

**PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM  
INVESTMENT OBJECTIVES AND GUIDELINES  
U.S. CORE PLUS FIXED INCOME**

**ADDENDUM I**

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**I. OBJECTIVES AND GOALS**

This actively managed U.S. fixed income portfolio will consist primarily of fixed income securities and cash equivalents.

**Measurement Process**

Relative performance will be measured versus the Lehman Brothers ~~Bond~~ **Aggregate U.S. Universal** Index. The target Information Ratio is 0.50.

**II. RISK**

The Board judges the question of risk to be categorized into groups of concerns including credit or bankruptcy, liquidity, diversification, hedging, non-U.S. currency exposure, and counterparties. These are applied to the market, sectors of the market, and individual issues. To a varying degree, each of these points is addressed implicitly or explicitly in different sections of these guidelines, but for clarity, they are summarized as follows:

**A. Credit or Bankruptcy:**

*Note:* Unless otherwise noted herein, all references to credit ratings throughout this document shall be read as applying to the ratings issued by Moody's, Standard & Poor's, and Fitch Investor Service (hereafter referred to as the "Credit Rating Agencies"). If each of the Credit Rating Agencies assigns a credit rating, the credit rating will be the middle of the three ratings (for example, if Moody's rates a security Baa2, S&P rates a security BB+, and Fitch rates a security BBB-, the middle credit rating would be considered BBB- by Fitch). If only two of the three Credit Rating Agencies assign a credit rating, the credit rating will be the lower of the two. If only one of the Credit Rating Agencies assigns a credit rating, that credit rating will apply.

U.S. and non-U.S. Bonds - Only securities rated ~~B3/B-C3/C-~~ or better are acceptable.

U.S. Non-Convertible Preferred Stock - Only non-convertible preferred stock investments of recognized companies rated ~~B3/B-C3/C-~~ or better are acceptable. In addition, 100% of the companies issuing non-convertible preferred stock held in the portfolio must have been listed on

the major exchanges (New York, American, or Nasdaq) for a minimum of 3 years. Spin-offs of companies are considered to have a listing equal to that of the company from which it was spun-off.

- B. Liquidity - To insure the flexibility necessary to take defensive action when appropriate, positions should be in issues with sufficient float so as to facilitate, under most market conditions, prompt sale without severe market effect.
- C. Diversification - Concentration in any one issue, issuer, industry, issuer sector or geographic area is to be avoided. Adherence to the guidelines documented under III. Portfolio Definition and any amendments thereto will meet the Fund's diversification requirement.
- D. Hedging - The non-U.S. currency exposure of the portfolio may be hedged back to the U.S. dollar using forwards and options on foreign exchange contracts. From 0% to 100% of the non-U.S. bond or currency exposure of a portfolio may be hedged back to the U.S. Dollar.
- E. Non-U.S. Currency Exposure - In addition to holdings in securities denominated in non-U.S. currencies, the portfolio may gain exposure to non-U.S. currencies through the use of futures, options, or forward currency contracts subject to a maximum limit of 35% of the portfolio value provided that written permission from the Chief Investment Officer is received. Exposures to non-U.S. currencies are subject to the limitations set forth in III. Portfolio Definition, Country Allocations.
- F. Counterparties - The commercial and investment banks used for approved OTC futures, approved OTC options, or forward/spot currency transactions must be rated A3 or better by Moody's Counterparty Ratings, (if not rated by Moody's, then rated A- or better by Standard and Poor's Counterparty Ratings or rated B or better by Fitch's Bank Individual Ratings). Net forward/spot contracts, futures contracts, and option exposures to any counterparty will not exceed 20% of the market value of the portfolio. Exposure is measured in net U.S. dollar equivalent terms (offsetting contracts will be netted for this purpose). Counterparty limits will not be applied to listed futures and options.
- G. Capital Loss - Preservation of capital is of major concern. It is the manager's responsibility to avoid, or minimize, capital losses.

### **III. PORTFOLIO DEFINITION**

It is required that the account be continuously managed. This does not imply continuous activity. It requires staying current at all times with the objectives of the

manager's investment policy for discretionary U.S. fixed income portfolios and the requirements of these Guidelines.

Within that framework, the fact that this portfolio is to be fixed income in nature, and within the following limitations, the manager has the discretion to make portfolio changes to accomplish the stated objectives.

## General

- A. All subsequent references in these guidelines do not apply to issues or issuers fully guaranteed by the United States Government and its agencies rated Aaa/AAA.
- B. All securities in the Lehman Brothers ~~Aggregate~~ U.S. Universal Index are permissible.
- C. At no time may the manager's portfolio:
  - i. have more than 7% of its assets at market value invested in the securities of any issuer (including cash equivalents)(limit does not apply to securities of non-U.S. governments) where the issuer has a credit rating of Baa3/BBB- or better. For those issuers in the portfolio with a credit rating below Baa3/BBB-, a 2% limit per issuer at market value applies, or
  - ii. have more than 25% of the portfolio at market value invested in asset backed securities (defined as financial instruments collateralized by one or more types of assets including mortgages, receivables, loan paper, etc.) other than U.S. or U.S. agency guaranteed asset backed securities for which there is no limit. Asset backed securities must be rated Baa3/BBB-or better, or
  - iii. have more than 2% of the portfolio at market value invested in non-convertible preferred stock of any one company or have more than 10% of the portfolio at market value invested in non-convertible preferred stock in aggregate.
- D. The manager's portfolio may have up to 10% of the portfolio at market value invested in convertible bonds (bonds convertible into common stock) that are trading at 110% of par value or less. The purchase of convertible bonds trading at more than 110% of par value is prohibited. When the convertible bonds in the portfolio are trading at more than 110% of par value, the manager must sell within 60 days or receive written permission from the Chief Investment Officer to continue to hold the security.
- E. The manager's portfolio may have up to 10% of the portfolio at market value invested in 144A securities with or without registration rights as long as these securities have a credit rating of Baa3/BBB- or higher.

Investments in 144A securities that have registration rights and are registered within 180 days of issue are permissible without limitation.

*Note: These restrictions are to be taken in conjunction with the maturity and credit limits discussed above under "Risk" and below under "Fixed Income Securities."*

## Country Allocations

- A. The fixed income market and currency weightings in bonds and cash or equivalent exposure gained through the use of futures, options, or forward currency contracts, when combined, may each range from (percentages apply to each individual country based on sovereign local currency ratings):

*Note:* Unless otherwise noted herein, all references to sovereign local currency ratings throughout this document shall be read as applying to the ratings issued by Moody's, Standard & Poor's, and Fitch Investor Service (hereafter referred to as the "Rating Agencies"). If each of the Rating Agencies assigns a sovereign local currency rating, the sovereign local currency rating will be the middle of the three ratings (for example, if Moody's rates a security Baa2, S&P rates a security BB+, and Fitch rates a security BBB-, the middle sovereign local currency rating would be considered BBB- by Fitch). If only two of the three Rating Agencies assign a sovereign local currency rating, the sovereign local currency rating will be the lower of the two. If only one of the Rating Agencies assigns a sovereign local currency rating, that sovereign local currency rating will apply.

Sovereign Ratings (includes the whole rating category in each instance)	% of Total Portfolio
United States	0 - 100%
Other Aaa/AAA rated countries	0 - 35%
Aa/AA rated countries	0 - 35%
A/A rated countries (each country limited to 10%)	0 - 20%
Baa/BBB rated countries (each country limited to 5%)	0 - 10%*
Under Baa/BBB rated countries and unrated countries (each country limited to 2%)	0 - 5%

\* - the 10% maximum exposure includes countries with sovereign local currency ratings under Baa/BBB.

When a country is reclassified below the minimum sovereign ratings described above, the portfolio manager must either, using its best reasonable efforts, bring the portfolio into compliance within 60 days of

reclassification or receive written permission from the Chief Investment Officer to hold amounts in excess of the approved percentages above.

Direct investment in any country is contingent upon the Fund's custodian bank being able to successfully establish a sub-custodian relationship in that country. If the Fund's custodian bank currently does not have a sub-custodian relationship established on behalf of the Fund in a desired country, the manager should send a letter to the Fund requesting to establish a sub-custodian relationship. The Fund will then work with the custodian bank to establish a sub-custodian relationship in the market(s) the manager wishes to invest. However, establishing a sub-custodian relationship in all markets requested cannot be guaranteed.

*This relates only to the percentage of the portfolio that may be allocated to these countries. Credit ratings as they relate to specific fixed income issues are discussed elsewhere in these guidelines.*

- B. The total maximum non-U.S. exposure of the portfolio will be 35% of the market value of the total portfolio. Non-U.S. exposure will be determined based on the issuer of the underlying instrument. Therefore, Yankee bonds, while dollar-denominated, will be considered non-U.S. securities for purposes of determining total non-U.S. exposure.

## **Cash and Cash Equivalents**

With respect to cash equivalents (securities with maturities of 15-months or under, securities putable within 12 months at face amount or higher, and variable rate securities that reset at least quarterly), overall quality and risk guidelines apply. Approved for use are: STIF, securities issued by the United States Government and its agencies, certificates of deposit with federally insured banks, bankers acceptances with major money center banks who are members of the Federal Reserve System and insured by the FDIC, repurchase agreements with counterparties meeting the rating guidelines under Counterparties, commercial paper rated P-1, securities rated A3/A- or better putable at face amount or higher within 12 months, and variable rate securities that reset at least quarterly and are rated A3/A- or better. No single issue used in this section may exceed 7% of the portfolio at market value at any time, (excluding STIF and U.S. Government securities).

## **Fixed Income Securities**

### **Maturity Limits**

All securities must have a final legal maturity of 40 years or less if they are not included in the Lehman Brothers ~~Aggregate Bond~~U.S. Universal Index. Maturity limits do not apply to those securities included in the Lehman Brothers ~~Aggregate Bond~~U.S. Universal Index.

## Duration Limits

The effective or option-adjusted duration of the portfolio must range from plus to minus 35% of the effective or option-adjusted duration of the Lehman Brothers ~~Aggregate Bond~~ U.S. Universal Index.

## Credit Ratings and Limits

A maximum of ~~40~~15% of the portfolio at market value may be invested in high yield bonds with ratings from ~~B3/B-C3/C-~~ to Ba1/BB+, with no more than 2% of the portfolio at market value invested in securities rated Caa1/CCC+ or lower. Bonds rated Baa [1-3]/BBB [- to +], when combined with high yield bonds, are limited to 25% of the portfolio at market. Non-rated debt securities are not permitted in the portfolio. The overall weighted-average rating of the portfolio must be A2/A or better.

## Downgrades

When a security held in the portfolio is reclassified below the minimum credit ratings described above, the portfolio manager must either, using its best reasonable efforts, sell the security within 60 days of the reclassification or receive written permission from the Chief Investment Officer to hold the security.

## Derivatives

### Mortgage Loan Related Tranches

Real estate mortgage investment conduit (REMIC) and collateralized mortgage obligations (CMOs) are permissible investments in the portfolio and are included in the 25% asset-backed security limit noted in the General Fixed Income Guidelines above (limit excludes U.S. Government or U.S. Government agency guaranteed debt). REMICs and CMOs must be rated Baa3/BBB-or better.

### Options

The portfolio shall be permitted to establish and maintain long and short positions in listed options on currencies and listed options on fixed income and currency futures. Options on fixed income futures may only be used for interest rate risk management. In addition, the use of any form of derivative security or investment strategy that effectively leverages the portfolio is prohibited.

### Forward Contracts

The portfolio shall be permitted to establish and maintain long and short fixed income and currency forward commitment positions, including mortgage dollar

rolls. Fixed income forward commitment positions may only be used for interest rate risk management. In addition, the use of any form of derivative security or investment strategy that effectively leverages the portfolio is prohibited.

### **Futures**

The portfolio shall be permitted to establish and maintain long and short positions in listed fixed income and currency futures contracts. Fixed-income futures may only be used for interest rate risk management. In addition, the use of any form of derivative security or investment strategy that effectively leverages the portfolio is prohibited. All futures trades must be cleared through clearing brokers who have contracts with the Fund.

### **Absolute Restrictions**

Unless otherwise covered in these investment guidelines, all other investments are strictly prohibited without the written permission of the Chief Investment Officer. The following are examples of some of the prohibited types of transactions and is not meant to be an all-inclusive list: leverage of any sort, letter stock, private placements (excluding 144A securities), commodities, etc.