Public Safety Personnel Retirement System Amended and Restated Statement of Investment Policies

I. INTRODUCTION¹

The Public Safety Personnel Retirement System (the "System") is a multi-employer governmental plan acting as an independent agency of the State of Arizona to provide retirement and disability benefits for Arizona's public safety personnel and their beneficiaries and survivors. The System and two other governmental plans, the Elected Officials' Retirement Plan ("EORP") and Corrections Officer Retirement Plan ("CORP"), which collectively, are called the "Plans," are administered by a single, seven-member board of trustees (the "Board"). The EORP provides retirement and disability benefits for Arizona's jurists and elected officials and their beneficiaries and survivors. The CORP provides retirement and disability benefits for Arizona's corrections officers and their beneficiaries and survivors.

By law, the Board administers the Plans through the System's offices. The Plans have created a group trust called the "Arizona PSPRS Trust" (the "<u>Trust</u>") to commingle their assets for purposes of investment, and, indeed, all investments made by the Plans are made through the Trust. The Trust and each of the Plans publish annual reports on their operations and investment experience. The Plans and Trust operate on a fiscal year basis ending every June 30.

Each of the Plans is principally funded from three sources: employee contributions, employer contributions and investment returns. The benefits payable by each of the Plans differ, as do the demographics of their respective memberships. The amount of employee contributions is a set percentage of each employee's gross pay. The amount of employer contributions payable annually is that actuarially required over an established period to keep each Plan fully funded, after application of any investment returns (smoothed over a seven-year period) and any employee contributions received, less actual expenses for the year in question.

Two of the Plans, the System and CORP, apportion employer contribution liability by participating employer, such that each employer is responsible for the benefits payable to its particular employees. All EORP participating employers have to pay any unfunded liability for their participating employees prior to their participation in that plan. Then, the employers participating in the EORP share any future liabilities among all employers participating in that plan.

The Plans also provide a mechanism for annual benefit increases of up to 4%, depending upon Plan funding levels. The Board is required to exercise reasonable care, skill and caution and to invest and manage the Plans' assets in accordance with an ordinary prudence standard by considering the purposes, terms, distribution requirements and other circumstances of the Plans.

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¹ The material contained in Sections I and II of this Investment Policy is not intended to modify, and shall not be construed as modifying, any terms specified elsewhere in this Investment Policy (or as otherwise provided by law or in the Board's Governance Policies) and instead is provided merely as a general overview of the Plans for persons not otherwise familiar with the Plans.

The Plans' investments (through the Trust) must not only be "prudent" but must also comply with all applicable statutes, as well as all policies and procedures approved by the Board.

II. STATEMENT OF GOALS AND OBJECTIVES

The purpose of this Amended and Restated Statement of Investment Policies (the "<u>Investment Policy</u>") is to set forth an appropriate set of goals and objectives for investment of the Plans' assets and to establish policies within which the Plans' Chief Investment Officer and the Plans' external investment managers (the "<u>External Managers</u>") may formulate and execute investment decisions on behalf of the Plans.

This Investment Policy shall apply to all of the Plans' and Trust's fiduciaries, including the members of the Board, the Administrator, the Plans' Chief Investment Officer and his/her investment staff (the "Staff"), and all of the Plans' and Trust's retained professionals, as well as their External Managers, in the course of their assistance in investing the assets of the Plans and the Trust. This Investment Policy may be amended by the Board at any time.

A. Goals, Objectives and General Guidelines

The following shall be the Plans' and the Trust's investment goals, objectives and general guidelines:

- 1. Primary Goal. Total return, consistent with prudent portfolio management, is the primary goal of the Plans and Trust. The total return target is to meet or exceed the Plans' actuarially assumed rate net of fees compounded annually. The current actuarial assumed rate of return is 7.85%. Total return, as used herein, includes income plus realized and unrealized gains and losses on Plan or Trust assets. In addition, assets of the Plans or Trust shall be invested to ensure that principal is preserved and enhanced over time. The time horizons for evaluating total fund investment performance shall be 25 to 30 years in the long term, and three to five years in the intermediate term.
- **2. Policy Index**. The total return for the Plans and Trust should meet or exceed the Plans' Policy Index (as described in <u>Appendix I</u>). As a secondary comparison, the Plans' and Trust's total return shall also be compared with comparable public pension funds as represented by the Investor Force Universe ("<u>IFU</u>") data of public funds greater than one billion dollars (\$1 billion) with the understanding that the Plans' funded status and overall investment risk profile may differ from the average public pension fund in that Universe.
- **3. Assets v. Liabilities**. The Plans' assets should equal or exceed their liabilities within any thirty-year period. *See* A.R.S. § 38-843(B).
- **4. Annual Adjustments**. The Plans shall annually adjust the employer contribution rates based on the recommendations made by the Plans' actuary in annual actuarial valuations. The Plans shall determine a reasonable contribution rate necessary to fund benefits and then to the extent possible, to reduce employer contribution rates over time.

- **5. Benefit Goals**. The Plans shall strive to provide the opportunity for increased benefits for retirees as the legislature of the State of Arizona may from time to time enact through the systematic growth of the investments of the Plans' assets.
- **Risk Exposure Evaluation**. The Plans' and Trust's total portfolio risk exposure and total portfolio risk-adjusted returns will be evaluated annually and on a rolling three and five year basis compared with a universe of funds similar to the Plans and Trust. Total portfolio risk exposure should generally rank in the mid-range or lower of comparable funds. Risk-adjusted returns are expected to consistently rank in the top-half of comparable funds. The Board is aware that there may be deviations from these performance targets. Normally, results will be evaluated over a three- to five-year time horizon, but shorter-term results will be regularly reviewed and action taken if in the best interest of the Plans and Trust.
- 7. Benchmark Rank. External Managers should exceed the return of their designated benchmark index annually and should rank in the top-half of the appropriate asset class and style universe over a three to five year period. Specific guidelines, time frames, benchmarks and performance requirements for the External Managers are specified in the Asset Class Appendices attached hereto.
- **8. Internal Management**. While the Board has discretion to internally manage all of the assets and portfolios of the Plans and Trust, it may vest its Staff with discretionary authority to manage up to half of the Plans' and Trust's assets. Conversely, the Board has discretion to have all assets of the Plans and Trust managed by External Managers.
- Monitoring. For compliance purposes, the Plans and Trust shall monitor internal manager and External Manager performance, as well as the total portfolio's compliance with all of the Plans' and Trust's applicable policies, contractual obligations, statutory limitations and asset allocations, targets and ranges. Compliance shall be reported to the Board and its Investment Committee (the "Investment Committee") on a monthly basis. Investment activities to restore compliance shall be completed in a timely and prudent manner with progress reported monthly to the Board until compliance has been restored.

B. Benchmarks

Unless otherwise specified by the Board, the following benchmarks shall be used to evaluate the performance of the assets of the Plans and Trust:

ASSET CLASS BENCHMARKS

Asset Class	Benchmark	Asset Class Universe	
U.S. Equities	Russell 3000	IFU Total Domestic Equity	
International Equities	MSCI ACWI Ex. U.S.	IFU Total International Equity	
Global Fixed Income	Barclays Capital Global Aggregate	IFU Total Fixed Income	
Global Real Estate	NCREIF Property Index NPI	IFU Real Estate	
Global Private Equity	Russell 3000 + 1%	IFU Private Equity	
Global Tactical Asset Allocation	3-month LIBOR + 3%		
Credit Opportunities	50% BofA ML US High Yield BB-B		
	Rated Constrained / 50% CSFB Fixed		
	Income Arbitrage Index		
Absolute Return	BofA ML 3-month T-Bills + 2%	HFRI Conservative Fund of	
		Funds Universe	
Real Assets	CPI +2%		
Risk Parity	60% Barclays Capital Global Aggregate		
	/ 30%; MSCI AC World Net / 10%		
	Dow Jones-UBS Commodity Index TR		
Cash	BofA ML 3-month T-Bill	IFU Cash Universe	

III. INVESTMENT POLICIES

The investments of the Plans and Trust shall recognize and generally follow the tenets of Modern Portfolio Theory as explained in the Third Restatement of Trusts, including analysis of investments from a total portfolio perspective and not from an isolated or individual perspective. Periodically, as it deems appropriate, the Board shall adopt an asset allocation model for the Plans and Trust that seeks to fully achieve the primary investment objectives of the Plans and Trust. The overall capital structure targets and permissible ranges for eligible asset classes are detailed in Appendix I attached hereto.

A. Eligible Investments

Subject to all Arizona statutory requirements, including those specified in A.R.S. §§ 38-848-38-848.03, as well as this Investment Policy and any contractual limitations governing the relations between the Plans and Trust and their respective External Managers, the following investments are specifically authorized to be acquired by the Plans and Trust, subject to any limitations set forth below or in any appendices to this Investment Policy:

1. Global Publicly-Traded Equity Investments. Common stocks, convertibles (when exercised), warrants and rights traded on exchanges authorized by A.R.S. § 38-848(D), are permitted, subject to the provisions in Appendix I, Appendix II and Appendix III attached hereto. The External Equity Managers shall reserve or allocate no more than 10% of their portfolio to cash or cash equivalents. The External Managers of equity securities should ensure that the securities to be purchased are traded on a U.S. exchange or an exchange in a country maintaining diplomatic relations with the United States and that such securities have sufficient

liquidity and risk characteristics so as to be suitable for the Plans and Trust. The Plans and Trust shall not purchase corporate stock or exchange traded funds ("ETFs") on foreign exchanges which in the aggregate exceed 20% of the Plans' and Trust's assets, based on cost.

- 2. Global Publicly-Traded Fixed Income Investments. Investments traded on exchanges authorized by A.R.S. § 38-848(D) are permitted, subject to the guidelines set forth in Appendix I, and may include U.S. government obligations and obligations of any U.S. government agency (each an "Agency"); mortgage backed securities ("MBS"), including non-Agency mortgages and commercial mortgage-backed securities ("CMBS"); Collateralized Mortgage Obligations ("CMO"); asset-backed securities ("ABS"); corporate bonds; Collateralized Debt Obligations ("CDO"); Collateralized Loan Obligations ("CLO"); Collateralized Bond Obligations ("CBO"); structured notes; debentures; commercial paper; and municipal bonds. These limitations shall not require divestiture of any existing holdings of the Plans.
- 3. Fixed Income Ratings. Except ETF's, which may have a minimum quality rating below investment grade, the minimum quality rating of any publicly-traded fixed income issue held in an internally managed portfolio at the time of purchase shall be "BBB", as rated by Moody's Investors Service or an equivalent rating agency. The total amount of EFT's held by the Trust shall not exceed 3% of the total portfolio of the Trust. Fixed income securities held in an internally managed portfolio may be held in the portfolio if doing so is likely to prove economically advantageous to the Plans or Trust. Despite these minimum rating requirements, External Managers are responsible for making an independent analysis of the credit worthiness of securities and their suitability as investments, regardless of the classifications provided by rating agencies. Unrated securities may be held in fixed income portfolios subject to the investment management requirements for such portfolios.
- **4. Public Fixed Income Durations**. If the internally managed fixed income portfolio exceeds five percent (5%) of the total trust portfolio, then the average duration (interest rate sensitivity) of an internally managed fixed income portfolio shall be within +/- 50% of its applicable benchmark index, unless an exception is granted by the Board or its Investment Committee, or the internally managed portfolio comprises less than 1% of the total Trust portfolio.
- 5. Equity Concentration. Not more than 60% of the assets of the Plans and Trust shall be invested in corporate stock. Not more than 5% of the combined assets of the Plans and Trust shall be invested in corporate stock issued by any one corporation, other than corporate stock issued by the U.S. government or its Agencies. The Plans and Trust shall not directly own more than 5% of the voting stock of any one corporation, but this limitation does not apply to membership interests in limited liability companies or companies qualified and/or regulated as ETFs, mutual funds or closed-end funds.

- 6. Cash Reserves/Equivalents. Staff, the Custodian Bank or External Managers may make and maintain reserve and cash equivalent investments. However, these investments should be made on the basis of safety and liquidity, and only secondarily by yield available. Portfolios of such securities, other than U.S. government issued debt shall carry a minimum average rating from Standard & Poor's Ratings Services of A-1, P-1 or an equivalent rating from a nationally recognized rating agency. Cash reserves will be limited to cash equivalent instruments of maturities less than one year; the pooled cash fund of the Plans or Trust's custodian bank and any commingled funds in which the Plans or Trust invests shall be exempt from satisfying this requirement.
- **Turnover**. There shall be no specific limitation to turnover. However, modest (as opposed to heavy) turnover is preferred.
- 8. Alternative Asset Investments. Investments in "alternative asset investments," which are non-publicly-traded securities, such as private equity, venture capital, hedge, credit opportunities, real estate, absolute return, real assets, risk parity, and global tactical asset allocation ("GTAA") funds, among others, shall be made so as to create and maintain diversified asset-specific portfolios. considerations shall include diversification by: manager, strategy, geography, product type, sub-asset classes, and vintage year. However, diversification shall also be viewed in the context of the total portfolio of the Plans and Trust. As described more fully in Section IV of this Investment Policy, the Administrator shall be empowered to consent to the direct acquisition by the Plans and Trust of all alternative investments. Except as otherwise provided in this Investment Policy or any of its Appendices, the Board has expressly delegated complete discretion to the Administrator, upon the recommendation of the Chief Investment Officer and in consultation with the Fiduciary Consultant (defined below) and/or any applicable Specialist Consultant (defined below), as specified in Section IV(A), to make all decisions regarding the Plans' and Trust's external investments (those which are not managed by Staff directly), including alternative asset investments, so long as such decisions comply with this Investment Policy, the Plans' enabling legislation set forth in A.R.S. §§ 38-848 and 38-848.03, and all other applicable laws.

B. Ineligible Investments

Unless specifically approved by the Board or Investment Committee or elsewhere in this Investment Policy, the following securities or strategies shall not be directly purchased for or directly employed by the Plans and Trust:

1. **Derivatives**. Derivative instruments, except as permitted in the Derivatives Policy in <u>Appendix II</u> or as specifically provided in any investment management agreement, limited partnership agreement, limited liability operating agreement or any other governing agreements (each, an "<u>IMA</u>") approved by the Chief Investment Officer for a particular External Manager. Unless otherwise authorized by the Administrator, or within the portable alpha structures, the Chief Investment Officer shall not use derivative instruments to internally manage the

Plans' and Trust's publicly-traded securities and fixed income portfolios described in <u>Appendix III</u> and <u>Appendix IV</u> attached hereto.

- **2. Lettered Stock**. Lettered, legend or similar stocks.
- **Tax Free Issues**. Non-taxable municipal securities, unless pricing anomalies in the marketplace suggest the likelihood of capital gains when normal spread relationships resume.
- **4. Certain Shorts.** "Naked" short sales (i.e., shorting a security not owned).
- **5. Unlawful Transactions**. Any transaction prohibited by law, including any federal or Arizona statute.

C. Liquidity Requirements

External Managers will be given adequate notice of the Plans' cash needs and an estimation of the Plans' liquidity requirements. External Managers will be selected in consideration of the total portfolio to provide for anticipated withdrawals without impairing the normal investment process.

D. Proxy Voting

Responsibility for the exercise of ownership rights through proxy solicitations shall normally rest with the External Managers. Voting rights shall be exercised strictly for the economic benefit of the Plans and Trust or as required by Arizona law or as otherwise specified in an IMA. External Managers shall be encouraged to annually report to the Plans and Trust standing policies with respect to proxy voting, including any changes that have occurred in those policies promptly after the occurrence of any such change.

E. Commingled Funds Exception

Mutual funds, hedge funds and other types of commingled investment vehicles, such as commingled investment funds ("CIFs"), private equity funds (typically in the form of limited partnerships or limited liability companies), unit trusts and ETFs can provide lower costs and better diversification than can be obtained with a separately managed fund pursuing the same investment objectives. However, commingled investment vehicles cannot customize investment policies and guidelines to the specific needs of individual clients. The Board is willing to accept the policies of such commingled investment vehicles in order to achieve the lower costs and diversification benefits of commingled investment vehicles. Therefore, commingled investment vehicles selected by Staff and consented to for investment by the Administrator shall be exempt from the policies and restrictions specified herein but shall otherwise satisfy all requirements imposed by law.

F. Derivatives and Alternative Investments

Unless otherwise provided in an External Manager's IMA approved by the Chief Investment Officer, the provisions in <u>Appendix II</u> attached hereto shall govern the use of derivative instruments by External Managers of the Plans and Trust.

IV. ROLES AND RESPONSIBILITIES

A. Board of Trustees and Investment Committee

The Board's responsibilities are specified in the Board's Governance Policies and A.R.S. § 38-848 and 38-848.03. Among other things, the Board is responsible for adopting this Investment Policy. In accordance with the Plans' enabling legislation, the Board has delegated to the Plans' Administrator authority to prudently invest the assets of the Plans and Trust in accordance with this Investment Policy and applicable law, and the Administrator, in turn, has delegated such authority to the Plans' Chief Investment Officer, subject to the supervision of (and approval of each External Manager by) the Administrator. Despite such delegation of authority, the Board has reserved authority to approve the hiring and firing of the Administrator, Chief Investment Officer, custodian bank and professional consultants, as well as to make substantive changes to their operative contracts with the Plans and Trust. The Board has also delegated to its Investment Committee the authority to recommend changes to this Investment Policy, as well as changes to the Trust's investment strategies and asset allocations, and in rare cases, as specified in Section IV(A)(2) below, to determine whether to make certain investments. The Investment Committee and Board shall be free to advise the Administrator, Staff and the Chief Investment Officer of any information they deem material to particular investments that are then being contemplated for or that have already been made by the Plans and Trust, although all such communications shall comply with Arizona's open meeting laws. The Administrator (and in the cases referenced in Section IV(A)(2) below, the Investment Committee) is authorized to approve for the Plans and Trust all external investments of the Plans and Trust (including alternative asset investments) in accordance with the following requirements:

1. Consensual Approval. Except as specified with respect to the powers specifically delegated to the Chief Investment Officer described in Section IV(C) below and in any Appendix to this Investment Policy, no External Managers shall be retained to manage the assets of the Plans and Trust (or to invest Trust assets in entities managed by such External Managers or their affiliates) without the consent of the Administrator upon the recommendation of the Chief Investment Officer and (i) the concurrence of one or more of the Trust's Specialist Consultants and (ii) verification by the Fiduciary Consultant that the External Manager and/or investment is appropriately allocated within the Trust's portfolio and is consistent with the Trust's appropriate asset allocation and implementation plan. Except as otherwise provided in this Investment Policy, including any Appendix thereto, no decision regarding the termination of an External Manager (and the investment he/she manages) shall be implemented without the consent of The Administrator's consent to any investment (or any the Administrator. decisions of the Chief Investment Officer) shall be reflected in writing and reported to the Board and Investment Committee at the next meeting of the Board and Investment Committee following issuance of the Administrator's consent.

- 2. **Non-consensual Approval.** In the event that a proposed external investment (one not managed by Staff themselves) lacks the concurrence of a Specialist Consultant and/or in the event the Fiduciary Consultant is unable or unwilling to verify that the investment is appropriately allocated within the Trust's portfolio and is consistent with the Trust's asset allocation and implementation plan, and in the event the Chief Investment Officer nevertheless believes the investment is appropriate for investment by the Plans and Trust, Staff shall present its case for making the investment to the Administrator, who may either consent to the investment or, instead, may request that the matter be presented to the Investment Committee for final determination. In the event the Administrator elects to have the matter resolved by the Investment Committee. Staff shall fully brief the Investment Committee about the investment and the Investment Committee shall consider whether to consent to the investment. Any action by the Administrator and/or Investment Committee pursuant to the provisions of this paragraph shall be reported to the Board (and Investment Committee, as appropriate) at its next scheduled meeting.
- 3. **Previously Approved Co-Investment Allocations.** If an External Investment has received Approval described herein, and includes a portion set aside for Co-Investments, the Chief Investment Officer, with input from the Investment staff, shall approve the specific investments and amounts of the Co-Investments keeping in mind overall portfolio diversification and portfolio constraints and construction.
- 4. Change in Material Terms. Once an external investment is made in accordance the procedures set forth in sections 1 or 2 of this Article IV(A), the Chief Investment Officer, with the approval of the Administrator, may approve any change in the terms of such investment proposed by the External Manager of such investment unless such change materially alters the stated purposes or risks of the investment or materially increases the Trust's capital commitment to said investment, in which case the proposed change cannot be approved without undertaking the procedures set forth in sections 1 or 2 of this Article IV(A). As used in this section, the term "material," or any derivation thereof, when applied to both risks and calls for additional capital, means amounts in excess of 5% For purposes of hypothetical illustration only, in the event a partnership targeting the acquisition of real estate seeks the Trust's approval to materially change its aim to invest in bio-medical venture capital opportunities, or to increase its Leverage by more than 5% above the ranges described in its offering memorandum, such changes cannot be approved by the Trust unless and until the proposed changes are approved in accordance with the procedures set forth in sections 1 or 2 of this Article IV(A). In contrast, in the event the same partnership seeks approval to call up to 4% more capital than previously agreed, or to increase Leverage by no more than 4% above the ranges set forth in its offering memorandum, the Chief Investment Officer, with the approval of the Administrator, may authorize such change without undertaking the procedures set forth in sections 1 or 2 of this Article IV(A).

A. The Administrator

The Board has vested the Plans' Administrator with all powers authorized by law or bestowed upon the Administrator in the Board's Governance Manual, and motions or resolutions approved by the Board, including the authority to prudently invest the assets of the Plans and Trust in accordance with this Investment Policy and enter into contracts with External Managers (and make external investments). The Administrator, in turn, has delegated his/her authority to invest the assets of the Plans and Trust to the Plans' Chief Investment Officer, subject to the authority of the Administrator to consent to all external investments and subject to the direction of the Investment Committee and Board and the requirements of this Investment Policy (and its Appendices) and applicable law.

B. Chief Investment Officer

The Administrator has delegated authority to the Chief Investment Officer of the Plans and Trust to prudently invest the assets of the Plans and Trust in accordance with this Investment Policy and applicable law. Such authority includes authority to enter into investment contracts of any kind, including those with External Managers, so long as the investments governed by such contracts comply with the requirements of this Investment Policy and are consented to by the Administrator as specified in Section IV(A) or are otherwise authorized in this Investment Policy or its Appendices attached hereto. The Chief Investment Officer may retain professional staff to assist the Chief Investment Officer to perform his/her duties, subject to the consent of the Administrator and Board. The Chief Investment Officer is responsible for advising the Administrator, Investment Committee and Board about all material investment decisions affecting the Plan and Trust and providing the Investment Committee, Board and Administrator with regular guidance regarding strategies to prudently grow the assets of the Plans and Trust. The Chief Investment Officer regularly monitors and reports upon all of the investments of the Plans and Trust to keep the Administrator, Investment Committee and Board advised of all material developments and prudent strategies regarding same. Investment Officer shall have authority (without the consent of the Administrator, Board or Investment Committee) to make the discretionary investments described in Appendices III and IV attached hereto (or any other discretionary investments described in Appendices to this Investment Policy and attached hereto), subject to the limitations described therein and all other limitations imposed by this Investment Policy, the Investment Committee, Board, and Administrator, as well as applicable law. When he/she can do so without revealing confidential or proprietary information, the Chief Investment Officer shall advise the Investment Committee of investments the Trust is considering for investment.

C. Fiduciary Consultant to the Board

One or more external investment consultants (each a "Fiduciary Consultant") shall assist the Board and Investment Committee in developing and modifying the Plans' and Trust's investment policy objectives and guidelines, including the development of asset allocation strategies, the development of derivatives policies, recommendations on long term asset allocation and the appropriate mix of investment manager styles and strategies. When requested and pursuant to contract, the Fiduciary Consultant(s) shall also provide assistance in manager searches and selection and in investment performance calculation, evaluation, and analysis. Each Fiduciary Consultant shall provide timely information on investment strategies, instruments, managers and other related issues, as requested by the Investment Committee or Board from time to time and shall also perform the applicable functions described in Section IV(1) and any Appendices to this Investment Policy. Each Fiduciary Consultant shall provide performance evaluation reports to the Investment Committee and/or Board on a quarterly basis. Reports will include absolute and relative performance of each of the External Managers and the Plans' or Trust's total assets. The Fiduciary Consultant(s) will utilize meaningful market indices and peer group universes for comparisons. The Fiduciary Consultant(s) shall also provide specialty reporting and analysis of the Plans' and Trust's overall investment program for portfolio risk.

D. Specialist Consultants to the Chief Investment Officer

Upon the authorization of the Board or Investment Committee, the Chief Investment Officer may retain one or more consultants (each, a "Specialty Consultant") to assist the Chief Investment Officer to evaluate certain securities, derivatives and asset classes being considered for investment or divestment by the Plans and Trust. These Specialty Consultants shall work directly with the Chief Investment Officer and Staff, but shall at all times act as fiduciaries of the Plans and Trust and shall ultimately report to the Board and Investment Committee.

E. External Investment Managers

Unless otherwise directed by the Investment Committee, and subject to Section III(E) of this Investment Policy, each External Manager retained by the Trust to manage portfolios for the Plans or Trust (or to invest assets of the Plans and Trust) shall be responsible, first, for complying with that manager's IMA as approved by the Chief Investment Officer and executing the investment strategy disclosed to Staff by that manager and, second, for complying with all applicable portions of this Investment Policy that do not otherwise conflict with that manager's IMA and investment strategy. Further, subject to the terms of its IMA, each External Manager retained by the Plans or Trust to manage portfolios for the Plans or Trust shall:

- 1. Meet with the Investment Committee or Board upon request;
- 2. Submit written reports to the Chief Investment Officer and the Specialty Consultant and Fiduciary Consultant, at least quarterly;

3. Subject to Section III(E) of this Investment Policy, confirm in writing to the Plans and Trust the External Manager's intention to comply with this Investment Policy. If this Investment Policy is amended subsequent to the execution of an IMA with an External Manager and such External Manager is unable to comply with the amended Investment Policy, the Chief Investment Officer, in consultation with the Administrator and if necessary, the Specialty Consultant and Fiduciary Consultant, shall determine whether to exempt such External Manager from the amendment to the Investment Policy or take reasonable measures, as he may deem appropriate, including if necessary and subject to the terms of the applicable IMA, the redemption of the portfolios of the Plans or Trust entrusted to the care of such External Manager.

Subject to this Investment Policy and the Derivatives Policy specified in <u>Appendix II</u> attached hereto, or unless otherwise authorized by the Chief Investment Officer, External Managers may be granted a power of attorney from the Plans or the Trust, as applicable, to execute in the name of the Plans or the Trust, as applicable, certain instruments for the Plans and Trust, including, without limitation, derivative contracts and instruments, except that, unless otherwise authorized by the Chief Investment Officer, no such power of attorney shall subject the Plans or Trust to liability in excess of their committed capital to the investment in question, nor shall such power of attorney be employed to substantively amend the economic rights or interests of the Plans or Trust in said investment without a vote of the owners of such investment.

In the event an External Manager deems as confidential the IMA and any guidelines governing the portfolio that External Manager is administering for the Plans or Trust, said IMA and/or guidelines shall be considered not a public record as specified in A.R.S. § 38-848(U) and shall not be disclosed to the public unless authorized by the Plans or Trust or ordered by a court of competent jurisdiction.

G. Custodian Bank

In order to maximize the returns of the Plans and Trust, little money should be allowed to remain idle. Dividends, interest, proceeds from sales, new contributions and all other monies are to be invested or reinvested promptly. The Plans' or Trust's custodian bank(s) will be responsible for performing the following functions:

- 1. Accepting daily instructions from the Chief Investment Officer and his/her designated Staff.
- 2. Notifying External Managers of proxies, tenders, rights, fractional shares or other dispositions of holdings.
- 3. Resolving any problems that Staff may have relating to the custodial account(s).
- 4. Safekeeping of securities.
- 5. Collecting of interest and dividends.

- 6. Daily cash sweep of idle principal and income cash balances.
- 7. Processing of all transactions.
- 8. Collecting proceeds from maturing securities.
- 9. Disbursement of all income or principal cash balances as directed.
- 10. Collecting asset values from pooled accounts, such as from hedge funds and private equity investments and other asset accounts not custodied by the bank for inclusion in the Plans' and Trust's comprehensive monthly valuation reports.
- Providing monthly statements by investment account and a consolidated statement of all assets.
- 12. Working with Specialty Consultants and Fiduciary Consultants and the Plans' and Trust's accountants, auditors and other consultants to ensure accuracy in reporting.
- 13. Providing written monthly reconciliation statements of custody and investment managers' accounting statements.
- 14. Filing claims for the Plans and Trust in securities class actions affecting their interests.
- 15. Other services as directed by the Chief Investment Officer, Administrator the Investment Committee or the Board.

V. SPECIAL CONSIDERATIONS FOR PRIVATE EQUITY AND OTHER ALTERNATIVE ASSET INVESTMENTS

A. Special Considerations for Alternative Investments

Unless otherwise instructed by the Investment Committee, the following rules shall apply to the Trust's alternative asset investment transactions:

1. "Catch Up" Fee Assessments. All capital authorized for investment in any private equity, venture capital, hedge, real estate or other alternative asset investment fund shall be invested in such fund without deducting from the amount of such authorized investment any late fee, additional fee, "catch-up" fee or other sums howsoever characterized that are assessed by the fund as a result of the Plans' or Trust's participation in the fund after the fund's initial closing, such that the Plans and Trust shall be authorized to pay the amount of any late fee, additional fees, catch-up fees or the like in addition to the amount authorized for such investment. Such a policy will enable more of the money of the Plans' and Trust to be put to work in each investment. As a hypothetical illustration, if the Administrator were to authorize \$75,000,000 to be invested in private equity Partnership A, and because the Plans or Trust were investing in Partnership A at its last closing, Partnership A assessed the Plans or Trust a "late fee" equal to

\$250,000, the Plans and Trust would not back the late fee out of the \$75,000,000 authorized such that the Plans' and Trust's net commitment to Partnership A was \$74,750,000. Instead, the Plans and Trust would commit the full \$75,000,000 as their capital commitment to Partnership A and pay the \$250,000 fee in addition to the \$75,000,000 authorized for investment in Partnership A.

- Attorneys' Fees and Investigation Expenses. 2. All capital authorized for investment in any private equity, venture capital, hedge, real estate or other alternative asset investment fund shall be invested in such fund without deducting from the amount of such authorized investment any attorneys' fees, investigation expenses or other costs incurred by the Plans or Trust to perform due diligence in connection with investment in such fund. Such a policy will enable more of the money of the Plans and Trust to be put to work in each investment. As a hypothetical illustration, if the Administrator were to authorize \$75,000,000 to be invested in private equity Partnership A and if in connection with such investment, the Plans and Trust had incurred legal fees and investigation expenses of \$30,000. the Plans and Trust would not back such fees and expenses out of the \$75,000,000 authorized such that the Plans' and Trust's net commitment to Partnership A was \$74,970,000. Instead, the Plans and Trust would commit the full \$75,000,000 as their capital commitment to Partnership A and bear the \$30,000 in fees and expenses in addition to the \$75,000,000 authorized for investment in Partnership A.
- **Investor Borne Management Fees.** All capital authorized for investment in any 3. private equity, venture capital, hedge, real estate or other alternative asset investment fund shall be invested in such fund without deducting from the amount of such authorized investment any management fees that are payable by an investor in addition to each investor's capital commitment, such that the Plans and Trust shall be authorized to pay such management fee in addition to the amount authorized by the Investment Committee for such investment. Such a policy will enable more of the money of the Plans and Trust to be put to work in each investment. As a hypothetical illustration, if the Administrator were to authorize \$75,000,000 to be invested in private equity Partnership A, and if Partnership A required that each investor annually pay a management fee to Partnership A for the 10 year estimated life of the partnership equal to \$200,000, and such management fee would be payable in addition to the Plans' and Trust's capital commitment, the Plans and Trust would not back the total estimated management fee of \$2,000,000 out of the \$75,000,000 authorized for investment such that the Plans' and Trust's net commitment to Partnership A was \$73,000,000. Instead, the Plans and Trust would commit the full \$75,000,000 as their capital commitment to Partnership A, and pay the \$200,000 management fee each year in addition to the \$75,000,000 authorized for investment in Partnership A. This Section (V)(C) shall apply retroactively to all existing investments, including those authorized before the date this Investment Policy became effective. Other fees, including those associated with Co-Investments shall be treated in the same fashion. These Fees, however, shall be included in the total return calculations for their respective investments.

The CIO, in concert with internal Investment Staff and external consultants, evaluates the reasonableness of investment management fees among many economic and qualitative factors. Staff minimizes the impact of investment management fees on portfolio returns by 1) using a competitive selection process that makes fee negotiation a key factor in the selection decision; 2) using low-cost passive index investment strategies when appropriate; and 3) exploring opportunities for achieving economics of scale. While the Trust prefers performance fee structures that compensate investment managers only after achieving a specific return hurdle, occasionally a base management fee is appropriate. In every case, the CIO, Staff and Consultants ensure fee arrangements reflect an appropriate alignment of interest and support the trust's long-term earning potential.

- 4. Foreign Currency Conversions. All investments by the Plans or Trust in any private equity, venture capital, hedge, real estate or other alternative investment funds which are required to be made in a foreign currency shall be converted from U.S. Dollars to the applicable foreign currency on a date determined by the Chief Investment Officer, and from that date forward, the authorized commitment for such shall be the value of the commitment in the subject foreign currency on the date of conversion (and as typically stated in the applicable investment subscription agreement), and the Chief Investment Officer shall account for draws on the Plans' or Trust's capital commitment to the investment in the applicable foreign currency.
- 5. Unrelated Business Taxable Income. Pursuant to the advice of the Board's counsel, while the Plans and Trust take the position they are exempt from paying any tax on unrelated business taxable income ("UBTI") generated by the Plans' or Trust's investments, the Plans and Trust have a preference to invest in private equity, venture capital, hedge, real estate or other alternative investment funds or ventures which take active measures to "block" and thereby minimize receipt by the Plans or Trust of UBTI, even though such blocking measures might slightly reduce the returns generated from such investment. However, in the event any measures employed to block or mitigate UBTI are expected to reduce the returns of the Plans or Trust in the investment at issue more than 0.1% per annum, the Chief Investment Officer, in consultation with the Plans' and Trust's counsel, is authorized to forgo use of such blocking mechanisms. UBTI blocking mechanisms shall also not be employed in the event they would violate the Plans' enabling legislation, and in particular, A.R.S. §§ 38-848 and 38-848.03.
- 6. Overlay Liability. The Trust may engage in "Portable Alpha" and other investments utilizing derivative exposures as authorized by the Administrator upon the recommendation of the Chief Investment Officer and the Specialty Consultant and/or Fiduciary Consultant, as applicable, or as otherwise provided in Section IV(A)(2) of this Investment Policy. Generally, Portable Alpha investments are comprised of two portions—the "Beta" portion, in which the Trust invests no capital at the outset but, through the use of derivatives, agrees to realize the return (whether positive or negative) of a particular group of publicly-traded securities

over a given period (typically expressed as an agreement to experience the return of a particular index or indices (or LIBOR based threshold), and the "Alpha" portion, in which the Trust invests cash with the expectation (but not guarantee) of achieving a return in excess of a particular index or indices (or LIBOR based threshold). With respect to its investment in the Alpha portion, the Trust risks loss of its invested capital, as is the case with any investment. With respect to its investment in the Beta portion, however, the Trust's risks may equal as much as its investment in the Alpha portion, such that the Trust's total losses in connection with a Portable Alpha investment (or other derivative-based investment) may potentially equal twice that allocated for that investment, plus any costs and fees.

For example, if the Trust were to allocate \$100,000,000 to a particular Portable Alpha investment, invest the full \$100,000,000 in the *Alpha* portion of said investment, and, correspondingly, agree to experience, as the *Beta* portion of the investment, the return attributable to a \$100,000,000 investment in the S&P Index over a term equal to that of the Trust's investment in the *Alpha* portion, then, in the unlikely event the S&P Index fell to zero during the given investment period, the Trust would be obligated to pay \$100,000,000 (plus any associated costs and fees) as and for its obligations relating to the *Beta* portion, regardless of how the *Alpha* portion performed. Such losses are mitigated by careful monitoring of the *Beta* portion, periodic true ups of any liabilities attributable to the *Beta* portion, and generally, the ability to exit the *Beta* portion at periodic intervals in the event the index or indices (or LIBOR threshold) to which such portion is tied appear(s) to be moving in an adverse direction (although such exit may be subject to various costs, including termination fees and penalties).

It is the Board's expectation that the Trust's liability attributable to the *Beta* portion of any Portable Alpha investment, or any investment in which there is a derivative overlay (the "Overlay") will be closely monitored by Staff and the External Managers of such investment such that any liability attributable to the Overlay will be modest and reasonable in relation to the prospective gains of such investment. Based upon that expectation, amounts authorized for investment in any particular Portable Alpha type security (or other investment involving one or more Overlays) may be allocated solely to the Alpha portion of such investment, with the Trust to pay periodically, with other and additional funds derived from the Trust's overall portfolio, any liability arising with respect to the Overlay portion of the investment.

For purposes of illustration, if the Administrator were to authorize investment of \$100,000,000 in a particular Portable Alpha investment, all \$100,000,000 authorized may be invested in the *Alpha* portion of said investment, with any liability arising from the Overlay to be paid by the Trust from other Trust funds as are then available from the Trust's portfolio generally. Any monies paid by the Trust to cover an Overlay shall be accounted for by the Trust as attributable to the Portable Alpha or other investment to which such Overlay pertains. Further, when a Portable Alpha investment (or other investment utilizing an Overlay) is presented to the Administrator for his consideration and approval, Staff shall estimate the

expected range of liability that may be incurred by the Trust from the investment's Overlay so the Administrator can better understand the investment's potential risks. Finally, the System's legal counsel, Chief Investment Officer, Chief Risk Officer and applicable Specialty Consultant and/or Fiduciary Consultant must approve in writing (or by email) an External Manager's program for employment of Overlays, and in the event any one or more of them disapprove of a particular External Manager's program for employment of Overlays, such program shall not be implemented for the benefit of the Plans and/or Trust unless first approved by the Administrator or otherwise approved in accordance with Section IV(A)(2) of this Investment Policy.

- 7. Concurrent Investments. In situations in which an underlying secondary investment, such as those through the ORG AZ Secondary Opportunity Fund, the Stepstone AZ Secondary Opportunities Fund (or any of the Trust's other secondary funds) is in the same partnership or fund in which the Trust already has made a direct investment, the capital commitment authorized for the direct investment in such partnership or fund shall not limit or diminish the Trust's secondary investment in the same partnership or fund, so long as both the direct and secondary investments are separately accounted for in the Trust's books and records.
- 8. Underlying Holdings Approval. In situations in which an IMA requires that an underlying investment to be acquired by an externally managed fund must be approved by the Trust, the Chief Investment Officer is authorized to grant such approval with the Administrator's consent. Thus, for purposes of illustration, in situations in which a secondary investment to be acquired by and through the ORG AZ Secondary Opportunity Fund, the Stepstone AZ Secondary Opportunities Fund or any of the Trust's other secondary funds cannot proceed without the Trust's prior approval, the Chief Investment Officer is authorized to grant such approval with the Administrator's consent.
- 9. Authorization of Increases Above Caps. In situations in which the operating agreement or limited partnership agreement of the ORG AZ Secondary Opportunity Fund, the Stepstone AZ Secondary Opportunities Fund (or any of the Trust's other secondary, co-investment or other funds) limit the amount of an investment made by those funds to a specified amount without the Trust's approval, such approval may be granted by the Chief Investment Officer after obtaining the Administrator's consent. By way of hypothetical illustration, in the event a secondary fund approved for investment by the Trust in accordance with the procedures set forth in sections 1 or 2 of Art. IV(A) of this Policy has a cap of \$8 million on the amount that can be invested by that fund in any asset to be acquired by the fund unless the Trust consents to waive the cap, the Chief Investment Officer, with the approval of the Administrator, may authorize such waiver without having to undertake the procedures set forth in sections 1 or 2 of Art. IV(A) of this Policy.

VI. OTHER CONSIDERATIONS

A. Regular Review

It is the intent of the Board to revise this Investment Policy to reflect modifications and revisions to the Plans' enabling legislation, which may be enacted from time to time. It is also the policy of the Board to review the terms of this Investment Policy at least once per year and to communicate any necessary changes to the Administrator, Chief Investment Officer, and all applicable External Managers. External Managers are urged to review the Plans' enabling legislation to make sure they are aware of any applicable amendments to same.

B. External Manager Compliance

Unless otherwise provided in an External Manager's IMA that has been approved by the Chief Investment Officer, this Investment Policy provides mandatory rules for the Plans' and Trust's External Managers to follow. Should any External Manager believe that this Investment Policy is unduly restrictive or inappropriate; such External Manager shall so advise the Chief Investment Officer and the Board.

VII. IMPLEMENTATION

This Investment Policy shall be effective on the date it is approved by the Board as specified below, and upon the effective date of this Investment Policy, all prior investment policies of the Plans shall be revoked. The terms of any addenda of this Investment Policy are hereby incorporated into and made a part of this Investment Policy by this reference as if fully recited herein.

A. Conflicts

Should any conflict arise between the terms of this Investment Policy and any of its addenda, the terms of the applicable addenda shall control. If there shall arise any conflict between the terms of this Investment Policy and the Board's Governance Policies, the terms of this Investment Policy shall control. All monies invested for the Plans or Trust after the adoption of this Investment Policy shall conform to this Investment Policy, unless the Board agrees otherwise. If there shall arise any conflict between the terms of this Investment Policy and applicable law, applicable law shall control.

B. Effectiveness

Except as otherwise specified in this Investment Policy, effective January 25, 2012, all amendments to this Investment Policy shall provide whether such amendments are retroactive. This Investment Policy was originally adopted by the Board at its meeting on February 25, 2009, and was amended by action of the Board on March 31, 2010, October 27, 2010, December 15, 2010, February 23, 2011, January 25, 2012, July 25, 2012, January 15, 2014, June 25, 2014, August 27, 2014, October 22, 2014 and November 19,

2014.² None of the amendments effective after January 25, 2012 are retroactive except the amendment made January 25, 2012, which pertains to Section V(C). This Investment Policy includes each of the Appendices (I through XV) which follow.

Date	d this 25th day of May, 2016.
By:	
·	Brian Tobin, Chairman
By:	
•	Jared Smout, Administrator

² These dates reflect the dates upon which revisions to the body of the Amended and Restated Statement of Investment Policies were adopted by action of the Board. The adoption date of revisions to individual Appendices are noted on the affected Appendix.

Public Safety Personnel Retirement System

Asset Allocation Policy

Adopted: February 25, 2009 Revised: May 26, 2010 Revised: August 18, 2010 Revised: April 25, 2012 Revised: May 30, 2012 Revised: June 19, 2013 Revised: January 15, 2014 Revised June 25, 2014 Revised: May 25, 2016

The Board shall determine the Plans' and Trust's asset allocation policy. In order to have a reasonable probability of achieving the Trust's target return at an acceptable risk level, the Plans and Trust have adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on a quarterly basis and will be readjusted when an asset class weighting is outside its target range.

A. Asset Allocations and Benchmarks

ASSET CLASS	TARGET	TARGET	TARGET
	<u>%</u>	RANGE %	BENCHMARK
EQUITIES			
U.S. Equities	16	12-22	Russell 3000
International	14	10-18	MSCI ACWI Ex. U.S.
Equities			
FIXED INCOME	7	4-12	Barclays Capital Global Aggregate
GLOBAL	10	6-14	3-month LIBOR + 3%
TACTICAL ASSET			
ALLOCATION			
REAL ESTATE	11	6-16	NCREIF Property Index NPI
PRIVATE EQUITY	11	6-14	Russell 3000 + 1%
CREDIT	13	6-15	50% BofA ML US High Yield BB-B
OPPORTUNITIES			Rated Constrained / 50% CSFB
			Fixed Income Arbitrage Index
ABSOLUTE	4	0-8	BofA ML 3-month T-Bills + 2%
RETURN			
REAL ASSETS	8	5-11	$CPI + 2\%^{3}$

³ CPI for any given period shall consist of the consumer price index initially reported by the U.S. Bureau of Labor Statistics without later restatement or adjustment.

0-8 RISK PARITY 4 60% Barclays Capital Global Aggregate / 30% MSCI AC World Net / 10% Dow Jones – UBS Commodity Index TR

CASH

0 - 6Short Term BofA ML 3-month T-Bill

В. **Adjustments within Ranges**

The Plans' Chief Investment Officer shall adjust the Trust's asset allocations within ranges after consideration of the available economic and financial data and the advice of the Board's Fiduciary Consultant or any other consultants (including any necessary Specialist Consultants) retained by the Board, Investment Committee or Chief Investment Officer. This should be accomplished with views toward both improving investment returns and toward preservation of capital. Actual asset class allocations will be reported to the Board and Investment Committee on a monthly basis. When large and rapid changes to asset allocations within target ranges are contemplated (a reallocation of greater than 5% of the total portfolio away from targets within 30 days), it must be presented to and approved by the Investment Committee, in advance. Changes toward targets do not require such approval.

C. **Plans' Policy Index**

The Plans' Policy Index ("Policy Index") is a custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this Appendix I. It is useful in separating the impact of the Investment Policy from execution of the investment strategy in evaluating the performance of the Plans' and Trust's investment program. The Policy Index is calculated by multiplying the target commitment to each asset class of the Plans or Trust by the rate of return of the appropriate market index, as listed above, on a monthly basis. Staff and/or the Fiduciary Consultant(s) shall report monthly to the Board and Investment Committee how the Trust's actual returns compare to those of the Policy Index.

D. Rebalancing

The Fiduciary Consultant(s) will review the Plans' and Trust's asset allocation at least quarterly to determine if the asset allocation is consistent with the exposure ranges described herein. Readjustments to asset classes falling outside their prescribed ranges shall be accomplished by the Chief Investment Officer in a timely manner with progress reported regularly to the Board and Investment Committee until the exposures are within the applicable ranges. The Chief Investment Officer will consider market conditions, expected portfolio cash flows, and transaction costs, as well as any other relevant factors when rebalancing assets in the Plans' or Trust's portfolios.

Public Safety Personnel Retirement System

DERIVATIVES POLICY

Adopted February 25, 2009 Revised: July 25, 2012 Revised May 22, 2013 Revised January 15, 2014 Revised June 25, 2014

A. Objectives

Unless the Board otherwise directs, this derivatives policy ("Derivatives Policy") identifies and permits External Managers of the Plans and Trust who directly and/or separately manage the Plans' or Trust's assets to deploy common derivative investments and strategies which are consistent with applicable law and the Investment Policy. Except as specified herein, this Derivatives Policy also requires External Managers of the Plans' and Trust's assets to follow certain controls, documentation and risk management procedures when employing derivatives. Derivatives may be employed by the Plans' and Trust's External Managers who directly and/or separately manage the Plans' and Trust's assets based on an analysis by the Plans' Chief Investment Officer that the use of such derivatives will have a positive impact on the Plans' or the Trust's ability to manage its underlying assets and liabilities. Unless otherwise provided in this Investment Policy or approved by the Administrator, the Chief Investment Officer and his/her Staff shall not employ derivatives in the management of the Plans' or Trust's internally-managed However, nothing in this Derivatives Policy shall preclude the Chief portfolios. Investment Officer or Staff, with the consent of the Administrator (or in accordance with any provision of this Investment Policy) from purchasing ETFs, CIFs, mutual funds, hedge funds, portable alpha funds, private equity funds, Global Tactical Asset Allocation funds, venture capital funds or other types of commingled investment vehicles or securities (in whatever form, including without limitation, limited partnerships, trusts, limited liability companies, partnerships, joint ventures, unit trusts or corporations) which might be characterized as derivatives or which have derivative components or employ derivative strategies.

B. Definition and Classification of Derivatives

A derivative is a security or contractual agreement which derives its value from some underlying security, commodity, currency, or index. The following derivative contracts are authorized derivatives to be entered into by the Plans' and Trust's External Managers on behalf of the Plans and Trust:

- **1. Forwards.** Forward-based derivatives, including forward contracts, futures contracts, swaps, and similar instruments
- **2. Options.** Option-based derivatives, including put options, call options, swaptions, interest rate caps and floors, and similar instruments

C. Allowed Uses of Derivatives

- 1. Hedging. To the extent that the non-derivative component of a Plan's or the Trust's portfolio is exposed to clearly defined risks and derivative contracts exist which can be used to prudently reduce those risks, to the extent authorized by an External Manager's IMA with the Plans and Trust, such External Manager is permitted to use derivatives contracts for hedging purposes, including cross-hedging of currency exposures, subject to the documentation requirements below.
- 2. Creation of Market Exposures. If specifically authorized by their applicable IMA with the Plans or Trust, External Managers of the Plans and Trust may use derivatives to replicate the risk/return profile of an asset or asset class.
- **3. Management of Country and Asset Allocation Exposure**. External Managers of the Plans and Trust may use derivative contracts to change the exposure of their portfolio to different countries and/or asset classes, so long as their IMA authorizes such strategies.

D. Prohibited Uses of Derivatives

Any use of derivatives not referenced in Section C of this Derivatives Policy is prohibited without the prior consent of the Administrator. The Plans' and Trust's External Managers are encouraged to solicit such approval if they believe the list in section C is too restrictive. By way of amplification, and except for derivatives employed in commingled funds in which the Plans or Trust hold an interest, the following two uses of derivatives are prohibited in any portfolio of the Plans and Trust, unless specifically authorized by the Administrator:

- 1. Leverage. As used throughout this Policy, the term "Leverage" means the degree to which the amount of an investment is increased through the use of borrowed money. Derivatives shall not be used to magnify exposure to an asset, asset class, interest rate, or any other financial variable beyond that which would be allowed by a manager's IMA. Except as otherwise authorized in Section V(F) (Overlay Liability) of the Investment Policy, or by the IMA of a particular External Manager, derivatives shall not be employed so as to subject the Plans or Trust to liability in excess of their committed capital to any investment.
- 2. Unrelated Speculation. Derivatives shall not be used to create exposures to securities, currencies, indices, or any other financial variable unless such exposures would be allowed by an External Manager's IMA if created with non-derivative securities.

E. Portfolio-Level Risk Control Procedures and Documentation Requirements

1. Counterparty Credit Risk for Non-Publicly Traded Derivatives

External Managers are required to measure and monitor exposure to counterparty credit risk. All counterparties contracting directly with the Trust or Plans must

have commercial paper credit ratings of at least "A2" or its equivalent by at least one nationally recognized rating agency at the time the related derivative is entered into. If the term of the derivative contract exceeds one year, an analysis shall be conducted to determine the counterparty's long-term rating and risk exposure. Documentation relating to each derivative shall require that upon the downgrade to a specified level or withdrawal of the rating of such counterparty, the Plans, the Trust or the External Manager, as applicable, may elect to terminate the derivative or to cause the related counterparty to collateralize its obligations under such derivative with cash or securities acceptable to the Plan, the Trust or the External Manager (on behalf of the Plans or the Trust) at levels acceptable to the Plans, the Trust or the External Manager (on behalf of the Plans or the Trust). Counterparty exposure should be evaluated with respect to concentration and diversification.

2. Ongoing Monitoring of Risk Exposures

The term and other risk exposure limits specified in this Derivatives Policy, the Investment Policy or a particular External Manager's IMA with respect to investments made by that External Manager for the Plans or Trust, including, without limitation, that the performance of an External Manager is consistent with regulatory requirements, are expected to be satisfied on an ongoing basis. Thus, the Chief Investment Officer and External Managers shall monitor changing risk exposures.

To the extent an External Manager enters into (or offers to enter into) swaps on behalf of the Trust and the Plans, Staff must have a reasonable basis to believe that such External Manager has sufficient knowledge to evaluate the transaction and risks; is not subject to a statutory disqualification; is independent of the swap dealer or major swap participant with which it will enter into transactions; undertakes a duty to act in the best interests of the Trust and the Plans, as applicable; will make appropriate and timely disclosures to the Trust and the Plans; will evaluate, consistent with any guidelines provided by the Trust or the Plans, fair pricing and the appropriateness of the swap; will observe applicable restrictions on certain political contributions imposed by the United States Commodities Futures Trading Commission, the United States Securities and Exchange Commission, or any self-regulatory organization subject to the jurisdiction of such regulatory bodies; and will comply with the collateralization requirements of Arizona Revised Statutes § 35-1002(A), which provides that, if a non-governmental counterparty is not rated by a nationally recognized rating agency in one of the top two rating categories of the rating agency at the time the swap agreement is entered into, that counterparty shall collateralize its obligations under the swap agreement with securities or cash acceptable to the Trust or Plans.

3. Valuation of Holdings

External Managers employing derivative strategies and the Trust's custodian shall provide the Plans and the Trust with pricing policies, including a list of sources used to value the Plans' or the Trust's holdings. The Plans and the Trust should

be notified of any exceptions to these policies. The custodian is required to obtain prices independent of the External Manager or to notify the Plans and the Trust that independent prices are not available.

At least monthly, External Managers employing derivatives shall reconcile the valuations of all of their derivatives positions with the custodian.

4. Quarterly Reporting

Unless otherwise provided in its IMA, each External Manager using derivatives for the benefit of the Plans and Trust shall submit to the Plans and the Trust, within thirty days of the end of each quarter, a written report with the following information:

- a) A list of all derivative positions of the Plans and the Trust as of quarterend (and those terminated since the last report) including, without limitation, the related notional amount, the term and the rating of the related counterparty.
- b) An explanation of any significant pricing discrepancies between the External Manager and custodian bank.
- c) An explanation of any events of non-compliance with respect to any aspect or element of this Derivatives Policy, the Investment Policy or the IMA of said External Manager with the Plans and/or Trust.

5. Execution of Derivatives Documentation

Subject to the terms of this Derivatives Policy, the Investment Policy and any IMA governing an External Manager's contract with the Plans and/or Trust, an External Manager will be authorized to execute derivatives on behalf of a Plan or the Trust in connection with the applicable investment strategies authorized by the Plans or Trust for such External Manager. Derivatives executed by the Plans, the Trust or the External Managers (on behalf of the Plans or the Trust) must include all provisions required to be in contracts executed by the Plans or the Trust pursuant to Arizona law.

F. Guidelines for Use of Pooled or Commingled Investment Funds which Employ Derivatives

Mutual funds, hedge funds, CIFs, ETFs, unit trusts, private equity funds limited partnerships, limited liability companies and other types of commingled investment vehicles provide, under some circumstances, lower costs and better diversification than can be obtained with separately managed funds pursuing the same investment objectives. However, commingled investment vehicles cannot customize investment policies and guidelines to the specific needs of individual clients. The Plans and the Trust are willing to accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled

investment vehicles. Therefore commingled investment vehicles (including, without limitation, mutual funds, hedge funds, private equity funds, and venture capital funds (which may be in the form of limited partnerships, limited liability companies, unit trusts, CIFs or ETFs) are exempt from all policies specified above *unless* the Administrator concludes the commingled investment vehicle's use of derivatives is so inconsistent with the spirit of this Derivatives Policy that value to be gained by investment in the fund is outweighed by the risks of such investment.

G. Use of Derivatives by Business Development Corporations

In the discretion of the Chief Investment Officer and with the approval of the Administrator, the Trust may invest in business development corporations which employ derivatives that do not comply with the policies set forth in this Derivatives Policy.

Public Safety Personnel Retirement System

REQUIREMENTS FOR INTERNALLY-MANAGED PUBLIC EQUITIES PORTFOLIO

Adopted February 25, 2009 Revised: July 25, 2012 Revised: January 15, 2014

This <u>Appendix III</u> to the Investment Policy governs the requirements of the internally-managed publicly-traded equities portfolio of the Plans and Trust.

A. Chief Investment Officer's Authority

Subject to the Plans' and Trust's overall asset allocation limits and other provisions set forth in the Investment Policy and <u>Appendix I</u> thereto, the Chief Investment Officer is delegated authority to use the assets of the Plans and Trust to directly purchase and sell publicly-traded equity securities for the Plans and Trust and/or without consent of the Administrator, Investment Committee or Board, to invest in ETFs, mutual funds, CIFs, and unit trusts to build out the Trust's Internally Managed Public Equity Portfolio, subject to all other limitations described in the Plans' enabling legislation as well as the following guidelines and limitations.

B. Benchmarks

The performance of the internally-managed publicly-traded equities portfolio shall be determined by comparing performance to the following Benchmark(s):

U.S. Equities Russell 3000

International Equities MSCI ACWI Ex. U.S.

C. Derivatives

Unless otherwise consented to by the Administrator, the Chief Investment Officer and his/her Staff shall not employ derivatives (as defined in Appendix II to the Investment Policy) in the management of the Plans' or Trust's internally managed portfolios, including those portfolios described in this Appendix III, except that nothing shall preclude the Chief Investment Officer or his/her Staff from (i) purchasing ETFs, CIFs, mutual funds, unit trusts or other commingled investment vehicles of any kind for the Internally Managed Public Equity Portfolio which technically, might be characterized as derivatives because they have derivative-like exposures, or (ii) to use derivatives within approved portable alpha strategies. Derivatives also may be used in an Overlay if approved by the Administrator.

D. Composition

The Chief Investment Officer shall endeavor to have the Internally Managed Public Equity Portfolio be comprised of (i) ETFs and other ETF-like vehicles (such as CIFs, mutual funds, or unit trusts) that are diversified by geography, sector or industry and which shall be used to help "build out" the Trust's total equity exposure as well as (ii) externally managed passive exposures and externally managed active exposures (each in the form of commingled vehicles or separate accounts) in forms other than ETF-like structures. Externally managed investments not structured as mutual funds, CIFs, ETFs or unit trusts require the consent of the Administrator. All positions and all monthly transactions involving positions shall be reported to the Investment Committee and Board monthly.

E. Plan for Public Equities

Staff and the Fiduciary Consultant(s) shall regularly present a "Plan for Public Equities" to the Investment Committee and Board for consideration. This Plan for Public Equities shall be a directional document demonstrating how the total equity portfolio will be developed in the coming year(s). Staff's implementation decisions in transactions and in manager selection and allocation shall broadly track the Plan for Public Equities, with progress and positions reported to the Investment Committee on a monthly basis. Material departures from the Plan for Equities must be consented to by the Investment Committee and reported to the Board.

Public Safety Personnel Retirement System

REQUIREMENTS FOR THE INTERNALLY-MANAGED FIXED INCOME PORTFOLIO

Adopted: February 25, 2009 Revised: April 22, 2009 Revised: July 25, 2012 Revised: January 15, 2014 Revised: May 25, 2016

This <u>Appendix IV</u> to the Investment Policy governs the management of the internally-managed publicly-traded fixed-income portfolio of the Plans and Trust.

A. Chief Investment Officer Authority

Subject to the Plans' and Trust's overall asset allocation limits and other provisions set forth in the Investment Policy and <u>Appendix I</u> thereto, the Chief Investment Officer and External Managers are delegated authority to use the assets of the Plans and Trust to directly purchase and sell publicly-traded fixed-income securities for the Plans and Trust, and without consent of the Administrator, Investment Committee or Board, to invest in ETFs, mutual funds, CIFs, and unit trusts to build out the Trust's Internally Managed Fixed Income Portfolio, subject to all other limitations described in the Plans' enabling legislation, as well as the following guidelines and limitations:

B. Benchmarks

To the extent the internally-managed fixed income portfolio exceeds 5% of the total portfolio of the Trust, the performance of the internally-managed publicly-traded fixed income portfolio shall be determined by comparing performance to the following Benchmark: Barclays Capital Global Aggregate Index (or other appropriate benchmark as approved by the Investment Committee).

C. Aims

Fixed income investments should emphasize marketability, and be diversified by issuer, geography, strategy, sector and quality.

D. Types of Securities

Fixed Income holdings may be in diversified fixed-income based ETFs, CIFs, mutual funds, unit trusts or other commingled vehicles of any kind, including without limitation, limited partnerships and limited liability companies.

E. Concentration

Not more than 2% of the total assets of the Trust (at market value) shall be invested internally in bonds issued by any one institution, agency or corporation with the exception of bonds issued as direct obligations of, the U.S. Government, and bonds rated AAA and above and issued by any U.S. Agency.

F. Unrated Securities

Non-publicly-traded, nonrated fixed income securities may be held in the internally managed fixed income portfolio if the inclusion of such securities in the portfolio is authorized by the Administrator. The percentage of such securities as part of the internally managed fixed income portfolio shall be reported to the Investment Committee and Board monthly, in writing, by the Chief Investment Officer.

G. Derivatives

Unless otherwise authorized by the Administrator, the Chief Investment Officer and his/her Staff shall not employ derivatives in the management of the Plans or Trust's internally managed portfolios, including those portfolios described in this <u>Appendix IV</u>, except that nothing shall preclude the Chief Investment Officer or Staff from purchasing ETFs, CIFs, mutual funds and unit trusts for the Internally Managed Fixed Income Portfolio to build out such Portfolio, even if technically, these vehicles might be characterized as derivatives because they have derivative-like exposures.

Public Safety Personnel Retirement System

SECURITIES LENDING POLICY

Adopted: February 25, 2009 Revised: May 26, 2010 Revised: July 25, 2012 Revised: January 15, 2014

A. Scope

This Appendix V to the Investment Policy applies to all assets of the Trust eligible for loan by the Trust under a securities lending program.

B. Purpose

This Securities Lending Policy establishes rules governing the securities lending activities of the Trust, and applies to all of the Trust's portfolios. The objective of the Trust's securities lending program is to provide incremental income to the respective asset classes without undue risk of loss of principal or impediment of or to the Trust's managed accounts.

C. The Process

Securities brokers and commercial banks, among others, often have a need to "borrow" securities to cover securities "fails" (securities sold but not available for delivery), short sales, and option and arbitrage positions. Securities lending is conducted through openended "loan" agreements, which may be terminated on short notice by the lender to the borrower. The objective of such lending is to receive a relatively "safe" return in addition to the normal interest or dividends. The loans are typically collateralized by U.S. Government or federal agency securities, cash, or letters of credit, with each loan collateralized at a predetermined margin, depending upon the "type" of security lent (i.e., domestic or foreign securities). If the market value of the collateral falls below an acceptable level during the time the loan is outstanding, a margin call is made by the lender. In contrast, if the loan becomes over-collateralized because of appreciation of collateral or market depreciation of a loaned security, the borrower often has the opportunity to request a return of any excess margin. When a securities loan is terminated, the securities are returned to the lender and the collateral to the borrower.

Typically, financial institutions lend the securities of their customers held in custody. Pursuant to a securities lending agreement between a customer and its custodian, fees received on securities loans authorized by such agreement are divided between the lender institution/custodian and its customer which owns the securities. In situations involving cash collateral, part of the interest earned on the temporary investment of cash is returned to the borrower and the remainder is divided between the lender institution/custodian and the customer account that owns the securities.

D. Roles, Responsibilities and Reporting

1. The Board, Investment Committee and Administrator

The Administrator may engage the Trust's custodian(s) or other financial institution(s) to act as securities lending agent(s) to implement securities lending program(s) for the Trust. Each securities lending program shall be managed to gain an incremental return while protecting principal and not impeding operation of the Trust's managed accounts. The Investment Committee shall review the performance of the Trust's securities lending program quarterly upon receipt of a report about same from the Chief Investment Officer as provided in Section D(4) below. Annually, the Chief Investment Officer shall report the results of the Trust's securities lending program to the Investment Committee and Board.

2. Lending Agent

Each lending agent shall have discretionary authority to lend the Trust's securities in accordance with this Policy and the terms of the written securities lending agreement negotiated with the Trust. In acting as lending agent with discretionary authority to loan securities owned by the Trust, each lending agent shall acknowledge it is a fiduciary of the Trust. Further, each lending agent shall have written policies and procedures governing its securities lending program, and upon the request of the Chief Investment Officer of the Trust, shall explain these policies and procedures to the Chief Investment Officer and the Trust's counsel.

3. Fiduciary Consultant

The Fiduciary Consultant(s) shall review and comment upon this Policy and any guidelines for managing this Policy recommended by the Chief Investment Officer. Annually, the Fiduciary Consultant shall report the results of the Trust's securities lending program to the Board.

4. Chief Investment Officer

The Chief Investment Officer shall develop and strive to consistently improve this Policy and the Trust's securities lending program. The Chief Investment Officer shall also work with the Trust's counsel to negotiate with lending agents all applicable securities lending agreements, and ultimately, be responsible for the day-to-day administration of the Trust's securities lending program. The Chief Investment Officer shall monitor the performance of the Trust's securities lending program and report the results thereof to the Investment Committee quarterly, and annually to the Board. The Chief Investment Officer shall also monitor the risks associated with the Trust's securities lending program from data provided by the Trust's lending agents and report any material exceptions or concerns to the Administrator, Investment Committee and Board, as well as the Trust's legal counsel.

E. Risk Management

Securities lending programs are not risk free, and the Chief Investment Officer shall attempt to minimize the risks associated with implementation of the program using the following quantitative and qualitative constraints, as well as any others the Chief Investment Officer (and the lending agent(s)) may employ:

1. Cash Reinvestment Risk

A prime risk associated with securities lending is the risk that cash reinvestment assets will not be sufficient to cover the liabilities due the borrower or its broker. To mitigate such risk, the lending agent shall limit investment of cash collateral to the instruments referenced in Exhibit A attached hereto and shall manage the cash collateral in accordance with the guidelines specified in Exhibit A attached hereto In accordance with the guidelines set forth in Exhibit A attached hereto, the lending agents shall ensure that cash collateral is invested in a diversity of eligible investments to limit concentration exposure to any one asset or class of assets.

2. Borrower Risk

Another risk associated with securities lending is the risk that the borrower or borrowing broker will not return the security borrowed. This risk can be managed by the lending agent's regular monitoring of the amounts on loan to each borrower or borrowing broker and ensuring that excess collateral is held for each loan in the minimum amount of 102% of the daily market value for domestic securities and 105% of the daily market value for international securities, in each case plus interest for debt securities. These collateral amounts shall be reviewed daily and marked--to-market if necessary in order to maintain proper collateralization should there ever be a need to utilize this collateral to replace a security not returned by the borrower. In order to further control potential risk associated with securities lending, the lending agent shall conduct on-going credit reviews and set overall credit limits for its approved borrowers. In addition, the Trust may request that a lending agent completely restrict a borrower, limit exposure by dollar amount, or limit borrowing by a percentage. Collateral must be received by the lending agent simultaneously with delivery of each loaned security (DVP "delivery vs. payment"). Further, the Trust shall request that each lending agent indemnify the Trust for a borrower's failure to returned loaned assets or securities. The lending agent shall have written loan agreements with each borrower.

3. Liquidity Risk

Another risk associated with securities lending is that assets may be on loan when liquidity is needed. The Chief Investment Officer shall mitigate this risk by requiring that the Trust be entitled to terminate a securities loan at any time and recall any security on loan within a reasonable time. Further, the maximum percentage of lendable assets that may be on loan at any time shall not exceed 50% of the Trust's total lendable assets.

F. Further Limitations

1. Duration

The average days to reset the collateral investment portfolio shall not differ from the average maturity of the outstanding loans by more than 60 days.

2. Liquidity

To maintain liquidity, a minimum of 10% of the loan portfolio must be invested in overnight instruments.

3. Securities Lending Agreement

The Trust's securities lending agreement with any lending agent shall comply in all respects with this Securities Lending Policy and those other terms that the Trust's counsel and Chief Investment Officer deem appropriate in the circumstances. The Trust's securities lending agreement with any lending agent shall provide for no less than a market return to the Trust for its participation in the lending agent's securities lending program, with such a market determination to be made by the Chief Investment Officer in consultation with the Trust's independent investment consultant.

4. Voting Rights

The Trust shall be empowered to waive the right to vote any voting securities loaned to a borrower (and the right to participate in any dividend reinvestment program) or delegate to the borrower, for the duration of any securities loaned the borrower, its voting rights in such securities and right to participate in any dividend reinvestment program. Until such time as a loan of securities is terminated and such securities are returned to lending agent, a borrower shall have all incidents of ownership of the securities loaned, including, but not limited to, the right to transfer the securities to others; provided, however, that a borrower shall be obligated to the lending agent with respect to all distributions, including amounts equivalent to dividends, interest and other cash distributions pertaining to the securities.

EXHIBIT A to APPENDIX V

INVESTMENT OBJECTIVES AND POLICIES

A. Separate Account

Cash collateral received by the lending agent on behalf of the Trust shall be held and maintained in a separately managed Cash Collateral Account established and maintained by the lending agent for the Trust (the "Cash Collateral Account"), the assets of which shall be invested and reinvested in one or more of the "Approved Investments," and subject to the credit quality, concentration guidelines, maturity guidelines, and liquidity guidelines set forth below.

B. Affiliated Services

Lending agent and/or its affiliates of the lending agent may provide services with respect to Approved Investments, and may receive compensation at fair market rates with respect to these services, provided that the terms of such retention are no less favorable to the Trust than those terms that would have been obtained in a comparable arm's-length transaction with a third party.

C. Approved Investments

All Approved Investment, credit quality, concentration and liquidity guidelines set forth herein shall be applicable only at time of purchase (i.e., trade date). Approved Investments may have fixed or floating interest rate provisions. Floating rate notes will reset no less frequently than quarterly. Approved Investments may include the following types of securities:

1. Instruments

- a) Obligations of the U.S. Treasury as well as agencies and instrumentalities and establishments of the U.S. Government ("<u>U.S. Government</u> Securities").
- b) Repurchase transactions (including tri-party repurchase transactions) collateralized at 102% or greater at time of purchase and marked-to-market on each business day. Collateral will consist of one or more Approved Investments described herein without limitation on maturity, as well as publicly-traded equity securities listed on established exchanges.
- c) Obligations issued by the central government of any OECD country and any of their respective agencies, instrumentalities or establishments ("OECD Obligations").
- d) Obligations issued by so-called "Supranational Organizations," including but not limited to African Development Bank, Asian Development Bank,

Council of Europe, Eurofima, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, International Bank for Reconstruction and Development (World Bank), International Finance Corporation, and Nordic Investment Bank.

- e) Commercial paper, notes, bonds and other debt obligations (including funding agreements and guaranteed investment contracts), whether or not registered under the Securities Act of 1933, as amended.
- f) Certificates of deposit, time deposits and other bank obligations.
- g) Asset-backed securities, including asset-backed commercial paper.
- h) Shares of money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940, including affiliated funds of the Lending Agent. (These shares shall be deemed to have a final maturity of one business day for the purposes of the Maturity Guidelines in Section F.)
- i) Units of unregistered, collective investment vehicles sponsored or advised by the Lending Agent or an affiliate of the Lending Agent. (These units shall be deemed to have a final maturity of one business day for the purposes of the Maturity Guidelines in Section F.)

2. Currency

Shall be limited to the same currency in which the Cash Collateral being invested is denominated.

D. Credit Quality

- 1. Repurchase transaction counterparties must have executed a written repurchase agreement and they, or their parent company, must have a short term rating of at least A-2, P-2 or F2 or equivalent by at least one nationally recognized statistical rating organization ("NRSRO"). In the event a counterparty lacks the requisite credit rating but its parent has such a rating, the parent must guarantee the obligation of its subsidiary.
- 2. Obligations issued by 'Supranational Organizations' must be rated AAA or equivalent by at least one NRSRO.
- 3. OECD Obligations, bank obligations, commercial paper (including asset-backed commercial paper), notes, bonds and other debt obligations must be rated at least A-1, P-1 or F1 or equivalent by an NRSRO. Obligations rated by more than one NRSRO must be rated A-1, P-1 or F1 or equivalent by at least two NRSROs. Obligations that are not rated will be Approved Investments if the issuer of the obligation meets the above rating criteria.

- 4. Asset-backed securities (other than asset-backed commercial paper) must be rated AAA, Aaa or AAA by at least one of the following NRSROs: Standard & Poor's, Moody's or Fitch. Asset-backed securities (other than asset-backed commercial paper) rated by more than one of the foregoing NRSROs must be rated AAA, Aaa or AAA by at least two of: Standard & Poor's, Moody's and Fitch. Asset-backed securities (other than asset-backed commercial paper) that have only short term ratings must be rated A-1+, P-1 or F1+ by a NRSRO. Asset-backed securities (other than asset-backed commercial paper) that have only a short term rating from more than one NRSRO must be rated A-1+, P-1 or F1+ by at least two NRSROs.
- 5. Registered money market funds must be rated in the highest category available to such funds by one NRSRO.
- 6. U.S. Government Securities do not require a rating by a NRSRO.

E. Concentration Guidelines

- 1. Excluding U.S. Government Securities, concentration of any Approved Investment in the Cash Collateral Account will not exceed 5% per issuer.
- 2. A maximum of 25% of the Cash Collateral in the Cash Collateral Account may be invested in repurchase transactions with a single counterparty.

F. Maturity Guidelines

- 1. Approved Investments will have a maximum final maturity of 397 days, except U.S. Government Securities, which shall have a final maturity not exceeding 762 days.
- 2. The weighted average maturity of Approved Investments in the Cash Collateral Account (based on the shorter of final maturity or days to reset for floating rate obligations) shall not exceed 90 days.
- 3. The weighted average life of Approved Investments in the Cash Collateral Account based on final maturity shall not exceed 120 days.

G. Liquidity Guidelines

- 1. All Approved Investments shall be deemed to be liquid at time of purchase, with the exception of time deposits and repurchase agreements having a final maturity greater than 7 days, which shall be deemed to be illiquid for purposes hereof.
- 2. "Illiquid" Approved Investments shall not exceed 5% of the total amount of Approved Investments in the Cash Collateral Account.
- 3. No Approved Investment having a final maturity longer than one business day shall be made if, immediately after such investment, the total amount of Approved

- Investments in the Cash Collateral Account would have less than 10% of total assets maturing in one business day.
- 4. No Approved Investments other than Weekly Liquid Assets (as defined below) shall be made if, immediately after such investment, the Cash Collateral Account would have less than 30% of total assets invested in Weekly Liquid Assets. "Weekly Liquid Assets" are defined as cash, direct obligations of the U.S. Government (i.e., bills, bonds and notes), U.S. government agency discount notes with a remaining maturity of 60 days or less, and any other Approved Investments that will mature in, or have an unconditional put option of, five business days or less.

REQUIREMENTS FOR MANAGEMENT OF THE CREDIT OPPORTUNITY PORTFOLIO

Adopted: February 25, 2009 Revised: March 25, 2009 Revised: May 7, 2009 Revised: July 25, 2012 Revised: January 15, 2014 Revised June 25, 2014

A. Scope & Purpose

This <u>Appendix VI</u> to the Investment Policy applies to the Credit Opportunities investments of the Plans and Trust and provides the broad strategic framework for management of the Credit Opportunities investments allocation. Credit Opportunities investments should take advantage of extraordinary dislocations and conditions in credit markets that have more scope, scale and/or magnitude than fixed-income opportunities that are regularly available.

B. Investment Philosophy - Diversification

The Credit Opportunities investments program should predominantly use active external management strategies. Generally it is anticipated that credit market dislocations will be limited in duration. Accordingly the anticipated investment period for Credit Opportunities may be shorter than for other alternative investments. Since the extent and duration of a Credit Opportunities investment cycle may not be clear in advance, the Plans and Trust will seek to diversify their allocation by time and commit over multiple time horizons. Credit Opportunities investments will be diversified by External Manager and strategy to the extent possible, recognizing that there may be few opportunities available at any one time and that External Managers of Credit Opportunities may limit investors in terms of timing and total commitments. It is anticipated that the target allocation will likely change over a full credit cycle.

C. Investment Structures

Funding of the Credit Opportunities investments program will predominantly be in either closed-end or open-ended commingled investment funds.

1. Investment Vehicles

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual funds, hedge funds or other commingled vehicles, whether in the form of partnerships, limited liability companies, limited partnerships and or involving discretionary managers investing in partnerships, limited partnerships,

limited liability companies, mutual funds, hedge funds, ETFs, CIFs, unit trusts or other entities.

2. Co-Investment and Direct Placements

Some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities. Upon the consent of the Administrator in accordance with the procedures specified in Section IV(A) of the Investment Policy, the Chief Investment Officer may authorize the Plans or Trust to participate in these opportunities. Discretionary managers may exercise co-investment rights approved by the Administrator and Chief Investment Officer.

3. Derivatives

Investing in entities that purchase options, futures, swaps or derivative securities are contemplated within the Credit Opportunities allocation. The use of derivatives shall be governed by the Derivatives Policy contained within this Investment Policy or as otherwise provided in an External Manager's IMA.

D. Strategy Allocation

The Credit Opportunities investment program will endeavor to create a diversified substrategy allocation by diversifying among investments in residential mortgage-backed securities (<u>RMBS</u>), commercial mortgage-backed securities (<u>CMBS</u>), other types of asset-backed securities, various portions of corporate credit (including "bank loans", arbitrage amongst various portions of the capital structure, high yield debt, convertible securities, "distressed" corporate debt, and mezzanine loans), collateralized loan obligations (<u>CLO</u>), and other credit-sensitive strategies.

The Credit Opportunities Plan shall typically include allocations to opportunistic credit, relative value credit and distressed credit. There shall be no need to establish minimum percentages among these strategies since substantial credit dislocations may not exist in assets among all of these strategies at the same time and opportunities may be concentrated in specific strategies in any given time period.

E. The Credit Opportunities Plan

The Chief Investment Officer and the Specialist Consultant(s) for Credit Opportunities will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the Credit Opportunities portfolio. The Annual Plan will include a pacing analysis suggesting the number and size as well as the strategies of projected commitments for the Credit Opportunities portfolio over the succeeding 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Credit Opportunities portfolio.

F. Performance Objectives

Credit Opportunities investments are tactical in nature and, therefore, have a short to intermediate investment period followed by an appropriate term for investment returns to be realized. Performance will be evaluated on a gross-of-fees basis. The benchmark for the Credit Opportunities portfolio shall be the 50% BofA ML US High Yield BB-B Rated Constrained / 50% CSFB Fixed Income Arbitrage Index.

G. Risk Management

Credit Opportunities investment strategies do not lend themselves to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the significant risks with Credit Opportunities investments and method of control.

1. Liquidity

Credit Opportunities investments can be illiquid. Certain investments may have expected holding periods of between ten and twelve years. Private investments are typically held until maturity and selling prior to maturity results in a discount to fair value. Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits. Asset allocation exposure is controlled through the investment pacing described above. The Board has authority to change asset allocation targets and recognizes that lowering the Credit Opportunities target allocation may result in forced sales and increased exposure to liquidity risk. While some External Managers and strategies may have quarterly liquidity, they should not be considered as liquid as other strategies in the traditional portfolio.

2. Manager Concentration Risk – Fund Level

Not more than 3% of the Plans' and Trust's total assets should be allocated to any Credit Opportunities investment fund, measured at the date of the investment or the commitment date for closed-end funds.

3. Manager Concentration Risk Manager level

Firm risk is the exposure to an individual Credit Opportunities External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same firm and its affiliates. No more than 5% of the Trust's total assets should be allocated to any External Manager (or its affiliates) of any Credit Opportunities investment.

4. Leverage

Many underlying Credit Opportunities investment programs will utilize Leverage. The intent of the Plans and Trust is to not rely on External Managers employing high degrees of Leverage. It is the policy of the Plans and Trust to avoid any

individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

H. Roles and Responsibilities for the Credit Opportunities Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving the Credit Opportunities Investment Appendix and Annual Plan. The Administrator is responsible for approving each Credit Opportunity investment recommended by Staff, except as provided in Section IV(A)(2) of the Investment Policy.

2. Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending the Credit Opportunities Investment Policy Appendix, subsequent modifications to same, and the Credit Opportunities Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing Credit Opportunities and recommending specific opportunities to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy.

Due diligence on Credit Opportunity investments will be conducted by Staff, the Plans' and the Trust's legal counsel and/or Specialist Consultant(s). Monitoring of Credit Opportunities investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plans' and Trust's Custodian and the Specialist Consultant referenced in Section H(3) below; in accordance with the requirements of this Credit Opportunities Investment Policy Appendix. Notwithstanding Section H(1) above, so long as the Trust's maximum allocation for Credit Opportunities investments has not been invested with External Managers,, without the consent of the Administrator, Board or Investment Committee, the Chief Investment Officer may invest in ETFs, unit trusts, mutual funds, CIFs or other commingled investment vehicles to achieve diversified exposures consistent with the scope and purpose of Credit Opportunities.

3. Specialist Consultant for Credit Opportunities

The Trust shall engage one or more Specialist Consultant(s), to assist in managing Credit Opportunities investments. Specific responsibilities will be established with the selected Specialist Consultant(s) through contractual agreements, but will include working with Staff to develop the Credit Opportunities Annual Plan, conducting independent due diligence on recommended External Managers,

presenting finalist recommendations to the Investment Committee, and monitoring the on-going status of retained External Managers.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the Credit Opportunities portfolio are appropriately allocated to Credit Opportunities. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Plans' or Trust's Credit Opportunities investments so the Fiduciary Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

REQUIREMENTS FOR MANAGEMENT OF THE PRIVATE EQUITY PORTFOLIO

Adopted: February 25, 2009 Revised: August 26, 2009 Revised: July 25, 2012 Revised: January 15, 2014 Revised: June 25, 2014 Revised: May 25, 2016

A. Scope & Purpose

This <u>Appendix VII</u> to the Investment Policy applies to the Private Equity investments of the Plans and Trust, and is intended to provide the broad strategic framework for managing the Trust's Private Equity investments allocation. Private Equity investments are equity or debt (with equity participation) investments in assets that are generally not traded on public exchanges and may be illiquid in nature.

B. Investment Philosophy

The Private Equity investments program should seek attractive risk-adjusted return opportunities with a view towards diversification by manager, asset type, geography, strategy and vintage year. This will be accomplished predominantly using active external management strategies. The Plans and Trust will seek to diversify their allocation by making commitments over multiple vintage years. Private Equity investments will be diversified by External Manager and strategy recognizing that at times in the economic cycle, there may be few high quality opportunities available and that some of these opportunities may limit investors in terms of timing and total commitments. Staff will also consider the correlation of certain private equity strategies with factor exposures in the overall portfolio.

C. Investment Structures

Funding of Private Equity investments will predominantly be made through commitments to closed-end funds. These opportunities may be accessed via several alternative routes, including primary fund investment, secondary fund investment, funds of funds, and co-investment.

D. Investment Vehicles

This <u>Appendix VII</u> authorizes commitments to separately managed accounts or commingled accounts, including partnerships, limited liability companies, limited partnerships, unit trusts, CIFs, mutual funds, and discretionary managers investing in partnerships, limited partnerships, unit trusts, CIFs, mutual funds, limited liability

companies or other entities. Funds may be domiciled throughout the world, provided such domiciles do not conflict with specific Arizona statutes.

E. Co-Investment

Selectively, some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities. With the prior consent of the Administrator, and as part of the Trust and Plans' total commitment to specific funds, the Chief Investment Officer may authorize the Plans or Trust to participate in these opportunities.

F. Derivatives

Derivative securities may be utilized by External Managers in various Private Equity Investment strategies to trade/hedge credit risks, provide default protection, trade/hedge interest rate exposures, trade/hedge currency exposures and for other purposes as determined by the External Manager and provided for in the External Manager's IMA or as otherwise provided in Appendix II (Derivatives Policy).

G. Strategy Allocation

The Private Equity Investment program will endeavor to create a diversified sub-strategy allocation by investing across all stages of venture capital: buy-outs, mezzanine debt and such other equity vehicles as meet the risk/return objectives. Diversification within the class shall never supersede the return objective as a basis for approving any particular investment. The recommended allocation among strategies for these investments is:

Strategy	Target as a % of Private Equity	Minimum %	Maximum %
Buy-out	65%	30%	80%
Venture Capital	20%	10%	50%
Growth Equity	10%	0%	25%
Mezzanine	5%	0%	20%

Where indicated above, a zero absolute minimum percentage in a particular strategy recognizes that attractive Private Equity investments may not exist in all sub-asset classes at the same times and that the opportunities may be concentrated in specific strategies in any given time period. The percentages above refer to the target allocation relative to the fair market value of invested capital in Private Equity investments.

1. International Private Equity

International Private Equity investments present opportunities for diversification and for access to managers, markets, and economies that can present attractive risk adjusted returns. The Private Equity Investment program should seek to prudently access these markets and opportunities. However, since the Plans' liabilities are U.S. dollar denominated and since the U.S. Private Equity market is the largest regional market, no more than 40% of the Private Equity Portfolio should be invested in funds pursuing non-U.S. strategies.

2. The Private Equity Plan

The Chief Investment Officer and the Specialist Consultant(s) for Private Equity will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the Private Equity Investment portfolio. The Annual Plan will include a pacing analysis suggesting the number and size as well as the strategies of projected commitments for the Private Equity Investment portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Private Equity Investment portfolio.

H. Performance Objectives

Private Equity investments should have higher risk/return characteristics than the opportunities that are regularly available in the publicly-traded markets to compensate for the lack of liquidity. Private Equity investments are tactical in nature and, therefore, have an intermediate investment period followed by an appropriate term for investment returns to be realized. Performance will be evaluated on a net basis. The program, when fully developed, is expected to generate sufficient returns in excess of the public markets to compensate for the risk and illiquidity of Private Equity investments. For fiscal year 2012 through 2013 and thereafter, the benchmark to be used for the target portfolio shall be the Russell 3000 plus 100 bps, which benchmark shall be reviewed annually at the April Board and Investment Committee meetings. Over longer periods of time it is expected that the returns of the Private Equity investments portfolio will outperform the private equity returns for the median public pension system (with over \$1 billion in total assets under management) or comparable universe.

I. Risk Management

Private Equity Investment strategies do not lend themselves to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the significant risks with Private Equity investments and methods of attempting to control such risk.

1. Liquidity

Private Equity investments are illiquid. Most commitments have expected holding periods of between ten to twelve years. Private Equity investments are typically expected to be held until maturity, and selling prior to maturity normally results in a significant discount to fair value. Liquidity risk will be managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits. Asset allocation exposure will be controlled through cash-flow planning, which will lead to the investment pacing plan described in the Annual Plan. The Board has authority to change asset allocation targets and recognizes that lowering the Private Equity Investment target or maximum allocation may result in forced sales and increased exposure to liquidity risk.

2. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of External Managers in the Private Equity Investment program. Both will be controlled primarily by careful External Manager selection and comprehensive due diligence.

a) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle will be controlled by limiting the commitment size to a specific investment vehicle.

b) Manager Concentration Risk – Fund Level

Not more than 2.5% of the Plans' and Trust's total assets should be committed to any individual Private Equity Investment fund, measured at the date of commitment.

3. Firm Risk

Firm risk is the exposure to an individual External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same External Manager and its affiliates. The maximum commitment to any External Manager of Private Equity and/or its affiliates should be 25% of the Plans' and Trust's Private Equity assets (total active commitments), measured at the time of commitment.

4. Currency

The Private Equity Investment program accepts the currency risks consistent with the geographic constraints of the investment opportunity, which will be long-term and incapable of being forecast with any precision. Private Equity investments generally do not hedge currency risk and the Private Equity Investment program will not implement currency hedges.

5. Geography

Geographic risk is controlled through a long-term international target exposure. Global opportunities generally indicate geographic limits and exposure will be attributed and monitored accordingly. The geographic risk will be controlled and detailed in the Annual Plan.

6. Vintage Year Risk

Vintage year risk is driven by the fact that the year of first closing or capital drawdown is a key factor in determining the performance of Private Equity investments. The risk that the under-performance of the group of commitments made in any particular vintage year will impact a portfolio can be reduced by diversification of commitments across vintage years. The Annual Plan controls the short and long-term investment pacing that minimizes vintage year risk while achieving targeted exposure. Secondary opportunities may be pursued to gain prior vintage year exposure so long as such investments do not interfere with the overall goal of superior risk adjusted returns.

7. Leverage

Many underlying Private Equity funds will utilize Leverage. The intent of the Plans and Trust is to not rely on External Managers employing high degrees of Leverage. It is the policy of the Plans and Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

J. Roles and Responsibilities for the Private Equity Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this Private Equity Investment Policy Appendix and Annual Plan. The Administrator is responsible for evaluating and consenting to each commitment to an External Manager managing a Private Equity Investment, except as provided in Section IV(A)(2) of the Investment Policy.

2. Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this Private Equity Investment Policy Appendix VII, subsequent modifications to same, and the Private Equity Investment Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing Private Equity Investment opportunities and recommending specific opportunities to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. Due diligence on Private Equity investments will be

conducted by Staff, the Plans' and the Trust's legal counsel and/or Specialist Consultant(s). Monitoring of Private Equity investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plans' and Trust's custodian and the investment consultant(s) referenced below; in accordance with the requirements of this Private Equity Investment Appendix VII. Notwithstanding Section J(1) above, so long as the Trust's maximum allocation for Private Equity investments has not been invested with External Managers, the Chief Investment Officer may invest in ETFs, CIFs, unit trusts, mutual funds or other commingled investment vehicles to achieve diversified exposures consistent with the scope and purpose of this Private Equity Investment Appendix VII which serve as proxies for "Private Equity like" exposure, without first obtaining consent for same from the Administrator, Board or Investment Committee.

3. Specialist Consultant for Private Equity

The Trust shall engage one or more Specialist Consultant(s), to assist in a non-discretionary manner, in the management of the Private Equity Investment program. Specific responsibilities will be established with the Specialist Consultant(s) through contractual agreements, but may include working with Staff to develop a Private Equity Investment program, developing the Private Equity Annual Plan and pacing models, conducting independent due diligence on recommended External Managers, presenting recommendations to the Administrator, Board and Investment Committee, as applicable, and monitoring the on-going status of retained External Managers and current investments.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant(s) shall advise the Administrator whether specific investments recommended for inclusion in the Private Equity Investment portfolio are appropriately allocated to Private Equity investments. The Chief Investment Officer shall ensure that the Fiduciary Consultant(s) have complete access to information regarding the Plans' or Trust's Private Equity investments, insofar as such access does not breach any confidentiality obligations so that the Fiduciary Consultant(s) can prepare quarterly performance reports for presentation to the Investment Committee, Board and the Chief Investment Officer.

REQUIREMENTS FOR MANAGEMENT OF THE REAL ASSETS PORTFOLIO

Adopted: February 25, 2009 Revised: April 22, 2009 Revised: July 25, 2012 Revised: January 15, 2014 Revised: June 25, 2014

A. Scope & Purpose

This <u>Appendix VIII</u> to the Investment Policy applies to the Real Assets investments of the Trust. Real Assets typically exhibit low correlation to equities and fixed income markets and provide diversification benefits to the overall investment portfolio. Real Assets also provide inflation-adjusted or positive "real" return. The inflation protection provided by real asset investments can help the overall investment portfolio meet liabilities during periods of rising inflation.

B. Investment Philosophy - Diversification

The Real Assets investments program should predominantly use active external management strategies to implement the individual sub-asset class mandates. Real Assets investments will be diversified by External Manager and strategy within the ranges provided for in this <u>Appendix VIII</u>. Real Assets External Managers may limit investments in terms of timing and total commitments. This should be considered in the pacing of Real Assets commitments. Since the extent and duration of interest rate/inflation cycles may not be clear in advance, the Trust will also seek to diversify its allocation to Real Assets by investment timeframe, where appropriate. To maintain some inflation protection, the Trust will normally seek to maintain a minimum level of exposure to the Real Asset class across most market and interest rate cycles.

C. Investment Structures

Funding of the Real Assets investments program may be in a number of different structures, including closed-end and open-ended funds. Currency and commodity management vehicles are included within the Real Assets classification.

D. Investment Vehicles

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual funds, hedge funds or other commingled vehicles, whether in the form of partnerships, limited liability companies, limited partnerships and or involving discretionary managers investing in partnerships, limited partnerships, limited liability companies, mutual funds, hedge funds, ETFs, CIFs, unit trusts or other entities. This

Policy also authorizes investment in Exchange Traded Notes (<u>ETNs</u>), principal protected notes, individual securities and all other investment vehicles authorized by law.

E. Co-Investment and Direct Placements

Some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities that reduce or eliminate management fees and/or carried interest. With the consent of the Administrator, the Chief Investment Officer may authorize the Trust to participate in these opportunities. External Managers may exercise discretionary co-investment rights within an investment as approved by the Administrator and Chief Investment Officer and as governed by the investment's governing agreement or IMA.

F. Derivatives

Investing in entities that purchase options, futures, swaps, swaptions or other derivative securities are contemplated within the Real Assets allocation. The use of derivatives shall be governed by each External Manager's specific IMA or as otherwise provided in <u>Appendix II</u> (Derivatives Policy) contained within this Investment Policy.

G. Strategy Allocation

The Real Assets investment program will endeavor to create a diversified sub-strategy allocation by diversifying among investments in core capital assets, commodities, currency, infrastructure, timber, and TIPS/inflation protected bonds. The recommended allocation among strategies for these investments is:

Real Assets Investment Strategy	Target Allocation As % of Real Assets	Minimum %	Maximum %
Core Capital Assets	30%	0%	40%
Commodities	20%	0%	75%
Infrastructure	30%	0%	40%
Timber	20%	0%	30%

The use of no absolute minimum percentages among strategies recognizes the fact that these investments may be structured with limited liquidity or in closed end fund structures where there may be a commitment but no initial investment. Additionally, there may also be times when the opportunities in Real Assets may be concentrated within specific strategies. The percentages above refer to the total allocation to Real Assets by the Trust.

1. The Real Assets Plan

The Chief Investment Officer and the Specialist Consultant(s) for Real Assets will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the Real Assets Investment portfolio. The Annual Plan will include a pacing analysis suggesting the number and size as well as the strategies of projected commitments for the Real Assets portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Real Assets investment portfolio.

2. Performance Objectives and Benchmarks

Real Assets investments are meant to generate a real return (a return above the level of inflation during the investment term) that will serve as a diversifier for the Trust's entire portfolio during time periods when inflation increases leading to revaluations of traditional public market securities. The long-term benchmark for the Real Assets portfolio shall be the *Consumer Price Index (CPI)* +2.0%. In the short-term, the Trust may employ a strategy-weighted proxy index. Real Assets are an emerging class of investments and are subjective as to their composition across funds. Therefore, there is no clearly defined asset class universe with which to compare the Real Assets portfolio. Individual manager objectives will be addressed in the IMA of each External Manager. Performance will be evaluated on a gross-of-fees basis.

H. Risk Management

Real Assets investment strategies do not lend themselves to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks with Real Assets investments and possible methods of control.

1. Liquidity

Real Assets investments can be illiquid. Certain investments may have expected holding periods of ten years or more. Total liquidity risk in Real Assets should be minimized by vintage year and fund life diversification and by investment pacing. A pacing model in Real Assets should be reviewed by the Chief Investment Officer for adequacy at least annually. While some managers and strategies in Real Assets may have quarterly liquidity, they should not usually be considered as liquid as other assets in the total portfolio.

⁴ CPI for any given period shall be the consumer price index initially reported by the U.S. Bureau of Labor Statistics without later restatement or adjustment.

2. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of managers in the Real Assets investment program.

a) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle is controlled by limiting the commitment size to a specific investment and the diversification of the assets underlying that investment.

b) Manager Concentration Risk – Fund Level

Not more than 3% of the Trust's total assets should be allocated to any Real Assets investment, measured at the date of the investment or the commitment date for closed-end funds.

3. Firm Risk

Firm risk is the exposure to an individual Real Assets External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same External Manager and its affiliates. The maximum allocation to any alternative External Manager should be 5% of the Trust's assets measured at the time of investment, unless specifically agreed by the Administrator. Any Real Assets investment should not exceed 20% of any underlying External Manager's total amounts under management, unless specifically agreed by the Administrator.

4. Leverage

Many underlying Real Assets investment programs will utilize Leverage. The intent of the Plans and Trust is to not rely on External Managers employing high degrees of Leverage. It is the policy of the Plans and Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

I. Roles and Responsibilities for the Real Assets Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this Real Assets Appendix and the Annual Plan. The Administrator is responsible for evaluating and consenting to each Real Assets investment recommended by Staff, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. The Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this Real Assets Investment Policy Appendix VIII, subsequent modifications to same, and the Real Assets Investment Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing Real Assets and recommending specific opportunities for same to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. diligence on Real Assets investments will be conducted by Staff, the Plans' and the Trust's legal counsel and/or Specialist Consultant(s). Monitoring of Real Assets investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plans' and Trust's custodian and the Specialist Consultant referenced in Section I(3) below; in accordance with the requirements of this Real Assets Appendix. Notwithstanding Section I(1) above, so long as the Trust's maximum allocation for Real Assets investments has not been invested with External Managers, the Chief Investment Officer may invest in TIPS, ETFs, unit trusts, mutual funds, CIFs and other commingled investment vehicles with Real Asset-type exposures to achieve temporary diversified exposures which serve as proxies for Real Asset exposures, without first obtaining the consent of the Administrator, Board or Investment Committee.

3. Specialist Consultant for Real Assets

The Trust shall engage one or more Specialist Consultants to assist in managing the Real Assets investment program. Specific responsibilities will be established with the Specialist Consultant(s) through contractual agreements, but will include working with Staff to develop a Real Assets investment program and the Annual Plan, conducting independent due diligence on recommended External Managers, presenting finalist recommendations to the Investment Committee, and monitoring the on-going status of retained managers. The investment program for Real Assets shall be evaluated annually by the Chief Investment Officer.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the Real Assets portfolio are appropriately allocated to Real Assets. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Trust's Real Assets investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

REQUIREMENTS FOR MANAGEMENT OF THE REAL ESTATE PORTFOLIO

Adopted: February 25, 2009

Revised: May 27 2009 Revised: July 25, 2012 Revised: January 15, 2014 Revised: June 25, 2014 Revised: May 25, 2016

A. Scope & Purpose

This <u>Appendix IX</u> to the Investment Policy applies to the Real Estate investments of the Plans and Trust and provides the broad strategic framework for managing the Trust's real estate allocation. Real Estate investments are characterized by their relationship to real property and may include equity or debt participation.

B. Investment Philosophy

Real Estate investments should seek attractive risk adjusted return opportunities with a view toward diversification by manager, asset type, geography, strategy and vintage year. Real Estate managers may limit investors in terms of timing and total commitments. This should be considered in the pacing of Real Estate commitments.

C. Investment Structures

Funding of the Real Estate investments program may be in a number of different structures including joint ventures, limited partnerships, limited liability companies, closed-end funds, open-ended funds, commingled accounts (including unit trusts) and separate account structures.

D. Investment Vehicles

This Appendix IX authorizes commitments to separately managed accounts or commingled accounts (in the form of partnerships, limited liability companies, limited partnerships or joint ventures) and discretionary managers investing in partnerships, limited partnerships, limited liability companies or other commingled vehicles such as mutual funds, hedge funds, ETFs, CIFs and unit trusts. Funds may be domiciled throughout the world, provided that such domiciles do not conflict with specific Arizona statutes.

E. Co-Investment and Direct Placements

Some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities that reduce or eliminate management fees and/or carried interest. With the consent of the Administrator

(or Investment Committee) as specified in Section IV(A) of the Investment Policy, the Chief Investment Officer may authorize the Trust to participate in these opportunities. Discretionary managers may exercise co-investment rights within an investment so long as such co-investment has been approved by the Chief Investment Officer and is otherwise compliant with an External Manager's IMA.

F. Derivatives

Derivative securities may be utilized by External Managers in various Real Estate Investment strategies to trade/hedge credit risks, provide default protection, trade/hedge interest rate exposures, trade/hedge currency exposures and for other purposes as determined by the External Manager and provided for in the External Manager's IMA or pursuant to Appendix II Derivatives Policy.

G. Strategy Allocation

The Real Estate investment program will endeavor to create a diversified sub-strategy allocation by diversifying among investments in commercial core income producing, value add, and opportunistic investments as well as real estate project credit (non-securitized real estate lending and participating debt instruments), and residential properties. The residential category will initially be composed of the Trust's legacy residential joint venture projects. The recommended allocation among strategies for these investments is:

Real Estate Investment Strategy	Target Allocation As % of Real Estate	Minimum %	Maximum %
Core Income Producing	10%	0%	40%
Value Add	30%	0%	40%
Opportunistic	40%	0%	60%
Real Estate Mortgage Credit	10%	0%	20%
Joint Venture Residential	10%	0%	50%

The need for no absolute minimum percentages among strategies recognizes the fact that these assets are inherently illiquid and that these strategies tend to be cyclical over business and economic cycles. Opportunities may not exist in each asset strategy in proportion to the target allocation and the opportunities may be concentrated in specific strategies in any given time period. The percentages above refer to the total allocation to Real Estate investments.

The Real Estate Mortgage Credit allocation represents direct lending programs and trading strategies involving mortgage loans and/or mortgage loan securities that have a significant real estate component as opposed to debt instruments issued by real estate

entities and structured products that would be purchased within the fixed income portfolio or the credit opportunities portfolio if stressed.

The Joint Venture Residential allocation is designed to capture the Trust's legacy residential joint venture assets that will be managed towards exits in the future. It is envisioned that these assets will be a diminishing portfolio component to 10% or less prudently over time. Notwithstanding the foregoing, and except for follow on investments for the Trust's legacy joint venture portfolio, from January 15, 2014 forward, the Trust shall not enter into new Joint Venture real estate investments with External Managers who are real estate developers (as opposed to real estate private equity or hedge fund managers).

1. International Exposure

As Real Estate Investment opportunities occur around the globe, investments may be undertaken in many different markets in order to create geographic diversification of the portfolio holdings as well as to target attractive risk adjusted returns in markets that may have higher rates of growth as compared to domestic opportunities. International Real Estate investments generally have higher risk levels when compared to domestic investments, when taking into account currency, sovereign risk and contract law. In recognition of this, the Trust's geographic exposure to Real Estate investments is limited as follows:

Geographic Region	Minimum %	Maximum %
North America	40%	100%
Europe	0%	40%
Asia	0%	30%
Other	0%	20%

2. Annual Plan for Real Estate

The Chief Investment Officer and the Specialist Consultant(s) for Real Estate will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the Real Estate investment portfolio. The Annual Plan will include a pacing analysis suggesting the number and size as well as the strategies of projected commitments for the Real Estate portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Real Estate investment portfolio.

G. Performance Objectives

Real Estate investments are tactical in nature and, therefore, have an intermediate investment period followed by an appropriate term for investment returns to be realized. Performance will be evaluated on a net basis. The benchmark for the Real Estate portfolio shall be the *NCREIF Property Index (NPI)* produced by the National Council of Real Estate Investment Fiduciaries (NCREIF). Over longer periods of time it is expected that the returns of the Trust's real estate returns will outperform the real estate returns for the median public pension system (with over \$1 billion in total assets under management).

I. Risk Management

Real Estate investment strategies do not lend themselves to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks with Real Estate investments and possible methods of control.

1. Liquidity

Real Estate investments are illiquid. Most commitments have expected holding periods of between five to twelve years. These investments are typically expected to be held until maturity and selling prior to maturity normally results in a significant discount to fair value. Liquidity risk will be managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits. Asset allocation exposure will be controlled through cash-flow planning which will lead to the investment pacing plan described in the Annual Plan. The Board has authority to change asset allocation targets and recognizes that lowering the Real Estate target allocation may result in forced sales and increased exposure to liquidity risk.

2. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of External Managers in the Real Estate investment program.

a) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle is controlled by limiting the commitment size to a specific investment and the diversification of the assets in that investment.

b) Manager Concentration Risk – Fund Level

With the exception of the Trust's legacy relationship currently with the Desert Troon Companies, not more than 5% of the Trust's total assets should be allocated to any External Manager's investment fund, measured at the date of the investment or the commitment date for closed-end funds.

3. Firm Risk

Firm risk is the exposure to an individual Real Estate investment firm and is controlled by limiting the maximum commitment to funds actively managed by the same firm and its affiliates. With the exception of the Trust's legacy relationship currently with the Desert Troon Companies, the maximum commitment to any External Manager of Real Estate assets and/or its affiliates should be 25% of the Trust's Real Estate allocation, measured at the time of commitment.

4. Currency

The Real Estate Investment program accepts the currency risks consistent with the geographic constraints of the investment opportunities, which will be long-term in nature and incapable of being forecast with any precision. Real Estate investments may or may not hedge currency risk and the Real Estate program will not implement currency hedges.

5. Geography

Geographic risk is controlled through a long-term international target exposure within the limits prescribed above and this exposure will be monitored and reported accordingly.

6. Vintage Year Risk

Vintage year risk is driven by the fact that the year of first closing or capital drawdown is a key factor in determining the performance of Real Estate investments. The risk that the under-performance of the group of commitments made in any particular vintage year will severely impact a portfolio can be reduced by diversification of commitments across vintage years. The Annual Plan controls the short and long-term investment pacing that minimizes vintage risk while achieving targeted exposure. Secondary opportunities may be pursued to gain prior vintage year exposure so long as such investments do not interfere with the overall goal of superior risk adjusted returns.

7. Leverage

Many underlying Real Estate Investment programs will utilize Leverage. The intent of the Plans and Trust is to not rely on managers employing high degrees of Leverage. It is the policy of the Plans and Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

J. Roles and Responsibilities for the Real Estate Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving the Real Estate Investment Policy Appendix IX and Annual Plan. The Administrator is responsible for consenting to each Real Estate Investment, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending the Real Estate Investment Policy Appendix IX, subsequent modifications to same, and the Real Estate Investment Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing Real Estate investments and recommending specific opportunities to the Administrator, except as otherwise provided in Section IV(A)(2) of the Investment Policy. Due diligence on Real Estate investments will be conducted by Staff, the Plan's and Trust's legal counsel and/or Specialist Consultant(s). Monitoring of Real Estate investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plan's and Trust's custodian and the Specialist Consultant referenced in Section J(3) below; in accordance with the requirements of this Real Estate Investment Policy Appendix IX. Notwithstanding Paragraph J(1) above, so long as the Trust's maximum allocation for Real Estate investments has not been invested with External Managers, the Chief Investment Officer may invest in ETFs, unit trusts, CIFs, mutual funds and other commingled investment vehicles with Real Estate type exposures to achieve temporary diversified exposures which serve as proxies for Real Estate exposures without first obtaining consent for same from the Administrator, Board or Investment Committee.

3. Specialist Consultant – Real Estate

The Trust shall engage one or more Specialist Consultants to assist in a non-discretionary manner, the managing of the Real Estate Investment program. Specific responsibilities will be established with the Specialist Consultant(s) through contractual agreements, but may include working with Staff to develop a Real Estate Investment program and Annual Plan, conducting independent due diligence on recommended External Managers, presenting recommendations to the Administrator, Board and Investment Committee, and monitoring the ongoing status of retained External Managers, including performance reporting.

4. Monitoring, Allocation and Reporting by the Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the Real Estate portfolio are appropriately allocated to Real Estate. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the

Plan's or Trust's Real Estate investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee, Board and to the Chief Investment Officer.

REQUIREMENTS FOR MANAGEMENT OF THE GLOBAL TACTICAL ASSET ALLOCATION STRATEGY

Adopted: October 22, 2014

A. Scope & Purpose

This <u>Appendix X</u> to the Investment Policy applies to the Global Tactical Asset Allocation ("<u>GTAA</u>") investments of the Trust. GTAA is a top-down investment strategy that attempts to tactically allocate assets among a wide variety of global asset sets. The strategy focuses on global opportunities in the markets rather than on individual security selection.

Many institutional investment portfolios rely on long term asset allocations which tend to remain somewhat static regardless of market conditions. The GTAA managed portion of a portfolio is dynamic and responsive to global market movements, providing an opportunity to add value to portfolios by incorporating dynamic strategies. GTAA selects investments that capitalize on performance differentials between asset classes, currencies, They avoid or "short" negative performance situations and move and geographies. allocations to situations that are poised to outperform. The derivative instruments used in GTAA are often liquid and less expensive, which helps keep trading costs low. The analysis and decision making involved in GTAA is often focused on cross-market comparisons, which differ from comparison of securities within given markets. Accordingly, GTAA can be a good diversifier, particularly within an alpha portfolio. GTAA strategies can provide the Trust with a series of exposures that may not otherwise be prevalent in its portfolios. Managing these exposures provides an opportunity for the generation of returns that share low correlations with other sources of active return, and they can also be expected to lead to more reliable added value.

B. Investment Philosophy - Diversification

The GTAA investments program should predominantly use active external management strategies to implement the individual sub-asset class mandates. GTAA investments will be diversified by External Manager and strategy within the ranges provided for in this Appendix X. GTAA External Managers may limit investments in terms of timing and total commitments. This should be considered in the pacing of GTAA commitments. To maintain some dynamic asset protection and to retain a non-correlative position to the equity markets, the Trust will normally seek to maintain a minimum level of exposure to the GTAA asset class across most market and interest rate cycles.

C. Investment Structures

Funding of the GTAA investments program may be in a number of different structures, including closed-end and open-ended funds. Currency and commodity management vehicles are included within the GTAA assets classification.

D. Investment Vehicles

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual funds, hedge funds or other commingled vehicles, whether in the form of partnerships, limited liability companies, limited partnerships and or involving discretionary managers investing in partnerships, limited partnerships, limited liability companies, mutual funds, ETFs, CIFs, unit trusts or other entities.

E. Co-Investment and Direct Placements

Some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities that reduce or eliminate management fees and/or carried interest. With the consent of the Administrator, the Chief Investment Officer may authorize the Trust to participate in these opportunities. External Managers may exercise discretionary co-investment rights within an investment as approved by the Administrator and Chief Investment Officer and as governed by the investment's governing agreement or IMA.

F. Derivatives

Investing in entities that purchase options, futures, swaps, swaptions or other derivative securities are contemplated within the GTAA assets allocation. The use of derivatives shall be governed by each External Manager's specific IMA or as otherwise provided in Appendix II (Derivatives Policy) contained within this Investment Policy.

G. Strategy Allocation

The GTAA investment program will endeavor to create a diversified allocation by diversifying among managers which focus on different aspects of the markets, as well as managers whose strategies vary from one another and also vary geographically.

1. The GTAA Plan

The Chief Investment Officer and the Specialist Consultant(s) for GTAA will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the GTAA investment portfolio. The Annual Plan will include an analysis suggesting the number and size as well as the strategies of projected commitments for the GTAA portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the GTAA investment portfolio.

2. Performance Objectives and Benchmarks

GTAA investments are meant to generate a real return (a return above the level of inflation during the investment term) that will serve as a diversifier for the Trust's entire portfolio during time periods when changing inflation levels lead to revaluations of traditional public market securities. The long-term benchmark for the GTAA portfolio shall be 3 month LIBOR plus 3%. GTAA assets are an emerging class of investments and are subjective as to their composition across funds. Therefore, there is no clearly defined asset class universe with which to compare the GTAA portfolio. Individual manager objectives will be addressed in the IMA of each External Manager. Performance will be evaluated on a net-of-fees basis.

H. Risk Management

In addition to traditional quantitative measures of risk such as standard deviation and benchmark tracking error, GTAA risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks with GTAA investments and possible methods of control.

1. Liquidity

GTAA investments are usually liquid, with weekly holding periods. Total liquidity risk in GTAA should be minimized by selecting managers who optimize liquidity and generally avoid long term commitments.

2. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of managers in the GTAA investment program.

a) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle is controlled by limiting the commitment size to a specific investment and the diversification of the assets underlying that investment.

b) Manager Concentration Risk – Fund Level

Subject to any total portfolio manager constraints, no single GTAA investment, measured at the date of the investment (or the commitment date for closed-end funds) shall exceed the target weight for the GTAA asset class.

3. Firm Risk

Firm risk is the exposure to an individual GTAA External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same External Manager and its affiliates. The maximum allocation to any

GTAA External Manager should be 7% of the Trust's assets measured at the time of investment, unless specifically agreed by the Administrator.

4. Leverage

Many underlying GTAA investment programs will utilize Leverage. The intent of the Trust is to not rely on External Managers employing high degrees of Leverage. It is the preference of the Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

I. Roles and Responsibilities for the GTAA Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this GTAA Appendix X and the Annual Plan. The Administrator is responsible for evaluating and consenting to each GTAA investment recommended by Staff, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. The Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this GTAA Investment Policy Appendix X, subsequent modifications to same, and the GTAA Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing the GTAA program and recommending specific opportunities for same to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. Due diligence on GTAA investments will be conducted by Staff, the Plans' and the Trust's legal counsel and/or Specialist Consultant(s). Monitoring of GTAA investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plans' and Trust's custodian and the Specialist Consultant referenced in Section I(3) below; in accordance with the requirements of this GTAA Appendix. Notwithstanding Section I(1) above, so long as the Trust's maximum allocation for GTAA investments has not been invested with External Managers, the Chief Investment Officer may invest in TIPS, ETFs, unit trusts, mutual funds, CIFs and other commingled investment vehicles with GTAA-type exposures to achieve temporary diversified exposures which serve as proxies for GTAA exposures, without first obtaining the consent of the Administrator, Board or Investment Committee.

3. Specialist Consultant for GTAA

The Trust shall engage one or more Specialist Consultants to assist in managing the GTAA investment program. Specific responsibilities will be established with the Specialist Consultant(s) through contractual agreements, but will include working with Staff to develop a GTAA investment program and the Annual Plan, conducting independent due diligence on recommended External Managers, presenting finalist recommendations to the Investment Committee, and monitoring the on-going status of retained managers. The investment program for GTAA shall be evaluated annually by the Chief Investment Officer.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the GTAA portfolio are appropriately allocated to GTAA. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Trust's GTAA investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

REQUIREMENTS FOR PROXY VOTING

Adopted: August 26, 2009 Revised: July 25, 2012 Revised: January 15, 2014

A. Scope and Purpose

This <u>Appendix XI</u> to the Investment Policy applies to the proxy voting policies for the publicly-traded equity investments of the Trust. This policy provides the broad framework for the voting of proxies for both internally and externally managed equity investments.

B. Proxy Voting Philosophy

Proxies are to be voted consistent with the economic interests of the Trust and the underlying Plans. The economic interest of the Trust is to maximize the total return earned for each investment undertaken consistent with the Investment Policy.

C. Specific Voting Guidelines

There are specific issues that recur annually across many firms for which the Trust has developed the following positions, which may be amended from time to time by the Board. Proxy voting shall be administered in such a way as to seek to achieve the following objectives regarding these issues.

1. Independent Board of Directors

Corporate boards should be comprised largely of independent directors in order to provide an objective outside perspective as to management's effectiveness and to constrain management to work in the best interest of the firm's shareholders. Proxy voting shall be conducted so as to seek to achieve greater than 75% independent board member composition. In addition, all members of a firm's audit, nominating, and compensation committees should be independent of management.

2. Separation of Chairman and Chief Executive Officer

The positions of the Chairman of the Board and the Chief Executive Officer should be segregated so that the Chairman can act as an effective outside representative of the shareholders, providing oversight of the Chief Executive Officer and management. Proxy voting shall be conducted so as to seek to achieve this separation of duties.

3. Executive Stock Options and Bonus Plans

Compensation levels within firms and particularly the granting of stock options should serve as an incentive for achieving strong shareholder returns and the retention of high performing managers. Proxy voting shall be conducted so as to seek to achieve alignment of the interests of the firm's management with the stockholders preferably through a vesting process and limiting shareholder's dilution. Bonus plans should have clearly defined performance criteria and maximum awards expressed in dollars. Bonus plans with awards that are excessive in both absolute terms and relative to a comparative group generally will not be supported.

4. Shareholder Proposals

Shareholder proposals on proxy statements that seek to impose operating burdens, economic costs, or other restrictions upon the company, beyond that which are legally required (so-called "social investing") will be a detriment to the Trust's returns in that security. As identified in the Proxy Voting philosophy section above, proxy voting shall be conducted so as to oppose social investing proposals, seeking to avoid the added costs which would lead to decreased investment returns.

D. Corporate Actions

Corporate actions regarding an equity security are to be considered with regard to their impact on the investment's performance. Proxy voting on issues that determine a corporate action shall be conducted to achieve an optimal return for the Trust's investment as best determined by the External Manager for that investment.

E. Utilization of a Proxy Voting Consultant

The Board may elect to retain a proxy voting consultant who may provide advice to Staff, recommend voting strategies, perform portfolio screening for specific proxy issues, enter votes for identified securities, provide manager oversight on voting practices, implement a proxy voting program for the Trust, or such other services as the Board or Staff may request. Such a consulting relationship must be approved by the Board and may be directed towards internally managed securities, externally managed securities or both.

F. Internally-Managed Equities

For equity investments where Staff acts as the investment manager, Staff is responsible for the voting of proxies consistent with the guidelines described above. Staff will retain records of the voting forms and the votes placed for a period of five years. Votes may be placed by phone, mail, or via the internet. It is understood that Staff generally utilizes the internet voting options because of the convenience of this medium.

G. Externally-Managed Equities

1. Commingled Accounts

In commingled account structures, the Trust shares common ownership of a pool of equity securities with other investors. Within this structure it is difficult for a manager to execute customized voting instructions for each client on the basis of each client's pro-rata ownership. Because each External Manager will administer the proxy voting for the underlying equity issues based on a common set of practices across the whole of the commingled investment vehicle, this Policy shall not apply to the Trust's investments in commingled accounts. Staff will review each External Manager's proxy voting policies and procedures prior to funding capital to the External Manager as part of the due diligence process. Any unique characteristics will be reported to the Board and/or Investment Committee, as appropriate.

2. Separate Accounts

In a separate account structure the Trust has direct ownership of the equity securities that an External Manager is investing on behalf of the Trust. Therefore, the proxy votes for these securities need to be voted at the direction of the Trust. The Chief Investment Officer will direct Staff (based on Staff recommendation and input from the Specialist Consultant or Fiduciary Consultant) as to which of the following three processes (as described below) will be selected for a particular separately managed account:

a) Investment Manager Administers Voting

The proxy voting administration for an account may be delegated to the External Manager of that account. The External Manager will provide copies of its policy voting guidelines for review by Staff, and will be encouraged to report annually on proxy votes and any exceptions to the External Manager's guidelines.

b) Investment Staff Administers Voting

Staff may be delegated the responsibility for administering the proxy voting for an account and would do so in conformance to this $\underline{\text{Appendix}}$ $\underline{\text{XI}}$.

c) Consultant Administers Voting

The Trust may hire a proxy voting consultant or service to administer the proxy voting for all of the equity securities held within an account as provided for in Paragraph E of this Appendix XI.

H. Situations Where the Trust May Forego Its Voting Rights

1. Shares On Loan Within a Securities Lending Program

The Board acknowledges that the Trust foregoes its voting rights when securities have been placed on loan through a securities lending program, since the borrower has the right to vote those shares. The economic gain from the lending transactions is deemed to be suitable compensation for the Trust's loss of voting control. When voting issues arise for which the Trust would benefit from placing a vote on the issue, the Trust will request that the External Manager of the Trust's securities lending program (currently, its custodian) attempt to recall the security in advance of the date of record (for voting) so that the Trust will have an opportunity to vote on the issue. The party holding ownership of the shares at the record date is the one who will retain the right to vote the proxy.

2. Shares Sold Following the Record Date

External Managers may forego voting proxies for an equity security that is no longer held in an account. This would normally occur when a security is sold following the date of record but prior to the expiration of the voting period. At that point, the Trust would not have any economic interest in the outcome of the vote, but nevertheless incur a cost to vote.

3. Unjustifiable Costs or Strategic Disadvantages May Occur

External Managers may forego voting proxies for an equity security when the cost of voting may be excessive in comparison to the impact of the outcome of the vote or when the Trust would be materially disadvantaged by the vote. This may occur in certain non-U.S. jurisdictions, where the sale of the shares of equity securities voted may be prohibited between the record and meeting dates (so-called "share blocking"). The Board believes that the loss of investment flexibility resulting from share blocking generally outweighs the benefit to be gained by voting.

REQUIREMENTS FOR REDEMPTIONS FROM EXTERNALLY-MANAGED FUNDS

Adopted: August 31, 2011 Revised: July 25, 2012 Revised: January 15, 2014 Revised: May 25, 2016

A. Scope and Purpose:

The Trust invests in various investment structures commonly called "Hedge Funds." Hedge funds have several unique characteristics, which are somewhat similar to mutual funds and markedly different from private equity investments. Like mutual funds (but unlike private equity investments, which call capital only as portfolio investments are identified over the course of many years), capital is called in a hedge fund immediately upon investment. Somewhat like mutual funds (but unlike private equity investments, which generally prohibit redemption until the conclusion of the investment's term), investors in a hedge fund are usually allowed to redeem their investment at regular intervals, subject to certain limitations. Apart from these rough characteristics, hedge funds are not easily characterized because they can target any kind of asset and employ a wide variety of strategies. As a result, hedge funds are not really a separate asset class. Therefore, each particular hedge fund investment made by the Trust is allocated to the asset class which most closely relates to the assets being purchased by the hedge fund or the strategies, objectives and exposures to be employed by the hedge fund. The scope of this policy refers and applies to all hedge funds in which the Trust owns interests.

Because investors in hedge funds generally are entitled to redeem their interests at regular intervals, the Trust needs a policy governing how Staff can exercise the Trust's redemption rights when redemption seems appropriate due to changes in management, market conditions, or other concerns. The Purpose of this policy is to prudently accommodate the Trust's legitimate need to respond in a timely fashion to changing conditions and to developments in hedge funds (or other funds in which redemptions are authorized) by authorizing the Chief Investment Officer to exercise discretion in redeeming money already invested.

B. Specific Authority to Redeem:

The Chief Investment Officer or the Deputy Chief Investment Officer, in concert with the Administrator, may take the following actions as indicated:

1. Partial Redemptions

For any prudent reason, including rebalancing, the Chief Investment Officer or the Deputy Chief Investment Officer, in concert with the Administrator, may authorize the submission of a notice of withdrawal or redemption of any portion of the Trust's investment in a hedge fund (or other fund which allows redemptions), provided that the amount to be withdrawn or redeemed is less than 100% of the Trust's investment in such fund.

2. Full Redemptions

For any prudent reason, the Chief Investment Officer or the Deputy Chief Investment Officer, in concert with the Administrator, may authorize the submission of a notice of withdrawal or redemption of the full amount of the Trust's investment in a hedge fund (or other fund in which redemptions are permitted), provided that no such full withdrawal or redemption may be completed unless the Chief Investment Officer or Deputy Chief Investment Officer shall have completed a "Manager De-selection" pursuant to which:

- a) the Chief Investment Officer (or Deputy Chief Investment Officer) shall have recommended that the Trust fully liquidate its investment in the fund;
- b) the Specialist Consultant shall agree with the recommendation of the Chief Investment Officer/Deputy Chief Investment Officer to fully liquidate the Trust's investment in the fund;
- c) the Fiduciary Consultant shall agree with the recommendation of the Chief Investment Officer/Deputy Chief Investment Officer to fully liquidate the Trust's investment in the fund and that such liquidation will be consistent with the Trust's investment strategy; and
- d) the Administrator shall agree with the recommendation of the Chief Investment Officer/Deputy Chief Investment Officer to fully liquidate the Trust's investment in the fund.

Any notice of withdrawal or redemption that is revocable (either by its terms or by subsequent agreement with the applicable fund) may be treated as a partial redemption under Section B(1) of this Policy until such time as the Chief Investment Officer or Deputy Chief Investment Officer determines to effect the withdrawal or redemption of the full amount of the Trust's investment pursuant to a Manager De-selection.

3. Notice to Investment Committee and Board

The Chief Investment Officer or his designee shall report to the Investment Committee and the Board each completed full withdrawal or redemption of the Trust's interests in any hedge fund (or other fund permitting redemptions) at the first regularly scheduled meeting of the Board which follows such withdrawal or redemption.

C. Reinvestment of Redemption Proceeds

The proceeds of any redemption shall be temporarily re-invested by the Chief Investment Officer or Deputy Chief Investment Officer in a passive liquid investment or held in cash.

D. Redemption Justifications

All actions to initiate a notice of redemption shall be based on a prudent investor standard. Acceptable reasons for initiating redemptions include, but are not limited to, the following:

- 1. Mitigating underperforming strategies and managers or avoiding strategies which have had material adverse changes in expected risks and returns,
- 2. Avoiding adverse changes in terms, liquidity, or fees that materially depart from those upon which the initial investment was based or now vary from market;
- 3. Avoiding the consequences of uncertainty in the hedge fund manager occasioned by any internal or external disruption that could materially affect the likelihood of returns or expected risk; and
- 4. Assuring compliance with law or the mitigation of legal risk.

Public Safety Personnel Retirement System

REQUIREMENTS FOR MANAGEMENT OF RISK PARITY STRATEGIES

Adopted: November 19, 2014

A. Scope & Purpose

This Appendix XIII to the Investment Policy applies to the Risk Parity investments of the Trust. Risk Parity is an investment strategy which seeks to balance risk in a portfolio among four economic regimes, namely: High Growth/High Inflation, High Growth/Low Inflation, Low Growth/High Inflation and Low Growth/Low Inflation. In the common nomenclature, this approach is designed to produce an "All Weather" or "All Seasons" portfolio. In each of the above regimes, certain assets should perform better while others lag or produce negative returns. This balance is designed to protect against dramatic losses and to stabilize returns regardless of which of the four described quadrants the economy demonstrates. The portfolio is intended to serve as a hedge against those economic regimes that are under-represented in the Trust's broader, overall portfolio.

	GROWTH	INFLATION
RISING	25% of Risk • Equities • Corporate Spreads • Commodities • EM Debt Spreads	25% of Risk Inflation-Linked Bonds Commodities EM Debt Spreads
FALLING	Nominal Bonds Inflation-Linked Bonds	• Nominal Bonds • Equities

NOTE: THIS CHART MAY BE SUBJECT TO FURTHER REFINEMENT

B. Investment Philosophy – A completion Portfolio

The Risk Parity investments program is designed to be limited in scope. The reason for this limitation is that, while it is an attractive risk mitigant in various economic cycles, it trades away higher returns for the mitigation of risks. Deploying this strategy on the entire PSPRS Trust portfolio might produce an expected return below that required to meet or exceed the System's assumed earnings rate. Recognizing this limitation, but also recognizing the potential benefits from this strategy, it is possible to evaluate the entire Trust portfolio periodically and to determine which of the four quadrants present the greatest downside risks to the portfolio. Using a percentage of the total portfolio (less than 10%) set aside for this purpose and within this strategy, Staff and its consultants select those assets, strategies and/or managers that will "tilt" the total portfolio away from the quadrant(s) of greatest downside exposure.

C. Investment Structures

Implementation of the Risk Parity investments program may be in a number of different structures, including closed-end and open-ended funds, as well as separately managed and commingled accounts.

D. Investment Vehicles

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual funds, hedge funds or other commingled vehicles, whether in the form of partnerships, limited liability companies, limited partnerships and or involving discretionary External Managers investing in partnerships, limited partnerships, limited liability companies, mutual funds, ETFs, CIFs, unit trusts or other entities.

E. Derivatives

Investing in entities that purchase options, futures, forwards, swaps, swaptions or other derivative securities are contemplated within the Risk Parity assets allocation. The use of derivatives shall be governed by each External Manager's specific IMA or as otherwise provided in <u>Appendix II</u> (Derivatives Policy) contained within this Investment Policy.

F. Strategy Allocation

The Risk Parity portfolio shall be comprised of a collection of assets and strategies selected to "tilt" the Trust's portfolio away from the economic regime(s) that it is most biased towards based upon analysis to be conducted no less than twice each fiscal year (typically January and June). The analysis shall be done using a risk budgeting methodology, such as the one available from Bridgewater or a similar External Manager or Consultant. It is prudent to conduct a Risk Parity analysis following major changes in the portfolio (whether market or management driven) or during consideration of such major changes. **For Illustration**:

- 1. An analysis showing a bias in the total portfolio towards positive growth suggests a Risk Policy exposure to assets that do well in low or negative growth environments, *e.g.* long government bonds.
- 2. An analysis showing a bias in the portfolio toward low inflation suggests a Risk Parity exposure to assets that perform well during periods of higher inflation, *e.g.* Tips and commodities.

G. The Risk Parity Plan

The Portfolio Manager and the Specialist Consultant(s) for Risk Parity will produce a report to the Investment Committee and Board (the "Annual Plan") each year detailing long and mid-term strategic objectives of the Risk Parity investment portfolio. The Annual Plan will include an analysis suggesting the number and size, as well as the strategies, for the Risk Parity portfolio over the ensuing 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Risk Parity portfolio.

H. Performance Objectives and Benchmarks

The long-term benchmark for the risk parity portfolio shall be 60% Barclays Capital Global Aggregate / 30%; MSCI AC World Net / 10% Dow Jones-UBS Commodity Index TR. Risk parity assets are an emerging class of investments and are subjective as to their composition across funds. Therefore, there is no clearly defined asset class universe with which to compare the Risk Parity portfolio. Individual manager objectives will be addressed in the IMA of each External Manager. Performance will be evaluated on a net-of-fees basis. As noted earlier, the portfolio is intended to serve as a hedge against those economic regimes that are under-represented in the Trust's broader, overall portfolio.

I. Risk Management

Given the need for flexibility in the Risk Parity allocation, the assets included should be selected with a view toward liquidity, transaction costs and manager concentration. There should also be a prudent consideration of the use of Leverage in this sub portfolio. By its nature and purpose the portfolio will not generally be diversified. Instead the assets and/or strategies are expected to move in the expected direction together as economic régimes prevail and persist.

Risk Parity investment strategies do not lend themselves to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks with Risk Parity investments and possible methods of control.

1. Liquidity

Risk Parity investments often use futures to achieve a higher return per unit of risk than typically characterizes a 60% stock, 40% bond portfolio, but that should not materially increase the liquidity risk of the portfolio. Total liquidity risk in risk parity strategies are minimized by selecting External Managers who optimize liquidity and generally avoid long term commitments.

2. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of managers in the Risk Parity investment program.

a) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle is controlled by limiting the commitment size to a specific investment and the diversification of the assets underlying that investment.

b) Manager Concentration Risk – Fund Level

Not more than 10% of the Trust's total assets should be allocated to any Risk Parity investment, measured at the date of the investment or the commitment date for closed-end funds.

3. Firm Risk

Firm risk is the exposure to an individual Risk Parity External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same External Manager and its affiliates. The maximum allocation to any alternative External Manager in relation to Risk Parity investments should be 10% of the Trust's assets measured at the time of investment, unless specifically agreed by the Administrator.

4. Leverage

Many underlying Risk Parity investment programs will utilize Leverage. The intent of the Trust is to not rely on External Managers employing high degrees of Leverage. It is the preference of the Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of the committed capital must be approved both by the Fiduciary Consultant and the Board.

J. Roles and Responsibilities for the Risk Parity Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this Risk Parity <u>Appendix XIII</u> and the Annual Plan. The Administrator is responsible for evaluating and consenting to each Risk Parity investment recommended by Staff, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. The Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this Risk Parity Investment Policy Appendix XIII, subsequent modifications to same, and the Risk Parity Annual Plan to the Board and Investment Committee. Investment Officer is also responsible for reviewing, and analyzing the Risk Parity program and recommending specific opportunities for same to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. The selection of external Risk Parity investments will be conducted by Staff, and the Plans' and the Trust's legal counsel and the Specialist Consultant(s). Monitoring of Risk Parity investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plans' and Trust's custodian and the Specialist Consultant referenced in Section J(3) below in accordance with the requirements of this Risk Parity Appendix. Notwithstanding Section J(1) above, so long as the Trust's maximum allocation for Risk Parity investments has not been invested with External Managers, the Chief Investment Officer may invest in TIPS, ETFs, unit trusts, mutual funds, CIFs and other commingled investment vehicles with Risk Parity-type exposures to achieve temporary diversified exposures which serve as proxies for Risk Parity exposures, without first obtaining the consent of the Administrator, Board or Investment Committee.

3. Specialist Consultant for Risk Parity

The Trust shall engage one or more Specialist Consultants to assist in managing the Risk Parity investment program. Specific responsibilities will be established with the Specialist Consultant(s), but will include working with Staff to develop a Risk Parity investment program and the Annual Plan, conducting independent due diligence on recommended External Managers, presenting finalist recommendations to Staff and/or the Investment Committee, and monitoring the on-going status of retained managers. The investment program for Risk Parity shall be evaluated annually by the Chief Investment Officer.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the Risk Parity portfolio are appropriately allocated to Risk Parity. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Trust's Risk Parity investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

Public Safety Personnel Retirement System

REQUIREMENTS FOR MANAGEMENT OF ABSOLUTE RETURN STRATEGIES

Adopted: October 22, 2014

A. Scope & Purpose

This <u>Appendix XIV</u> to the Investment Policy applies to the Absolute Return investments of the Trust. Absolute Return is an investment strategy, often employed in a hedge fund structure, which seeks to achieve consistently positive returns by deploying investment management techniques such as short selling, futures, options, derivatives, arbitrage, Leverage and unconventional assets. The purpose and goal of absolute return strategies is to consistently generate positive returns regardless of market directions.

B. Investment Philosophy - Diversification

The Absolute Return investments program should predominantly use active external management strategies to implement the individual sub-asset class mandates. Absolute Return investments will be diversified by External Manager and by strategy within the ranges provided for in this <u>Appendix XIV</u>. Although generally invested in liquid investments, Absolute Return External Managers may occasionally limit investments in terms of timing and total commitments. This should be considered in the pacing of Absolute Return commitments. Since the extent and duration of interest rate/inflation cycles may not be clear in advance, the Trust will also seek to diversify its allocation to Absolute Return by investment timeframe, where appropriate. To maintain some tactical portions of the total Trust and retain a non-correlative position to the equity markets, the Trust will normally seek to maintain a minimum level of exposure to the Absolute Return asset class across most market and interest rate cycles.

C. Investment Structures

Funding of the Absolute Return investments program may be in a number of different structures, including closed-end and open-ended funds, as well as separately managed and commingled accounts.

D. Investment Vehicles

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual funds, hedge funds or other commingled vehicles, whether in the form of partnerships, limited liability companies, limited partnerships and or involving discretionary managers investing in partnerships, limited partnerships, limited liability companies, mutual funds, ETFs, CIFs, unit trusts or other entities.

E. Co-Investment and Direct Placements

Some investments may include opportunities for additional capital participation such as co-investment or other side-by-side direct investment opportunities that reduce or eliminate management fees and/or carried interest. With the consent of the Administrator, the Chief Investment Officer may authorize the Trust to participate in these opportunities. External Managers may exercise discretionary co-investment rights within an investment as approved by the Administrator and Chief Investment Officer and as governed by the investment's governing agreement or IMA.

F. Derivatives

Investing in entities that purchase options, futures, swaps, swaptions or other derivative securities are contemplated within the Absolute Return assets allocation. The use of derivatives shall be governed by each External Manager's specific IMA or as otherwise provided in Appendix II (Derivatives Policy) contained within this Investment Policy.

G. Strategy Allocation

The Absolute Return investment program will endeavor to create a diversified allocation by diversifying among managers which focus on different aspects of the markets.

1. The Absolute Return Plan

The Chief Investment Officer and the Specialist Consultant(s) for Absolute Return will produce a report to the Investment Committee and Board ("Annual Plan") each year detailing long and mid-term strategic objectives of the Absolute Return investment portfolio. The Annual Plan will include a pacing analysis suggesting the number and size as well as the strategies of projected commitments for the Absolute Return portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Absolute Return investment portfolio.

2. Performance Objectives and Benchmarks

Absolute Return investments are meant to generate a real return (a return above the level of inflation during the investment term) that is not correlated to the capital markets, which will serve as a diversifier for the Trust's entire portfolio. The long-term benchmark for the Absolute Return portfolio shall be BofA ML 3 month Treasury Bills plus 2%. Absolute Return assets shall be compared to the HFRI Conservative Fund of Funds Universe. Individual manager objectives will be addressed in the IMA of each External Manager. Performance will be evaluated on a net-of-fees basis.

H. Risk Management

In addition to traditional quantitative measures of risk such as standard deviation and benchmark tracking error, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks with Absolute Return investments and possible methods of control.

5. Liquidity

Absolute Return investments are usually liquid, with long term holding periods. Total liquidity risk in Absolute Return should be minimized by selecting managers who optimize liquidity and by investing with a wide number of managers who collectively, invest in a broad range of uncorrelated markets.

6. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of managers in the Absolute Return investment program.

c) Manager Exposure Risk – Strategy Level

The exposure to a specific External Manager within an investment vehicle is controlled by limiting the commitment size to a specific investment and the diversification of the assets underlying that investment.

d) Manager Concentration Risk – Fund Level

Subject to any total portfolio manager constraints, no single Absolute Return investment, measured at the date of the investment (or the commitment date for closed-end funds) shall exceed the target weight for the Absolute Return asset class.

3. Firm Risk

Firm risk is the exposure to an individual Absolute Return External Manager and is controlled by limiting the maximum commitment to funds actively managed by the same External Manager and its affiliates. The maximum allocation to any Absolute Return External Manager should be 5% of the Trust's assets measured at the time of investment, unless specifically agreed by the Administrator.

4. Leverage

Many underlying Absolute Return investment programs will utilize Leverage. The intent of the Trust is to not rely on External Managers employing high degrees of Leverage. It is the preference of the Trust to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plans or Trust to losses in excess of their committed capital. Any use of Leverage by an External Manager or Staff which might expose the Plans or Trust to losses in excess of their committed capital must be approved both by the Fiduciary Consultant and the Board.

I. Roles and Responsibilities for the Absolute Return Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this Absolute Return <u>Appendix XIV</u> and the Annual Plan. The Administrator is responsible for evaluating and consenting to each Absolute Return External Manager recommended by Staff, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. The Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this Absolute Return Investment Policy Appendix XIV, subsequent modifications to same, and the Absolute Return Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing the Absolute Return program and recommending specific opportunities for same to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. Due diligence on Absolute Return investments will be conducted by Staff, the Plans' and the Trust's legal counsel and/or Specialist Consultant(s). Monitoring of Absolute Return investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Plans' and Trust's custodian and the Specialist Investment Officer, the Consultant referenced in Section I(3) below in accordance with the requirements of this Absolute Return Appendix. Notwithstanding Section I(1) above, so long as the Trust's maximum allocation for Absolute Return investments has not been invested with External Managers, the Chief Investment Officer may invest in TIPS, ETFs, unit trusts, mutual funds, CIFs and other commingled investment vehicles with Absolute Return-type exposures to achieve temporary diversified exposures which serve as proxies for Absolute Return exposures, without first obtaining the consent of the Administrator, Board or Investment Committee.

3. Specialist Consultant for Absolute Return

The Trust shall engage one or more Specialist Consultants to assist in managing the Absolute Return investment program. Specific responsibilities will be established with the Specialist Consultant(s) through contractual agreements, but will include working with Staff to develop an Absolute Return investment program and the Annual Plan, conducting independent due diligence on recommended External Managers, presenting finalist recommendations to Staff and/or the Investment Committee, and monitoring the on-going status of retained managers. The investment program for Absolute Return shall be evaluated annually by the Chief Investment Officer.

4. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator whether specific investments recommended for inclusion in the Absolute Return portfolio are

appropriately allocated to Absolute Return. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Trust's Absolute Return investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

Public Safety Personnel Retirement System

REQUIREMENTS FOR MANAGEMENT OF THE FIRE FIGHTER AND PEACE OFFICER CANCER INSURANCE PLAN ACCOUNT

Adopted: August 27, 2014

A. Scope & Purpose

This <u>Appendix XV</u> to the Investment Policy applies to the investment of all cash and securities contained in the account (the "<u>Account</u>") established for the benefit of the Fire Fighter and Peace Officer Cancer Insurance Plan (the "<u>Plan</u>"). The Plan is an insurance plan established by the Arizona Legislature to reimburse cancer stricken firefighters and police officers for certain medical expenses. The Plan is administered by the Board, and is funded by annual premiums remitted by participating employers. The assets in the Plan's Account cannot be commingled with the assets of the other retirement plans that the Board administers, and because of the Plan's liquidity requirements, limited income, prudent expense restrictions and relatively small amounts under management, it is the determination of the Board and its Fiduciary Counsel that the assets in the Account must be invested conservatively to enable the Account to cover its current and future obligations and thereby seek to avoid the necessity of premium increases.

B. Investment Philosophy - Diversification

The assets of the Account should be exclusively invested in publicly-traded securities with liquidation rights. Correspondingly, the Account's assets should currently not be invested in illiquid or privately-traded investments, such as direct investments in private equity, venture capital and real estate.

To maintain the Plan's modest expense experience, the assets in the Account should predominantly be invested in passive external management strategies with index like exposures to implement the individual sub-asset class mandates. Investments in the Account will be diversified by External Manager and strategy within the ranges provided for in this Appendix XV.

C. Investment Structures

Subject to the other restrictions set forth herein, funding of the investments in the Account may be in a number of different structures, including direct securities purchases, as well as indirect investments in securities through separately managed and commingled accounts.

D. Investment Vehicles

This Policy authorizes direct purchases of publicly-traded securities, as well as the purchase of publicly-traded securities through separately managed accounts. The Policy

also authorizes the purchase of securities through publicly-traded commingled vehicles such as Exchange Traded Funds ("<u>ETFs</u>"), commingled investment funds ("<u>CIFs</u>"), unit trusts, or mutual funds. No investments can be made for the Account unless such investments enjoy immediate liquidation rights.

E. Derivatives

Investments which employ derivatives, options, swaps, futures, or overlays will be permitted so long as such devices do not expose the Account to liability beyond its initial investment (or are approved by the Board). The use of derivatives shall be governed by each External Manager's specific IMA or as otherwise provided in <u>Appendix II</u> (Derivatives Policy) contained within this Investment Policy.

G. Strategy Allocation

The investment program for the Account will endeavor to create a relatively-broad allocation by diversifying among asset classes which focus on different aspects of the markets, as well as funds whose strategies vary from one another and also vary geographically. The Account's investment program may also seek to create diversification by including funds which trade in commodities, as well as inflation protected treasuries ("<u>TIPs</u>"). The recommended allocation among strategies for these investments is:

Account Investment Strategy	Target Allocation As % of Account Assets	Minimum Maximum %
Cash	5%	3% 7%
US Equities	25%	20% 30%
Non-US Equities	25%	20% 30%
Core Bonds	30%	25% 35%
High-Yield Bonds	0%	0% 10%
TIPS	10%	5% 15%
Commodities	5%	0% 10%

1. The Account Plan

The Chief Investment Officer and the Fiduciary Consultant will produce a report to the Investment Committee and Board ("<u>Annual Plan</u>") each year detailing long and mid-term strategic objectives of the Account's investment portfolio. The

Annual Plan will include an analysis suggesting the number and size as well as the strategies of projected commitments for the Account's portfolio over the next 12 months. The Annual Plan will be revised periodically to reflect changes in its underlying assumptions and the actual experience of the Account's investment portfolio.

2. Performance Objectives and Benchmarks

The Account's investments are meant to generate a real return (a return above the level of inflation during the investment term) sufficient to protect the Account's corpus without exposing it to significant risk. The long-term benchmark for the Account's portfolio shall be a blended benchmark of 25% Russell 3000 Index, 25% MSCI AC World ex USA Index, 30% BC Global Aggregate Index, 10% Barclay's U.S. Treasury Inflation Protected Securities Index, 5% Spider Gold Trust Index (GLD) and 5% ML 90-day Treasury bills. Individual manager objectives will be addressed in the IMA of each External Manager. Performance will be evaluated on a gross-of-fees basis.

H. Risk Management

Risk is managed through a combination of quantitative and qualitative constraints. The following sections identify some of the significant risks of the Account's investments and possible methods of control.

7. Liquidity

The Account's investments are intended to be highly-liquid, but with long term holding periods. Total liquidity risk should be minimized by selecting publicly-traded securities or managers of commingled vehicles who purchase publicly-traded securities.

8. Manager Risk

Manager risk is the exposure to an individual External Manager and is controlled by limiting the maximum allocation to funds actively managed by the same External Manager and its affiliates. The maximum allocation to any External Manager should be 60% of the Account's assets measured at the time of investment, unless specifically agreed by the Administrator. Any investment should not exceed 20% of any underlying External Manager's total amounts under management, unless specifically agreed by the Administrator. These restrictions would only be applied to actively-managed investments.

3. Leverage

Some commingled accounts in which the Plan may invest may utilize Leverage. The intent of the Plan is to not rely on External Managers employing high degrees of Leverage. It is the preference of the Plan to avoid any individual External Manager whose strategy utilizes Leverage which will expose the Plan to losses in excess of its contributed capital. Any use of Leverage by an External Manager or

Staff which might expose the Plan to losses in excess of its contributed capital must be approved both by the Fiduciary Consultant and the Board.

I. Roles and Responsibilities for the Absolute Return Investment Portfolio

1. Board of Trustees, Investment Committee and Administrator

The Board and Investment Committee are responsible for reviewing and approving this <u>Appendix XV</u> and the Annual Plan. The Administrator is responsible for evaluating and consenting to each investment for the Account recommended by Staff, except as otherwise provided in Section IV(A)(2) of the Investment Policy.

2. The Chief Investment Officer and Staff

The Chief Investment Officer is responsible for recommending this Policy Appendix XV, subsequent modifications to same, and the Annual Plan to the Board and Investment Committee. The Chief Investment Officer is also responsible for reviewing, and analyzing the Account's investment program and recommending specific opportunities for same to the Administrator or as otherwise provided in Section IV(A)(2) of the Investment Policy. Due diligence on Account investments will be conducted by Staff, the Plan's legal counsel, and/or the Fiduciary Consultant. Monitoring of the Account's investments and performance reporting to the Board and to the Investment Committee shall be the responsibility of the Chief Investment Officer, the Plan's custodian and the Fiduciary Consultant referenced in Section I(3) below; in accordance with the requirements of this Appendix.

3. Monitoring, Allocation and Reporting by Fiduciary Consultant

The Fiduciary Consultant shall advise the Administrator on the Plan's overall asset allocation and targeting, including whether specific investments recommended for inclusion in the Account's portfolio are appropriately allocated for the portfolio. The Chief Investment Officer shall ensure that the Fiduciary Consultant has complete access to information regarding the Plan's investments so that said Consultant can prepare quarterly performance reports for presentation to the Investment Committee and to the Chief Investment Officer.

PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM BOARD OF TRUSTEES MEETING

May 25, 2016

MINUTES

Present: Mr. Brian Tobin, Chairman, Trustee

Mr. Gregory Ferguson, Vice Chairman, Trustee

Mr. Jeff McHenry, Trustee Ms. Randie Stein, Trustee Mr. Richard Petrenka, Trustee Mr. William C. Davis, Trustee

Others Present: Mr. Jared Smout, Administrator

Mr. Ryan Parham, Chief Investment Officer
Ms. Ivy N. Voss, Esq., Assistant Attorney General
Mr. Marty Anderson, Deputy Chief Investment Officer

Mr. Shan Chen, Lead Portfolio Manager

Mr. Mark Steed, Deputy CIO and Chief of Staff

Ms. Vaida Maleckaite, Investment Operations Analyst -

Excused

Mr. Owen Zhao, Portfolio Manager

Mr. William Thatcher, Lead Portfolio Manager Mr. Jefferson Weston, Investment Analyst

Mr. Allan Martin, NEPC LLC

Ms. Bridget Feeley, Internal Audit and Compliance Officer Ms. Jennifer Eichholz, Esq., In-House Investment Counsel

Ms. Rose Crutcher, Investment Paralegal Mr. Paul Hemmes, Information Technology Mr. Jack Poupore, Investment Intern Mr. Brandon Hellewell, Investment Intern Ms. Dianne McAllister, Public Policy Partners

Mr. Doug Cole, Public Policy Partners Mr. Christian Palmer, Avant Strategies

Mr. Jim Keeler, Nationwide

Mr. Mark Buis, Senior Consultant, Gabriel, Roeder, Smith & Company

Mr. James D. Anderson, Senior Consultant, Gabriel, Roeder,

Smith & Company

Mr. Francois Pieterse, Consultant, Gabriel, Roeder, Smith &

Company

The meeting was called to order at 1:00 p.m. by Chairman Tobin who, including the Board observed a moment of silence on behalf of Phoenix police officer Mr. David Glasser who passed away May 19, 2016 and condolences were extended to the family.

Good wishes were extended to staff member Ms. Leslie Clark for her new endeavors.

2. Call to the Public.

This is the time for the public to comment. Members of the Board of Trustees may not discuss items that are not specifically identified on the agenda, except to address criticism from the public. Therefore, pursuant to A.R.S. § 38-431.01(H), the Board of Trustees' reaction to any public comment is limited to addressing criticism or recommending that the Board of Trustees or Staff respond or study such comment or schedule the subject matter for further consideration at a later date after appropriate notice.

Chairman Tobin announced the retirement of Mr. Jeff McHenry from the Tempe Police Department effective May 14, 2016. Mr. Bill Thatcher, a new staff member was introduced as were two interns, Mr. Brandon Hellewell and Mr. Jack Pourpore.

- Appropriate Action for approval of the items on the Consent Agenda (documentation concerning the matters on the consent agenda may be reviewed at the PSPRS office).
 Any matter on the Consent Agenda will be removed from the Consent Agenda and discussed as a regular agenda item upon the request of any member of the Board of Trustees.
 - a. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of Helene F. Abrams.
 - b. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Brian Bond.
 - c. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Gail Buchanan.
 - d. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of Robert B. Buchanan.
 - e. Acceptance of Elected Officials' Retirement Plan of termination of early retirement benefit of Richard W. Donato.
 - f. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Lee A. Gibson.
 - g. Acceptance of Elected Officials' Retirement Plan of termination of early retirement benefit of Robert J. Gibson.
 - h. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Barbara Goodfarb.
 - i. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of Stanley Z. Goodfarb.
 - j. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of Robert W. Harral, Jr.
 - k. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Nancy Harral.

- I. Acceptance of Elected Officials' Retirement Plan of termination of survivor benefit of Theresa Hungerford.
- m. Acceptance of Elected Officials' Retirement Plan of termination of survivor benefit of Gertrude Kipps.
- n. Acceptance of Elected Officials' Retirement Plan of termination of early retirement benefit of Laura Knaperek.
- o. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Robert Knaperek.
- p. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of H. Philip Lieberman.
- q. Acceptance of Elected Officials' Retirement Plan of survivor benefit of R. Juanita Lieberman.
- r. Acceptance of Elected Officials' Retirement Plan of death benefit for Stacey Lee Meier.
- s. Acceptance of Elected Officials' Retirement Plan of normal retirement benefit of John N. Nelson.
- t. Acceptance of Elected Officials' Retirement Plan of termination of survivor benefit of Mary Dell Pritzlaff.
- Acceptance of Elected Officials' Retirement Plan of survivor benefit of Loretta P. Shumway.
- v. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of Peter D. Shumway.
- w. Acceptance of Elected Officials' Retirement Plan of termination of normal retirement benefit of H. Paul Smith.
- x. Acceptance of Elected Officials' Retirement Plan of survivor benefit of Constance Uribe.
- y. Acceptance of Transfer Between State Retirement Systems of Mark Timpf.
- z. Acceptance of Transfer Between State Retirement Systems of Joe Lapre.
- aa. Acceptance of Transfer Between State Retirement Systems of Marc Bennett.
- bb. Acceptance of Transfer Between State Retirement Systems of Loretta Coffman.
- cc. Acceptance of Transfer Between State Retirement Systems of Frank Pace.
- dd. Acceptance of Transfer Between State Retirement Systems of Nicholas Adams.
- ee. Acceptance of Transfer Between State Retirement Systems of Anthony Brokaw.
- ff. Acceptance of Transfer Between State Retirement Systems of Hector Figueroa.
- gg. Acceptance of Transfer Between State Retirement Systems of Dylan Ansell.
- hh. Acceptance of Transfer Between State Retirement Systems of David Schwartz.
- ii. Acceptance of Transfer Between State Retirement Systems of Eric Breindl.
- jj. Acceptance of Transfer Between State Retirement Systems of Shalamar Titone-Jones.
- kk. Acceptance of Transfer Between State Retirement Systems of Dustin Taylor.
- II. Acceptance of Transfer Between State Retirement Systems of Delia Neal.
- mm. Acceptance of Transfer Between State Retirement Systems of Deron Miller.
- nn. Acceptance of Transfer Between State Retirement Systems of Rachael Dales.
- oo. Acceptance of Transfer Between State Retirement Systems of Guy Sularz.
- pp. Acceptance of Transfer Between State Retirement Systems of Armando Carbaial.
- qq. Acceptance of Transfer Between State Retirement Systems of John Yeoman.
- rr. Acceptance of Transfer Between State Retirement Systems of Eunice Garcia.
- ss. Acceptance of Transfer Between State Retirement Systems of Paul Matson.

- tt. Acceptance of Transfer Between State Retirement Systems of Richard Fisher.
- uu. Acceptance of Transfer Between State Retirement Systems of Matthew Cox.
- vv. Acceptance of Transfer Between State Retirement Systems of Timothy Duffy.
- ww. Acceptance of Transfer Between State Retirement Systems of Amanda Faulkner.
- xx. Acceptance of Transfer Between State Retirement Systems of Christy Calderon.
- yy. Acceptance of Transfer Between State Retirement Systems of Jeffrey Eccles.
- zz. Acceptance of Transfer Between State Retirement Systems of Michael McCasland.
- aaa. Acceptance of Transfer Between State Retirement Systems of Alex Mers.
- bbb. Acceptance of Transfer Between State Retirement Systems of Laura Truett.
- ccc. Acceptance of Transfer Between State Retirement Systems of Ashley Roche.
- ddd. Acceptance of Transfer Between State Retirement Systems of Donald Gilbreth.
- eee. Acceptance of Transfer Between State Retirement Systems of Julie Egea.
- fff. Acceptance of Transfer Between State Retirement Systems of Lawrence Wharton.
- ggg. Acceptance of Transfer Between State Retirement Systems of Warren Poole.
- hhh. Acceptance of Transfer Between State Retirement Systems of Jeremy Cullum.
- iii. Acceptance of Transfer Between State Retirement Systems of Alan Zagorski.
- jjj. Approval of the Minutes of the March 23, 2016 Meeting of the PSPRS Board of Trustees and May 10, 2016 Special Meeting of the PSPRS Board of Trustees.

Mr. Brian P. Tobin

MOTION:3-5/25/16 At 2:52 p.m.

Motion: To accept the Consent Agenda as presented.

Moved by: Mr. Ferguson Seconded by: Mr. McHenry

Discussion: None Unanimous Motion: Passes

4. Appropriate **Action** regarding the approval of the Joinder Agreement with the Mountain Vista Fire District; and approval of the Applications for Membership Waiver of participation. *Mr. Brian P. Tobin*

Tabled

5. Appropriate **Action** regarding the Agreement to participate in the Supplemental Defined Contribution Plan with the Central Arizona Fire and Medical Authority.

Mr. Brian P. Tobin

MOTION:4-5/25/16 At 2:53 p.m.

Motion: To approve the agreement to participate in the Supplemental

Defined Contribution Plan with the Central Arizona Fire and

Medical Authority.

Moved by: Mr. McHenry Seconded by: Mr. Ferguson

Discussion:NoneIn Favor:UnanimousMotion:Passes

Report by Mr. Richard Petrenka, Chairman of the Investment Committee, regarding agenda items 6. through 15., which were discussed at the Investment Committee meeting held today, May 25, 2016, on or after 11:00 a.m., and possible Action on the Committee's recommendations to the Board regarding same.

6. **Appointment** of Investment Committee Vice-Chairman for remainder of fiscal year.

Mr. Richard Petrenka

The Investment Committee appointed Mr. Davis who agreed to serve.

7. Written report and possible discussion of monthly review of Management Fees for months ending February 29, 2016 and March 31, 2016.

Ms. Bridget Feeley Internal Audit and Compliance Officer

No items were out of order.

8. Report by the System's Internal Audit and Compliance Officer and discussion regarding investment compliance, holdings and transactions, for months ending February 29, 2016 and March 31, 2016.

Ms. Bridget Feeley

There were no compliance issues.

9. Discussion and possible **Action** to amend the consulting agreement with NEPC to include additional duties and fees.

Mr. Ryan Parham Assistant Administrator and CIO Mr. Allan Martin NEPC

This adjustment allows for an annual 2% inflation increase going forward. NEPC's clients have paid the increase in the past and this, if approved, will be the first time for PSPRS.

MOTION:1-5/25/16 At 1:41 p.m.

Motion: To accept the recommendation of the Investment Committee to

approve the amendment to the consulting agreement with NEPC

to include additional duties and fees.

Moved by: Mr. Petrenka

Seconded by: As approved by the Investment Committee

Discussion:NoneIn Favor:UnanimousMotion:Passes

10. Presentation and discussion by Staff and NEPC representatives on the (i) 3rd Fiscal Quarter (1st Calendar Quarter) investment performance and the 2016 Fiscal Year investment performance for the Arizona PSPRS Trust; (ii) the Month-End and Fiscal Year-to-Date performance for the PSPRS Trust as of March 31, 2016; and (iii) written report regarding the asset allocation and performance of the Firefighters and Peace Officers Cancer Insurance Program.

Mr. Ryan Parham Mr. Martin Anderson Deputy Chief Investment Officer Mr. Allan Martin

A description of the current market environment was presented by Mr. Martin who stated that PSPRS has achieved reduction of volatility in the portfolio and has earned high returns per unit of risk. Absolute return numbers in an up trending equity market achieved returns in the middle of PSPRS' peers. A low return equity market slows income for funds with more equities. When others stumble, we do better.

In this environment it is unlikely that the 7.5% assumed earnings rate will be achieved. Performance for the past three months was 1.7%; for the past year it was 1.6% (the return does rank in the second percentile); and for the past three years it was 6.5%. The Fund increased by \$25 million from a year ago with assets totaling \$8.3 billion and the Fund experienced a net investment gain of \$104 million over that time. Staff operates within Board approved ranges for asset allocations and for the last quarter the Real Estate Portfolio outperformed its index. Discussion was held regarding asset allocation details and choice of outside managers.

Mr. Martin informed the members of the board that Institutional Investor Magazine nominated 5 people, including Mr. Ryan Parham as potential Chief Investment Officer of the Year. The results of the votes of 500 CIOs determined that Mr. Arn Andrews of the City of San Jose Department of Retirement Services received the award. Mr. Martin thanked the PSPRS Board, Staff and consultants for their efforts.

11. Nationwide Retirement Solutions (NRS) Quarterly Administrative Review of the PSPRS Supplemental & EODCRS 401(a) Plans.

Mr. Jim Keeler Nationwide Retirement Solutions

The performance report included information about equity investment options, based upon the levels of risk, that members can choose from in order to put together a portfolio. The board can remove from or add to this list. Nationwide does not use index funds. Administrator Smout stated that due to pension reform and a larger membership in these plans, we need to take a more active fiduciary role. The total balance of EODCRS 401(a) Plans' value is \$853,877.12 and the balance of the Supplemental Plan is \$12,324,046 for 532 participants.

12. Presentation and report by Investment Department Staff regarding Portfolio Risk as of March 31, 2016.

Mr. Owen Zhao Portfolio Analyst - Risk

Nothing was reported this morning to be out of the ordinary.

13. Presentation and discussion by Investment Department Staff and Consultants regarding the annual Overview and Strategic Plan for the Fixed Income and Credit Opportunities portfolios.

Mr. Mark Steed Deputy Chief Investment Officer & Chief of Staff Mr. Allan Martin

Fixed Income portfolio in public markets provides liquidity and Credit Opportunities portfolio provides opportunities in originating loans. The current outlook was presented for core bonds, corporate credit, securitized credit and emerging market credit. Broad recommendations for public plans and then recommendations for PSPRS were presented. Descriptions were given of private credit strategies regarding loans.

- 14. Disclosure by Investment Department Staff of the following manager selection matters:
 - A. New and potential investments considered this period:
 - 1. Disclosure of a potential investment of up to \$75,000,000 for purposes of investment with **SJC Direct Lending Fund III, GP**, in the Credit Opportunities portfolio, subject to final Staff and legal due diligence.
 - 2. Disclosure of a potential investment of up to \$60,000,000 direct and a reserve allocation of up to \$20,000,000 for purposes of co-investment with **Rubenstein Properties Fund III, L.P.**, in the Real Estate portfolio, subject to final Staff and legal due diligence.
 - 3. Disclosure of a potential investment of up to \$10,000,000 for purposes of an increase in investment with **Iguazu Partners**, **LP**, in the Fixed Income portfolio, subject to final Staff and legal due diligence.
 - 4. Disclosure of a potential investment of up to \$70,000,000 for purposes of investment with **Freeport First Lien Loan Fund III**, in the Credit Opportunities portfolio, subject to final Staff and legal due diligence.
 - 5. Disclosure of a potential investment of up to \$70,000,000 for purposes of investment with **Northern Shipping Fund III**, in the Credit Opportunities portfolio, subject to final Staff and legal due diligence.
 - 6. Disclosure of a potential investment of up to \$75,000,000 for purposes of investment with **Crestline Opportunity Fund III**, in the Credit Opportunities portfolio, subject to final Staff and legal due diligence.
 - B. Disclosure of terminated transactions for this period:
 - 1. None.
 - C. Disclosure of closed transactions for this period:
 - Castle Creek Capital Partners VI; Asset Class: Private Equity Portfolio; Date Closed: 02/10/2016.

- 2. **Berkshire Fund IX-A, L.P.**; Asset Class: Private Equity Portfolio; Date Closed: 03/17/2016.
- 3. **Rubenstein Properties Fund III, L.P.**; Asset Class: Real Estate Portfolio; Date Closed: 04/15/2016.
- 4. **Iguazu Partners, LP**; Asset Class: Fixed Income; Date Closed: 04/25/2016.
- 5. Salient Capital Partners Salient Risk Parity Delta-Rho-Q; Asset Class: Risk Parity Portfolio; Date Closed: 05/02/2016.
- D. Current investments considered for de-selection this period:
 - 1. **Apollo VII Fund**; Sale of L.P. interest; Date Closed: 03/31/2016. This investment was allocated to PSPRS Asset Class: Private Equity.
 - 2. **Blackstone V, BCPV-AC Fund**; Sale of L.P. interest; Date Closed: 03/31/2016. This investment was allocated to PSPRS Asset Class: Private Equity.
 - 3. Franklin Templeton Emerging Markets Debt Opportunities Fund; Redemption requested: 03/31/2016; This investment was allocated to PSPRS Asset Class: Fixed Income.
 - 4. **Gracie Zona, LP**; Redemption Requested: 04/01/2016; This investment was allocated to PSPRS Asset Class: Fixed Income.
- E. Disclosure of completed transactions for this period:
 - 1. **Apollo VII Fund**; Sale of L.P. interest; Date Closed: 03/31/2016. This investment was allocated to PSPRS Asset Class: Private Equity.
 - 2. **Blackstone V, BCPV-AC Fund**; Sale of L.P. interest; Date Closed: 03/31/2016. This investment is allocated to PSPRS Asset Class: Private Equity.

There were no questions from the Board of Trustees regarding this disclosure.

15. Discussion and possible **Action** regarding adoption of minor clarification revisions to the PSPRS Investment Policy Statement.

Jennifer Eichholz, Esq. Ivy Voss, Esq. Assistant Attorney General

MOTION:5-5/25/16 At 3:01 p.m.

Motion: To approve the recommendation of the Investment Committee to

accept the redline changes for minor clarifications to the PSPRS

Investment Policy Statement.

Moved by: Mr. Petrenka

Seconded by: As approved by the Investment Committee

Discussion:
In Favor:
Motion:
None
Unanimous
Passes

Presentation by Mr. Gregory Ferguson, Chairman of the Operations, Governance Policy and Audit Committee, regarding agenda items 16. through 25., which were discussed at the Operations, Governance Policy and Audit Committee meeting held today, May 25, 2016, on or after 11:00 a.m., and possible Action on the Committee's recommendations to the Board regarding same.

16. Presentation of the Month-to-Date Budget Report for FY 2016 and possible **Action** on same.

Mr. John Hendricks Manager of Finance and Accounting

We are 4.21% under budget.

17. Update on the progress of the Local Board Training Program and discussion and possible **Action** regarding the same.

Mr. Robert Ortega Local Board Training Coordinator and Human Resources Manager Mr. Don Mineer Local Board Training Specialist

The written report was discussed during the Operations, Governance Policy and Audit Committee meeting. There were no concerns.

18. Presentation of the "Requests for Local Board Rehearing" Report for the current month.

Mr. Jared A. Smout

Three of the six requests have been resolved.

19. Review and discussion regarding law firms' billings for legal services performed in March and April, 2016.

Mr. Jared A. Smout

The bills for March in the amount of \$89,939.77 and April in the amount of \$39,276.60 were approved for payment during the committee meeting

20. Report and possible **Action** on FY 2016 Compliance and Internal Audit Plan.

Ms. Bridget Feelev

Policies and procedures are being updated, work is continuing regarding the 2017 risk assessment and all items on the implementation log are on track.

21. Discussion and possible **Action** regarding changes to the PSPRS organizational structure.

Mr. Jared A. Smout

There are four funded positions in the process of being filled. A discussion was held regarding new positions being requested and their fulfillment dates. Some positions are being shifted to other departments and others are being planned for the future. A question and answer session was held regarding duties and positions. Mr. Petrenka encouraged the establishment of an investment accounting department, Mr. Parham inquired regarding additional work required in the next year due to the pension reform bill.

MOTION:6-5/25/16 At 3:27 p.m.

Motion: To accept the recommendation from the Operations, Governance

Policy and Audit Committee to approve the PSPRS organizational structure, but moving forward with the organizational chart has

budget implications.

Moved by: Mr. Ferguson

Seconded by: As approved by the Operations, Governance Policy and Audit

Committee.

Discussion:NoneIn Favor:UnanimousMotion:Passes

22. Presentation, discussion and possible **Action** regarding the renewal of fiscal 2016-2017 contracts for various services.

Mr. Jared A. Smout

Discussion was held regarding the draft contract with Cortex for the study of the consolidation of the local boards.

MOTION:7-5/25/16 At 4:02 p.m.

Motion: To accept the recommendation of the Operations, Governance

Policy and Audit Committee to approve Mr. Smout moving forward

to work on the contract with Cortex. Stage 1 - \$130,000.

Moved by: Mr. Ferguson

Seconded by: As approved by the Operations, Governance Policy and Audit

Committee.

Discussion: Mr. Ferguson stated he cannot understand why legislature will not

fund this study, but directed PSPRS to spend our money. Mr. Petrenka inquired as to the possibility of the actuaries advising us. Mr. Smout responded that it is the desire of legislature this be done

by an independent party

In Favor: Unanimous Motion: Passes

23. Review, discussion and possible **Action** with respect to the FY 2017 PSPRS Administrative Budget.

Mr. Jared A. Smout

Personnel changes have been reviewed, there is a small increase in education, travel, training costs AND professional services. In the budget are expenses for employer audits and a reduction in the expenses for financial audits. Discussion was held regarding a full time temporary United Health Care worker to help staff with questions from retirees about health insurance. Also in the budget is \$60,000 for replacement of two of the seven old air conditioning units.

24. Review, discussion and possible **Action** on pending and passed legislative proposals for the 2016 legislative session including an administrative amendment bill.

Mr. Jared A. Smout

All the PSPRS bills have passed and been signed by the governor. HB2019 – credited service; HB2643 – PSPRS administrative changes; HB2074 – cancer insurance changes; SB1152 – continuation of the System; HB2350 – PTSD; SB1160 – CORP reverse DROP and SB1206 – EORP opt out.

25. Update, discussion and possible **Action** on pension reform initiatives and implementation timeline.

Mr. Jared A. Smout

A written report was given to the Board with all of the changes to be implemented and a plan going forward.

26. Presentation and discussion by the Plan's actuaries, including possible action to approve, disapprove or modify the Assumed Earnings Rate for the fiscal year beginning July 1, 2016 and/or other actuarial matters.

Mr. Mark Buis, FSA, FCA, EA, MAAA Senior Consultant Mr. James D. Anderson, FSA, EA, MAAA Senior Consultant Mr. Francois Pieterse, A.S.A, M.A.A.A. Consultant Gabriel, Roeder, Smith & Company

A work study session with the Gabriel, Roeder, Smith & Company representatives, where no action was taken, was held yesterday regarding this agenda item with some members of the board in attendance. The agenda for today's meeting included the assumption study process, volatility/risk, investment return assumption. An experience study is completed every five years and the next one will be implemented in the June 30, 2017 valuations. The experience study covers interest rate, mortality assumptions, rates of return and investment return. The results of the meeting today affect the DROP interest rate beginning July 2016 and contributions beginning fiscal year 2018-19. Return risk is influenced by volatility which drags down returns. Discussion regarding the kind of risk needed for achieving returns and the nature of risk and return. The investment return assumptions need to be reasonable and discussion was held regarding how actuaries determine reasonable assumptions for returns. This is developed by eight investment consultants for a reasonable range of future expectations that actuaries can use. It is recommended a reduction from 7.5% to 7.4% which includes inflations expectations. A survey of other public retirement plans indicated the trend to lowering their rates.

A question was taken from a member of the public.

MOTION:2-5/25/16 At 1:54 p.m.

Motion: To accept the recommendation of the actuaries to reduce the

Assumed Earnings Rate to 7.4% from 7.5% starting July 1, 2016

which applies to the valuation of July 2017.

Moved by: Mr. Davis Seconded by: Ms. Stein

Discussion: Mr. Petrenka stated to consider a much lower rate of 6.5%. **In Favor:** Four: Ms. Stein, Mr. Davis, Mr. Ferguson, Mr. McHenry

Opposed: One: Mr. Petrenka Abstain: One: Mr. Tobin

Motion: Passes

27. Discussion and appropriate **Action** regarding Board of Trustee member requests to participate in training, educational and due diligence opportunities.

Mr. Brian P. Tobin

There were no requests.

- 28. Discussion and consultation with legal counsel and Staff and possible **Action** regarding IRS determination letter requests, proposed legislation, investment matters, ongoing, contemplated or threatened legal action involving the Trust and Plans, including vendor disputes, public record requests, personnel matters and actual or potential litigation and claims based on contract, tort or statute, including matters involving, judges Thompson and Hall, retired judges Fields and Lankford, retired police officers Rappleyea and Everson, active police officers Parker, Griego, Manganiello and Robles, the Pivotal Group, Bank of America and Stroh Ranch Development and Timbervest. The Board may vote to discuss these matters in Executive Session pursuant to A.R.S. §§ 38-431.03(A)(1), (2), (3), (4) and (7) as set forth in item 29.
- 29. The Board of Trustees may vote to go into Executive Session (which will not be open to the public) to discuss matters pursuant to A.R.S. §§ 38-431.03(A) (1), (2), (3) and (4), as applicable, including to receive legal advice from the Board's attorneys on any matter listed on the agenda, including:
 - a. Discussion and consultation with legal counsel and Staff regarding matters arising from public record requests or subpoenas, and ongoing or threatened legal action or claims involving the Plans or Trust not otherwise referenced above in Item 28., including but not limited to, those involving Ken Fields and the status of lawsuits challenging provisions of S. B. 1609, as authorized by A.R.S. §§ 38-431.03(A) (2), (3).
 - b. Update and discussion on personnel matters, as authorized by A.R.S § 38-431.03(A)(1).

The Board of Trustees did not hold an Executive Session.

30.	Schedule future meeting date(s). (Currently scheduled for Wednesday, June 15, 2016		
	The next meeting will be held on Wedneso	day, June 15, 2016.	
31.	Adjournment.		
	The meeting was adjourned at 4:33 p.m.		
/s/ Brian P. Tobin			
Brian P. Tobin, Chairman			
/s/ C	Gregory Ferguson	/s/ Randie A. Stein	
	Gregory Ferguson, Trustee, Vice Chairman	Randie A. Stein, Trustee	
<u>/s/ Je</u>	off Allen McHenry	/s/ Richard J. Petrenka Richard J. Petrenka, Trustee	
	Jen Allen Wichenry, Trustee	Nichard J. Petrenka, Trustee	
		/s/ William C. Davis	
		William C. Davis, Trustee	