

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 "Trust") to commingle their assets for purposes of investment, and, indeed, nearly 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 membership. 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 cost of living ("COLA") 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

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.

prudence standard by considering the purposes, terms, distribution requirements and other circumstances of 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 "Investment Policy") 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 "External Managers") 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.

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

1. 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. The total return for the Plans and Trust should meet or exceed the Plans' Policy Index (as described in Appendix I). As a secondary comparison, the Plans' and Trust's total return shall also be compared with comparable public pension funds as represented by the Independent Consultants Cooperative (the "ICC") Universe 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. The Plans' assets should equal their liabilities within any thirty-year period. See A.R.S. § 38-843(B).
4. 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 approved by the legislature of the State of Arizona and then to the extent possible, to reduce employer contribution rates over time.
5. 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.

6. 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. 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. Specific guidelines, time frames, benchmarks and performance requirements for the External Managers are specified in the Asset Class Appendices attached hereto.
8. 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.
9. 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. 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.
10. 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	ICC Total Domestic Equity
International Equities	MSCI ACWI Ex. U.S.	ICC Total International Equity
Global Fixed Income	Barclays Capital Global Aggregate	ICC Total Fixed Income
Global Real Estate	NCREIF Property Index NPI	ICC Real Estate
Global Private Equity	Russell 3000 + 1%	ICC 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	ICC 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.

1. 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 Equity Managers 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 (“MBSs”), including non-Agency mortgages and commercial mortgage-backed securities (“CMBSs”); Collateralized Mortgage Obligations (“CMOs”); asset-backed securities (“ABSs”); corporate bonds; Collateralized Debt Obligations (“CDOs”); Collateralized Loan Obligations (“CLOs”); Collateralized Bond Obligations (“CBOs”); 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.** The minimum quality rating of any publicly-traded fixed income issue held in an internally managed investment grade portfolio at the time of purchase shall be “B”, as rated by Moody’s Investors Service or an equivalent rating agency. 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.** 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 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/Equivalent.** 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 "A2" 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.
7. **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, global tactical asset allocation ("GTAA") funds, among others, shall be made so as to create and maintain diversified asset-specific portfolios. Diversification 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(1), 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, 38-848.03, and all other applicable laws.

2. **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 purchased for or employed by the Plans and Trust:

- A. Derivative instruments, except as permitted in the Derivatives Policy in Appendix II or as specifically provided in any investment management agreement or other governing instruments (“IMA”) approved by Staff for a particular External Manager. Unless otherwise authorized by the Board or Investment Committee, or within the portable alpha structures, the Chief Investment Officer shall not use derivative instruments to internally manage the Plans’ and Trust’s public securities and fixed income portfolios described in Appendix III and Appendix IV attached hereto.
- B. Lettered, legended or similar stocks.
- C. Non-taxable municipal securities, unless pricing anomalies in the marketplace suggest the likelihood of capital gains when normal spread relationships resume.
- D. “Naked” short sales (i.e., shorting a security not owned).
- E. Any transaction prohibited by law, including any federal or Arizona statute.

3. **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 expected to manage their funds to provide for anticipated withdrawals without impairing the investment process.

4. **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.

5. **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.

6. Derivatives and Alternative Investments

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

IV. ROLES AND RESPONSIBILITIES

1. 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 Paragraph B 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 Paragraph B 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:

- A. Except as specified with respect to the powers specifically delegated to the Chief Investment Officer described in Section IV(3) 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. The Administrator's consent to any investment (or any 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.

- B. In the event that a proposed external investment (one not managed by Staff in-house) 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.

2. 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.

3. 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(1) 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. The Chief 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.

4. 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.

5. 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.

6. External Investment Managers

Unless otherwise directed by the Investment Committee, 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, second, for complying with all applicable portions of this Investment Policy that do not otherwise conflict with that manager’s IMA. Further, each External Manager retained by the Plans or Trust to manage portfolios for the Plans or Trust shall:

- A. Meet with the Investment Committee or Board upon request;
- B. Submit written reports to the Chief Investment Officer and the Specialty Consultant and Fiduciary Consultant, at least quarterly;
- C. Work with the Plans’ and Trust’s custodian bank to verify monthly accounting reports;
- D. Except for any portion of its IMA which conflicts with this Investment Policy, confirm in writing to the Plans and Trust the External Manager’s intention to comply with the remainder of this Investment Policy as it currently exists and may be amended, from time to time, except that if such External Manager is unable to comply with any amendments to the Investment Policy, such External Manager will promptly so advise

the Chief Investment Officer and shall either take reasonable measures to redeem those portfolios of the Plans or Trust entrusted to its care or seek an exemption from the applicable policies pursuant to Section IV(1) of this Investment Policy.

Subject to this Investment Policy and the Derivatives Policy specified in Appendix II 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(S) and shall not be disclosed to the public unless authorized by the Plans or Trust or ordered by a court of competent jurisdiction.

7. 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:

- A. Accepting daily instructions from the Chief Investment Officer and his/her designated Staff.
- B. Notifying External Managers of proxies, tenders, rights, fractional shares or other dispositions of holdings.
- C. Resolving any problems that Staff may have relating to the custodial account(s).
- D. Safekeeping of securities.
- E. Collecting of interest and dividends.
- F. Daily cash sweep of idle principal and income cash balances.
- G. Processing of all transactions.
- H. Collecting of proceeds from maturing securities.
- I. Disbursement of all income or principal cash balances as directed.
- J. 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.
- K. Providing monthly statements by investment account and a consolidated statement of all assets.
- L. Working with Specialty Consultants and Fiduciary Consultants and the Plans' and Trust's accountants, auditors and other consultants to ensure accuracy in reporting.
- M. Providing written monthly reconciliation statements of custody and investment managers' accounting statements.
- G. Filing claims for the Plans and Trust in securities class actions affecting their interests.

- H. 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

Unless otherwise instructed by the Investment Committee:

1. Late 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 \$75M authorized for investment in Partnership A.

2. Attorneys’ Fees and Investigation Expenses.

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.

3. Investor Borne Management Fees.

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 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 \$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)(3) shall apply retroactively to all existing investments, including those authorized before the date this Investment Policy became effective.

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 0.5% 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(1)(B) 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 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, Staff 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(1)(B) of this Investment Policy.

7. Concurrent Investments.

In situations in which an underlying secondary investment 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 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.

VI. OTHER CONSIDERATIONS

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.

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. 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.

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 and July 25, 2012.² None of the amendments effective after January 25, 2012 are retroactive except the amendment made January 25, 2012, which pertains to Section V(3).

Dated this 25th day of July, 2012.

By: _____
Brian Tobin, Chairman

By: _____
James M. Hacking, 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

Effective: July 1, 2012

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.

<u>ASSET CLASS</u>	<u>TARGET %</u>	<u>TARGET RANGE %</u>	<u>TARGET BENCHMARK</u>
EQUITIES			
<i>U.S. Equities</i>	18	13-23	<i>Russell 3000</i>
<i>International Equities</i>	14	10-18	<i>MSCI ACWI Ex. U.S.</i>
FIXED INCOME	12	8-16	Barclays Capital Global Aggregate
GLOBAL TACTICAL ASSET ALLOCATION	8	4-12	3-month LIBOR + 3%
REAL ESTATE	10	5-15	<i>NCREIF Property Index NPI</i>
PRIVATE EQUITY	9	5-13	<i>Russell 3000 + 1%</i>
CREDIT OPPORTUNITIES	12	6-15	<i>50% BofA ML US High Yield BB-B Rated Constrained / 50% CSFB Fixed Income Arbitrage Index</i>
ABSOLUTE RETURN	4	0-8	<i>BofA ML 3-month T-Bills + 2%</i>
REAL ASSETS	7	4-10	<i>CPI + 2%</i>
RISK PARITY	4	0-8	<i>60% Barclays Capital Global Aggregate / 30% MSCI AC World Net / 10% Dow Jones – UBS Commodity Index TR</i>

CASH

Short Term

2

0 – 6

BofA ML 3-month T-Bill

Asset Allocation Within Ranges

The Plans' Chief Investment Officer shall adjust the Trust's asset allocations within ranges after consideration of the advice of the Board's Fiduciary Consultant and 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 allocation 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 consented to by the Investment Committee in advance.

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.

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

Effective: May 22, 2013, 2012

1. 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 consented to 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. However, nothing in this Derivatives Policy shall preclude the Chief 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.

2. 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:

- A. Forward-based derivatives, including forward contracts, futures contracts, swaps, and similar instruments
- B. Option-based derivatives, including put options, call options, swaptions, interest rate caps and floors, and similar instruments

3. **Allowed Uses of Derivatives**

- A. **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.
- B. **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.
- C. **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.

4. **Prohibited Uses of Derivatives**

Any use of derivatives not referenced in Paragraph 3 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 3 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:

- A. **Leverage.** 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(6) (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.
- B. **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 a portfolio's IMA if created with non-derivative securities.

5. **Portfolio-Level Risk Control Procedures and Documentation Requirements**

A. **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.

B. 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.

C. 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.

D. 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:

- i) A list of all derivative positions of the Plans and the Trust as of quarter-end (and those terminated since the last report) including, without limitation, the related notional amount, the term and the rating of the related counterparty.
- ii) An explanation of any significant pricing discrepancies between the External Manager and custodian bank.
- iii) 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.

E. 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.

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

Mutual funds, hedge funds, CIFs, ETFs, unit trusts, private equity funds 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, 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.

Public Safety Personnel Retirement System

INTERNAL MANAGER REQUIREMENTS FOR INTERNALLY MANAGED PUBLIC EQUITIES PORTFOLIO

Adopted February 25, 2009

Revised: July 25, 2012

Effective: July 25, 2012

This Appendix III to the Investment Policy governs the Chief Investment Officer's management of the publicly-traded equities portfolio of the Plans and Trust. Subject to the Plans' and Trust's overall asset allocation limits and other provisions set forth in the Investment Policy and Appendix I 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:

Benchmark(s):	U.S. Equities	<u>Russell 3000</u>
	International Equities	<u>MSCI ACWI Ex. U.S.</u>

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 previously consented to by the Administrator.

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, 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.

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

INTERNAL MANAGER REQUIREMENTS FOR THE FIXED INCOME PORTFOLIO

Adopted: February 25, 2009

Revised: April 22, 2009

Revised: July 25, 2012

Effective: July 25, 2012

This Appendix IV to the Investment Policy governs the management of the publicly-traded fixed-income portfolio of the Plans and Trust. Subject to the Plans' and Trust's overall asset allocation limits and other provisions set forth in the Investment Policy and Appendix I 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:

1. Benchmark(s): Barclays Capital Global Aggregate Index (or other appropriate benchmark as approved by the Investment Committee)
2. Fixed income investments should emphasize marketability, and be diversified by issuer, geography, strategy, sector and quality.
3. Fixed Income holdings may be in diversified fixed income based ETFs, CIFs, mutual funds, unit trusts or other commingled vehicles of any kind, including limited partnerships and limited liability companies. The minority of the fixed income portfolio shall be managed by Staff.
4. Not more than two percent (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.
5. 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.
6. 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 Appendix IV, 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

Effective: July 25, 2012

1. **Scope**

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

2. **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.

3. **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 open-ended "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.

4. Roles, Responsibilities and Reporting

A. 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 Paragraph4(C) below. Annually, the Chief Investment Officer shall report the results of the Trust's securities lending program to the Investment Committee and Board.

B. 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.

C. 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.

D. 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.

5. 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:

A. 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.

B. 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, each lending agent shall 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.

C. 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.

6. Further Limitations

A. 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.

B. Liquidity

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

C. 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.

D. Voting Rights

The Trust shall be empowered to 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 investment 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

Cash collateral received by the lending agent on behalf of the Trust shall be invested and maintained by the lending agent pursuant to the following guidelines, unless otherwise approved by the Administrator:

1. Accounting Treatment

Cash collateral shall be pooled into a commingled fund (“Fund”). The Fund shall seek to provide as high a level of current income as is consistent with the preservation of capital and the maintenance of liquidity and will seek to stabilize its net asset value at \$1.00 per share, although no assurances can be given that such net asset value will be maintained at all times.

Collateral which is invested in the Fund is assigned a value of approximately \$1.00 per unit. Unless the lending agent determines otherwise, the Fund shall be operated on a cost, rather than market value basis, and as a result, for purposes of subscriptions and redemptions, if non-cash assets are to be sold prior to their maturity for purposes of affecting a participant’s withdrawal from the Fund, it is possible that a loss may be realized. The amortized or book value of the Fund’s assets and underlying fair market value of its assets may differ to a certain degree, and accordingly, admissions or withdrawals from the Fund utilizing such amortized or book value may be made when the fair market value of the underlying assets of the Fund is less than, or exceeds, such amortized or book value.

2. Eligible Investments

Subject to those securities deemed eligible investments under Rule 2a-7 promulgated under the Investment Company Act of 1940, as amended (the “Rule”), cash collateral may be invested in the following securities (“Eligible Securities”):

<u>Asset Class</u>	<u>Credit</u>	<u>Maturity</u>
Repurchase Agreements	100% minimum collateralization	397 days
US Government/Agency Fixed Floating		397 days 762 days
Asset Backed Securities Fixed Floating	A1/P1 or F1 A1/P1 or F1	397 days (maturity) 397 days (maturity)
Floating Rate Notes	A1/P1 or F1	397 days
Commercial Paper	A1/P1 or F1	397 days
CD/TD’s (Foreign or Domestic) Fixed Floating	A1/P1 or F1 A1/P1 or F1	397 days 397 days

Guaranteed Investment Contracts	A1/P1 or F1	397 days
Money Market Mutual Funds	Eligible	
General		
Issuer Concentration	5% of Portfolio (exceptions apply as stated in Investment Guidelines)	
Weighted Average Maturity	90 days	

3. Limitations Regarding Portfolio Investments

The Fund will limit its portfolio investments to those United States dollar-denominated Eligible Securities that the lending agent or its designated manager (“Investment Manager”) determines present minimal credit risks at the time of acquisition.

At all times, and notwithstanding anything to the contrary herein, the Fund will invest only in securities which are eligible investments for a money market fund under Rule 2a-7 (the “Rule”) promulgated under the Investment Company Act of 1940. The following definitions and limitations shall apply to the Fund’s investments under the current version of the Rule, although such provisions automatically shall be changed to conform to the Rule as said Rule is amended from time to time:

- A. **First Tier Securities.** A “First Tier Security” is an Eligible Security having a top rating from a minimum of two of the three National Rating Services “Rating Services”.
- B. **Second Tier Securities.** A “Second Tier Security” is an Eligible Security rated as within the second highest rating category by all three Rating Services. Immediately after the acquisition of any Second Tier Security, the Fund shall not have invested more than 5% of its total assets in Eligible Securities that are Second Tier Securities;
- C. **Securities Subject to Guarantees.** An Eligible Security that is subject to a guarantee may be determined to be a First Tier Security based solely on whether the guarantee is a First Tier Security; and
- D. **Securities Subject to Conditional Demand Features.** An Eligible Security that is subject to a conditional demand feature (an “Underlying Security”) may be determined to be a First Tier Security only if:
 - (i) the Eligible Security is a First Tier Security, and
 - (ii) at the time of the acquisition of the Underlying Security, the Investment Manager has determined that there is minimal risk that the circumstances that would result in the conditional demand feature not being exercisable will occur; and

- (a) the conditions limiting exercise either can be monitored readily by the Fund, or relate to the taxability, under federal, state or local law, of the interest payments on the security; or
- (b) the terms of the conditional demand feature require that the Fund will receive notice of the occurrence of the condition and the opportunity to exercise the demand feature in accordance with its terms;
- (iii) the Underlying Security or any guarantee of such security (or the debt securities of the issuer of the Underlying Security or guarantee that are comparable in priority and security with the Underlying Security or guarantee) has received either a short-term or long-term rating, as the case may be, from the requisite Rating Services within the Rating Services' two highest short-term or long-term ratings categories (within which there may be subcategories or gradations indicating relative standing) or, if unrated, is determined to be of comparable quality by the Investment Manager to a security that has received a rating from the Rating Services within their two highest short-term or long-term rating categories, as the case may be.

4. **Portfolio Diversification.**

A. **Issuer Diversification.** The Fund shall be diversified with respect to issuers of securities acquired by the Fund as provided below, other than with respect to government securities and securities subject to a guarantee issued by a non-controlled person.

- (i) **Single Issuer.** Immediately after the acquisition of any security, the Fund shall not have invested more than 5% of its total assets in securities issued by the issuer of the security; provided, however, that the Fund may invest up to 25% of its total assets in the First Tier Securities of a single issuer for a period of up to three business days after the acquisition thereof; provided, further, that the Fund may not invest in the securities of more than one issuer in accordance with the foregoing provision in this paragraph at any time.
- (ii) **Second Tier Securities.** Immediately after the acquisition by the Fund of any Second Tier Security, the Fund shall not have invested more than the greater of 1.0% of its total assets or one million dollars in Second Tier Securities issued by that issuer.

B. **Issuer Diversification Calculations.** For purposes of making calculations under Section IV(a) above:

- (i) **Repurchase Agreements.** The acquisition by the Fund of a repurchase agreement shall be deemed to be an acquisition of the Underlying Securities of said repurchase agreement, provided that the obligation of the seller to repurchase the Underlying Securities from the Fund is fully collateralized.

(ii) **Refunded Securities.** The acquisition of a refunded government security shall be deemed to be an acquisition of an escrowed government security.

(iii) **Conduit Securities.** A conduit security shall be deemed to be issued by the person (other than the municipal issuer) ultimately responsible for payments of interest and principal on the security.

(iv) **Asset Backed Securities.**

(a) **General.** An asset backed security acquired by the Fund (“Primary ABS”) shall be deemed to be issued by the special purpose entity that issued the asset backed security; provided, however:

(1) **Holdings of Primary ABS.** Any person whose obligations constitute 10% or more of the principal amount of the qualifying assets of the Primary ABS (“Ten Percent Obligor”) shall be deemed to be an issuer of the portion of the Primary ABS such obligations represent; and

(2) **Holdings of Secondary ABS.** If a Ten Percent Obligor of a Primary ABS is itself a special purpose entity issuing asset backed securities (“Secondary ABS”), any Ten Percent Obligor of such Secondary ABS also shall be deemed to be an issuer of the portion of the Primary ABS that such Ten Percent Obligor represents.

(b) **Restricted Special Purpose Entities.** A Ten Percent Obligor with respect to a Primary or Secondary ABS shall not be deemed to have issued any portion of the assets of a Primary ABS as provided in paragraph (A) above if that Ten Percent Obligor is itself a special purpose entity issuing asset backed securities (“Restricted Special Purpose Entity”), and the securities that it issues (other than securities issued to a company that controls, or is controlled by or under common control with, the Restricted Special Purpose Entity and which is not itself a special purpose entity issuing asset backed securities) are held by only one other special purpose entity.

(c) **Demand Features and Guarantees.** In the case of a Ten Percent Obligor deemed to be an issuer, the Fund shall satisfy the diversification requirements of Paragraph 4(c) below with respect to any demand feature or guarantee to which the Ten Percent Obligor’s obligations are subject.

(v) **Shares of Other Money Market Funds.** If the Fund acquires shares issued by another money market fund in an amount that would otherwise be prohibited by Section IV(a) above, it shall nonetheless be deemed in compliance if the Investment Manager reasonably believes that the fund in which it has invested satisfies Section (c)(4) of the Rule.

C. **Diversification Rules for Demand Features and Guarantees.** The Fund shall be diversified with respect to demand features and guarantees acquired by the Fund as provided above, other than with respect to a demand feature issued by the same institution that issued the Underlying Security, or with respect to a guarantee or demand feature that is itself a government security.

- (i) **General.** Immediately after the acquisition of any demand feature or guarantee, or security subject to a demand feature or guarantee, the Fund, with respect to 75% of its total assets, shall not have invested more than 10% of its total assets in securities issued by or subject to demand features or guarantees from the institution that issued the demand feature or guarantee, subject to subsections (ii) and (iii), below.
- (ii) **Second Tier Demand Features or Guarantees.** Immediately after the acquisition by the Fund of any demand feature or guarantee (or a security after giving effect to the demand feature or guarantee) that is a Second Tier Security, the Fund shall not have invested more than 5% of its total assets in securities issued by or subject to demand features or guarantees from the institution that issued the demand feature or guarantee.
- (iii) **Demand Features or Guarantees Issued by Non- Controlled Persons.** Immediately after the acquisition by the Fund of any security subject to a demand feature or guarantee, the Fund shall not have invested more than 10% of its total assets in securities issued by, or subject to demand features or guarantees from the institution that issued the demand feature or guarantee, unless, with respect to any security subject to demand features or guarantees from that institution (other than securities issued by such institution), the demand feature or guarantee is a demand feature or guarantee issued by a non-controlled person.

D. **Demand Feature and Guarantee Diversification Calculations.**

- (i) Fractional Demand Features or Guarantees. In the case of a security subject to a demand feature or guarantee from an institution by which the institution guarantees a specified portion of the value of the security, the institution shall be deemed to guarantee the specified portion thereof.
- (ii) Layered Demand Features or Guarantees. In the case of a security subject to demand features or guarantees from multiple institutions that have not limited the extent of their obligations as described in subparagraph (i), above, each institution shall be deemed to have provided the demand feature or guarantee with respect to the entire principal amount of the security.

5. **Demand Features and Guarantees Not Relied Upon.**

If the Investment Manager determines that the Fund is not relying on a demand feature or guarantee to determine the quality or maturity, or liquidity of the portfolio security and maintains a record of this determination, then the Fund may disregard such demand feature or guarantee for all purposes of making the election to invest in such security.

6. **Maturity of Portfolio Securities.**

- A. The Fund will maintain a dollar-weighted average portfolio maturity appropriate to its objective of maintaining a stable net asset value per share; provided, however, that the Fund will not:
- (i) acquire any instrument with a remaining maturity of greater than 397 calendar days, or
 - (ii) maintain a dollar-weighted average portfolio maturity that exceeds 90 days.
- B. Should the disposition of a portfolio instrument or market action cause the dollar-weighted average portfolio maturity of the Fund to exceed 90 days, the Investment Manager shall invest the Fund's available cash in a way that will reduce its dollar-weighted average portfolio maturity to 90 days or less as soon as reasonably practicable.
- C. For the purposes of these Investment Guidelines, the maturity of the Fund's portfolio security shall be deemed to be the period remaining (calculated from the trade date or such other date on which the Fund's interest in the security is subject to market action) until the date on which, in accordance with the terms of the security, the principal amount must unconditionally be paid, or in the case of a security called for redemption, the date on which the redemption payment must be made, except that:
- (i) **Adjustable Rate Government Securities.** A government security which is a variable rate security where the variable rate of interest is readjusted no less frequently than every 762 calendar days shall be deemed to have a maturity equal to the period remaining until the next readjustment of the interest rate. A government security which is a floating rate security shall be deemed to have a remaining maturity of one day.
 - (ii) **Short-Term Variable Rate Securities.** A variable rate security, the principal amount of which, in accordance with the terms of the security, must unconditionally be paid in 397 calendar days or less shall be deemed to have a maturity equal to the earlier of the period remaining until the next readjustment of the interest rate or the period remaining until the principal amount can be recovered through demand.
 - (iii) **Long-Term Variable Rate Securities.** A variable rate security, the principal amount of which is scheduled to be paid in more than 397 calendar days, that is subject to a demand feature shall be deemed to have a maturity equal to the longer of the period remaining until the next readjustment of the interest rate or the period remaining until the principal amount can be recovered through demand.
 - (iv) **Short-Term Floating Rate Securities.** A floating rate security, the principal amount of which, in accordance with the terms of the security,

must unconditionally be paid in 397 calendar days or less shall be deemed to have a maturity of one day.

- (v) **Long-Term Floating Rate Securities.** A floating rate security, the principal amount of which is scheduled to be paid in more than 397 calendar days, that is subject to a demand feature, shall be deemed to have a maturity equal to the period remaining until the principal amount can be recovered through demand.
- (vi) **Repurchase Agreements.** A repurchase agreement shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur, or, where the agreement is subject to demand, the notice period applicable to a demand for the repurchase of the securities.
- (vii) **Portfolio Lending Agreements.** A portfolio lending agreement shall be treated as having a maturity equal to the period remaining until the date on which the loaned securities are scheduled to be returned, or where the agreement is subject to demand, the notice period applicable to a demand for the return of the loaned securities.
- (viii) **Money Market Fund Securities.** An investment in a money market fund shall be treated as having a maturity equal to the period of time within which the acquired money market fund is required to make payment upon redemption, unless the acquired money market fund has agreed in writing to provide redemption proceeds to the Fund within a shorter time period, in which case the maturity of such investment shall be deemed to be the shorter period.

Public Safety Personnel Retirement System

Investment Manager Requirements and Framework for Credit Opportunities Investments

Adopted: February 25, 2009

Revised: March 25, 2009

Revised: May 7, 2009

Revised: July 25, 2012

Effective: July 25, 2012

1. **Scope & Purpose**

This Appendix VI to the Investment Policy applies to the Credit Opportunities investments of the Plans and Trust and provides the broad strategic framework for managing 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 opportunities that are regularly available.

2. **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 investment manager and strategy to the extent possible, recognizing that there may be few opportunities available at any one time and that Credit Opportunities managers 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.

3. **Investment Structures**

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

A. **Investment Vehicles**

This Policy authorizes commitments to separately managed accounts, ETFs, CIFs, unit trusts, mutual 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.

B. 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(1) 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.

C. 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.

4. Strategy Allocation

The Credit Opportunities investment program will endeavor to create a diversified sub-strategy allocation by diversifying among investments in residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), 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 (CLO), 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.

5. 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 next 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.

6. 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.

7. **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.

A. **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.

B. **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.

C. **Manager Concentration Risk Manager level**

Firm risk is the exposure to an individual Credit Opportunities investment firm 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.

D. **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 manager/strategy utilizing leverage in excess of 5:1.

8. **Roles and Responsibilities for the Credit Opportunities Investment Portfolio**

A. **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(1)(B) of the Investment Policy.

B. Investment 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(1)(B) 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 Paragraph 8(C) below; in accordance with the requirements of this Credit Opportunities Investment Policy Appendix. Notwithstanding Paragraph 8(A) above, until such time as the Trust's maximum allocation for Credit Opportunities investments has 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, or CIFs to achieve diversified exposures consistent with the scope and purpose of Credit Opportunities.

C. 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.

9. 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.

Public Safety Personnel Retirement System

Investment Manager Requirements and Framework for Private Equity Investments

Adopted: February 25, 2009

Revised: August 26, 2009

Revised: July 25, 2012

Effective: July 25, 2012

1. **Scope & Purpose**

This Appendix VII 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 Private Equity investments allocation. Private Equity investments are understood to mean equity or debt (with equity participation) investments in assets that are generally not traded on public exchanges and may be illiquid in nature.

2. **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 investment 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.

3. **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.

A. **Investment Vehicles**

This Appendix VII authorizes commitments to separately managed accounts or commingled accounts, including partnerships, limited liability companies, limited partnerships, unit trusts and discretionary managers investing in partnerships, limited

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

B. 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.

C. 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 Manager's IMA or as otherwise provided in Appendix II (Derivatives Policy).

4. 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.

A. 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 invested capital should be invested in funds pursuing non-U.S. strategies.

B. 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.

5. 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.

6. 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 controlling such risk.

A. 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.

B. 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 manager selection and comprehensive due diligence.

(i.) 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.

(ii.) 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.

C. Firm Risk

Firm risk is the exposure to an individual Private Equity Investment firm and is controlled by limiting the maximum commitment to funds actively managed by the same firm 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.

D. 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.

E. 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.

F. 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.

G. Leverage

Many underlying Private Equity funds 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 Private Equity manager/strategy utilizing a target rate of leverage in excess of 3:1 at the fund level. However, the Plans and Trust recognize at the portfolio company level, leverage may be used for prudent tactical and strategic reasons.

7. Roles and Responsibilities for the Private Equity Investment Portfolio

A. 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(1)(B). of the Investment Policy

B. Investment 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(1)(B) 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 Paragraph 7(A) above, until such time as the Trust's maximum allocation for Private Equity has been invested with External Managers, the Chief Investment Officer may invest in ETFs, CIFs, unit trusts, or mutual funds 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.

C. Specialist Consultant 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.

8. **Monitoring, Allocation and Reporting**

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. Quarterly performance reports may include an analysis of the Trust's Private Equity investments against both the benchmark for Private Equity and the Venture Economics Universe. The Venture Economics Universe or similar universe will provide a relative comparison of Private Equity Funds with similar vintage years.

Public Safety Personnel Retirement System

Investment Manager Requirements and Framework for Real Assets Investments

Adopted: February 25, 2009

Revised: April 22, 2009

Revised: July 25, 2012

Adopted: July 25, 2012

1. **Scope & Purpose**

This Appendix VIII 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.

2. **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 investment manager and strategy within the ranges provided for in this Appendix VIII. Real Assets 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.

3. **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 that are funded will be included within the Real Assets classification.

A. **Investment Vehicles**

This Policy authorizes commitments to investments including, but not limited to, separately managed accounts, hedge funds, ETFs, unit trusts, CIFs, mutual funds

(whether in the form of partnerships, limited liability companies, and limited partnerships) and discretionary managers investing in partnerships, limited partnerships, limited liability companies, Exchange Traded Notes (ETNs), CIFs, unit trusts or other commingled investment vehicles or similar investment vehicles, including without limitation, principal protected notes and individual security purchases.

B. 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. Upon the consent of the Administrator, the Chief Investment Officer may authorize the Trust to participate in these opportunities. Discretionary managers may exercise co-investment rights within an investment approved by the Administrator and Chief Investment Officer and as governed by the investment’s governing agreement or IMA.

C. 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 Appendix II (Derivatives Policy) contained within this Investment Policy.

4. 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	20%	0%	40%
Commodities	15%	0%	75%
Currency	10%	0%	20%
Infrastructure	20%	0%	40%
Timber	15%	0%	30%
TIPS/Inflation Prot Bonds	20%	0%	80%

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. Staff will produce a report (“Annual Plan”) each year detailing strategic objectives, pacing, and the means for implementation for the next twelve months in the Real Asset portfolio.

5. **Performance Objectives**

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 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's of each External Manager. Performance will be evaluated on a gross-of-fees basis.

6. **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.

A. **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.

B. **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.

(i.) **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 vehicle and the diversification of the assets underlying the vehicle.

(ii.) **Manager Concentration Risk – Fund Level**

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

C. Firm Risk

Firm risk is the exposure to an individual Real Assets investment firm or manager and is controlled by limiting the maximum commitment to funds actively managed by the same firm and manager and their 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 after consultation with the Investment Committee. Any Real Assets investment should not exceed 20% of any underlying External Manager's total fund, unless specifically agreed by the Administrator.

D. Leverage

Many underlying Real Assets 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 Policy of the Trust to avoid any individual External Manager whose strategy utilizes net leverage in excess of 5:1.

7. Roles and Responsibilities for the Real Assets Investment Portfolio

A. 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(1)(B) of the Investment Policy.

B. Investment 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(1)(B) of the Investment Policy. Due 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 Paragraph 7(C) below; in accordance with the requirements of this Real Assets Appendix. Notwithstanding Paragraph 7(a) above, until such time as the Trust's maximum allocation for Real Assets has been invested with External Managers, the Chief Investment Officer may invest in TIPS, ETFs, unit trusts, mutual funds 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.

C. Specialist Consultant 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 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.

8. MONITORING, ALLOCATION AND REPORTING

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.

Public Safety Personnel Retirement System

Investment Manager Requirements and Framework for Real Estate Investments

Adopted: February 25, 2009

Revised: May 27 2009

Revised: July 25, 2012

Effective: July 25, 2012

1. **Scope & Purpose**

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

2. **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.

3. **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.

A. **Investment Vehicles**

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

B. **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. Upon the consent of the Administrator (or Investment Committee) as specified in Section IV(1) 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.

C. 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.

4. 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, opportunistic investments; and, 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 20% prudently over time.

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%

Staff will produce a report ("Annual Plan") each year detailing strategic objectives, pacing, and the means for implementation for the next twelve months in the Real Estate portfolio.

5. **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).

6. **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.

A. **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.

B. Manager Risk

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

(i.) 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 vehicle and the diversification of the assets underlying the vehicle.

(ii.) Manager Concentration Risk – Fund Level

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

C. 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 with Desert Troon, the maximum commitment to any Real Estate Investment management firm, and/or its affiliates should be 25% of the Trust's Real Estate allocation, measured at the time of commitment.

D. 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.

E. 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.

F. 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

G. 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 a target rate of leverage in excess of 5:1 at the fund level. Generally, strategies that include cross collateralization of the leveraged projects within a fund will be avoided and investment in funds with leveraged structures that provide for recourse to the total fund in excess of the amount of committed capital are prohibited.

7. Roles and Responsibilities for the Real Estate Investment Portfolio

A. 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(1)(B) of the Investment Policy.

B. Investment 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(1)(B) 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 Paragraph 7(C) below; in accordance with the requirements of this Real Estate Investment Policy Appendix IX. Notwithstanding Paragraph 7(A) above, until such time as the Trust's maximum allocation for Real Estate investments has been invested with External Managers, the Chief Investment Officer may invest in ETFs, unit trusts, CIFs, and mutual funds 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.

C. 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 on-going status of retained External Managers, including performance reporting.

8. **Monitoring, Allocation and Reporting**

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.

Public Safety Personnel Retirement System

***Investment Manager Requirements
and
Framework for
Global Tactical Asset Allocation Strategies***

Adopted: _____

Effective: _____

Public Safety Personnel Retirement System

Requirements and Framework for Proxy Voting

Adopted: August 26, 2009

Revised: July 25, 2012

Effective: July 25, 2012

1. **SCOPE & PURPOSE**

This Appendix XI 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.

2. **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.

3. **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.

A. 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.

B. 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.

C. 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.

D. Shareholder Proposals

Shareholder proposals on proxy statements that seek to impose operating burdens, economic costs, or other restrictions upon the firm, beyond that which is legally required (broadly termed 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 these shareholder proposals, seeking to avoid the added costs which would lead to decreased investment returns.

4. 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.

5. 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.

6. Internally Managed Equities

For equity investments where the 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.

7. Externally Managed Equities

A. 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 their pro-rata ownership. The 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 vehicles, 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.

B. 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 Administrator will direct Staff (based on Staff recommendation and input from the Specialist Consultant or Fiduciary Consultant) as to which of three implementation processes (as described below) will be selected for a particular separately managed account.

(i.) 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.

(ii.) 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 Appendix XI.

(iii.) 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 5 of this Appendix XI.

8. Situations Where the Trust May Forego Its Voting Rights

A. 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 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.

B. 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.

C. 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, including what is known as “share blocking,” where the sale of the shares of equity securities voted may be prohibited for some period of time, generally between the record and meeting dates. The Board believes that the loss of investment flexibility resulting from share blocking generally outweighs the benefit to be gained by voting.

Public Safety Personnel Retirement System
Requirements
and
Framework for
Redemptions from Hedge Fund Structured Investments

Adopted: August 31, 2011

Revised: July 25, 2012

Effective: July 25, 2012

1. Scope and Purpose:

The Trust invests in a various investment structures commonly called "Hedge Funds." Hedge funds are not a separate asset class but rather an investment vehicle that may invest in assets from a range of classes. Therefore, these investment vehicles are allocated to asset classes based upon the hedge fund's strategies, objectives and exposures. Accordingly, Hedge Fund structured investments reside in different asset allocations within the Trust. The scope of this policy refers and applies to all Hedge Funds in which the Trust owns interests.

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 by authorizing the Chief Investment Officer to exercise discretion in redeeming money already invested in Hedge Funds.

2. Specific Authority to Redeem:

The Chief Investment Officer or the Deputy Chief Investment Officer, in concert with the Administrator, may:

- redeem all or any portion of any Trust investment in a Hedge Fund; and
- issue notices of redemption for all or any portion of any Trust investment in a Hedge Fund.

The proceeds of any such redemption shall be temporarily re-invested by the Chief Investment Officer with a liquid investment within the same sub-asset class to maintain compliance with all mandated portfolio characteristics, or held in cash.

Every redemption and notice of redemption shall be promptly reported to the Chairman of the Board, the members of the Investment Committee, the Investment Compliance Officer, and investment counsel.

At the meeting of the Investment Committee immediately following initiation of a notice of redemption, notice of the redemption shall be presented to the Committee, including the

reasons for said redemption, provided that Staff shall not disclose any information during a public meeting of the Investment Committee relating to the redemption which is precluded from disclosure under applicable confidentiality laws.

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

- Redeeming from strategies and managers that are underperforming, or who have had material changes in expected risks and returns,
- To avoid changes in terms, liquidity, or fees that materially depart from those upon which the initial investment was based; and
- To avoid 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.

Public Safety Personnel Retirement System

*Investment Management Requirements
and
Framework for
Risk Parity Strategies*

Adopted: _____

Revised: _____