# COMMONWEALTH OF PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM

#### **SERS # 00874.2**

# SECOND AMENDMENT TO ADVISORY AGREEMENT WITH BARCLAYS GLOBAL INVESTORS, N.A.

This Second Amendment made as of this 22 day of 1009 (the "Second Amendment"), by and between the COMMONWEALTH OF PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM (herein "SERS") and BARCLAYS GLOBAL INVESTORS, N.A., a national banking association, with its principal office and place of business at 400 Howard Street, San Francisco, CA 94105 (herein "ADVISOR"),

#### WITNESSETH:

WHEREAS, SERS and ADVISOR have previously entered into an Advisory Agreement for Enhanced Index Equity Portfolio and Collective Funds Management, SERS # 00874, dated September 1, 2006 (the "Agreement"), as amended; and

WHEREAS, SERS and ADVISOR wish to amend the Agreement to amend the Investment Guidelines and Fee Schedule;

**NOW, THEREFORE**, in consideration of the foregoing recitals that are incorporated herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

- 1. The above recitals are incorporated into this Second Amendment as if fully set forth herein.
- 2. Exhibit C-Fee Schedule is hereby amended and restated in its entirety and replaced with the attached Exhibit C-Fee Schedule.

- 3. Exhibit G-Investment Guidelines is hereby amended and restated in its entirety and replaced with the attached Exhibit G-Investment Guidelines.
- 4. Capitalized terms used in this Second Amendment and not otherwise defined herein shall have the meanings specified for such terms in the Agreement.
- 5. Except as expressly provided otherwise herein, all other provisions and terms of the Agreement remain in full force and effect.
- 6. This Second Amendment may be executed and delivered in counterparts (including by facsimile transmission), each of which will be deemed an original.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto, each intending to be legally bound hereby, have caused this First Amendment to be executed as of the date first written above.

BY:

BY:

Clas 69

TITLE: CLIENT SERVICE Date OPERATIONS SPECIALIST

BY:

Managing Director

BY:

Managing Director

BY:

TITLEANGE IS SAMSON

Principal

COMMONWEALTH OF PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM Federal Tax Identification Number:

Date

# EXHIBIT C

#### **EXHIBIT G**

#### **INVESTMENT GUIDELINES**

For

# COMMONWEALTH OF PENNSYLVANIA STATE EMPLOYEES' RETIREMENT SYSTEM

The Board has determined that the investment needs of the Fund can best be met by investing a portion of its assets in the Collective Funds listed below. Where listed in Exhibit G the Collective Funds may invest in structured transactions using stocks, bonds, currencies and money market instruments, as well as exchange traded futures and options and over-the-counter forward contracts, swaps and options, as a temporary substitute, or in addition to, or in lieu of, investing in equity securities, it shall be noted that the counterparties of such transactions enter into agreements with the Collective Funds, and not with SERS.

#### **Equity Index Non-Lendable Fund**

The Equity Index Non-Lendable Fund shall be invested and reinvested in a portfolio of equity securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of that segment of the United States market for publicly traded equity securities represented by the larger capitalized companies. The criterion for selection of investments shall be the S&P 500 Index. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the Equity Index Non-Lendable Fund in futures contracts for the purpose of acting as a temporary substitute for investment in equity securities. The Equity Index Non-Lendable Fund will not engage in speculative futures transactions. The Equity Index Non-Lendable Fund will not engage in securities lending.

#### Russell 3000® Index Non-Lendable Fund

The Russell 3000® Index Non-Lendable Fund shall be invested and reinvested in a portfolio of equity securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the segment of the United States market for publicly traded equity securities represented by the Russell 3000® largest capitalized companies. The criterion for the selection of investments shall be the Russell 3000 Index. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the Russell 3000® Index Non-Lendable Fund in stock index futures contracts for the purpose of acting as a temporary substitute for investment in equity securities. The Russell 3000® Index Non-Lendable Fund will not engage in speculative futures transactions. The Russell 3000® Index Non-Lendable Fund will not engage in securities lending.

### **BGI MSCI EAFE Equity Index Non-Lendable Fund**

The BGI MSCI EAFE Equity Index Non-Lendable Fund shall be invested and reinvested in a portfolio of international equity securities whose total rates of return will approximate as closely as practicable the capitalization weighted total rates of return of the markets in certain countries for equity securities traded outside the United States. The ADVISOR shall determine from time to time which countries shall be represented in the BGI MSCI EAFE Equity Index Non-Lendable Fund and may subdivide the BGI MSCI EAFE Equity Index Non-Lendable Fund into one or more separate divisions each of which represents a national equity market ("National Divisions"), or may subdivide the BGI MSCI EAFE Equity Index Non-Lendable Fund into one or more separate divisions representing two or more national equity markets ("Multinational Divisions"). A participating account may be invested in a BGI MSCI EAFE Equity Index Non-Lendable Fund, in any one or more of the National Divisions or in any one or more of the Multinational Divisions in whatever proportion among National Divisions or Multinational Divisions as

is deemed appropriate by the fiduciary responsible for the funding policy of such participating account. The primary criterion for selection of investments in each National Division shall be the Morgan Stanley Capital International Europe Australasia and Far East Index for the country represented. The primary criterion for selection of investments in the BGI MSCI EAFE Equity Index Non-Lendable Fund shall be the relative market weight of units of the National Divisions. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the BGI MSCI EAFE Equity Index Non-Lendable Fund in futures contracts and American Depository Receipts for the purpose of acting as a temporary substitute for investment in international stocks. The BGI MSCI EAFE Equity Index Non-Lendable Fund will not engage in speculative futures transactions. The BGI MSCI EAFE Equity Index Non-Lendable Fund will not engage in securities lending.

# **Emerging Markets Index Non-Lendable Fund**

The Emerging Markets Index Non-Lendable Fund shall be invested and reinvested in a portfolio of international equity securities, registered investment companies, other investment funds and derivative assets with the objective of providing returns which approximate as closely as practicable the capitalization weighted total rates of return of the markets in certain countries for equity securities traded outside the United States. In addition to, or in lieu of, investing in international equity securities, the ADVISOR may engage in structured transactions using non-U.S. stocks, bonds, currencies and money market instruments, as well as exchange traded futures and options and over-the-counter forward contracts, swaps and options. The Emerging Markets Index Non-Lendable Fund will not engage in speculative futures transactions. The ADVISOR shall determine from time to time which countries shall be represented in the Emerging Markets Index Non-Lendable Fund and may subdivide the Emerging Markets Index Non-Lendable Fund into one or more separate divisions each of which represents a national equity market ("National Division"), or may subdivide the Emerging Markets Index Non-Lendable Fund into one or more separate divisions representing two or more national equity markets ("Multinational Divisions"). A participating account may be invested in the Emerging Markets Index Non-Lendable Fund, in any one or more of the National Divisions or in any one or more of the Multinational Divisions in whatever proportion among National Divisions or Multinational Divisions as is deemed appropriate by the fiduciary responsible for the funding policy of such participating account. The primary criterion for selection of investments in each National Division shall be an emerging markets index for the country represented which is designated by the ADVISOR at the initiation of the collective fund, which may be the MSCI Emerging Markets Free Index. The Emerging Markets Index Non-Lendable Fund will not engage in securities lending.

#### Alpha Tilts Fund

The Alpha Tilts Fund shall be invested and reinvested in a portfolio of equity securities with the objective of approximating the capitalization weighted total rate of return of the S&P 500 Index; provided, each fund portfolio shall be selected and maintained in accordance with a quantitative formula designed to select stocks through optimized tilts toward particular stock characteristics based upon information selected by the ADVISOR. The formula is designed to provide systematic exposure to such characteristics with the objective of producing long-term returns in excess of the total rate of return of the S&P 500 Index. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the Alpha Tilts Fund in stock index futures contracts for purpose of acting as a temporary substitute for investment in common stocks. The Alpha Tilts Fund will not engage in speculative futures transactions. The criteria for selection of investments shall be equity securities in the S&P 500 Index and equity securities outside of the S&P 500 Index determined to be consistent with the portfolio's objectives.

#### **BGI MSCI World Index Fund**

The BGI MSCI World Index Fund shall be invested and reinvested in a portfolio or portfolios of international equity securities whose total rates of return will approximate the capitalization weighted total rates of return of the markets in certain countries for equity securities, including securities traded in the United States of America and Canada. The ADVISOR shall determine from time to time which countries shall be represented in the BGI MSCI World Index Fund into one or more separate divisions, each of which represents a national equity market ("National Division"), or may subdivide the BGI MSCI World Index Fund into one or more separate divisions that represents two or more national equity markets ("Multinational Divisions"). The Account may be invested in a BGI MSCI World Index Fund, in any one or more of the National Divisions, or in any one or more of the Multinational Divisions in whatever proportion among National Divisions or Multinational Divisions as is deemed appropriate by the fiduciary responsible for the fund policy of such participating account. The primary criterion for selection of investments in each National Division shall be the MSCI World Index for the country represented. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the BGI MSCI World Index Fund in futures contracts or registered investment companies, including exchange traded funds, for the purpose of acting as a temporary substitute for investment in equity securities. The BGI MSCI World Index Fund will not engage in speculative futures transactions.

#### Russell 2500™ Index Fund

The Russell 2500™ Index Fund shall be invested and reinvested in a portfolio of equity securities with the objective of approximating as closely as practicable the capitalization weighted total return of the segment of the United States market for publicly traded equity securities represented by the Russell 2500™ Index. When deemed appropriate by BGI, BGI may invest a portion of the Russell 2500™ Index Fund in futures contracts for the purpose of acting as a temporary substitute for investment in equity securities. The Russell 2500™ Index Fund will not engage in speculative futures transactions.

#### **BGI MSCI EAFE Small Cap Equity Index Fund**

The BGI MSCI EAFE Small Cap Equity Index Fund shall be invested and reinvested in a portfolio or portfolios of international equity securities with total rates of return that will approximate the capitalization weighted total rates of return of the markets in certain countries for equity securities. The ADVISOR shall determine from time to time which countries shall be represented in the fund and may subdivide the fund into one or more separate divisions, each of which represents a national equity market ("National Division"), or may subdivide the fund into one or more separate divisions that represents two or more national equity markets ("Multinational Divisions"). The primary criterion for selection of investments in each National Division shall be the Morgan Stanley Capital International Provisional EAFE Small Cap Index or the Morgan Stanley Capital International EAFE Small Cap Index. The primary criterion for selection of investments in the fund shall be the relative market weight of units of the National Divisions. When deemed appropriate by the ADVISOR, the ADVISOR may invest a portion of the fund in futures contracts for the purpose of acting as a temporary substitute for investment in common stocks. Neither the fund nor any sub-fund will engage in speculative futures transactions.

#### ACWI ex-U.S. IMI Index Fund

The ACWI ex-U.S. IMI Index Fund shall be invested and reinvested in a portfolio of international equity securities whose total rates of return will approximate as closely as practicable the capitalization weighted total rates of return of the markets in certain countries for equity securities traded outside the United States. The ADVISOR shall determine from time to time which countries shall be represented in the ACWI ex-U.S. IMI Index Fund and may subdivide the ACWI ex-U.S. IMI Index Fund into one or more separate divisions each of which represents a national equity market ("National Divisions"), or may

subdivide the ACWI ex-U.S. IMI Index Fund into one or more separate divisions representing two or more national equity markets ("Multinational Divisions"). The Account may be invested in an ACWI ex-U.S. IMI Index Fund, in any one or more of the National Divisions or in any one or more of the Multinational Divisions in whatever proportion among National Divisions or Multinational Divisions as is deemed appropriate by the fiduciary responsible for the funding policy of the Account. The primary criterion for selection of investments in each National Division shall be the MSCI ACWI ex-U.S. IMI Index for the country represented. The primary criterion for selection of investments in the ACWI ex-U.S. IMI Index Fund shall be the relative market weight of units of the National Divisions. When deemed appropriate, the ADVISOR may invest a portion of the ACWI ex-U.S. IMI Index Fund in futures contracts approved by the Commodity Futures Trading Commission (CFTC) for the purpose of acting as a substitute for investment in securities for liquidity purposes or in shares of exchange-traded funds that are open-end investment companies registered under the Investment Company Act of 1940 ("ETFs") including ETFs that are advised or sub-advised by the ADVISOR or an affiliate of the ADVISOR. In addition, the ACWI ex-U.S. IMI Index Fund may hold other collective funds that seek to provide returns consistent with such fund's goal of approximating the return of the MSCI ACWI ex-U.S. IMI Index. The ACWI ex-U.S. IMI Index Fund will not engage in speculative futures transactions.

### BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund

The BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund shall be invested and reinvested primarily in a portfolio of international equity securities with the objective of approximating as closely as practicable the capitalization weighted total rates of return of the markets in certain countries for publicly traded equity securities. The benchmark for the BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund shall be the Morgan Stanley Capital International ("MSCI") All Country World Index ("ACWI") Ex-U.S. The ADVISOR shall determine from time to time which countries shall be represented in the BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund and may subdivide the BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund into one or more separate divisions, each of which represents a distinct equity market. The primary criterion for selection of investments in each country shall be the relative market weight of the constituent markets in the MSCI ACWI Index Ex-U.S. In addition to or in lieu of investing in international equity securities, the ADVISOR may invest assets in American Depository Receipts, Global Depository Receipts, registered investment companies and other country funds managed by investment advisors not affiliated with the ADVISOR, and other structured transactions utilizing foreign stocks, bonds, currencies and money market instruments, futures, exchange traded and over-the-counter options, forward contracts and swaps. The BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund shall not engage in speculative futures transactions. The BGI MSCI ACWI Ex-U.S. Index Non-Lendable Fund shall not engage in securities lending.

The above referenced collective investment funds may invest through one or more short term investment funds used for a cash "sweep" vehicle to manage uninvested cash or reinvestment and management of cash collateral associated with securities loans (each, a "STIF Fund").

STIF Funds used for a cash "sweep" vehicle are invested primarily in short term debt securities, such as variable amount notes, commercial paper, U.S. government securities, repurchase agreements, certificates of deposit of banks and savings institutions, and other short term obligations.

STIF Funds used to manage cash collateral associated with securities loans ("Cash Equivalent Funds") invest such cash collateral in short term debt instruments. These instruments include, but are not limited to, the following: obligations issued by the United States government, its agencies and instrumentalities; corporate debt obligations; asset-backed securities (including mortgage-backed securities); instruments

issued by banks, including time deposits, certificates of deposit and bankers acceptances; supranational and sovereign debt obligations; repurchase agreements; master notes; promissory notes; loan participations; shares in institutional money market funds; and insurance company funding agreements. Cash Equivalent Funds may also use strategies that seek a return that is higher than the current money market rates of return by engaging in "synthetic cash" transactions which have characteristics similar to money market instruments. These transactions may involve the following: financial futures, forwards or options transactions, equity securities, swap transactions and/or other derivative transactions that have the potential for enhancing the return of the Cash Equivalent Fund. In addition, certain Cash Equivalent Funds may invest in other Cash Equivalent Funds.