

Commonwealth of Pennsylvania Public School Employees' Retirement System

DATE: February 16, 2016

SUBJECT: Proposed Revisions to Investment Policy Statement, Objectives, and Guidelines

TO: Members of the Board

FROM: Joseph W. Sheva, CPA 
Risk Manager

At the March Finance Committee meeting, we will recommend that the Committee adopt the following changes to Addendum W and Exhibits D, E, and the establishment of Exhibit F of the Investment Policy Statement, Objectives and Guidelines (IPS).

Addendum W (Farmland Investment Program)

Due to potential investment opportunities in farmland, IOS recommends the following changes to this Addendum.

- Replace the Objectives section statement regarding Program closure to new acquisitions with current investment objectives.
- Within the Cropland Types – Permanent Cropland section, reduce the annual cash yield expectations by 1% to 8%. The expectations were lowered due to cash returns currently being lower (near zero) than in the year 2009 (greater than 1%) when these guidelines were last updated.
- Establishment of an explicit leverage constraint of 75% leverage. This constraint is deemed reasonable, while also providing flexibility for investment in the expected types of investment opportunities identified within the Addendum.

Investment Policy Statement (IPS):

- **Exhibit D – Policy Index**

IOS recommends the reducing the publicly-traded non-U.S. developed market (DM) equity currency hedge ratio from 100% to 75% in order to bring the hedge in-line with the goal of hedging 50% of PSERS' overall DM equity foreign currency exposures (e.g. inclusive of Private Market DM currency exposures). Due primarily to the sale of private equity Funds during 2015, the current 100% hedge ratio equates to hedging approximately 70% of the overall DM equity foreign currency exposures. The recommended effective date of this change is April 1, 2016.

- **Exhibit E – Public Market Investment Manager Target Ranges and**

IOS recommends increasing the minimum allocation to U.S. Core Plus or Non-U.S. Developed Fixed Income Investment Managers by 1.0% to 3.0%. This change is requested in order to provide greater flexibility to allocate assets based on risk, versus capital, and is deemed necessary in part due to efforts by IOS to retain Investment Managers in which IOS has the greatest conviction of process and strategy.

Also, IOS recommends the formalization of capital limits already approved for the Public Markets In-House Co-Investment Program at \$100 million. The approval of this recommendation allows the Board to express its' maximum risk appetite with regard to overall capital exposures to this Program in the IPS and delegates implementation management of the Program to the CIO.

- **Exhibit F – Private Market and Real Estate Discretionary Structure Capital Limits**

IOS recommends the establishment of this Exhibit to the IPS as a means of expressing capital limits for the Private Markets and Private Real Estate Discretionary (i.e. Separate Account, Open-End Fund, Co-Investment and Secondary Investments) strategies in one location within the IPS. The Board previously approved in numerous resolutions the capital limits contained in this recommended exhibit, with the exception of Farmland, which through an adoption of the Addendum W recommendations would necessitate a limit, and an increase of \$100 million, to \$450 million, for Private Market In-House Co-Investment and Secondary Investments, which is requested due to the potential for additional investment opportunities. As noted in the Exhibit E recommendation above, the approval of these recommendations allows the Board to express its' maximum risk appetite with regard to overall capital exposures to these strategies and delegates implementation management to the CIO. Capital limits are deemed necessary due to the structure of these strategies allowing for discretion of timing and amount of investment in each type by IOS. The recommended limits represent an appropriate amount of risk control for each strategy.

Blacklined and clean copies to each guideline have been included in the package for your review.

If you have any questions or comments, please contact me at 717-720-4632.

**PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT OBJECTIVES AND GUIDELINES
FARMLAND INVESTMENT PROGRAM**

ADDENDUM W

STATEMENT OF PURPOSE

The purpose of the Pennsylvania Public School Employees' Retirement System ("PSERS") Farmland Investment Program Policy Statement is to provide the framework and specific requirements which will allow the Finance Committee (the "Committee"), Board of Trustees (the "Board"), Staff and external real estate professionals to fully understand and implement the farmland investment program.

In addition to this "Statement of Purpose" and the following "Definitions" sections, this Policy Statement is separated into four sections: "Objectives", "Duties and Authorities of Managers", "Reporting" and "Accounting".

This Policy Statement is designed to enable the PSERS' farmland investment program to achieve the highest possible risk-adjusted returns in a controlled, coordinated and comprehensive manner. This document will be revised and updated as needed.

DEFINITIONS

Investment Manager ("Manager"): any company or entity which, by contractual agreement, assumes discretion over a specified amount of PSERS' capital allocated to farmland investment, provides asset management services and periodically reports to PSERS.

Farmland Property/Farmland Investment: all direct interests acquired for PSERS in real property, the primary use of which is devoted to farming or agriculture and the personal property, both tangible and intangible, directly or indirectly associated or connected with the use of such real property.

Farmland Property Manager: any company, individual, affiliate or entity retained by the Manager to fulfill certain of its duties and obligations under this Policy Statement.

Farm Operator/Tenant Farmer: the lessee responsible for the day-to-day farming operations of the individual farmland properties.

Consultant: any company or individual which provides any of the following services to PSERS: (1) definition, modification and monitoring of farmland investment policy and program; (2) recommendations which relate to establishment or termination of relationships with Managers; and (3) monitoring of and reporting on farmland investment performance and portfolio composition characteristics.

OBJECTIVES

The investment objective of the program is to invest in high quality properties with the following characteristics:

- Permanent plantings producing commodities with broad consumer acceptance; and,
- Current return emphasized over appreciation returns.

PERFORMANCE

The farmland portfolio will be expected to achieve a minimum, long-term six percent (6%) real (inflation-adjusted) net (after fee) rate of return. The target real rate of return is for the total portfolio of each Manager.

Acceptable return for any individual investment will be determined within the context of:

- a. The role of that investment in enabling PSERS' farmland portfolio to meet its overall diversification objectives.
- b. The anticipated components of overall return (income and appreciation), as related to the cropland type, geographic location, lease structure and quality of the income stream (as defined herein).
- c. The degree of risk associated with the investment in terms of the foregoing composition categories.

While PSERS considers farmland a long-term asset, each investment position must be regularly monitored and disposition strategies must be in place so that transactions are able to occur to maximize individual investment profitability and value.

DISCRETION

PSERS gives its Managers full discretion over individual investment and management decisions. The selection of farmland investments is guided by the "prudent expert" standard, embracing the prudent decision-making process typically employed by experts in the areas of farmland acquisition, operation, management and disposition.

DIVERSIFICATION AND RISK MANAGEMENT

For the purpose of focusing on maximized risk-adjusted returns, preservation of investment capital, and implementation of appropriate asset management procedures, risk management must be addressed in the farmland investment program.

Categories of risk specific to farmland investment include production risk (weather, crop diseases and pests), marketing risk (variability of commodity prices), domestic and foreign competition, increased input prices (fertilizer and fuel), technological risk, changes in government farm policy and environmental risk. No farmland investment will be made

without full assessment of the lease structures and/or farm operating arrangements as related to the quality of the rental income stream, the reasonableness of economic property operating forecasts, and a complete analysis of all physical property and market area characteristics.

A major factor of risk management is the monitoring of portfolio performance and composition so that active strategies may be implemented from time to time to improve overall risk-adjusted performance at the portfolio level.

Another critical factor to effective risk management is market awareness, specifically as it applies to farmland market conditions and trends. The PSERS' farmland program will take into consideration such factors as relative capital intensity in the marketplace, availability of quality products and opportunities, and achievable yields.

Therefore, PSERS' farmland investment program will be limited to permanent cropland which will be diversified by crop and geographic location in order to minimize the impact of weather, local economic conditions, pests and diseases, and costs associated with farming.

INVESTMENT CRITERIA

The investment criteria specified herein apply to PSERS' specified Managers and PSERS' farmland investments under their management. The criteria will be used by PSERS and its Consultant to review and evaluate the underlying characteristics of the farmland portfolio and strategies of the Managers to which PSERS may allocate real estate capital. Each section of these investment criteria will be used in conjunction with all other sections.

OWNERSHIP STRUCTURE

PSERS' Managers will acquire properties with no more than 75% leverage. Emphasis is placed on the degree of equity orientation and minimization of financial risk.

CROPLAND TYPES

PSERS' Managers seek only high-quality farmland properties. Quality is defined as those farmland properties that have, based on their operating history and level of profitability, the ability to efficiently and consistently produce above-average crop yields. The Manager will focus on properties with good soils, climate, drainage, stable water resources, and local, well-established agricultural infrastructures including the availability of quality farm tenants to operate and lease the farm. The property types that PSERS' Managers can consider are:

Permanent Cropland: Farmland planted to vineyards, orchards and groves in the production of fruit and nut crops. Permanent cropland puts the investor at the greatest risk since the income producing asset is a tree or vine that is difficult to replace or repair in a short time period. Annual crop production may also be influenced by weather or insect problems, in addition to changes in consumer preference for the commodity grown. Annual cash yields from permanent cropland are expected to generally exceed 8%.

GEOGRAPHIC LOCATIONS

In order to minimize risk, the geographic location is as important to a successful farmland investment strategy as the cropland in which PSERS will invest. PSERS' Managers will focus on high-quality permanent crop farmland located in primary farming regions that are in close proximity to well-established agricultural infrastructures, which would include the following regions:

West: California, Washington, Oregon

Southeast: Florida, Alabama, and Georgia

LEASE STRUCTURES

Agricultural properties are either directly operated or are leased to a tenant farmer using different rent structures. The selection of lease structure has a direct relationship to the cropland type, and each carries a different set of risk factors. PSERS' Managers may utilize the following lease structures:

Cash Lease. This lease structure is the most conservative and would put PSERS at the least investment risk. It is an annual fixed rent at a set dollar amount per acre and is usually paid in two installments. The volatility of the cash lease is relatively low since the rents, which are usually negotiated annually, move slowly up or down from year to year.

Crop Share Lease. This lease structure is based upon a percentage share of the gross revenue generated by the farming activity on the property. Since the amount of the rent will vary as the gross income varies based upon the prices of the crops

produced and the crop yields experienced on the property, the risk or volatility of the returns is somewhat higher than a Cash Lease.

Base Rent/Crop Share Lease. This lease structure is a combination of a Cash Lease and a Crop Share Lease. For this lease structure a Base Rent is determined, which is a fixed amount that is slightly less than the comparable rent on a Cash Lease. In addition, PSERS receives a fixed percentage of the gross income if such amount exceeds the Base Rent or a negotiated benchmark amount (override). This lease structure reduces the risk of the Crop Share Lease but is more volatile than a Cash Lease.

Permanent cropland more typically requires that property owners bear the cost of the operational expenses in return for a higher percentage of return on the investment. Since such operating arrangements may result in unrelated business taxable income to PSERS, farmland under direct operation should be acquired only through a life insurance company separate account.

ENVIRONMENTAL HAZARDS

PSERS will not buy any farmland properties with existing environmental hazards. PSERS' Managers will prepare an environmental audit and will ensure that the farm operators comply with all local, state and federal environmental-related regulations.

DUTIES AND AUTHORITIES OF MANAGERS

PSERS' Managers are responsible for meeting the objectives of PSERS' farmland investment program. In fulfilling this responsibility, PSERS' Managers will have the authority and discretion with respect to the management and disposition decisions. Managers will provide the following services and functions, unless otherwise directed by PSERS:

Overall

1. Establish an Investment Committee or designate a Portfolio Manager that shall make all decisions with respect to the acquisition and disposition of farmland properties, develop and implement portfolio strategy, and physically inspect each farmland property prior to its acquisition.
2. Perform ongoing economic and market research and analysis focused on those considerations which affect agricultural investments.
3. Attend to legal matters in connection with the acquisition, holding or disposition of PSERS' farmland properties.

4. Assist PSERS and the Consultant in their performance of formal reviews of the decisions and performance of the Manager and PSERS' farmland investment program.

Asset Management

1. Monitor the ongoing operation of each farmland property and take steps on behalf of PSERS that will maximize the total return from the investment.
2. Oversee prompt payment of all proper expenses of the portfolio and keep accurate books and records relating to all portfolio revenue and expenses in accordance with generally accepted accounting principles.
3. Oversee the deposit of all funds, net of administration expenses, included in the portfolio's assets in a bank account or accounts as directed by PSERS.
4. Prepare annual Business Plans for each farmland property that detail the annual budget, a review of the disposition strategy and the decision to hold or sell the investment. Business Plans will be submitted to PSERS no later than forty-five days before each calendar year-end.
5. Retain a qualified Farmland Property Manager for all property-level duties. The duties of the Farmland Property Manager include, but may not be limited to:
 - a. making available to the Manager and the Investment Committee the advice of expert advisors in the area of farm property investments;
 - b. working with the Manager to develop property objectives and strategy;
 - c. working with the Manager to assist in the identification, acquisition and disposition of farmland properties;
 - d. obtaining information, research and detailed analysis on each acquisition, and the availability and quality of potential tenant farm operators;
 - e. selecting tenants who will be responsible for the operation of the farm property;
 - f. reviewing, assessing, discussing and approving the operating methods to be used by the tenant on farm properties;
 - g. negotiating written leases with tenants;
 - h. monitoring the operations of each tenant through regular periodic contacts and preparing reports as directed by the Manager;
 - i. management of each farm property in accordance with the budget for that property, including necessary arrangement for the services of legal or specialized consultants;
 - j. recommending and directing all capital and repair and maintenance expenditure projects in accordance with the farmland budget;

- k. preparing an annual budget for each property on a calendar or fiscal year basis; and
 - l. keeping books and records as required by the Manager.
6. As directed by PSERS, arrange for appraisals of properties under management by a member of the American Society of Farm Managers and Rural Appraisers, American Institute of Real Estate Appraisers, or other nationally recognized society of appraisers.

REPORTING

Individual Investments

Within forty-five days after each calendar quarter, the Manager will provide PSERS and the Consultant with a report on each investment containing the following:

1. Property summary including property name, location, acreage, crop type, and lease structure.
2. Summary of investment activity, by property, during the quarter, including capital contributions by PSERS, contributions for operations, capital expenditures, return of capital, gross operating income, expenses, net operating income and cash flow.
3. Brief update on the progress of each property in relation to its asset management plan goals and objectives specifically commenting on (a) critical factors or events that have significantly influenced or may potentially influence the property's performance or (b) recommended changes to the Annual Budget.
4. Information specific to PSERS' investment position, including gross income, operating expenses, capital contributions, distributions of income and Manager's fee.
5. Property-specific comparisons to actual, budget and acquisition projections for effective gross income, total operating expenses and capital improvements, plus an explanation of material variances. (A material variance is defined as actual activity that varies by more than 10% of budget in either direction.)
6. Calculated gross (before Manager fee) and net (after Manager fee) returns to PSERS, by property, for total return and the components of total return (income and appreciation).
7. As directed by PSERS, reconcile reported returns to cash distributions.

Portfolio Level

In conjunction with quarterly reporting on individual farmland investments, the Manager will prepare a portfolio summary report on the aggregate of PSERS' investments under its management. The portfolio summary report will be submitted to PSERS and to the Consultant within forty-five days after each quarter end and will include the following:

1. Portfolio highlights: portfolio activity, including transactions, major capital improvements, revaluations, major market or economic changes, etc.
2. Current value financial statements including a statement of Assets and Liabilities, and a statement of Operations.
3. Projected returns: calculated by individual property and for the total portfolio through the end of the current calendar year.
4. For the fourth quarter report each year, conduct an annual review of the entire farmland portfolio. This review should include the physical condition and financial results of each farmland property and comparison of the actual versus budget financial performance of each farmland property and explanations for major deviations from budget.
5. For the fourth quarter report each year, conduct a comparison of the performance of each farmland property with the projections set forth in the Acquisitions Analysis for that farmland property.

ACCOUNTING

To maintain the consistency of reporting on PSERS' real estate portfolio, PSERS requires that the following accounting assumptions be employed by the Managers:

1. The accounting and budgeting systems of the Managers will be maintained on a modified accrual basis, meaning that generally income is recorded as it is earned and expenses as they are incurred.
2. Cash held in PSERS' account and distributions of cash will be allocated at the farmland property level.
3. The accounting systems will be current value. Real estate investments will initially be recorded at cost and adjusted periodically to reflect changes in value from independent appraisers.
4. Capital expenditures will be capitalized as part of the farmland's value and not depreciated or amortized.

5. Changes in value to farmland, including capital expenditures, will be accounted for through the appraisal process.
6. PSERS desires to retain where possible cash committed to but not yet invested in real estate. Therefore, cash will be invested as specific investments are to be funded.

AMENDMENTS AND REVIEW

It is the Board's intention through the consultant and investment staff to review manager compliance with this document quarterly, and if the guidelines are changed in any way, the foregoing will be so amended.

In the application and implementation of the Investment Policy Statement, Objectives, and Guidelines, the Chief Investment Officer has the authority to narrow or broaden the guidelines to meet individual portfolio needs and to determine the appropriateness of any investment. All changes will be reported to the Finance Committee at the next regularly scheduled meeting.

If at any time the manager feels that the objectives cannot be met, or the guidelines constrict performance, the Chief Investment Officer should be notified in writing. The manager is encouraged to suggest changes in these guidelines at any time. By signature the manager agrees to these Investment Policy Statement, Objectives, and Guidelines and shall perform in accordance herewith.

Company Name

**Pennsylvania Public School Employees'
Retirement System**

Managing Director Signature

Chief Investment Officer

Managing Director Name

Date Accepted

Date Proposed

Exhibit D – Policy Index

The Board adopts the following weighted policy benchmarks to measure the performance of the System beginning ~~October~~ April 1, 2015~~6~~, subject to footnotes 1 & 4:

	<u>Policy Weight</u>	
Equity Exposure		
Publicly-traded Global Equity		
MSCI USA IMI Gross Index	8.80% ¹	
MSCI ACWI Ex USA IMI with Developed Market Currencies (75% Hedged to USD) Index Net	13.20%	
MSCI Emerging Markets Index Net	0.50%	
Private Markets		
Burgiss Median, one-quarter lagged ²	15.00% ¹	
Total Equity Exposure		37.50%
Fixed Income Exposure		
Investment Grade		
Barclays Capital U.S. Aggregate Index	5.00%	
Barclays Capital Global Aggregated GDP-weighted Developed Market ex-U.S. (Hedged to USD) Index	1.00%	
Barclays Capital U.S. Aggregate Long Treasury Index	2.50%	
Credit-Related		
Barclays Capital EM Local Currency – Government - MV Weighted (Unhedged) - 10% Country Cap Index	2.00%	
Barclays Capital U.S. High Yield Index	6.00%	
Inflation Protected		
Barclays Capital World Government Inflation-Linked Bond Index (Hedged to USD)	12.00%	
Total Fixed Income Exposure		28.50%
Real Asset Exposure		
Master Limited Partnerships		
S&P MLP Index	4.00%	
Infrastructure		
FTSE Developed Core Infrastructure 50/50 (Hedged to USD) Index Net	1.00%	
Commodities		
Bloomberg Commodity Index	5.00%	
Bloomberg Commodity Gold Subindex	3.00%	
Real Estate		
Private		
NFI and Burgiss Median, one- quarter lagged ³	12.00% ⁴	
Publicly-traded		
FTSE EPRA/NAREIT Developed Index (Hedged to USD) Net	0.00% ⁴	
Total Real Asset Exposure		25.00%

Exhibit E – Public Market Investment Manager Target Ranges

All allocations to individual Investment Manager portfolios shall be subject to the limits established by the Board through the Current Target Allocation in **Exhibit C**. IOS is permitted to manage the allocation of capital to each Investment Manager portfolio within the target ranges to public market Investment Manager portfolios of the total fund noted below. The CIO shall have discretion on the timing of reducing any Investment Manager portfolio exceeding the maximum ranges approved below. However, the CIO is not permitted to allocate additional capital to those portfolios currently above the target ranges.

	Target Capital Ranges as a Percentage of the Total Fund
Equity Portfolios:	
Public Markets U.S. Equity Portfolios	
Internally Managed S&P 500 Index	0.0% - 20.0%
Internally Managed S&P 400 Index	0.0% - 2.5%
Internally Managed S&P 600 Index	0.0% - 2.5%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
Public Markets Non-U.S. Equity Portfolios	
Internally Managed MSCI ACW Index ex. U.S.	0.0% - 15.0%
Internally Managed MSCI World Small Cap Index ex. U.S.	0.0% - 2.5%
Internally Managed MSCI Emerging Markets Index	0.0% - 2.5%
Non-U.S. Equity	0.0% - 2.5%
Non-U.S. Small Cap Equity	0.0% - 1.0%
Emerging Markets Equity	0.0% - 1.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
Fixed Income Portfolios:	
Investment Grade Portfolios	
Internally Managed U.S. Core Fixed Income	0.0% - 5.0%
U.S. Core Plus or Non-U.S. Developed Fixed Income	0.0% - 23.0%
Internally Managed U.S. Long Treasuries ³	0.0% - 1.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 5.0%
Credit-Related Portfolios	
Emerging Market Fixed Income	0.0% - 1.5%
U.S. High Yield Fixed Income	0.0% - 2.0%
Specialty Finance Debt Strategy	0.0% - 1.0%
Multi-Sector Fixed Income Portfolios	0.0% - 3.0%
Inflation Protected (TIPS) Portfolios¹	
Internally Managed U.S. TIPS	0.0% - 8.0%
U.S. and Non-U.S. TIPS	0.0% - 6.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

¹ The total TIPS portfolios may be leveraged up to 3.3 times in aggregate.

² The maximum amount of internally managed synthetic beta replication will be 11% of the total fund (excludes beta synthetically replicated within the actively managed and indexed Separate Account portfolio).

³ The U.S. Long Treasury Portfolio will be notionally funded subject to a maximum notional value of 6% of the total market value of the fund. The capital allocated to this portfolio will be for margin requirements and to settle margin variation.

Target Capital Ranges
as a percentage
of the Total Fund

Real Asset Portfolios:

Master Limited Partnership Portfolios

Externally Managed Enhanced and Full Discretion	0.0% - 2.0%
Internally Managed U.S. Master Limited Partnership Index	0.0% - 4.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

Infrastructure Portfolios

Externally Managed Enhanced and Full Discretion	0.0% - 2.0%
Internally Managed Infrastructure Index Portfolio	0.0% - 2.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

Commodities Portfolios

Externally Managed Full Discretion and Enhanced Index Commodity	0.0% - 2.0%
Internally Managed Enhanced Commodities Index Portfolio	0.0% - 7.0%
Internally Managed Gold Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

PTRES Portfolios

Externally Managed U.S., Non-U.S., and Global PTRES	0.0% - 1.0%
Internally Managed PTRES Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication ²	0.0% - 2.0%

Risk Parity Portfolios:

Externally Managed Risk Parity Portfolios	0.0% - 4.0%
Internally Managed Risk Parity Portfolio	0.0% - 5.0%
Absolute Return Portfolios:	0.0% - 2.0%

Short Duration Fixed Income Portfolios:

Internally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 8.0%
Externally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 5.0%
Externally Managed Short Duration Non-Agency RMBS Portfolios	0.0% - 1.0%
Internally Managed Short-Term Investment Pool	No limit

Foreign Currency Hedge Overlay: Up to 100% of the Foreign Currency Exposure⁴

Public Markets In-House Co-Investment Program	\$100 million
• \$15 million limit for each initial investment	
• \$10 million limit for follow-on investments	

Internally Managed Synthetic Beta Replication represents market exposures in the various asset classes achieved through Derivative exposures such as futures, options, swaps, etc. IOS will synthetically achieve beta exposures to either assist in a transition from one actively managed portfolio to another or to generate alpha. It excludes synthetic beta replication within the actively managed and indexed Separate Account portfolios.

² The maximum amount of internally managed synthetic beta replication will be 11% of the total fund (excludes beta synthetically replicated within the actively managed and indexed Separate Account portfolio).

⁴ The Total Fund (both public market and private market) foreign currency exposure may be hedged up to 100% back to the U.S. dollar.

Exhibit F – Private Market and Real Estate Discretionary Structure Capital Limits

All allocations to individual Private Market and Real Estate Discretionary Structure (i.e. Separate Account, Open-end Fund, Co-Investment and Secondary Investment) strategies shall be subject to the limits established by the Board through the Current Target Allocation in Exhibit C. IOS is permitted to manage the allocation of capital to each Private Market and Real Estate strategy up to the capital limits noted below. The CIO shall have discretion on the timing of reducing any strategy exceeding the limits approved below. However, the CIO is not permitted to allocate additional capital to those strategies currently above the limits.

Capital Limits

Private Markets:

Private Markets In-House Co-Investment and Secondary Investments \$450 million

- \$15 million limit for each initial investment
- \$25 million limit for each secondary investment
- \$10 million limit for follow-on investments

Private Debt In-House Co-Investment and Secondary Investments \$100 million

- \$15 million limit for each initial investment
- \$25 million limit for each secondary investment
- \$10 million limit for follow-on investments

Real Estate:

Open-end Real Estate Fund Investments \$500 million

- \$200 million limit per open-end Real Estate Fund

Farmland Investments \$100 million

Real Estate In-House Co-Investment and Secondary Investments \$300 million

- \$15 million limit for each initial investment
- \$25 million limit for each secondary investment
- \$10 million limit for follow-on investments

Other:

Private Markets and Real Estate Pennsylvania In-House Co-Investments \$250 million

- \$25 million limit for each initial investment
- \$10 million limit for follow-on investments