report. This report will contain individual property information as well as consolidated information for all properties the Asset Manager manages for NYSTRS. Required quarterly reports shall be delivered to NYSTRS within forty-five (45) working days after the end of each calendar quarter. The report shall contain information as specified by NYSTRS. The Real Estate Investment Officer or his designee shall maintain all monthly and quarterly reports in the NYSTRS' real estate program filing system.

3. Valuations

a. Independent Third-Party Appraisals

Independent third-party appraisals shall be conducted on NYSTRS' core real estate assets every three (3) years. The scope (full appraisal versus appraisal update) and timing of interim appraisals will be determined by NYSTRS based upon known market changes and recommendations from the Advisors. NYSTRS has the right to request an "interim" appraisal for any asset at any time.

NYSTRS shall maintain a listing of several MAI or equivalently qualified appraisers and will engage one or more to conduct the scheduled or required appraisals on the individual property assets. The selection process shall be the responsibility of the Real Estate Investment Officer or his designee. The screening process includes the following: (1) a request for information; (2) an interview with the appropriate parties; (3) submission of a sample report(s) and a review of said report(s) by NYSTRS; and (4) a minimum of three references, preferably from institutional investors comparable to NYSTRS. The list shall be regularly monitored by the Real Estate Investment Officer or his designee. The Asset Managers may submit a list of recommended appraisers to NYSTRS for consideration. However, NYSTRS has final authority regarding the selection of appraisers.

For property level investments wholly-owned by NYSTRS, appraisers will be engaged directly by NYSTRS. NYSTRS will be responsible for coordination of the appraisal process and review of appraisal reports, although the Advisor or other third parties may assist with these activities at NYSTRS' discretion. All appraisals shall comply with the uniform standards of the Professional Appraisal Foundation and the Appraisal Institute. Original copies of the appraisal reports (either hard copies or electronic files) shall become part of the permanent files maintained by NYSTRS for each property.

The cost of the appraisal shall be borne by NYSTRS.

b. Internal Valuations

In addition, in each year, the Asset Manager will value each property according to NYSTRS' Internal Valuation Policy. The internal valuation will be done as of the fiscal year-end and included as part of the annual business plan.



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c. Market Valuations

The reported market value for the property will be the lower of the two valuations for years in which a third party appraisal is obtained.

4. Property Management and Leasing

Annual property management and leasing guidelines shall be identified by Asset Managers and recommended for approval by the Real Estate Investment Officer or his designee in the initial business plan and updated in subsequent business plans. These guidelines shall consist of the following: lease provisions and terms, rent levels (specifying gross, net and net effective rents), marketing strategies, and property management and leasing contract conditions (including compensation for Property Managers and Leasing Agents).

a. Selection of a Property Manager and Leasing Agent

Asset Managers shall recommend a Property Manager and Leasing Agent for each property asset to NYSTRS for approval. The property management and leasing functions may or may not be performed by the same company.

Asset Managers shall interview and perform due diligence on several potential Property Managers and Leasing Agents for any property prior to making said recommendation. Included for consideration shall be the level of fees, the track records of the companies, the companies' familiarity with the subject property asset or assets and the specification of named employees to be involved with NYSTRS' property. Potential Property Managers and Leasing Agents shall be required to divulge any existing or potential business relationship with any existing or potential contractor for any NYSTRS property.

Any Asset Manager may recommend itself as the Property Manager and/or Leasing Agent if it is willing to compete on a competitive basis (in terms of fees, capabilities and familiarity with the subject property) to provide such services for any asset. After approval by the Real Estate Investment Officer or his designee, the Asset Manager may engage the Property Manager and Leasing Agent.

b. Duties and Responsibilities of Property Managers and Leasing Agents

Property Managers and Leasing Agents will typically be required to have an on-site office at each asset which will be open and staffed during normal business hours and will have a visible, specified address and phone number. At the discretion of the Real Estate Investment Officer, smaller properties and properties which are fully leased and occupied may require less than full-time presence by on-site personnel. The Property Manager and Leasing Agent shall provide personnel and systems at the levels necessary to support the property and comply with adopted management practices.

Personnel of Property Managers and Leasing Agents responsible for the handling of cash or who are signatories on any property related bank account shall be sufficiently bonded. Written evidence of such bonding shall be provided to NYSTRS, as requested. Property Managers shall perform their duties in accordance with the terms of a Property Management Agreement approved by NYSTRS.

Asset Managers may use discretion as to the information and documentation requirements that Property Managers must follow. However, any such delegation of work product shall not remove the Asset Manager from the responsibility of providing said product in approved form and detail to NYSTRS.



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The Property Manager shall be specifically required to provide and oversee the following:

1. Employment and payment of specified, named employees sufficient to manage the property assets.
2. Coverage of its own overhead.
3. Maintenance of accounting records in compliance with NYSTRS' requirements.
4. Collection of all rents and miscellaneous sources of income.
5. Appeal, if so directed by NYSTRS, reassessments of property taxes.
6. Payment of all bills and settlement of all claims, not to exceed an amount established by the Asset Manager.
7. Keeping of all buildings and other improvements in good order, repair and condition.
8. Immediate provision of emergency repairs and services to the property.
9. Operation and maintenance of the property in accordance with all statutes, laws and regulations of all appropriate governmental agencies.
10. Negotiation of contracts for utilities and the provision of all required utility services to the property.
11. Distribution to NYSTRS of all required cash at the specified time periods.
12. Prompt notification of the Asset Manager of any condition of the property or its operations which fails to meet the requirements of adopted Asset Management Policies and Procedures, any pending legal action or any fact whatsoever which may adversely affect the operations of the property in any material way.
13. Provision of Workmen's Compensation and other insurance which may be deemed required by NYSTRS.
14. Comply with any other requirements of NYSTRS or the Asset Manager.

Leasing Agents shall perform their duties in accordance with the terms of a Leasing Agreement approved by the Asset Manager and NYSTRS. Asset Managers shall be responsible for the implementation by the Leasing Agent of approved leasing practices and the supervision of individual property leasing activity. In addition to the definition of appropriate rent levels and lease structures, Asset Managers shall designate marketing strategies which consider the necessity for tenant concessions, tenant improvement costs, market surveys and advertising programs and expenses.



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c. Leasing Policies and Procedures

Asset Managers shall be required to obtain the approval of the NYSTRS Real Estate Investment Officer or his designee for any change in leasing policy or any proposed lease which falls outside the approved leasing guidelines. To the extent possible, all new leases for any property asset shall be on a standardized form.

To the extent necessary, NYSTRS shall be provided with lease abstracts by the Asset Manager immediately upon the funding of any wholly-owned property and for any new leases consummated thereafter.

Property Managers and Leasing Agents shall report to the Asset Managers in accordance with the Reporting sub-section.

5. Property Inspection

In addition to requiring regular feedback from the on-site Property Manager regarding the physical condition of any property, competitive factors and specific market area trends affecting the property, an Asset Manager shall be required to physically inspect the property, its neighborhood and its general market area at least once quarterly, unless otherwise provided for in the permanent Business Plan for the property.

The physical premises shall be inspected for the purpose of maintaining conformance with tenant improvement and other capital expenditure budget items and to designate specific procedures to avoid incurrence of unwarranted future capital expenditures either through continued deferred maintenance or functional obsolescence.

The Asset Manager shall also personally inspect the property's neighborhood and general market area to determine the status of competitive properties, to ascertain the level of rents being charged and tenant concessions being granted and other area features, such as changing road patterns, rezoning activity, and local developments which may in any way affect the current or future operations and valuation of any NYSTRS property.

The information derived from the property inspection shall be communicated to NYSTRS in the quarterly report (unless something is noted warranting immediate notification) and used as a basis for modifications to the annual business plan. NYSTRS staff shall inspect each property as frequently as staffing levels permit and property conditions require, but not less than once every three years. Properties held in the two operating companies, Donahue Schriber and Edens and Avant are inspected by the staff of the operating companies and are not subject to this requirement.

6. Audits

NYSTRS requires an annual audit of all direct equity, joint venture, and discretionary fund assets. The audit should be performed by an independent certified public accountant. For wholly owned properties, the REIO or his designee will engage the independent certified public accountant and all audit reports and findings as a result of the audit will be directly communicated to the REIO or his designate. All audit reports should be provided to NYSTRS within 180 days of the holding entity's year-end.



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7. Accounting

For specified property investments, the accounting systems employed by the Property Manager, Asset Manager and internally by NYSTRS are on a fair value basis. The Property Manager and Asset Manager will be responsible for the proper reporting of free rent, capitalization of acquisition fees, tenant improvements, tenant allowances, leasing commissions, leasehold improvements, building improvements and overall valuation of the assets. Discretionary Manager and Advisor fees will be expensed on NYSTRS books.

The accounting for all activity for each property asset shall be established at the property level by the Asset Manager and Property Manager and at the portfolio level by NYSTRS in substantial conformity with generally accepted accounting principles.

A cash management system with the proper level of internal controls by the Property Manager and the Asset Manager over all cash receipt and cash disbursement items is critical to NYSTRS. In accordance with the previously specified duties and responsibilities of the Leasing Agents, Property Managers and Asset Managers, rents and miscellaneous sources of income shall be collected and expenses paid at the property level. All property operating bank accounts shall have as signatories appropriate personnel of the Property and Asset Manager. The Asset Manager will submit the name(s) of bank(s) and account number(s) for NYSTRS' approval.

Excess funds held in bank accounts by the Property Manager or Asset Manager should be sufficient to cover anticipated expenses up to two months. Funds that are held in bank accounts as compensating balances to reduce fees and/or charges by the Property Manager and/or Asset Manager shall be communicated to NYSTRS' Real Estate Department.

Unless NYSTRS provides prior approval for a different schedule, the frequency of excess cash distributions to NYSTRS should be at least monthly. The Asset Manager should submit a letter monthly indicating whether a cash distribution will be made for the period. The dates of the distributions should be consistent from month to month based on the collection of rents and payment of expenses. The Asset Manager will be responsible to provide the NYSTRS Investment Information and Real Estate Departments with prior notification of the amounts and expected delivery dates of the transfers, to monitor the timely transfers of funds to NYSTRS' account and to ensure that confirmations of the transfers are immediately provided to the Real Estate Investment Officer. The wired funds will include a description on the wire as to the property name and what the distribution is for such as mortgage payment and/or cash flow distributions. Within three (3) days prior to the transfer of funds to the NYSTRS account, the Asset Manager shall make certain that a reconciliation statement is sent to the NYSTRS Real Estate Investment Officer and to the Investment Information Department showing the following:

- a. The date of the distribution
- b. The source and amount of wired funds by subsidiary corporation or joint venture
- c. The category of wired capital (operating distribution capital distribution, interest earned, mortgage payment, etc.)
- d. Any appropriate explanatory notes

The Asset Managers will typically be paid their asset management fee in arrears. The asset management fees should not be deducted from monthly distributions. NYSTRS will pay authorized asset management fees via warrant.



8. Environmental Policy

For all real property assets with any defined or potential environmental hazard, NYSTRS will adopt an environmental hazard management plan as a part of its permanent asset management policies and procedures as defined in the business plan. No property investment should be consummated without full compliance with all requirements enumerated in the section entitled "Environmental Hazard Review" of this Real Estate Policy Manual.

The basic objective of a property-specific environmental hazard management plan is to manage risk by providing awareness of any potential hazard (including those from hazardous waste, toxic waste, radon, asbestos, toxic mold, or unknown origin) to any person in occupancy at any property, facilitate abatement or cleanup of any hazard, reduce to the extent possible future adverse effects from the existence of any hazard, continually monitor the effect on a property and its tenants from any hazard, and minimize the potential liability of NYSTRS.

Since asbestos is a common hazard, NYSTRS has developed guidelines for addressing asbestos issues. Asbestos risk management programs may include:

- a. Removal of all Asbestos Containing Material ("ACM's") at one time, or
- b. Removal of ACM's over an identified time period, or
- c. Encapsulation of all problem areas, either at one time or over a scheduled period, or
- d. If undisturbed, with little potential for future disturbance, it may be left in place.

Where NYSTRS elects to remove ACM's, as specified in an approved asbestos management/maintenance program, specifications for such removal will be prepared by a qualified consultant. Such specifications will detail the extent of the asbestos removal, and abatement and control procedures needed to complete the removal. Identification of a property's specific building codes or other local, regional or federal governmental regulations will be included in the specifications designed by the consultant. The consultant will assist in selection of a contractor to perform the work and will monitor all work undertaken. Such monitoring activities will include industrial hygiene air monitoring to determine the levels of airborne concentrations of fiber. Sampling will be conducted in accordance with OSHA guidelines.

The Advisor shall be responsible for rescheduling inspection and surveillance of each property for which any asbestos testing has revealed the presence, or possible presence, of ACM's. Follow-up reports will be made a part of the NYSTRS asset management policies and procedures plan for the specified property asset. No less often than annually, the Advisor shall include in its reports to NYSTRS (and NYSTRS' Consultant as applicable) updated information regarding asbestos surveillance activities.

VII. DISPOSITION PROCEDURES

A. DISPOSITION PLAN

Asset Managers are required to conduct a formal hold/sell analysis for all of NYSTRS' real estate investments as part of the annual business planning process. As dictated by market conditions and other events, the Asset Manager may also propose a sale at other times. In the event an Asset Manager determines that an asset should be sold, the Asset Manager shall provide the Real Estate Investment Officer or his designee (via the business plan, quarterly report, or on an as needed basis) with the following:



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1. Specific reasons for the recommendation.
2. Structure of disposition (outright sale, partial sale, etc.).
3. Potential gross disposition price and basis for said price assumption.
4. Identification of potential buyers.
5. Process for implementing any disposition decisions (need for brokers, appraisers, engineers, other professionals).
6. Anticipated disposition period and closing date.
7. Estimated costs of sale.
8. Estimated net disposition proceeds.
9. Estimated cash received from sale by NYSTRS.
10. Estimated NYSTRS' internal rate of return for the asset's holding period.
11. "Conflict of Interest" clearance form executed by the Advisor in the format specified by NYSTRS.
12. Any existing legal limitations with respect to the sale e.g. right of first offer, right of first refusal, lockout periods, any other options, etc.
13. A summary of any trailing liability issues (if any) that NYSTRS would have to consider related to the sale.

In the event NYSTRS approves the disposition of the investment, the Real Estate Investment Officer may retain outside professionals to implement the disposition decision.

B. PROCEDURES FOR OFFERS TO PURCHASE

Any offer made to an Asset Manager or solicited by NYSTRS or an Asset Manager for the acquisition of any asset or investment position shall be presented to NYSTRS by the Asset Manager. The presentation shall include:

1. Gross offering price, disposition costs and net disposition proceeds.
2. Disposition proceeds, disbursement schedule, including Asset Manager, Advisor or Joint Venture Partner sharing in such proceeds and the share of proceeds to be retained by NYSTRS.
3. The anticipated closing date.
4. For recommended offers, an estimate of NYSTRS' net internal rate of return as of the anticipated closing date.
5. List of conditions precedent to closing.
6. Summary of any competitive offers.



7. Statement of buyer's ability to close.
8. Written recommendation from the Asset Manager regarding the proposed sale.
9. A summary of any trailing liability issues (if any) that NYSTRS would have to consider subsequent to the sale.

Upon approval of the offer by NYSTRS, the Asset Manager will formally accept the offer on behalf of NYSTRS and shall immediately schedule the activity required to satisfy all conditions precedent to closing. In the event that a change in conditions of closing or a buyer's willingness or ability to close would result in a material decline in net disposition proceeds to NYSTRS or a substantial decline in the projected internal rate of return from the levels on which NYSTRS based its approval of the transaction, the transaction shall not close without re-approval by NYSTRS.

The Asset Manager shall be responsible for the transmission of NYSTRS' disposition proceeds via Federal Funds Wire ("Fed Wire") directly to the NYSTRS account at a bank designated by the Real Estate Investment Officer.



APPENDIX A

**INDUSTRIAL SEPARATE ACCOUNT
INVESTMENT GUIDELINES AND PROCEDURES**

I. PURPOSE

As part of its real estate program, NYSTRS has developed an industrial investment program that focuses on the acquisition of industrial properties with gross market values between \$3 million and \$50 million. In order to broaden the scope of this program so as to include business parks, office properties are included. The purpose of this Appendix is to describe the investment guidelines for this program.

It should be noted that the approval/closing process for this program is different from other separate account acquisitions covered by this Manual. Although the acquisition of larger-size industrial properties is also permitted under NYSTRS' real estate program, the guidelines in this Appendix only apply to properties valued between \$3 million and \$50 million.

II. INVESTMENT STRATEGY

The investment strategy is to acquire a diversified portfolio of industrial properties offering the following characteristics:

- A. Simple, utilitarian buildings designed for warehouse/distribution or light manufacturing or assembly uses (provided they are suitable for reuse as warehouse/distribution buildings) or uses generally considered to be consistent with a business park, with office finish up to 100%, and meeting the criteria outlined in this Agreement.
- B. Well located near the primary transportation corridors of their markets.
- C. Between \$3 million and \$50 million in gross market value.
- D. Properties may be in any of the following stages of a property's investment life cycle, as defined in the Manual:
 - 1. Operating
 - 2. Leasing
 - 3. Developmental
 - 4. Re-Developmental
 - 5. Opportunistic



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III. PROGRAM OBJECTIVES

The overall objectives of the NYSTRS' separate account industrial investment program are as follows:

- A. Attractive initial cash yields.
- B. Growth of income and capital over time.
- C. Downside protection through emphasis on fundamental value.

IV. GEOGRAPHIC DIVERSIFICATION

The portfolio will focus on specified markets that have above-average potential to maintain strong occupancy levels and provide increasing rents over time.

Markets where the ownership, management or leasing of industrial properties is dominated by a single firm will generally be avoided.

V. BUILDING DESIGN AND ATTRIBUTES

Each property will be selected based on its ability to meet the needs of a broad segment of the tenant universe within its market. While the specific characteristics will vary by market and by the property's intended use, the following criteria **will generally apply** (for properties in a life cycle other than operating or leasing, the characteristics are intended to apply after the improvement project is completed and upon stabilization):

- 1. Building Size - 50,000 to 400,000 square feet ("SF"). Where tenants with smaller space requirements are prevalent, up to 20% of the portfolio may be invested in properties designed to attract those tenants (5,000 - 15,000 SF/tenant).
- 2. Ceiling Heights - 21 to 32 feet to ceiling joists for buildings designed for larger tenants. 12 to 24 feet for buildings designed for smaller tenants.
- 3. Loading - dock-high loading, with at least one loading dock for each 10,000 SF of building area. Buildings designed for smaller tenants may utilize drive-up doors.
- 4. Divisibility - larger buildings must be configured to offer the potential to be divided for multi-tenant use.
- 5. The Advisor should ensure that the types of goods that are stored in the property can be controlled by the owner of the property.
- 6. A maximum of 50% site coverage (0.5 FAR).
- 7. Width to depth ratio of approximately 2-1.
- 8. Rectangular shape with minimal curves or indentations.
- 9. Situated parallel to the street with multiple curb cuts.
- 10. Truck courts with a turning radius of 100 feet or more.



11. Minimum bay sizes 30 x 40 feet.
12. Fire sprinkler system that meets current codes and market standards.
13. Minimal office finish (10% or less for large tenants and 30% or less for smaller tenants) in buildings designed for industrial use. No limit for buildings designed primarily for office use.
14. Parking ratio of one space per one thousand SF of building area.
15. Truck doors at least 9 feet by 9 feet.
16. Floor construction of at least five inches of reinforced concrete at its thinnest point.
17. High durability, low maintenance skin as appropriate to the market (100% metal buildings are not acceptable).
18. 480/227 3-phase power.
19. Mechanical and utility systems designed for easy access.
20. Interior roof drains in cold climates.
21. Concrete trailer pads.

VI. TRANSACTION REVIEW AND CLOSING PROCESS

NYSTRS will retain discretion regarding acquisition and disposition decisions. The NYSTRS' Board has delegated the responsibility for these decisions to NYSTRS' staff for this program.

The Advisor will be responsible for generating investment opportunities that fit the criteria set forth in NYSTRS' approved acquisition criteria. The Advisor will notify NYSTRS in writing of every investment opportunity it is reviewing on the NYSTRS' behalf. This notice will include the following information as well as any other information the Advisor deems pertinent:

1. Property name and address
2. Physical description
3. Seller
4. Major tenants
5. Asking price and target acquisition price
6. Initial cash yield, cash flow analysis, and 10 year internal rate of return (based on target acquisition price). The returns should be shown on both a before and after fee basis.
7. Scheduled closing date



Equity Real Estate Investments

8. Estimated replacement cost
9. Market Analysis and Market Rent information

Unless NYSTRS notifies the Advisor within five (5) business days that it does not want the opportunity pursued on its behalf, the Advisor shall continue to review the opportunity. If the proposed investment meets the criteria set forth in this Appendix and the Advisor's own underwriting standards, the Advisor may proceed to issue a non-binding letter of intent in order to secure the property for further underwriting and due diligence. The Advisor shall provide NYSTRS with a copy of the letter of intent as soon as possible.

Prior to execution of a Purchase and Sale Agreement, the Advisor will prepare and submit to NYSTRS an investment brief containing information in a format specified by NYSTRS. NYSTRS will have fifteen (15) business days from receipt to review the investment brief to ascertain compliance with the terms and investment guidelines and procedures set forth in this Appendix and to notify the Advisor that the investment proposal is acceptable. If NYSTRS fails to respond within said fifteen days, the Advisor shall not proceed with the proposal on NYSTRS' behalf.

If the proposal is accepted by NYSTRS, the Advisor will be primarily responsible for full due diligence and the closing process, including: (i) the scheduling of the closing process in coordination with NYSTRS, (ii) establishment of a closing checklist approved by NYSTRS, (iii) review and approval of all closing checklist items, including major condition-to-closing items, and (iv) the engagement of the outside professional firms required to provide proper due diligence and ensure compliance with all closing checklist items, with the exception of outside counsel and the appraiser, if appropriate (who will be selected and retained by NYSTRS). Prior to the retention of such professional firms, the Advisor will submit a recommendation on each for NYSTRS approval.

NYSTRS will strive to secure independent third-party appraisals for properties acquired under this industrial program prior to closing. Appraisals shall be completed on all properties in the first year of ownership.

After the due diligence review, and upon completion of the generation, review and approval of the closing checklist items, a final recommendation shall be issued by the Advisor. Such recommendation shall include an attestation as to the sufficiency of all closing checklist items and a verification that there has been no material change, since the initial acceptance of the investment opportunity by NYSTRS, of any physical property, market area or economic factor which could cause the investment to be of any lower quality than that which has been accepted. This recommendation letter and the investment package (in a format specified by NYSTRS) are to be received by NYSTRS prior to closing.

As soon as practicable after the closing, the Advisor, in conjunction with NYSTRS' outside counsel, will provide NYSTRS with a Closing Binder containing originals of all pertinent documentation, including necessary addenda and attachments to be permanently maintained by NYSTRS. An additional copy of the Closing Binder shall be provided in electronic form, to the extent possible.

Following the closing of a transaction, the Advisor shall be responsible for ensuring that all asset management policies, plans and procedures for the property are fully functional and are in compliance with NYSTRS' Equity Real Estate Policy Manual.



VII. ENVIRONMENTAL HAZARDS

NYSTRS prefers property investments that comply fully with all applicable statutes regarding environmental hazards. NYSTRS may consider properties that are affected by environmental hazards, but only after a satisfactory, systematic evaluation by qualified professionals. Major pre-investment considerations include the potential risks, liabilities and costs associated with the presence and management of the environmental hazards. Quantification of the potential liability must be made prior to investment.

VIII. ASSET MANAGEMENT POLICIES AND PROCEDURES

The Asset Management Policies and Procedures as described in Section VI of NYSTRS Policy are applicable to this program.

IX. DISPOSITION POLICIES AND PROCEDURES

The Disposition Policies and Procedures as described in Section VII of NYSTRS Policy are applicable to this program.



APPENDIX B

APARTMENT SEPARATE ACCOUNT INVESTMENT GUIDELINES AND PROCEDURES

I. PURPOSE

As part of its real estate program, NYSTRS has developed an apartment investment program that focuses on the acquisition of apartment properties with gross market values of \$50 million or less. The purpose of this Appendix is to describe the investment guidelines and procedures for this program.

It should be noted that the approval/closing process for this program is different from other separate account acquisitions covered by this Manual. Although the acquisition of larger-size apartment properties is also permitted under NYSTRS' real estate program, the guidelines in this Appendix only apply to properties less than \$50 million in gross market value.

II. INVESTMENT STRATEGY

The investment strategy is to acquire a diversified portfolio of apartment properties which shall be:

- A. In markets with strong demand characteristics and attractive tenant demographics.
- B. Well located in areas characterized as infill locations or within primary residential growth corridors, with proximity to complimentary land uses and with necessary infrastructures.
- C. \$50 million or less in gross market value.
- D. Properties meeting the criteria outlined in this Appendix.

The apartment investment program includes existing properties, rehab/redevelopment projects and development opportunities.

III. PROGRAM OBJECTIVES

The overall objectives of the NYSTRS separate account apartment investment program are to provide:

- A. Attractive initial cash yields for existing properties and attractive risk-adjusted returns for all apartment investments.
- B. Growth of income and capital over time.
- C. Downside protection through emphasis on fundamental value.
- D. Provide diversification to the portfolio.

**IV. GEOGRAPHIC DIVERSIFICATION**

The portfolio will be nationally diversified and focus on specified markets which have above average potential to maintain strong occupancy levels and provide increasing rents over time. Target markets will be reviewed on an annual basis by advisors and approved by NYSTRS. Markets where rent control is predominant and may negatively impact the specific properties will generally be avoided.

Advisors will work with NYSTRS to ensure NYSTRS achieves portfolio-level diversification by geographic region.

V. BUILDING DESIGN AND ATTRIBUTES

Each property will be selected based on its ability to meet the needs of its targeted tenant population. While the specific characteristics may vary by market, the following criteria will generally apply (either at acquisition or at stabilization):

Project Size: 125 to 500 units.

Type: Garden style, high-rise and mid-rise apartment properties.

Age: Generally built after 1980 for core and after 1970 for value-added investments. The age limit is set in an attempt to avoid properties with asbestos and lead-based paint. Exceptions may be made for older properties with superior construction quality or unique redevelopment opportunities.

Amenities: Properties must possess, or the advisor must be able to add, full amenity packages comparable or superior to competitive properties within the market and appropriate for the target tenant. Areas of comparability include common area facilities, unit size and design, construction quality and materials, and unit amenities.

Construction: High quality construction with wood, brick, stucco, aluminum or vinyl siding, as appropriate for the market.

Tenancy: Middle or upper income tenants of all ages.

Occupancy: 80% or greater for existing projects.

Unit Mix: Appropriate for the target tenant and market.

Unit Size: Appropriate for the target tenant and market.

Utilities: All units should be separately metered for gas and electricity.

Security: Properties must meet or exceed local market standards for security and safety.



VI. FINANCIAL CRITERIA

The following financial criteria apply to property acquisitions under this program:

- A. Attractive first-year net (after fees) cash yields and internal rates of return for existing, relatively new, substantially occupied properties with little deferred maintenance. Higher yields will be required for properties with more risks, such as value-added, pre-sale or developmental properties;
- B. Purchase price which is generally no more than replacement cost for existing properties;
- C. Acquisition generally on an all-cash basis. However, the prudent use of leverage will be permitted including the assumption of existing debt offering positive leverage and in a joint venture situation where our partner requires it.

NYSTRS staff will review the financial characteristics for the apartment investment program on a regular basis. As appropriate, the financial criteria may be revised in consideration of existing and projected market conditions.

VII. TRANSACTION REVIEW AND CLOSING PROCEDURES

NYSTRS will retain discretion regarding acquisition and disposition decisions. NYSTRS' Board has delegated the responsibility for these decisions to NYSTRS' staff for this program.

The Advisor will be responsible for generating investment opportunities which fit the criteria set forth in this Appendix. The Advisor will notify NYSTRS in writing of every investment opportunity it is reviewing on NYSTRS' behalf. This notice will include the following information as well as any other information the Advisor deems pertinent:

- A. Property name and address
- B. Physical description
- C. Seller
- D. Asking price and target acquisition price
- E. Initial cash yield, cash flow analysis, and 10 year internal rate of return (based on target acquisition price). The returns should be shown on both a before and after fee basis.
- F. Estimated replacement cost
- G. Current occupancy
- H. Scheduled closing date

Unless NYSTRS notifies the Advisor within five (5) business days that it does not want the opportunity pursued on its behalf, the Advisor shall continue to review the opportunity. If the proposed investment meets the criteria set forth in this Appendix and the Advisor's own underwriting standards, the Advisor may proceed to issue a non-binding letter of intent in order to secure the property for further underwriting and due diligence. The Advisor shall provide NYSTRS with a copy of the letter of intent as soon as possible.



Equity Real Estate Investments

Prior to execution of a Purchase and Sale Agreement, the Advisor will prepare and submit to NYSTRS an investment brief containing information in a format specified by NYSTRS. Where possible, NYSTRS will have fifteen (15) business days from receipt to review the investment brief to ascertain compliance with the terms and investment guidelines and procedures set forth in this Appendix, and to notify the Advisor that the investment proposal is acceptable. If NYSTRS fails to respond within said fifteen days (or fewer days if agreed to by NYSTRS), the Advisor shall not proceed with the proposal on NYSTRS' behalf.

If the proposal is accepted by NYSTRS, the Advisor will be primarily responsible for full due diligence and the closing process, including: (i) the scheduling of the closing process in coordination with NYSTRS, (ii) establishment of a closing checklist approved by NYSTRS, (iii) review and approval of all closing checklist items, including major condition-to-closing items, and (iv) the engagement of the outside professional firms required to provide proper due diligence and ensure compliance with all closing checklist items, with the exception of outside counsel and the appraiser (who will be selected and retained by NYSTRS). Prior to the retention of such professional firms, the Advisor will submit a recommendation on each for approval by NYSTRS.

NYSTRS will strive to secure independent third-party appraisals for properties acquired under this apartment program prior to closing. Appraisals shall be completed on all properties in the first year of ownership.

After the due diligence review, and upon completion of the generation, review and approval of the closing checklist items, final recommendation shall be issued by the Advisor. Such recommendation shall include an attestation as to the sufficiency of all closing checklist items and a verification there has been no material change, since the initial acceptance of the investment opportunity by NYSTRS, of any physical property, market area or economic factor which could cause the investment to be of any lower quality than that which has been accepted. This recommendation letter and the investment package (in a format specified by NYSTRS) are to be received by NYSTRS prior to closing.

As soon as practical after the closing, the Advisor, in conjunction with NYSTRS' outside counsel, will provide NYSTRS with a Closing Binder containing originals of all pertinent documentation, including necessary addenda and attachments to be permanently maintained by NYSTRS. An additional copy of the Closing Binder shall be provided in electronic form, to the extent possible.

Following the closing of a transaction, the Advisor shall be responsible for ensuring that all asset management policies, plans and procedures for the property are fully functional and are in compliance with NYSTRS' Equity Real Estate Policy Manual.

VIII. ENVIRONMENTAL HAZARDS

NYSTRS prefers property investments which comply fully with all applicable statutes regarding environmental hazards. NYSTRS may consider properties that are affected by environmental hazards, but only after a satisfactory, systematic evaluation by qualified professionals. Major pre-investment considerations include the potential risks, liabilities and costs associated with the presence and management of the environmental hazards. Quantification of the potential liability must be made prior to investment.



IX. ASSET MANAGEMENT POLICIES AND PROCEDURES

The Asset Management Policies and Procedures as described in Section VI of NYSTRS' Equity Real Estate Policy Manual are applicable to this program.

X. DISPOSITION POLICIES AND PROCEDURES

The Disposition Policies and Procedures as described in Section VII of NYSTRS' Equity Real Estate Policy Manual are applicable to this program.



APPENDIX C

**REAL ESTATE INVESTMENT TRUSTS (“REITS”)
INVESTMENT GUIDELINES AND PROCEDURES**

NYSTRS may invest in public real estate securities through: (1) a broadly diversified actively managed account; or (2) more concentrated positions in single securities. Concentrated positions may be acquired for tactical or strategic reasons, through direct purchases or private placements, through conversion of private assets to interests in public companies, or through in-kind distributions from fund investments. Managers will be retained to manage broadly diversified accounts within agreed upon guidelines. Concentrated positions in a single security may be acquired and/or managed through a manager or directly by NYSTRS.

Public real estate securities managers will be evaluated relative to the stated benchmark (generally NAREIT, Wilshire Real Estate Securities or Wilshire REIT Index) and the performance of NYSTRS' other public real estate securities managers.

For concentrated positions in a single security, staff will monitor whether the security is held in NYSTRS' diversified portfolios and regularly solicit input from NYSTRS' public real estate securities managers on their buy/hold/sell rankings. Based on this input, staff will make a determination as to whether the security should continue to be held or should be liquidated at a target price.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Real Estate Department General Authorization

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I. Introduction

The General Authorization for the operation of the Real Estate Department is set forth herein. This document identifies the types of activities performed by the Real Estate Department which need Board approval, and those which have been delegated to the Executive Director or the Real Estate Investment Officer or their designees.

II. Real Estate Transactions Requiring Board Approval And Execution Of Documents Related Thereto:

Upon unanimous approval of the Finance Committee or a majority of the Retirement Board, either the Executive Director or, alternatively, any one of the following officers: the Actuary, General Counsel, Director of Administration, Director of Member Relations, Associate General Counsel and any one or more Assistant General Counsels designated by the Executive Director in writing (hereinafter "Group A"), together with any one of the following officers: Real Estate Investment Officer, Associate Real Estate Officer, and Assistant Real Estate Officer (hereinafter "Group B"), may take the following actions on behalf of the System, including the execution of any and all documents related to:

A. Commitments For Mortgage Loans

Commitments for mortgage loans, including new and/or increased loans and mortgage co-lending programs, and the acquisition, sale or other disposition (not otherwise authorized under the Real Estate Department General Authorization) of real estate fixed income investments, whether direct, indirect or through commingled funds, limited partnerships or other investment entities established primarily for the purpose of investing in real estate fixed income investments..

B. Commitments For The Sale Of Mortgage Loans At A Discount

Commitments for the sale, assignment or disposition of mortgage loans where the consideration received by the System is less than the outstanding principal balance and interest due to the System under the terms of the loan and a comparable or higher quality investment providing an equal or higher yield is not available to the System.

C. Commitments For Real Estate Equity Purchases And Sales

Commitments for the acquisition, sale or other disposition of equity real estate investments, whether direct, indirect, in real estate holding corporations, or through limited partnerships, commingled funds or other investment entities established primarily for the purpose of investing in equity real estate or real estate related equity securities.

D. Commitments For Capital Improvements

Commitments for the cost of a single program of real estate capital improvements or leasing costs for real estate owned by the System (other than for real estate over which an outside investment manager has full discretion, as in the case of a commingled fund) where such capital improvement costs exceed 5% of, or such leasing costs exceed 5% per annum of, the gross market value of the property (excluding any debt) and such costs cannot be funded out of the property's cash flow. Market value to be based upon the most recent third party appraisal or, in the absence of such appraisal, total investment cost.



III. Actions Which May Be Taken By Either The Executive Director Or The Real Estate Investment Officer Or Their Designees And Execution Of Documents Related Thereto:

The Executive Director, the Real Estate Investment Officer and their designees, such designees to be determined under guidelines established by the Real Estate Investment Officer and approved by the Executive Director, which designees may include all officers in Groups A and B, are hereby authorized to take the following actions on behalf of the System, including the execution of any and all documents related thereto:

A. Term Of Commitments Or Authorizations

To permit the time for the consummation of mortgage loan authorizations and commitments to be extended to a date not more than 12 months following the date of the authorization or the date stipulated in the commitment letter (whichever is later). There may be any number of extensions for any period of time as long as the total period of extension does not exceed 12 months.

B. Releases, Consents And Subordinations

In regard to mortgage loans and the property securing those loans with or without consideration:

Consent to the owner's sale or transfer (including mortgages where there is a due on sale provision) of such property or any interest therein, subject to the System's lien;

Release the original or any succeeding obligor or guarantor of any loan from obligation on the loan if such obligation is assumed by a new owner of the property;

Consent to a modification of or approve all leases on property on which the System holds a mortgage;

Consent to the substitution of one lessee for another provided the substitute lessee has the ability to pay the rent and satisfy the other obligations of the lease;

Subordinate (whether by subordination, recognition or other instrument) liens to, and consent to the grant by the owner of the project subject thereto of: easements, permits, licenses and rights of way for utilities, pipelines, mains, sewers, drainage and irrigation projects, boundary line agreements, projections or encroachments of walls; easements and rights of way in driveways, alleys, streets and highways, for either public or private purposes; and leases or subleases of all or part of the property; and, in connection with any of the foregoing to require or abstain from requiring the consideration, if any, received by the owner shall be applied to the prepayment of the loan;

Consent to the removal and sale of sand, stone, earth, gravel, timber, or other natural resources from property subject to a lien of the System provided the amount so removed shall not materially reduce the value of the security for the loan;



Release a part of the security from the System's lien, or to consent to the demolition, removal or sale of improvements including salvage, provided such release or consent shall not materially reduce the value of the security (taking into consideration proceeds received in reduction of the mortgage principal, if any). In the case of government insured loans, no such release or consent shall be given which would end the government insurance or guaranty.

C. Postponement Of Payments, Modifications, And Foreclosure

With respect to any mortgage loan:

1. Postpone (defer) (i) the date or dates for one or more payments of or on account of interest for not more than an aggregate of 18 months, (ii) the date or dates for one or more payments of or on account of principal for not more than an aggregate of 36 months, and to final maturity the payment of amounts due or to become due on account of principal over a period of not more than three years and/or extend the maturity of the loan for a period not to exceed 36 months;
2. Upon the occurrence of any default, to institute foreclosure proceedings or to refrain from accelerating the unpaid loan balance and to defer foreclosure proceedings for not more than an aggregate of 18 months following the occurrence of such default unless adequate additional security is furnished the System and not in any event beyond the date when any mortgaged leasehold may be terminated by reason of such default or when any taxing authority may sell the mortgaged property by reason of any unpaid tax, assessment or other imposition;
3. Exercise any option to accelerate its maturity under a call or other provision contained therein, whether because of the passage of time, transfer or encumbrance of the security, default, or other reason.

D. Prepayments And Assignments

Permit prepayment of mortgage loans, in whole and in part, with or without charge, and to waive provisions requiring notice of intent to prepay and the payment of charges expressly required as a condition to such prepayment; provided in cases where prepayment of mortgage loans, in whole or in part, is subject to the discretion of the System, a comparable or higher quality investment providing an equal or higher yield is available to the System:

Effect assignments, satisfactions, discharges or releases of liens upon receipt of the entire principal and interest owing to the System.

E. Waiver, Modification And Amendment Of Covenants

Provided the value of the security for the loan is not materially reduced to waive, modify and amend covenants and other terms of mortgage loans (including the terms of leases and any other documents relating to or constituting security, and to consent to modifications, amendments and terminations thereof by others) and to change payment due dates and frequency thereof or waive any default in the observance of performance thereof; but in no event shall a reduction in the rate of interest payable on a loan be made hereunder, except (i) interest in excess of the regular contract rate which may be payable following a default and (ii) in the case of government insured loans, when necessary to reflect market conditions in order to retain such investments in the System's mortgage portfolio.



F. Government Insured Loans

1. In the case of government insured loans, to assign to the appropriate governmental agency or instrumentality or an officer thereof the note and mortgage in exchange for the consideration provided for in the government program, insurance, or guaranty.
2. To bid on, commit for or otherwise acquire whole loans or partial interest in pools or packages of government insured loans.
3. To amend the interest rate to reflect current market conditions when necessary in order to keep government insured investments in the System's mortgage portfolio.

G. Return Of Fees And Deposits

Effect the repayment in whole or in part of commitment and standby fees and application and good faith deposits received by the System in connection with applications for or commitments relating to mortgage loans or the purchase or sale of real estate equities.

H. Servicing Mortgage Loans

1. With respect to any loan in which the System holds or may hold a participation, to enter into agreements with other participant(s) under which the System and/or any other participant(s) services such loans whether or not compensated therefor and to modify and terminate such agreements; and
2. Enter into agreements under which others service loans held by the System, and to modify, terminate and consent to the assignment of such agreements.

I. Trustee's Action

With respect to any loan the security for which is held in whole or in part by a trustee, including a real estate bond issue, to take, or authorize the trustee's taking, any action which could otherwise be taken by the Executive Director or Real Estate Investment Officer, if the security for the loan were held directly by the System.

J. Acquisition Of Properties

Prior to the purchase of property previously authorized by the unanimous vote of the Finance Committee or by the Retirement Board, to increase by not more than 5% the purchase price to be paid for the property, provided an appraisal or feasibility report shall be obtained which shows the value of the property is at least equal to the increased purchase price. A report of each action taken under this paragraph shall be made to the Finance Committee or the Retirement Board.



K. Management And Operation Of Properties

Manage and operate, either directly or through a management agent (including asset managers), receivers and/or trustees, court or otherwise appointed or independent contractor, owned properties and interests therein, including for the purpose of this and other paragraphs of this section properties and interests acquired or about to be acquired by or in lieu of foreclosure, or held subject to redemption after foreclosure, such management and operation to include, without limiting the scope hereof, authority to:

1. Make, modify and terminate leases and subleases, and consent to assignments and subleases by others, covering all or part of such property (and in connection with new leases, to assume and adjust the new lessee's lease obligations at its former location), provided the expenditures, if any, incurred in connection therewith may not exceed the limitations on expenditures which may be incurred without Finance Committee or Retirement Board approval as set forth in Subdivision D of Section II above;
2. Charge off or cancel all or part of accruals of rent or accruals of claims for use and occupancy deemed to be uncollectible or deemed not to justify the estimated cost of probable recovery;
3. Effect repairs, whether for extraordinary damage or ordinary maintenance and whether or not the obligation of the System (thus covering foreclosures and receiverships), provided the expenditures, if any incurred in connection therewith may not exceed the limitations on expenditures which may be incurred without Finance Committee or Retirement Board approval as set forth in Subdivision D of Section II;
4. Change the use or function of such properties or the structures located thereon, effect improvements, additions and replacements, add additional structures, purchase or rent equipment or furnishings, demolish and dispose of structures, chattels and salvage no longer used or deemed useful and purchase additional adjacent land in implementation of any of the foregoing, provided the expenditures, if any incurred in connection therewith may not exceed the limitations on expenditures which may be incurred without Finance Committee or Retirement Board approval as set forth in Subdivision D of Section II above;
5. Sell or dispose of surplus miscellaneous material, furnishings and equipment;
6. Purchase fuel and supplies, materials for repairs, maintenance, fencing, construction and surfacing; and, water, electric and sewer lines, heating, refrigerating, incinerating, elevator and escalator and/or other building service equipment;
7. Recognize subleases notwithstanding the termination of a paramount lease covering all or part of such a property or interest therein;
8. Designate, use and invest in appropriate accounts as repositories for funds held by managing agents, asset managers, etc. pending their distribution to the System or their use for payment of operating expenses, and the drawing of checks, drafts or orders thereon;



9. Leverage properties with a prudent amount of mortgage financing (not to exceed 75% of appraised value) to take advantage of positive leverage; and re-finance existing mortgage loans to take advantage of favorable interest rate environments or to deal with impending maturities.

L. Sale Of Properties

Prior to completion of the sale of a property previously authorized by the unanimous vote of the Finance Committee or by the Retirement Board to decrease by not more than 5% the sales price of all or any part of any property owned by the System, regardless of any other terms of such sale provided an appraisal or feasibility report shall be obtained which shows the value of the property is not more than the decreased sale price. A report of each action taken under this paragraph shall be made to the Finance Committee or the Retirement Board.

M. Joint Ventures

Enter into partnership, joint venture, or like arrangements, to carry out projects authorized hereunder or otherwise authorized by the unanimous vote of the Finance Committee or by the Retirement Board with authority to act with respect to partnership, joint venture, or like arrangement properties to the same extent as herein authorized for the System owned properties and in addition to exercise the following authority with respect to partnership, joint venture, or like arrangement projects:

1. Execute such other agreements or instruments deemed necessary or desirable to carry out the purposes of the project, and to consent to the taking of action by the partnership, joint venture, or like arrangements pursuant to any such agreements or instruments; and
2. Provide for, or to establish procedures to provide for, the control of the business and affairs of the partnership, joint venture, or like arrangements within the scope approved by the Finance Committee or the Retirement Board.

N. Term Of Authorizations

Permit the time for the consummation of property acquisitions and sales including commingled real estate funds to be extended to a date not more than 12 months following the date of authorization or the date stipulated in the sale or acquisition contract (whichever is later). There may be any number of extensions for any period of time as long as the total period of extension does not exceed 12 months.

O. Consultants, Insurance, Expenditures And Miscellaneous Actions

Pursuant to guidelines established by the System with respect to any transaction being conducted by the Real Estate Department, including but not limited to the acquisition, sale or ownership of any real estate equity, commingled real estate fund or mortgage loan:

1. Employ or obtain the services of consultants, including but not limited to, architects, appraisers, environmental specialists, engineers, attorneys, agents and brokers, landscape architects and other property specialists and effect payment therefor;



2. Obtain documentation and reports, including but not limited to, tax, title, environmental, engineering, architectural, legal, appraisal and land use and effect payment therefor;
3. Determine and obtain appropriate amounts, types and sources of insurance and determine, subject only to limitations of law and the documentation, the disposition of any proceeds of fire, extended coverage or other hazard insurance;
4. Pay or prepay any tax, rent (including land rent), insurance, repair, mechanic's lien, maintenance charge, advance to a receiver, assessment, water and/or sewer charge, utility charge (electric, gas, telephone, etc.), sums necessary to cure lease defaults or any other charge or expense deemed necessary for the protection of or in furtherance of the System's interests and to commence actions relating thereto;
5. Obtain services and materials and make expenditures for repairs deemed necessary for the protection of or in furtherance of the System's interests;
6. Enter into contracts necessary for the operation of the property including, but not limited to, elevators, HVAC, security, water treatment, rubbish removal, pest control, landscaping, etc. and to effect payment therefor;
7. Consent to zoning and redevelopment plans, irrigation projects, ordinances and condominium documents, grant easements, rights of way and other rights affecting such properties, enter into agreements with adjoining owners covering encroachments, party walls, boundary lines and similar matters, provide for the cutting and/or sale of standing timber and the removal and/or sale of stone, earth and gravel, and enter into agreements and leases with respect to mineral and oil exploration and production.

P. Commingled Funds, Limited Partnerships and Other Investment Entities

Invest in limited partnerships, joint ventures, and other investment entities, as authorized hereunder or otherwise authorized by the unanimous vote of the Finance Committee or by the Retirement Board and to exercise the following authority with respect to such partnerships, joint ventures, and other investment entities:

1. Execute such agreements, documents and instruments as may be necessary or desirable to implement the System's participation in the commingled fund, limited partnership or other investment entity or to carry out the purposes or objectives of such fund, partnership or entity.
2. Take such actions as may be necessary or appropriate to implement or further the System's oversight of such investments.
3. Take such actions as may be necessary or appropriate to protect or preserve the System's investment in extraordinary circumstances, including the incurring of necessary or appropriate expenditures without Finance Committee or Retirement Board approval, provided such expenditures may not exceed an amount equal to 5% of the amount authorized by the Finance Committee or the Retirement Board for investment in the project.



Q. Documents

The list of documents enumerated below is not intended to be all inclusive, but illustrative of those which must be executed to operate in both the mortgage and real estate equity programs of the System. Except as otherwise specifically provided above, the Executive Director and Real Estate Investment Officer and/or their designees, who may include all the officers in Group A and Group B, are given authority to execute these documents and all others necessary to effectively administer the mortgage and real estate equity programs.

Acknowledgments

Affidavits

- In Support of Summary Judgments
- Pertaining to Appointment of Receivers
- Referee's Hearings and Related Instruments
- Verifying Information in Complaints
- Other

Affirmations

Agreements

- Assumption
- Attornment
- Bid
- Brokerage
- Buy-Sell
- Commission
- Commitment Fee
- Completion
- Condemnation and Appropriation
- Encroachment
- Escrow
- Good Faith Deposit
- Guaranty
- Indemnity
- Joint Venture and Related
- Lease Buy-Out
- Management
- Non-Disturbance
- Partnership and Related
- Performance Guaranty
- Sale Leaseback
- Security and Security Assignment
- Servicing
- Spreading
- Subordination
- Termination Tri-Party
- Other

Allonges

Appointments

- Trustees and Substitute Trustees
- Other



- Assignments
 - Agreements
 - Bonds
 - Income, Rents, Leases and Collateral
 - Assignments thereof
 - Mortgages and Chattel Mortgages
 - Notes
 - Profits
 - Other
- Bills of Sale
- Binders
- Bonds
- Budgets
- Cancellations
- Chattel Mortgages
- Checks, Drafts and Negotiable Instruments
- Commitments
- Consents
- Consolidations
- Contracts (see also Agreements)
 - Construction
 - Purchase
 - Sales
 - Service
 - Management
 - Operating
 - Other
- Deeds
 - Bargain and Sale
 - In Lieu of Foreclosure
 - Of Trust
 - Quit Claim
 - Warranty
 - Other
- Deficiency Judgments
- Discharges
- Easements
- Estoppels
- Extensions
- Eviction Notices
- Financial Statements
- Financial Documents
- Incorporation Documents and Related Instruments
 - (including Directors' and Other Resolutions)
- Injunctions
- Interrogatories
- Leases (including land)
- Lease Modifications
- Letters of Intent
- Lis Pendens
- Loss Drafts
- Mechanic's Liens
- Memorandums of Sale
- Modifications
- Mortgages



Notes
Notice and Demand Letters
Notices
Options
Plans and Specifications
Proof of Loss Documents
Real Property Transfer Tax Returns
Reconveyances
Releases
Satisfactions
Stipulations
Subleases
Tax Appeals (Certiorari)
Tax Settlement and Refund Documents
Treasury Authorizations
Warrants
Work Orders/Tenant Improvements, Building Improvements or Repairs



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Timberland Investments

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**Timberland Investments**

I. Introduction

Timberland is classified within the alternative investment asset class. Acceptable investment properties should include good quality, professionally managed timber that is in close proximity to established timber infrastructure and is of a sufficient size to allow efficient harvesting techniques and operation. Timberland investments may include properties in various stages of the timber production life cycle.

II. Portfolio Guidelines

- A. *Objective.* The objective of the portfolio will be timber production for maximum long term return, with current cash flow as a secondary objective.
- B. *Rate of Return.* The portfolio will consist of properties that as a group are expected to yield a rate of return of 8% or more above inflation over the long term.
- C. *Geographic Area.* Investments will be made principally in the Continental United States and Alaska. Investments in Hawaii and in foreign countries must be specifically approved by NYSTRS.
- D. *Geographic Diversification.* The portfolio will be diversified among regional timber markets within the defined geographic area.
- E. *Age Diversification.* The portfolio will be diversified by timber age.
- F. *Leverage.* Leverage will not be used in the portfolio except with prior written approval by NYSTRS following consideration with the Advisor of any "unrelated business taxable income" (as defined in Section 512 of the IRS Code) issues.
- G. *Participation Limitation.* Investments will not be made with any type of financial or operational partner except with prior written approval by NYSTRS following consideration between NYSTRS and the Advisor of any tax or other legal impact of such participation.

III. Property Guidelines

- A. *Minimum Investment Size.* The minimum investment (purchase price) per property will be \$1 million, except that smaller investments may be made in properties which adjoin or are in the vicinity of existing Portfolio Property.
- B. *Maximum Investment Size.* The maximum investment (purchase price) per property will be 25% of the current fair market value of the portfolio including uninvested allocations.
- C. *Acquisition/Sale Limitation.* All acquisitions and sales of property will be made from or to entities or persons who are not affiliated with the Advisor.
- D. *Quality.* Acquisitions will be high quality timberland properties that are generally characterized by:



Timberland Investments

1. Site index (productivity rating) in the high 70's or greater on a 50 year basis (Site index 80 on a 50 year basis means that trees on that site generally will grow to a height of 80 feet in 50 years).
2. Strong timber markets with multiple wood using plants within timber hauling distance.
3. Legal access to public roads.

IV. Real Estate Transaction Review and Closing Process

A. Definitions

The term "Investment Source" means any entity which submits a real estate investment to NYSTRS. The Investment Source will typically be one of NYSTRS contractual Advisors. In this section Investment Source and Advisor are used interchangeably.

B. Specified Property Investments

1. Registration Process

Investments will come primarily from NYSTRS' contractual Advisors. All valid written potential transactions submitted to NYSTRS will be entered into an Activity Log ("Log") which will be maintained in NYSTRS' office. No verbal proposal will be entered into the Log.

In order to register a potential transaction, Advisors must prepare information on the proposed transaction in a format acceptable to NYSTRS. This information must include the property name, location, and size. Additional information may be provided to NYSTRS at the Advisor's discretion. The registration notice should be accompanied by another copy which will be returned to the Advisor with a line for NYSTRS to acknowledge receipt of the notice.

2. Preliminary and Pre-Closing Procedures

Within 30 days after Registration, the Advisor must provide Preliminary Information on the proposed transaction. This information should include property name, location, size, timber type, age range, estimated purchase price, estimated closing date, seller, estimated returns, and any other pertinent information available at the time. At monthly intervals, following the registration of a proposed transaction, the Advisor will provide NYSTRS with a written update, identifying each transaction that the Advisor is pursuing and a brief statement as to its status. NYSTRS reserves the right, at its sole discretion, to cancel a registration at any time up to the point the Advisor presents a Letter of Intent or Purchase Agreement executed by the seller and, in summary form, its analysis supporting the terms embodied in the Letter of Intent or Purchase Agreement.

**Timberland Investments**

Upon completion of its review of the investment, the Advisor should provide NYSTRS with certain Pre-Closing Information. This Pre-Closing Information should include the full Environmental Site Assessment, the Original Appraisal, a Summary of the Timber Cruise, a Budget with updated return estimates, a Copy of the Purchase & Sale Agreement, and a Closing Checklist. The Closing Checklist shall indicate responsible parties for approving each checklist item (Advisor, legal counsel, etc.). Attached to this Closing Checklist will be a budget for all cost items to be incurred during the closing process with specification as to who is to incur each cost.

The Pre-Closing Information should be submitted by the Advisor to NYSTRS at least fourteen (14) days prior to closing. It should be accompanied by a cover letter from the Advisor confirming the investment opportunity is still available on the original terms specified.

3. Environmental Hazard Review

NYSTRS gives first priority to investments in properties which comply fully with all local, state, and federal government regulations, including, but not limited to, the Federal Water Pollution Control Act and the Endangered Species Act, regarding environmental hazards. NYSTRS may consider properties that are affected by environmental hazards, but only after a satisfactory, systematic evaluation by qualified professionals. Major pre-investment considerations include the potential risks, liabilities, and costs associated with the presence and management of the environmental hazards. Quantification of the potential liability must be made prior to investment.

Of primary importance to the proper assessment and management of environmental risks is a documented, detailed level of inquiry during the investment analysis process to detect any potential hazard (including those from hazardous waste, toxic waste, radon, asbestos or unknown origin). If, in the opinion of the Advisor, there is a possibility of the presence of a hazard or potential hazard, a thorough analysis of the situation should be conducted as follows:

- Assessment of all applicable environmental statutes;
- A physical inspection and engineering analysis of the property and its site to determine if any environmental hazards are present;
- A survey of the property and adjacent properties and sites to identify any materials or wastes which may be present as surface or subsurface contamination, including sources of potential contamination; and
- A review of property lease agreements, if any, to ascertain the actual or potential use of environmental hazards by tenants, and tenant and landlord responsibilities regarding same.

The outcome of studies conducted during the investment analysis stage is intended to enable NYSTRS to quantify the extent of environmental hazard liabilities of a prospective property investment and to identify alternative means for addressing such liabilities. If any environmental hazards are found, such quantification by NYSTRS includes:

- The establishment of an operations and management program for controlling or abating any environmental hazard;



Timberland Investments

- Negotiation of a purchase or investment agreement to account for the costs involved for the operation and management program and/or to provide for recourse against the seller (or borrower) for any present or future environmental hazard liabilities; and
- Where appropriate, the review and re-negotiation of lease agreements, including indemnification clauses, to transfer the responsibility and liability for the disposal or treatment of hazardous substances to a property's tenants.

The intent of the foregoing requirements of this Policy is to enable NYSTRS to understand and control environmental hazard liabilities associated with real estate investments and to allow NYSTRS the ability to consider investment in properties so affected.

4. Approval Process

The Advisor will have authority on a discretionary basis to invest and reinvest NYSTRS funds in timberland and timberland related assets.

5. Closing Process

The Advisor will schedule the closing process and comply with all Closing Checklist items. The Advisor shall hire outside professionals (civil engineers, foresters, appraisers, etc.) necessary to provide proper due diligence on behalf of NYSTRS for each property transaction. Outside professionals will be selected by means of a bid process, inviting at least three bids for each job from a list of approved, qualified vendors provided by NYSTRS to the Advisor. Absent unique circumstances, the job is to be awarded to the lowest qualified bidder.

The Advisor shall request that NYSTRS' General Counsel select the outside counsel who will typically be required to review and/or prepare as necessary the investment contracts and any other pertinent documents related to the transaction for compliance with state statutes and other matters related to the transaction.

At the time the Closing Checklist is prepared, the Advisor will specify an anticipated closing date. This date, the funding requirements, and the amount of funds required at closing will be specified so that the appropriate funds may be set aside for the acquisition and bank accounts can be opened. A time and place of closing will also be specified.

Upon completion of the generation and review of all closing checklist items, and at least 5 business days prior to closing, the Advisor shall send a letter to NYSTRS stating the following:

- a. All conditions to closing have been met (or list all outstanding items and their status); and
- b. To the best of the Advisor's knowledge, there have been no changes since the time of Advisor's Investment Committee approval of any physical property, market area, or economic factors that would cause the investment to be of lower quality than that which was approved.



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As soon as practical, but no later than sixty (60) days after the closing, the Advisor will provide NYSTRS with a Closing Binder. The Closing Binder will hold all pertinent original documentation pertaining to the property including, but not limited to, location, size, Purchase & Sale Agreement, Assignment from the Advisor to Client (if applicable), Closing Statement, Deeds, Owners Affidavit, and Title Insurance Policy.

NYSTRS will typically retain all original documents; however, based on agreements made during the closing process, NYSTRS may accept certified copies of certain documents in lieu of originals. In this event, NYSTRS must approve the location of original documents, and the holder of the original documents shall be required to obtain written approval from NYSTRS before moving these documents.

Immediately after closing, the Advisor must prepare and submit to NYSTRS a reconciliation detailing the specific use of all amounts funded by NYSTRS. Any excess funds should be returned to NYSTRS immediately and the reconciliation must explain the intended use of any funds which were not returned.

V. Asset Management Policies and Procedures

A. Introduction

Asset management of timberland assets is designed to add value to the investment by enhancing the overall quality of the assets. This includes the application of state-of-the-art silvicultural systems, harvest schedule optimization, and realization of economies of scale in forest operations. A wide range of forest management techniques is incorporated on each property to ensure responsible land stewardship, sustainable land productivity and protection from natural hazards. These techniques, including planting genetically improved seedlings, controlling competing vegetation, alleviating forest nutrient deficiencies, enhancing timber quality and growth through thinnings, and controlling natural hazards like fire and insects, optimize timberland investment value by providing long-term returns and portfolio stability.

The term "asset management" as it pertains to NYSTRS' real estate investment program encompasses all activities relating to the operations of the real estate investments in commingled funds and specified properties owned by NYSTRS and the timely and accurate reporting of the results of those operations.

The term "Asset Manager" shall mean any member of the Advisor's staff who performs "asset management".

B. Responsibilities

Asset Managers shall:

1. Provide and recommend the adoption of annual operating and capital budgets for property assets.
2. Execute property level contracts with service providers.
3. Select special project professionals such as engineers, appraisers and property managers.
4. Assure proper insurance coverage, when economically appropriate.



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5. Ensure that all property level taxes and assessments are paid on a timely basis.
6. Approve and execute contracts for capital improvements on any property.
7. Approve and execute leases that are consistent with the leasing guidelines contained in the property management plan.
8. Undertake property disposition strategies and opportunities for properties under their management.
9. Provide property level operational and economic information as required by NYSTRS to facilitate appraisal, audit and reporting practices.
10. Protect and defend NYSTRS' interests in any property as may be warranted by any event of an emergency or extenuating nature.
11. Attend partnership meetings and/or represent NYSTRS at all meetings relating to the asset management policies and procedures for the assets under their management, unless otherwise specified by NYSTRS.

With respect to all real property assets either owned outright, owned as an interest therein or as a security interest therein such as a deed of trust or mortgage, NYSTRS shall either have final authority for or in the case of co-investments, the investment instruments shall provide parameters controlling: (1) the financing or refinancing of all or any fractional ownership interest and, (2) substantive changes to ownership or security interests. Notwithstanding the above, the Advisor retains full discretion to sell all or part of all timberland assets.

Due to the special nature of timberland, the asset manager will also act as property manager and therefore be required to provide and oversee the following:

1. Employment and payment of specified, named employees sufficient to manage the property assets;
2. Coverage of its own overhead;
3. Maintenance of accounting records in compliance with NYSTRS' requirements;
4. Collection of all miscellaneous sources of income;
5. Appeal, if so directed by NYSTRS, reassessments of property taxes;
6. Payment of all bills and settlement of all claims;
7. Keeping of all buildings and other improvements in good order, repair and condition;
8. Immediate provision of emergency repairs and services to the property;
9. Operation and maintenance of the property in accordance with all applicable statutes;
10. If appropriate, negotiation of contracts for utilities and the provision of all required utility services to the property;
11. Distribution to NYSTRS of all required cash at the specified time periods;



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12. Prompt notification to NYSTRS of any condition of the property or its operations which fails to meet the requirements of adopted Asset Management Policies and Procedures, any pending legal action or any fact which may adversely affect the operations of the property;
 13. Provision of Workmen's Compensation and other insurance which may be identified in writing as required by NYSTRS; and
 14. Any other requirements of NYSTRS identified in writing to the Advisor.

Personnel of Asset Managers responsible for the handling of cash or who are signatories on any property related bank account shall be sufficiently bonded. Written evidence of such bonding shall be provided to the satisfaction of NYSTRS, as requested.

The Real Estate Investment Officer or his designee shall:

1. Review annual operating and capital budgets for all property assets within parameters specified in the Permanent Policies and Procedures subsection;
2. Be responsible for all property management activities undertaken by the Advisor;
3. Attend and represent NYSTRS at all meetings pertaining to asset management policies and procedures for the assets managed by Asset Managers;
4. Take all other reasonable actions necessary for the proper operation of the properties and preservation of the assets;
5. Report to the Real Estate Advisory Committee and/or Finance Committee on actions taken under these and other delegations of authority which have a significant effect on the value of any real estate asset and/or the real estate Portfolio;
6. Monitor the execution of the delegations of authority granted the Asset Managers;
 - a. Ensure that appropriate types and levels of insurance are in force at all properties and that Asset Managers have in force reasonable levels of liability insurance; and
 - b. Ensure that all property level taxes and assessments are paid on a timely basis on each property investment, with copies of payment receipts forwarded to NYSTRS for filing in the appropriate asset management files.

C. Preliminary Policies and Procedures

Advisors shall prepare preliminary asset management policy statements for approval by NYSTRS prior to funding. A preliminary asset management policy and procedures statement will include, if applicable:

1. Identification of local forestry consultants.
2. Initial management plans.
3. Environmental risk management plan, if necessary.
4. Market positioning related to competitive properties and other market influences.
5. Reporting timing procedures and methodology.



Timberland Investments

6. Preliminary disposition strategies.

D. Permanent Policies and Procedures

Permanent asset management policies and procedures shall be defined and adopted in accordance with the following requirements:

1. Property Management Plan

a. Purpose

The purpose of the property management plan is to describe the operating plan for the property over the short and long term. It will include the current year budget summary and detail by tract, as well as, budget summaries for the following four years in lesser detail.

b. Timing

An initial property management plan will be submitted by the Asset Manager to the Real Estate Investment Officer no later than six (6) months after closing. The plan must be updated by the Asset Manager and submitted to NYSTRS annually. NYSTRS will schedule meetings with the Asset Managers to review the plan.

In subsequent years, the property management plan will be prepared and submitted to NYSTRS no later than thirty (30) days before the beginning of the fiscal year.

c. Information Requirements

Asset managers shall prepare initial and subsequent property management plans that satisfy the information requirements as specified by NYSTRS.

2. Reporting

a. Property Management Plans

The requirements and timing for the property management plans are discussed in the subsection "Property Management Plan."

b. Monthly Reports

Asset Managers shall provide to NYSTRS on a monthly basis a statement of cash and bank reconciliations, including bank statements.

Asset Managers shall reconcile these reports to NYSTRS' cash received, budgets, operating policies and accounting procedures. The Asset Manager shall deliver the monthly reports to NYSTRS within thirty (30) working days after the end of each month.

**Timberland Investments**

c. Quarterly Reports

Each calendar quarter, the Asset Managers shall prepare on a fair market value basis an operating and status report, a balance sheet and an income statement. This report will contain individual property information as well as consolidated information for all properties the Asset Manager manages for NYSTRS. The report shall be submitted to the Real Estate Investment Officer. Required quarterly reports shall be delivered to NYSTRS within forty-five (45) working days after the end of each calendar quarter. The report shall contain information as specified by NYSTRS. All monthly and quarterly reports shall be maintained by the Real Estate Investment Officer in the NYSTRS real estate program filing system.

3. Valuations

a. Independent Third Party Appraisals

Independent third party appraisals shall be conducted on all NYSTRS real estate assets prior to closing and every three (3) years thereafter. The scope (full appraisal versus appraisal update) and timing of interim appraisals will be determined by NYSTRS based upon known market changes and recommendations from the Advisors. Appraisal methodology will be as set forth in Exhibit 1, attached hereto. NYSTRS has the right to request an "interim" appraisal for any asset at any time. No two successive appraisals of any property may be performed by the same appraiser or appraisal company.

The Advisor shall maintain a list of qualified appraisers and engage one or more to conduct the scheduled or required appraisals on the individual property assets. NYSTRS will be notified prior to such engagement and will have the right to disapprove any appraisal assignment. The credentials/qualifications outlined on Exhibit 2, shall be utilized when determining whether an appraiser should be included on the list.

Appraisers will be engaged directly by the Advisor. The Advisor will be responsible for coordination of the appraisal process and review of appraisal reports. Original copies of the appraisal reports shall become part of the permanent files maintained by NYSTRS for each property.

The cost of the appraisal shall be borne by NYSTRS.

b. Quarterly Valuation Process

At the end of the first quarter during which a property is purchased, it will be valued on the quarterly financial statement at cost. The following quarter and every quarter thereafter (as of the last day of each calendar quarter), the property will be valued by its component parts of land, merchantable timber, and pre-merchantable timber, as set forth in Exhibit 1. Land will be valued at purchase price for the first year following acquisition. Thereafter, it will be adjusted on an annual basis as set forth in Exhibit 1. The Asset Manager will report the results of the internal valuation of each property as set forth in this Timberland Investment Policy.



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4. Property Management and Leasing

a. Property management policies and procedures

Annual property management guidelines shall be identified by Asset Managers and presented to the Real Estate Investment Officer or his designee in the initial property management plan and updated in subsequent plans. The guidelines shall include marketing strategies, property management and leasing contract conditions, and in-depth management necessary for long-term timber production, including, but not limited to:

Surveillance and protection of properties

Conducting sales of all timber from properties.

Conducting sales of all mineral rights, land leases, etc.

Assisting in reviewing of independent appraisals of each property

Managing and implementing all stewardship projects

Hiring qualified contractors and overseeing all contractor activities, including:

- site preparation and planting
- road, bridge, gate and culvert construction and maintenance
- plowing and maintenance of firebreaks
- property boundary line maintenance (marking) and surveys
- vegetation management, chemical or mechanical
- insect and disease control
- slash burning and fire suppression
- fertilization
- stocking control
- animal control
- individual tree marking for harvest operations
- surveying for threatened and endangered species
- archeological or other specialized surveys outside the scope of services customarily provided by professional timberland managers in the area in question.

While there will be no specific current cash flow requirements, property management policies should include provisions to generate, to the extent possible, sufficient cash flow to cover expenses of property management, taxes and the Advisor's fees. Five-year management budgets will be prepared and included in the initial property management plan and updated annually for each property. Practices will be scheduled that increase property values and optimize cash flow in order to maximize returns. Each timber stand's economic maturity will be analyzed using computer-based growth and yield models to develop long-term harvest schedules. Timber sales will be planned using the long-term harvest schedule as a guide.

b. Leasing Policies and Procedures

To the extent possible, all lease forms and existing and new leases for any property asset shall be standardized as soon as practicable after funding or closing.

**Timberland Investments**

5. Property Inspection

The Asset Manager shall maintain current information regarding the physical condition of any property as well as the competitive factors and specific market area trends affecting the property. In addition, the Asset Manager shall be required to physically inspect the property and its general market area at least once quarterly, unless otherwise provided for in the permanent Property Management Plan for the property, for the purpose of maintaining conformance with the Plan.

The information derived from the property inspection shall be communicated to NYSTRS in the quarterly report where appropriate and used as a basis for modifications to the annual plan.

6. Audits

NYSTRS requires an annual audit of all timber investments. The audit should be performed by an independent certified public accountant. For wholly owned properties, the REIO or his/her designee will engage the independent certified public accountant and all audit reports and findings as a result of the audit will be directly communicated to the REIO or his/her designate. All audit reports should be provided to NYSTRS within 180 days of the holding entity's year-end.

7. Accounting

For specified property investments, the accounting systems employed by the Asset Manager and internally by NYSTRS are on a fair market value basis of accounting. Advisor fees will be expensed on NYSTRS books.

The accounting for all activities for each property asset shall be established at the property level by the Asset Manager and at the portfolio level by NYSTRS in substantial conformity with generally accepted accounting principles.

A cash management system with the proper level of internal controls by the Asset Manager over all cash receipt and cash disbursement items is critical to NYSTRS. In accordance with the previously specified duties and responsibilities of the Asset Managers, rents and miscellaneous sources of income shall be collected and expenses paid at the property level. All property operating bank accounts shall have as signatories appropriate personnel of the Asset Manager. The Asset Manager will submit the name(s) of bank(s) and account number(s) for NYSTRS approval. The Asset Manager policy manual for short-term cash investments and criteria used by the Asset Manager in selection of the bank(s) should be submitted to NYSTRS for review.

Excess funds held in bank accounts by the Asset Manager should be kept to a minimum. An operating reserve sufficient to cover three months of anticipated expenses shall be maintained by the Asset Manager. Funds that are held in bank accounts as compensating balances to reduce fees and/or charges by the Asset Manager should be communicated to NYSTRS Real Estate and Investment Information Departments.

**Timberland Investments**

Unless NYSTRS provides prior approval for a different schedule, the frequency of distributions to NYSTRS should be at least quarterly. The Asset Manager will be responsible for providing the NYSTRS Investment Information Department with prior notification of the amounts and expected delivery dates of the transfers, monitor the timely transfers of funds to NYSTRS' account and ensure that confirmations of the transfers are immediately provided to the Real Estate Investment Officer or his designee. The wired funds will include a description on the wire as to the property name and what the distribution is for, such as land sales and/or operating cash flow distributions. Within three (3) days prior to the transfer of funds to the NYSTRS' account, the Asset Manager shall make certain that a reconciliation statement is sent to the NYSTRS' Real Estate Investment Officer and to the Investment Information Department showing the following:

- a. The source and amount of wired capital by property
- b. The category of wired capital (excess monthly cash flow, preferred returns, interest earned, mortgage payment, etc.)
- c. The net amount wired
- d. Any appropriate explanatory notes
- e. Supporting documentation for expenses deducted from monthly distribution

8. Environmental Policy

For all real property assets with any defined or potential environmental hazard, NYSTRS will adopt an environmental hazard management plan as a part of its permanent asset management policies and procedures as defined in the business plan. No property investment should be consummated without full compliance with all requirements enumerated in Section IV.B.3 entitled "Environmental Hazard Review" of the Equity Real Estate Investment subpolicy of the Investment Policy Manual.

The basic objective of a property specific environmental hazard management plan is to manage risk by providing awareness of any potential hazard (including those from hazardous waste, toxic waste, radon, asbestos or unknown origin) to any person in occupancy at any property, facilitate abatement or cleanup of any hazard, reduce to the extent possible future adverse effects from the existence of any hazard, continually monitor the effect on a property and its tenants from any hazard, and minimize the potential liability of NYSTRS.

**VI. Disposition Procedures****A. Disposition Plan**

Timber will be sold when it is economically mature or when dictated by biological conditions such as the need for thinning or insect control. Market conditions will influence the exact timing of timber sales. As to land sales, timberland tracts generally will be held for long-term investment; however, the Advisor will monitor local markets for occasional land sale opportunities. Property will be sold when the sale price is greater than the estimated net present value of the tract's future cash flows if held for timber production. Properties will be sold either directly by the Advisor or, when market conditions or other circumstances dictate, by a local broker selected by the Advisor.

Asset Managers are required to conduct a formal hold/sell analysis for all NYSTRS real estate investments as part of the annual property management planning process. As dictated by market conditions and other events, the Asset Manager may also make a sale at other times. In the event an Asset Manager determines that an asset should be sold, the Asset Manager shall provide the Real Estate Investment Officer or his designee (via the management plan, quarterly report, or on an as needed basis) with the following.

1. Specific reasons for the sale.
2. Structure of disposition (outright sale, partial sale, etc.).
3. Potential gross disposition price and basis for said price assumption.
4. Identification of potential buyers.
5. Process for implementing any disposition decisions (need for brokers, appraisers, engineers, other professionals).
6. Anticipated disposition period and closing date.
7. Estimated costs of sale.
8. Estimated net disposition proceeds.
9. Estimated cash received from sale by NYSTRS.
10. Estimated NYSTRS' internal rate of return for the asset's holding period.
11. A summary of any trailing liability issues (if any) that NYSTRS would have to consider related to the sale.

The foregoing informational requirements for property dispositions shall not apply to dispositions arising from routine thinning harvests, the grant of utility easements, or dispositions of timberland consisting of fewer than 10 acres where the disposition is a result of taking by eminent domain.

The Advisor retains full discretion in making the decision to sell timber or land.

The Asset Manager shall be responsible for the transmission of NYSTRS' disposition proceeds, net of costs of sale, directly to the NYSTRS account at a bank designated by the Real Estate Investment Officer or to the account of the title-holding entity, as appropriate.



Timberland Investments

Exhibit 1 - Valuation of Assets

- A. Valuation. The Advisor will determine the market value of the assets of NYSTRS as of the last day of each calendar quarter. Any such date is referred to as a "valuation date". The results of such valuations of the Account will be reported to NYSTRS in the quarterly reports as required in Section V.D.2 of the Timberland Investment Policy.
- B. Method of Valuation. The Advisor will use the following methods in the valuation of the assets of the Account:

Timber will be valued based on its latest inventory (which shall be updated not less frequently than every six years), adjusted for estimated timber growth (based on the Advisor's best reasonably available information, and modified to reflect interim cuttings, new plantings or significant reproduction, and other relevant factors). The resulting inventory will be valued based on publicly quoted timber prices for the relevant geographic area. In connection with such valuation, the Advisor may use information from licensed foresters performing timber cruises or appraisals from real property appraisers.

In determining the market value of any real property interest in land, the Advisor may use any professional appraisal made within three (3) years prior to the valuation date, provided that NYSTRS may, at its option, require a professional appraisal to be done more frequently. The appraisal used will be updated annually by the Advisor based on its assessment of land values in the area, the state of the market for similar land, and such other factors as it deems relevant.

All properties shall be re-appraised not less frequently than every three years by an outside independent appraiser or appraising company selected by the Advisor in accordance with Section V.D.3 of the Timberland Investment Policy, provided that, should NYSTRS object to the appraiser or appraisal company so selected, the Advisor will select an alternate appraiser or appraisal company satisfactory to NYSTRS.

Assets other than debt and equity interests in timber and land will be valued at market value based on data obtained from sources considered by the Advisor to be best qualified. The Advisor may rely on the market value of similar investments for which a market value is readily ascertainable or retain, with prior written approval of NYSTRS, at such intervals as it deems necessary, a qualified appraiser or appraisers for such purpose.

Each calendar quarter the Advisor shall provide NYSTRS, as part of its quarterly report, a valuation summary for each property in the Account. The summary shall include merchantable timber volume, value per unit of merchantable timber volume, acres by age of pre-merchantable timber, value per acre of pre-merchantable timber, total acres of land, and value per acre of land. Significant market and industry factors which have materially affected the valuation during the quarter will be described in a narrative report in the quarterly report.



Exhibit 2 - Qualifications for Appraisal Firms

Appraisers and appraisal firms will be selected with care and diligence. The selection will include a review of each candidate's education, experience, references and recent sample reports. The following credentials / qualifications should also be considered:

- A. The firm must be well established with a solid reputation for honesty, integrity and adherence to professional appraisal standards and shall generally be registered foresters. This must be verified by obtaining and contacting references for all candidate firms.
- B. The firm's appraisers must have professional training and expertise in forestry as well as appraisal methodology and practice. This is documented by sample appraisals and résumés of key personnel and staff appraisers obtained from candidate firms, which are reviewed and maintained on file at the Advisor's office.
- C. The candidate firm must be large enough or have established working relationships with other firms to provide the human and technical resources needed to conduct large-scale timber inventories, which may be part of the appraisal assignment.
- D. The candidate firm must be properly licensed and/or certified to do appraisal work in the state in which the subject property is located.
- E. Where possible, appraisers with the MAI designation combined with appropriate forestry training and timberland appraisal experience will be utilized.
- F. Candidate firms shall have no direct or indirect economic interest in the Advisor.
- G. The Advisor will show preference to candidate firms with whom they had prior experience.



NEW YORK STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT POLICY MANUAL

Alternative Investments

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Alternative Investments

I. Introduction

The System's alternative investments include a variety of direct and indirect equity, debt and real estate investments that fall outside the portfolios of stocks, bonds, mortgages and real estate that are managed by system staff and external investment managers.

The types of equity include private equity such as venture capital, mezzanine or buyout funds and direct coinvestment with these funds. Other alternative equity investments include public securities received as distributions from the venture capital, mezzanine or buyout funds as well as the initial public offering (IPO) of equity securities.

The real estate alternative investments include undeveloped land such as timberland and farmland and participation as a limited partner in opportunistic real estate funds. (See Timberland Investments subpolicy under Real Estate tab)

Alternative investments may be attractive for the benefits of diversification and for long-term returns higher than those expected for marketable securities. Participation in this asset class, however, involves significant trade-offs including: lack of liquidity; initial periods of little, if any, return with the expectation of higher returns later; higher management and operation costs; time consuming evaluation procedures; and complex contractual structures.

Since the potential for distress in many alternative investments is great, there must be appropriate due diligence at every stage of the investment process.

The portfolio structure for alternative investments should be designed to control, to the greatest extent possible, the investment management costs for this asset class.

Background:

To date, the System's experience has been in the following areas: limited partnerships (mostly venture capital, buyout and mezzanine funds) and commingled trust funds. Other types of alternative investments are available and may be utilized upon the approval of the Retirement Board. The investments are initiated by either the Investment Department or Real Estate Department, depending on the type of underlying assets involved.

II. Purpose

To achieve higher long-term returns than are normally available through marketable securities. Investment objectives may cover periods of 10 years or more.

III. Performance Objective

- A. To earn, over the long term, an average total return that provides a substantial real return and experiences a risk level commensurate with return. In early years, investment return may be zero or even negative after considering expenses.
- B. For Private Equity, the return objective is to exceed the S&P 500 Stock Index plus 5.0% over the long term. For timberland/farmland, the objective is to exceed the CPI plus 5.0% over the long term.
- C. Performance objectives are net of fees and expenses.



Alternative Investments

IV. Management Structure

The utilization of various structures offers the potential to diversify and to reduce risk. The type of structure used by the System will be selected in light of: the form of investment under consideration; the System's objectives and time horizon; the System's ability to evaluate and monitor complex legal structures and the actual operations under these structures; and the cost of each operation.

Alternative investments may be divided into four common investment structures:

- A. **Direct investments.** The System may directly invest in the debt or equity of a company. This may be done as a coinvestment with the general partner of a limited partnership that we participate in, or by holding securities that were distributed by a limited partnership of which we are part, or through purchase in an IPO.
- B. **Limited Partnership Interest.** In a limited partnership, the general partner is in charge of managing and investing the partnership's assets. Initially, the partnership's assets consist of cash contributed by the investors, i.e., the limited partners (usually 99%), and the general partner (usually 1%). Legally, unless the partnership is a fund of funds, the relationship between the general partner and limited partners is not primarily one of client/manager, but rather that of partners in an investment venture, although certain fiduciary duties are owed by the general partner to the limited partners. As used herein, however, the term "investment manager" shall be construed broadly to include the general partner in a limited partnership. General partners in venture capital/mezzanine funds may not be registered under the Investment Company Act of 1940.
- C. **Fund of Funds.** The structure is the same as a limited partnership, except the general partner invests in other limited partnerships rather than individual companies.
- D. **Insurance Company Pools / Commingled Funds.** In a commingled trust fund, a number of investors contribute capital to a pool held by a trustee, which the investment manager then manages and invests for the benefit of the investors. Each investor is the beneficial owner of a pro-rata undivided interest in the trust assets.

The System may encounter other structures as it continues investing in alternative investments.

V. Legally Permissible Investments

Overall, alternative investments would be made pursuant to the Leeway Clause [§177(9) of the Retirement and Social Security Law].



Alternative Investments

VI. Risk Management

NYSTRS' Board understands the long-term nature of the asset class and that alternative investments are intended as a permanent component of the portfolio. Alternative investments have been incorporated into the portfolio in order to provide both enhanced returns and risk diversification over market cycles. While alternative investments may have a higher risk profile than more traditional asset classes, e.g., fixed income and public stocks, the Board recognizes that the primary risk of alternative investments within a well-diversified portfolio is illiquidity, particularly in the investment phase of each partnership's life cycle. That risk/return trade off is acceptable to the Board given the enhanced returns relative to other asset classes and the relatively low covariance between alternative investments and the more traditional asset classes. In addition, NYSTRS' liquidity needs are such that having a component of the portfolio with a longer duration to liquidity is not a problem within the context of the portfolio as a whole.

- A. Diversification: Alternative investments contribute to the diversification of the overall portfolio. The asset allocation target for Private Equity overseen by the System's Investment Department is 5% with an allowable range of 2-8%. Within the alternative investment sector:
1. Consideration may be given to differing forms of alternative investments, provided they do not involve a hostile situation, the risk level is fully understood, and such level of risk is appropriate to the System's Investment Policy.
 2. The diversification of alternative investments should be generally consistent with each investment type's portion of the total market of alternative investments. For example, private equity (venture capital, buyout funds, etc.) represents nearly three-quarters of the asset class and, therefore, is expected to be the largest component of the System's alternative investment portfolio. Consequently, only private equity investments may exceed 50% of the System's total alternative investment portfolio.
 3. The System's interest in an investment may not be more than the greater of \$50 million or 20% of that investment fund.
 4. No more than 45% of the total assets managed by any one manager (including such manager's affiliates) may be owned, directly or indirectly, by the System.
 5. New types of alternative investments, or emerging segments of the market, will be considered by the System only after they are sufficiently large to allow the System to invest a meaningful amount consistent with items 3 and 4, above, and provided such investment will not exceed 5% of that segment of the market.
 6. Unless specifically approved by the Retirement Board, the following types of alternative investments are excluded from investment:
 - a. "Hard" assets: precious metals, stamps, coins, antiques and art.
 - b. Derivative related: hedge funds, derivatives, commodities, etc.



Alternative Investments

- B. Due Diligence: Before an investment manager is retained, System staff must undertake the necessary due diligence to ensure that such manager is experienced, trustworthy, and otherwise qualified to manage a portion of the System's assets. Due diligence should include:
1. Ascertaining the financial, educational, and experiential background of key personnel, and otherwise examining the track record of the investment manager under consideration;
 2. Contacting other past and current clients to ascertain their level of satisfaction with the manager;
 3. Examining any SEC forms, other similar agency reports, or prospectuses which may be readily available;
 4. Consulting any services/publications which may rate or otherwise offer pertinent information regarding the prospective manager; and
 5. Taking such other measures as, under the circumstances, may be appropriate.
- C. Legal and Business Considerations: Alternative investments may involve complex, non-standard business and legal relationships, and contract documentation may be both highly complex and specialized. Due to the non-standard nature of alternative investments, the System will seldom be able to use in-house "off-the-shelf" contract documentation, with the result that the investment manager's form of agreement is used as a base for negotiations. These agreements, limited partnership agreements in particular, are often drafted with comprehensive protections built in for the investment manager. Serious consideration shall always be given to obtaining special counsel and other advisors qualified to represent the System's legal and business interests. The possibility of sharing the cost of such counsel and outside advisors with other similarly-situated investors will be explored as appropriate.
- D. The actions of the investment manager should be consistent with the following:
1. Diversification: To the extent reasonably possible, and taking into account the size and nature of a particular alternative investment portfolio, as well as market conditions, the investment manager is to diversify the portfolio's assets in order to minimize risk of loss.
 2. Acquisition/Sale of Alternative Investments: Each manager is expected to complete all necessary due diligence including legal, financial, technical or investment specific review necessary to determine the potential opportunities and risks for each alternative investment considered.
 3. Acknowledgments in Writing: Each investment manager retained by the System must be a person, firm, or corporation registered as an investment adviser under the Investment Advisors Act of 1940; a bank as defined in such Act; an insurance company qualified to do business in more than one state; or other experienced and qualified organization meeting all industry and System standards. SEC registered firms will be expected to provide a copy of the SEC ADV Form Part II on an annual basis.
 4. Discretion: Subject to the guidelines in this section and the policies documented herein, each investment manager will have full discretionary authority over the assets represented by the System's capital contribution.



Alternative Investments

5. Conflicts of Interest: An investment manager must fully disclose potential conflicts of interest to the partnership's advisory board, or other appropriate entity, pursuant to the partnership agreement. System staff will pursue membership on limited partner advisory boards when appropriate to represent NYSTRS interests. Contract language may be sought restricting new start-up ventures by the investment manager until commitments to current portfolio have been sufficiently invested.
- E. Distributions: Given a choice, the System prefers cash distributions. Stock distributions will be processed by the System's distribution manager with the intent of achieving an orderly liquidation of the securities.
- F. Monitoring and Control: System staff will pursue membership on limited partner advisory boards when appropriate to maximize the communication with the general partner and to strengthen the oversight of these investments.

VII. Communications

- A. Retirement Board Reporting: The Investment Department or the Real Estate Department (as applicable) will provide a quarterly report showing the status of each alternative investment to the Finance Committee of the Retirement Board.
- B. External Investment Manager Reporting: The external investment manager shall:
 1. Provide quarterly or semi-annual interim financial reports and annual audited financial statements prepared by an independent certified public accountant.
 2. Immediately report all instances of default on the partnership agreement to the staff and provide recommendations regarding options for curing the default, withdrawing from the investment, or other appropriate actions.



Alternative Investments

VIII. Procedures & Controls

Responsible Party	Action
Investment Information Department	1. Prepares a monthly cash flow forecast in coordination with the Securities Investment Officer, Real Estate Investment Officer, Finance Officer and Executive Director. This forecast coordinates cash available to invest with planned program investments and targeted asset allocations.
<p><u>SELECTION:</u></p> Investment or Real Estate Department	2. Recommend investments within guidelines. This process is opportunity driven rather than asset allocation driven. It involves a thorough analysis, can be time consuming, and may require expertise beyond in-house capabilities. For these reasons, a consultant(s) may be hired to assist in the process. 3. Works with the Legal Department in negotiating any legal documentation and drafting required terms. Other parties may be called upon for assistance in this process including outside counsel, Finance and other departments as needed.
Legal Department	4. Selects outside counsel sufficiently experienced and expert in the form of the alternative investment under consideration. 5. Works with outside counsel in negotiating the final form of any contract which may be required.
Investment or Real Estate Department	6. Instructs Investment Information Department to disburse funds to investment manager.
Investment Information Department	7. Prepares warrant and submits to Internal Audit.
Internal Audit	8. Pre-audits warrant and submits to Executive.
Executive	9. Approves warrant to disburse funds.
Finance Department	10. Receives signed warrant from Executive and forwards to NYS Treasurer.
NYS Treasurer	11. Records payment.
Finance Department	12. Posts warrant to General Ledger and retains executed copy.

**Alternative Investments****VIII. Procedures & Controls (continued)**

Responsible Party	Action
Investment Manager	13. In compliance with System policies and contract, manages the alternative investment portfolios on a day-to-day basis using full discretion. This includes, but is not limited to, selecting and valuing investments.
<u>MONITORING:</u> Investment or Real Estate Department	14. Maintains ongoing relationship with investment manager(s) and/or consultant(s). 15. Maintains reports and correspondence files. 16. Acts as a liaison between Investment Information Department and the manager on reconciliation issues.
Investment Information Department	17. Performs all investment related accounting and reporting, applying appropriate accounting controls. 18. Reconciles System accounting records to investment managers audited financial statements, annually. 19. Follows up on outstanding reconciling items to ensure resolution.
Investment Information Department in conjunction with Investment or Real Estate Department	20. Ensures compliance with the program as deemed appropriate, which may include reconciling to external financial statements and verifying income allocations, fees and distributions.
Legal Department	21. Assists staff and renders legal advice regarding any developments occurring during the life of the investment.
Retirement Board	22. Reviews performance of alternative investments quarterly.
<u>EXITING:</u> Investment or Real Estate Department	23. May decide (with the possible assistance of a consultant) to exit an investment sooner than the contractually agreed upon date, should performance and other considerations merit termination.
Legal Department	24. Assists staff and renders advice as needed.



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Security Lending

I. Introduction

This policy governs the lending of securities that are directly owned by the System. It does not address securities lent from commingled investments.

"Securities lending" occurs when the System transfers a security to a borrower, such as a broker-dealer or bank, for cash or non-cash collateral pursuant to an agreement to return the identical security in the future. Securities are borrowed for a variety of reasons including; settlement of short sales and to cover hedges, options, arbitrage positions and settlement fails. Consequently, the borrower receives custody of the transferred security and has the right to resell it. The borrower, however, is obligated to return the exact same security at the end of the loan period and to make the System whole for dividends, interest and other distributions as if the security remained in the System's portfolio.

II. Purpose

To prudently supplement the income normally received from investments.

III. Performance Objective

To obtain market lending rates for non-cash collateral. For cash collateral, to invest at a rate exceeding the borrowers' rebate rate in a Short Term Investment Fund (STIF), to provide the System with incremental income.

IV. Management Structure

All securities lending is transacted pursuant to a written agreement with the System's agent lender(s). The agent lender(s) reviews and selects the borrowers, negotiates the lending terms and collects all cash collateral and loan premiums. Additionally, the agent lender(s) invests the cash collateral pursuant to System approved investment guidelines and may act as custodian of the System's cash collateral short term investment fund (STIF). A portion of the interest earned on the cash collateral is remitted to the borrower as a result of a negotiated rebate. For non-cash collateral, the borrower pays the System a loan premium for lending the security.

V. Legally Permissible Investments

Subject to a determination by the Securities Investment Officer that securities lending is prudent, the System is authorized by Retirement and Social Security Law §177-d to enter into written security loan agreements. Agreements to lend a security must be with a broker-dealer or with New York State or nationally chartered banks and must not exceed a period of one year.

Additionally, the System may lend only those securities that are freely traded on recognized exchanges or marketplaces, which may include U.S. government bonds and domestic corporate equities and bonds. The following provisions also apply to all System security loan agreements:



Security Lending

- A. The System must retain the right to collect from the borrower all dividends, interest, premiums, rights and any other distributions to which the System otherwise would have been entitled.
- B. The System must retain the right to terminate the contract upon not more than five (5) business days notice.
- C. The borrower must provide collateral to the System in the form of cash, bonds or performance letters of credit drawn on a bank with capital, surplus and undivided earnings in excess of \$100 million, or other interest-bearing notes and obligations of the U.S. or federal instrumentalities eligible for investment by the System.
- D. The security loan agreement must provide for payment of additional collateral on a daily basis, or at such time as the value of the loaned marketable securities increases to agreed upon ratios.
- E. The market value of the loaned securities must be monitored daily. The value of the collateral posted must remain at or above the market value of the loaned securities.
- F. The System may waive the right to vote the securities during the term of the loan.

Asset allocation does not apply to this investment activity; however, the market value of securities loaned by the System shall not exceed 20% of the market value of the System's invested assets.

VI. Risk Management

- A. Credit Risk: Credit risk is controlled by the following measures:
 - 1. The agent lender shall lend securities to borrowers that have been approved by the agent lender's credit operations.
 - 2. The agent lender shall collect all cash and non-cash collateral from the borrower.
 - 3. The agent lender shall provide safekeeping for any non-cash collateral received.
 - 4. The agent lender shall indemnify the System for any losses resulting from broker default on return of securities as well as dividends, interest or other distributions resulting from a default by the borrower.
 - 5. The agent lender shall return securities to the System, in the event the System decides to call a loan. This should occur within the normal settlement period for that security class, which would be, at most, three days.
 - 6. The agent lender shall collect all distributions to which the System would otherwise have been entitled, and remit same to the System as if no loan existed.
- B. Market Risk: Controlling market risk in our securities lending program is addressed in two categories: the overall program, and the STIF.



Security Lending

1. The overall program:
 - a. The agent lender shall ensure that initial collateral of domestic securities on loan is at least 102% of the market value of the loaned security plus accrued interest.
 - b. The agent lender shall mark to market the securities on loan on a daily basis using the target of 102% for domestic securities on loan.

2. The STIF:

The agent lender shall invest any cash collateral in a STIF pursuant to agreed-upon investment guidelines that shall contain, at a minimum, the following provisions:

- a. The guidelines must contain specific credit quality standards, as follows:
 - 1) For investments with an original maturity of one year or less: at the time of purchase, no investments may carry a program or instrument rating of less than P-1 by Moody's or A-1 by S&P.
 - 2) For investments with an original maturity greater than one year: at the time of purchase, no investments may carry a program or instrument long-term rating of less than A2 by Moody's or A by S&P.
- b. STIF investment maturities must fall within particular guidelines to assure liquidity. The guidelines should specify maximum maturities for individual investments, weighted average portfolio duration and maturities.
- c. The portfolio must be diversified by issuer.
- d. Types of eligible investments must be identified.

- C. Operational Risk:

1. A written contract, reviewed by the System's Investment and Legal Departments, shall govern the relationship between the System and the agent lender.
2. The agent lender shall utilize written contracts (e.g., security lending agreements) to govern their relationships with the borrowers.
3. The Communications and Procedures & Controls sections will delineate the measures implemented to control operational risks.



Security Lending

VII. Communications

A. Retirement Board Reporting:

Investment Information Department will provide a quarterly report for inclusion in the minutes of the Finance Committee of the Retirement Board showing the market value of securities on loan and their percent of total invested assets; collateral held by the custodian; and year to date lending income.

B. Agent Lender Reporting:

1. Investment Information Department will receive daily “exposure reports” showing the level of collateral held for each borrower, STIF investment reports showing the portfolio composition, maturity and credit quality.
2. Investment Department will receive weekly collateral reports showing the composition of the STIF account, pertinent ratios, maturity, credit quality, and other information as required.
3. Investment Information Department will receive monthly earnings reports showing the monthly earnings in detail.

VIII. Procedures & Controls

Responsible Party	Action
Agent Lender	<ol style="list-style-type: none"> 1. As fiduciary for the System, and in compliance with the Retirement and Social Security Law, System policies, and STIF guidelines, manages the lending program on a day-to-day basis. This includes negotiating all loan terms, approving borrowers based upon credit analysis, maintaining collateral and collecting income
Investment Information Department	<ol style="list-style-type: none"> 2. Performs all investment related accounting and reporting, applying appropriate accounting controls. 3. Reviews exposure report daily for adequate collateral; asks agent lender for explanation or correction; closes loan if correction is not made within two business days. 4. Monitors borrower defaults and the System’s coverage of shortages. 5. Reviews reconciliations of outstanding loans per agent lender to custodial positions. 6. Reviews monthly earnings statement for reasonability. Verifies calculation of lending fee split and assures timely collection of lending income. 7. Performs a periodic review of program performance of each agent lender. 8. Negotiates contracts with agent lender and custodial bank governing securities lending. Serves as the primary relationship liaison with Agent lenders.

**Security Lending****VIII. Procedures & Controls (continued)**

Responsible Party	Action
Investment Department	<p>9. Receives the STIF reports from the agent lender, weekly.</p> <p>10. Reviews STIF accounts for compliance with the qualitative and quantitative guideline requirements, such as credit quality, eligible investments, performance, issuer limits, and maturity.</p> <p>11. Meets with Investment Information Department to discuss their respective reviews, and issues of concern.</p> <p>12. Converses at least monthly with the STIF manager regarding the composition and fund status, and resolves issues of concern.</p> <p>13. Fixed Income unit signs off on the STIF account reports, weekly.</p> <p>14. Determines and approves cash collateral reinvestment guidelines to be adhered to by agent lender(s).</p>
Investment Information Department	<p>15. Assures timely recall of securities on loan, collection of income due and timely corporate action communication for securities on loan.</p>
Legal Department	<p>16. Reviews contracts with agent lender and custodial bank governing securities lending.</p>
Investment Information Department	<p>17. Prepares summary report for the Finance Committee of the Retirement Board, quarterly.</p>