Commonwealth of Pennsylvania
Public School Employees' Retirement System

DATE: July 23, 2018

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

TO: Members of the Board

FROM: Joseph W. Sheva, CPA JWS
Senior Risk Manager

At the August Investment Committee meeting, the Investment Office will recommend that the Board adopt the Investment Policy Statement, Objectives and Guidelines (IPS) revisions to sections IV. Strategic Asset Allocation, V. Performance Objectives and VI. Risk Management and Controls as noted below.

IV. Strategic Asset Allocation - Current Target Allocation:

Staff and Aon recommend the following summarized changes to the Current Target Allocation effective October 1, 2018:

Asset Class:	Current Target	Proposed Target	Change
Publicly-traded Global Equity	19%	15%	-4%
Investment Grade	9%	10%	1%
Real Estate *	11%	10%	-1%
Risk Parity	10%	8%	-2%
Market Exposure Reduction:	**49%**	**43%**	**-6%**

Explicit Leverage:	Current Target	Proposed Target	Change
Cash	3%	6%	3%
Leverage (gross)**	-17%	-14%	3%
Net Leverage	**-14%**	**-8%**	**6%**

* Reduction in RE brings in line with the Long-term Target Allocation.

** Depicted as "Financing Cost of Leverage" in IPS

At a high level, the proposed changes above represent an overall reduction to Aon's 30-year expected risk of close to 100 bps (11.45% to 10.50%) relative to the incumbent Target Allocation, thus the proposal is less risky on a stand-alone risk basis. Views of the proposed allocation's resiliency to stress environments, or simply environments where forecasted performance is not achieved, is presented throughout Aon's presentation. For example, the key takeaway on page 28 notes the differences in funded ratios of the various portfolios when considering pessimistic projections over five years. A less risky profile on a stand-alone basis is logical during periods of market stress, as the reduction in overall expected risk is driven by the decrease to overall market exposure, with the primary sources being Publicly-traded Global Equity and Risk Parity (i.e. broad market exposures in one asset class).

Although the liquidity profile of the Fund is not challenged in the Current or Long-Term Target allocation, the proposed Current Target Allocation does substantially improve liquidity should a stress event occur. Having a greater allocation to cash provides greater flexibility to manage asset class rebalancing through an extreme market event.

V. Performance Objectives – Policy Index:

The Policy Index weights have been adjusted for consistency with the recommended asset class weight changes of the Current Target Allocation. Note that there are no proposed asset class performance benchmark changes.

VI. Risk Management and Controls:

The Investment Office recommends increasing the Public Markets In-House Co-Investment Program and Private Debt In-House Co-Investment and Secondary Investments total program capital limits by $150 million, from $100 million to $250 million, each. The concept of a co-investment program is to have the opportunity to participate in unique deals, typically at a lower fee than would be offered within an investment in a Fund structure. Therefore, significantly constraining co-investment capacity would potentially be counterproductive to a goal of investing in investments with a good risk/return profile at the lowest fee possible. The location of the changes within the IPS are sub-sections Investment Manager Target Ranges (for the Public Markets) and Private Market and Real Estate Discretionary Structure Capital Limits (for Private Debt).

The primary Board-level risk controls for the various co-investment and secondary investment programs (e.g. Public Markets, Private Markets, Real Estate, etc.) are to limit the size of each program (e.g. the proposed $250 million above) and to place limits on individual investments within the program (e.g. $25 million limit for each initial investment and $10 million for follow-on investments). As stated above, significantly constraining the size of each program would potentially be counterproductive to other Board objectives and thus these limits should be thoroughly considered through a risk/return paradigm, particularly in light of the length and success of the various programs. Regarding the limits on individual investments, I believe that these are reasonable and necessary to the management of risk of the program, as they limit individual investment concentration risk (e.g. promote diversification) and therefore remain appropriate.

The Investment Office implements each investment strategy within these limits, while considering all aspects of the investment portfolio risks at a fundamental-level. For example, concentration risk, such as those noted above, are considered on an investment-by-investment and on an on-going basis in conjunction with other risks such as the liquidity profile of the System, investment operational risks, the impact to the overall risk profile of the System, etc.

The blacklined excerpt and a clean copy of the above recommendations have been included in the package for your review. Also, Aon professionals will be present at the Board meeting to answer any questions regarding the Current Target Allocation recommendations.

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

Current Target Allocation

The current long-term, top-down Target Allocation of the Board, based on the market value of the System's assets as of October 1, ~~2017~~2018, subject to the provisions discussed below:

	Cash Markets	Leverage	Current Target Allocation	Policy Range Low	Policy Range High
Equity Exposure					
Publicly-traded Global Equity	~~19~~15.00%		~~19~~15.00%		
Private Markets	15.00%		15.00%		
Total Equity Exposure	**~~34~~30.00%**	**0.00%**	**~~34~~30.00%**	**~~24~~20.00%**	**~~44~~40.00%**
Fixed Income Exposure					
Investment Grade	~~6~~10.00%	~~3.00~~0.00%	~~9~~10.00%		
Credit-Related	11.00%		11.00%		
Inflation Protected	7.00%	8.00%	15.00%		
Total Fixed Income Exposure	**~~24~~28.00%**	**~~11~~8.00%**	**~~35~~36.00%**	**~~25~~26.00%**	**~~45~~46.00%**
Real Asset Exposure					
Infrastructure	5.50%	0.50%	6.00%		
Commodities	4.00%	4.00%	8.00%		
Real Estate	~~10~~9.50%	0.50%	~~11~~10.00%		
Total Real Asset Exposure	**~~20~~19.00%**	**5.00%**	**~~25~~24.00%**	**~~15~~14.00%**	**~~35~~34.00%**
Risk Parity	**~~9~~7.00%**	**1.00%**	**~~10~~8.00%**	**3~~5~~.00%**	**~~15~~13.00%**
Absolute Return	**10.00%**		**10.00%**	**5.00%**	**15.00%**
Opportunity Allocation[1]	**0.00%**		**0.00%**	**0.00%**	**5.00%**
Net Leverage					
Cash	~~3~~6.00%		~~3~~6.00%		
Financing Cost of Leverage		(~~17~~14.00%)	(~~17~~14.00%)		
Net Leverage	**~~3~~6.00%**	**(~~17~~14.00%)**	**(~~14~~8.00%)**	**10.00%**	**(20~~28~~.00%)**
TOTAL	**100.00%**	**0.00%**	**100.00%**		

Cash markets represent investments which are fully-funded by cash. Leverage represents economic exposures obtained generally through derivative exposure, other forms of financing, or leveraged funds. For example, exposure to Gold can be obtained with very little cash through the swap market.

The portfolio will be managed against the Current Target Allocation shown in the table above. The use of leverage within asset classes as shown reflects how leverage is currently deployed within the PSERS portfolio. It is not intended to be a target leverage allocation. Staff continually monitors the marketplace for opportunities to improve portfolio efficiency. Leverage may be deployed across any asset class in the portfolio where it is prudent to do so, based on efficient use of leverage within the constraints of the Policy Range and maximum net leverage permissible under this Policy.

The Policy Ranges for the Asset Allocation represent rebalancing triggers and tactical allocation constraints around the target allocations. For purposes of this analysis, cash and cash equivalents held in each Investment Manager's portfolio will be considered fully invested based on that advisor's objectives (i.e. cash in an equity Investment Manager's account will be considered as part of the Publicly-traded Global Equity in the table above). For classification purposes, cash equivalents include fixed income securities maturing in less than one year.

[1]The Opportunity Allocation is reserved for attractive or innovative strategies that may not fit into the Current or Long-Term Target Allocation but offer a compelling return enhancement and/or diversification benefit (risk reduction). Funding for these investments may come from any other part of the asset allocation, including leverage.

V. Performance Objectives

The overall return objective is to realize a return sufficient to achieve funding adequacy on an inflation-adjusted basis. Funding adequacy is achieved when the actuarial market value of assets is at least equal to the System's projected benefit obligations. The System has a return objective of meeting or exceeding the actuarial rate (currently 7.25%) over the long-term. In addition, the Board has the following broad objectives:

- The assets of the System shall be invested to maximize the returns for the level of Risk taken; and,
- The System shall strive to achieve a return that exceeds the Policy Index.

Policy Index

The Board adopts the following weighted policy benchmarks to measure the performance of the System beginning October 1, ~~2017~~2018, subject to footnotes 1 & 4:

	Policy Weight	
Equity Exposure		
Publicly-traded Global Equity		
MSCI USA IMI Gross Index	~~7.40~~4.80% [1]	
MSCI ACWI Ex USA IMI with Developed Market Currencies (75% Hedged to USD) Index Net	~~11.10~~9.70%	
MSCI Emerging Markets Index IMI Net	0.50%	
Private Markets		
Burgiss Total Return, one-quarter lagged[2]	15.00% [1]	
Total Equity Exposure		**~~34~~30.00%**
Fixed Income Exposure		
Investment Grade		
Barclays Capital U.S. Aggregate Index	~~5.00~~4.00%	
Barclays Capital Global Aggregated GDP-weighted Developed Market ex-U.S. (Hedged to USD) Index	~~1.00~~0.00%	
Barclays Capital U.S. Aggregate Long Treasury Index	~~3.00~~6.00%	
Credit-Related		
Barclays Capital EM Local Currency – Government - MV Weighted (Unhedged) - 10% Country Cap Index	1.00%	
Barclays Capital U.S. High Yield Index	10.00%	
Inflation Protected		
Barclays Capital World Government Inflation-Linked Bond Index (Hedged to USD)	15.00%	
Total Fixed Income Exposure		**~~35~~36.00%**

Real Asset Exposure		
Infrastructure		
S&P MLP Index	4.00%	
FTSE Developed Core Infrastructure 50/50 (Hedged to USD) Index Net	2.00%	
Commodities		
Bloomberg Commodity Index	5.00%	
Bloomberg Commodity Gold Subindex	3.00%	
Real Estate		
Private		
NFI and Burgiss Total Return, one- quarter lagged[3]	~~10.00~~9.00%[4]	
Publicly-traded		
FTSE EPRA/NAREIT Developed Index (Hedged to USD) Net	1.00%[4]	
Total Real Asset Exposure		**~~25~~24.00%**
Risk Parity		
Custom Benchmark[5]		**~~10.00~~8.00%**
Absolute Return		
3-Month LIBOR + 3.50%		**10.00%**
Net Leverage		
Cash		
Merrill Lynch U.S. Treasury Bill 0 - 3 Months	~~3.00~~6.00%	
Financing Cost of Leverage[6]		
3-Month LIBOR	(~~17.00~~14.00%)	
Net Leverage		**(~~14~~8.00%)**
TOTAL		**100.00%**

Footnotes to Policy Index:

[1] As the Private Markets allocation is funded (or distributions received) and/or the allocation increases/decreases due to the total market value of the Fund changing, the Publicly-traded Global Equity policy weight (specifically, the combination of MSCI USA IMI Gross Index and MSCI ACWI Ex USA IMI with Developed Market Currencies hedged to USD Index policy weights) will be proportionately and conversely revised to reflect these changes using a 60-40 split between the ex. USA (60%) and USA (40%) indices. For example, if the allocation to Private Markets increases by 100 basis points due to a change in the market value of the total Fund in the fourth quarter, then starting with the first quarter the policy weight will include this 100 basis points increase in the Private Markets benchmark and the Publicly-traded Global Equity policy weights will also be proportionately reduced by 100 basis points. Adjustments to the Private Markets policy weight will be completed in 50 basis point increments (adjustment will be made to the nearest 0.50%) on a quarterly basis.

	Target Capital Ranges as a percentage of the Total Fund
Real Asset Portfolios:	
Infrastructure Portfolios	
Externally Managed Enhanced and Full Discretion	0.0% - 2.0%
Open-end Infrastructure Fund Investments	0.0% - 2.0%
Internally Managed U.S. Master Limited Partnership Index	0.0% - 5.0%
Internally Managed Infrastructure Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication[1]	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[1]	0.0% - 2.0%
Real Estate Portfolios	
Externally Managed U.S., Non-U.S., and Global PTRES	0.0% - 1.0%
Open-end Real Estate Fund Investments	0.0% - 1.0%
Internally Managed PTRES Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication[1]	0.0% - 2.0%
Risk Parity Portfolios:	
Externally Managed Risk Parity Portfolios	0.0% - 4.0%
Internally Managed Risk Parity Portfolio	0.0% - 15.0%
Absolute Return Portfolios:	0.0% - 2.0%
Short Duration Fixed Income Portfolios:	
Internally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 10.0%
Externally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 5.0%
Externally Managed Short Duration Non-Agency RMBS Portfolios	0.0% - 2.0%
Internally Managed Short-Term Investment Pool	No limit
Foreign Currency Hedge Overlay:	Up to 100% of the Foreign Currency Exposure[2]

Public Markets In-House Co-Investment Program $~~100~~ 250 million

- $25 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.

[1] 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).
[2] The Total Fund (both public market and private market) foreign currency exposure may be hedged up to 100% back to the U.S. dollar.

Private Market and Real Estate Discretionary Structure Capital Limits

All allocations to individual Private Market and Real Estate Discretionary Structure (i.e. Co-Investment and Secondary Investment) strategies shall be subject to the limits established by the Board through the Current Target Allocation in the Strategic Asset Allocation section. 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 • $25 million limit for each initial investment • $25 million limit for each secondary investment • $10 million limit for follow-on investments	$750 million
Private Debt In-House Co-Investment and Secondary Investments • $25 million limit for each initial investment • $25 million limit for each secondary investment • $10 million limit for follow-on investments	$~~100~~ 250 million
Real Estate:	
Farmland Investments	$100 million
Real Estate In-House Co-Investment and Secondary Investments • $25 million limit for each initial investment • $25 million limit for each secondary investment • $10 million limit for follow-on investments	$300 million
Infrastructure:	
Infrastructure In-House Co-Investment and Secondary Investments • $100 million limit for each investment	$500 million
Other:	
Private Markets and Real Estate Pennsylvania In-House Co-Investments • $25 million limit for each initial investment • $10 million limit for follow-on investments	$250 million

Current Target Allocation

The current long-term, top-down Target Allocation of the Board, based on the market value of the System's assets as of October 1, 2018, subject to the provisions discussed below:

	Cash Markets	Leverage	Current Target Allocation	Policy Range Low	Policy Range High
Equity Exposure					
Publicly-traded Global Equity	15.00%		15.00%		
Private Markets	15.00%		15.00%		
Total Equity Exposure	**30.00%**	**0.00%**	**30.00%**	**20.00%**	**40.00%**
Fixed Income Exposure					
Investment Grade	10.00%	0.00%	10.00%		
Credit-Related	11.00%		11.00%		
Inflation Protected	7.00%	8.00%	15.00%		
Total Fixed Income Exposure	**28.00%**	**8.00%**	**36.00%**	**26.00%**	**46.00%**
Real Asset Exposure					
Infrastructure	5.50%	0.50%	6.00%		
Commodities	4.00%	4.00%	8.00%		
Real Estate	9.50%	0.50%	10.00%		
Total Real Asset Exposure	**19.00%**	**5.00%**	**24.00%**	**14.00%**	**34.00%**
Risk Parity	**7.00%**	**1.00%**	**8.00%**	**3.00%**	**13.00%**
Absolute Return	**10.00%**		**10.00%**	**5.00%**	**15.00%**
Opportunity Allocation[1]	**0.00%**		**0.00%**	**0.00%**	**5.00%**
Net Leverage					
Cash	6.00%		6.00%		
Financing Cost of Leverage		(14.00%)	(14.00%)		
Net Leverage	**6.00%**	**(14.00%)**	**(8.00%)**	**10.00%**	**(20.00%)**
TOTAL	**100.00%**	**0.00%**	**100.00%**		

Cash markets represent investments which are fully-funded by cash. Leverage represents economic exposures obtained generally through derivative exposure, other forms of financing, or leveraged funds. For example, exposure to Gold can be obtained with very little cash through the swap market.

The portfolio will be managed against the Current Target Allocation shown in the table above. The use of leverage within asset classes as shown reflects how leverage is currently deployed within the PSERS portfolio. It is not intended to be a target leverage allocation. Staff continually monitors the marketplace for opportunities to improve portfolio efficiency. Leverage may be deployed across any asset class in the portfolio where it is prudent to do so, based on efficient use of leverage within the constraints of the Policy Range and maximum net leverage permissible under this Policy.

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[1]The Opportunity Allocation is reserved for attractive or innovative strategies that may not fit into the Current or Long-Term Target Allocation but offer a compelling return enhancement and/or diversification benefit (risk reduction). Funding for these investments may come from any other part of the asset allocation, including leverage.

V. Performance Objectives

The overall return objective is to realize a return sufficient to achieve funding adequacy on an inflation-adjusted basis. Funding adequacy is achieved when the actuarial market value of assets is at least equal to the System's projected benefit obligations. The System has a return objective of meeting or exceeding the actuarial rate (currently 7.25%) over the long-term. In addition, the Board has the following broad objectives:

- The assets of the System shall be invested to maximize the returns for the level of Risk taken; and,
- The System shall strive to achieve a return that exceeds the Policy Index.

Policy Index

The Board adopts the following weighted policy benchmarks to measure the performance of the System beginning October 1, 2018, subject to footnotes 1 & 4:

	Policy Weight	
Equity Exposure		
Publicly-traded Global Equity		
MSCI USA IMI Gross Index	4.80% [1]	
MSCI ACWI Ex USA IMI with Developed Market Currencies (75% Hedged to USD) Index Net	9.70%	
MSCI Emerging Markets Index IMI Net	0.50%	
Private Markets		
Burgiss Total Return, one-quarter lagged[2]	15.00% [1]	
Total Equity Exposure		**30.00%**
Fixed Income Exposure		
Investment Grade		
Barclays Capital U.S. Aggregate Index	4.00%	
Barclays Capital Global Aggregated GDP-weighted Developed Market ex-U.S. (Hedged to USD) Index	0.00%	
Barclays Capital U.S. Aggregate Long Treasury Index	6.00%	
Credit-Related		
Barclays Capital EM Local Currency – Government - MV Weighted (Unhedged) - 10% Country Cap Index	1.00%	
Barclays Capital U.S. High Yield Index	10.00%	
Inflation Protected		
Barclays Capital World Government Inflation-Linked Bond Index (Hedged to USD)	15.00%	
Total Fixed Income Exposure		**36.00%**

Real Asset Exposure		
Infrastructure		
S&P MLP Index	4.00%	
FTSE Developed Core Infrastructure 50/50 (Hedged to USD) Index Net	2.00%	
Commodities		
Bloomberg Commodity Index	5.00%	
Bloomberg Commodity Gold Subindex	3.00%	
Real Estate		
Private		
NFI and Burgiss Total Return, one- quarter lagged[3]	9.00%[4]	
Publicly-traded		
FTSE EPRA/NAREIT Developed Index (Hedged to USD) Net	1.00%[4]	
Total Real Asset Exposure		**24.00%**
Risk Parity		
Custom Benchmark[5]		**8.00%**
Absolute Return		
3-Month LIBOR + 3.50%		**10.00%**
Net Leverage		
Cash		
Merrill Lynch U.S. Treasury Bill 0 - 3 Months	6.00%	
Financing Cost of Leverage[6]		
3-Month LIBOR	(14.00%)	
Net Leverage		**(8.00%)**
TOTAL		**100.00%**

Footnotes to Policy Index:

[1] As the Private Markets allocation is funded (or distributions received) and/or the allocation increases/decreases due to the total market value of the Fund changing, the Publicly-traded Global Equity policy weight (specifically, the combination of MSCI USA IMI Gross Index and MSCI ACWI Ex USA IMI with Developed Market Currencies hedged to USD Index policy weights) will be proportionately and conversely revised to reflect these changes using a 60-40 split between the ex. USA (60%) and USA (40%) indices. For example, if the allocation to Private Markets increases by 100 basis points due to a change in the market value of the total Fund in the fourth quarter, then starting with the first quarter the policy weight will include this 100 basis points increase in the Private Markets benchmark and the Publicly-traded Global Equity policy weights will also be proportionately reduced by 100 basis points. Adjustments to the Private Markets policy weight will be completed in 50 basis point increments (adjustment will be made to the nearest 0.50%) on a quarterly basis.

	Target Capital Ranges as a percentage of the Total Fund
Real Asset Portfolios:	
Infrastructure Portfolios	
Externally Managed Enhanced and Full Discretion	0.0% - 2.0%
Open-end Infrastructure Fund Investments	0.0% - 2.0%
Internally Managed U.S. Master Limited Partnership Index	0.0% - 5.0%
Internally Managed Infrastructure Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication[1]	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[1]	0.0% - 2.0%
Real Estate Portfolios	
Externally Managed U.S., Non-U.S., and Global PTRES	0.0% - 1.0%
Open-end Real Estate Fund Investments	0.0% - 1.0%
Internally Managed PTRES Index Portfolio	0.0% - 5.0%
Internally Managed Synthetic Beta Replication[1]	0.0% - 2.0%
Risk Parity Portfolios:	
Externally Managed Risk Parity Portfolios	0.0% - 4.0%
Internally Managed Risk Parity Portfolio	0.0% - 15.0%
Absolute Return Portfolios:	0.0% - 2.0%
Short Duration Fixed Income Portfolios:	
Internally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 10.0%
Externally Managed LIBOR-Plus Short-Term Investment Pool	0.0% - 5.0%
Externally Managed Short Duration Non-Agency RMBS Portfolios	0.0% - 2.0%
Internally Managed Short-Term Investment Pool	No limit
Foreign Currency Hedge Overlay:	Up to 100% of the Foreign Currency Exposure[2]

Public Markets In-House Co-Investment Program $250 million

- $25 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.

[1] 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).
[2] The Total Fund (both public market and private market) foreign currency exposure may be hedged up to 100% back to the U.S. dollar.

Private Market and Real Estate Discretionary Structure Capital Limits

All allocations to individual Private Market and Real Estate Discretionary Structure (i.e. Co-Investment and Secondary Investment) strategies shall be subject to the limits established by the Board through the Current Target Allocation in the Strategic Asset Allocation section. 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	$750 million
• $25 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	$250 million
• $25 million limit for each initial investment	
• $25 million limit for each secondary investment	
• $10 million limit for follow-on investments	
Real Estate:	
Farmland Investments	$100 million
Real Estate In-House Co-Investment and Secondary Investments	$300 million
• $25 million limit for each initial investment	
• $25 million limit for each secondary investment	
• $10 million limit for follow-on investments	
Infrastructure:	
Infrastructure In-House Co-Investment and Secondary Investments	$500 million
• $100 million limit for each investment	
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	