



D A L L A S
POLICE & FIRE
PENSION SYSTEM



INVESTMENT POLICY STATEMENT

Amended as of January 10, 2019

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Adopted April 14, 2016
Amended as of January 10, 2019

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INVESTMENT POLICY STATEMENT

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Section 1 Introduction and Purpose

This policy statement shall guide investment of the assets of the Dallas Police and Fire Pension System (DPFP). This investment policy statement (IPS) is issued for the guidance of the Dallas Police and Fire Pension System Board of Trustees (Board), Investment Advisory Committee (IAC), Executive Director, Staff, Consultant(s), Custodian, and Investment Managers. This IPS is intended to set forth an appropriate set of goals and objectives for DPFP. It will define guidelines to assist fiduciaries and Staff in the supervision of the investments of DPFP. The investment program processes and procedures are defined in the various sections of the IPS by:

- A. Stating in a written document DPFP's expectations, objectives and guidelines for the investment of assets;
- B. Setting forth an investment structure for managing the portfolio. This structure includes assigning various asset classes, investment management styles, asset allocation and acceptable ranges that, in total, are expected to produce an appropriate level of overall diversification and total investment return over the investment time horizon;
- C. Encouraging effective communications between the Board, IAC, Executive Director, Staff, Consultant(s), Investment Managers and Custodian(s);
- D. Setting forth policy that will consider various factors, including inflation, global economic growth, liquidity and expenses, that will affect the portfolio's short and long-term total expected returns and risk;
- E. Establishing criteria to select and evaluate Investment Managers; and
- F. Complying with applicable fiduciary and due diligence requirements experienced investment professionals would utilize, and with laws, rules and regulations applicable to DPFP.

Section 2 Goals, Objectives, and Constraints

A. Goals

1. Ensure funds are available to meet current and future obligations of the plan when due.
2. Earn a long-term, net of fees, investment return greater than the actuarial return assumption.
3. Rank in the top half of the public fund universe over the rolling five-year period, net of fees.

B. Objectives

1. Maintain a diversified asset allocation.
2. Accept the minimum level of risk required to achieve the return objective.

3. Outperform the Policy Benchmark¹ over rolling five-year periods.
4. Control and monitor the costs of administering and managing the investments.

C. Constraints

1. DPFPP will be managed on a going-concern basis. The assets of the Fund will be invested with a long-term time horizon, while being cognizant of the weak actuarial funded ratio and ongoing liquidity needs.
2. The Board intends to maintain sufficient liquidity in either cash equivalents or short-term investment grade bonds to meet two to three years of anticipated benefit payments and expenses (net of contributions).
3. DPFPP is a tax-exempt entity. Therefore, investments and strategies will be evaluated on a basis that is generally indifferent to taxable status.

Section 3 Ethics, Standards of Conduct, and Fiduciary Responsibility

The following are standards of conduct for the Board, Investment Advisory Committee, Staff, Investment Managers, Consultant(s), and all other investment related service providers of DPFPP.²

- A. Place the interest of DPFPP above personal interests.
- B. Act with integrity, competence, diligence, respect, and in an ethical manner.
- C. Use reasonable care, diligence, and exercise independent professional judgment when conducting analysis, making recommendations, and taking actions.
- D. Promote the integrity of and uphold the rules governing DPFPP.
- E. Comply with all applicable laws, rules, and regulations of any government agency, regulatory organization, licensing agency, or professional association governing their professional activities.
- F. Adhere to applicable policies relating to ethics, standard of conduct and fiduciary responsibility including the:
 1. Board of Trustees and Employees Ethics and Code of Conduct Policy;
 2. Board of Trustees Governance and Conduct Policy; and the
 3. Contractor's Statement of Ethics.

Section 4 Core Beliefs and Long-Term Acknowledgements

This section outlines the core beliefs and long-term acknowledgements for the overall governance of DPFPP. These beliefs and acknowledgements will serve as guiding principles in the decision making and implementation of DPFPP's investment mandate.

¹ The Policy Benchmark represents the return of the investable and non-investable indices as defined in Appendix B, at the target allocation for each asset class.

² These are informed by the CFA Institute and the Center for Fiduciary Studies.

- A. A well-defined governance structure with clearly delineated responsibilities is critical in achieving consistent, long-term performance objectives.
- B. The strategic asset allocation determines the risk reward profile of the portfolio and thus drives overall portfolio performance and volatility.
 - 1. Asset allocation has a greater effect on return variability than asset class investment structure or manager selection.
 - 2. It is essential to account for liabilities in setting long-term investment strategy.
 - 3. Rebalancing the portfolio is a key aspect of prudent long-term asset allocation policy.
- C. Investment costs will be monitored and minimized within the context of maximizing net return. The goal is not low fees, but rather maximum returns, net of fees.
 - 1. The opportunity for active manager risk-adjusted outperformance (alpha) is not uniformly distributed across asset classes or Investment Managers' strategies.
 - 2. Active strategies are preferred when there is strong conviction that they can be expected to add alpha, net of fees.
 - 3. Passive strategies should be considered if alpha expectations are unattractive.
- D. Risk is multifaceted and will be evaluated holistically, incorporating quantitative measures and qualitative assessments.
 - 1. Global investment reduces risk through diversification.
 - 2. Diversification across different risk factors reduces risk.
 - 3. The pattern of returns matters because volatility levels and the sequence of gains and losses can impact funded status.
 - 4. Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.
 - 5. Generating positive investment return requires recognizing and accepting non-diversifiable risk. Not taking enough risk is risky; therefore, DPFP will accept a prudent amount of risk to achieve its long-term target returns.

Section 5 Roles and Responsibilities

A. Board of Trustees

The Board of Trustees (Board) has a fiduciary responsibility to ensure prudent management of the plan and compliance with all state and federal laws. Additionally, the Board:

- 1. Establishes investment objectives consistent with the needs of DPFP and approves the IPS of DPFP;
- 2. Approves strategic asset allocation targets and ranges, and asset class structures;
- 3. Prudently hires, monitors, and terminates key investment service providers including: Consultant(s), Investment Managers and Custodian;

4. Appoints members to the Investment Advisory Committee (IAC);
5. Reviews investment related expenses;
6. Approves Board travel related to investments; and
7. Reviews the IPS annually and revises as needed.

B. Investment Advisory Committee (IAC)

1. IAC Composition, Selection and Criteria
 - a. The requirement and general composition of the IAC is defined by statute.
 - b. The IAC serves at the discretion of the Board of Trustees.
 - c. IAC recommendations are not binding on the Board, provided however the Board may in the exercise of its fiduciary discretion grant decision-making authority to the IAC.
 - d. The IAC is composed of up to six members including one or two current Board members and a majority of outside investment professionals.
 - e. IAC members will serve two-year terms.
 - f. The Board will appoint members of IAC members by vote.
 - g. IAC meetings require a quorum of at least three IAC members. IAC members shall be provided reasonable notice of upcoming meetings, but this shall not prevent the IAC from meeting on short notice for an urgent item requiring immediate attention.
 - h. One IAC member who is also a member of the Board will function as Chair of the IAC. The Chair shall serve as liaison to the Board and preside over IAC meetings.
 - i. The Board of Trustees may elect to dismiss a member of the IAC for any reason.
2. IAC Roles and Responsibilities:
 - a. A key role of the IAC is to ensure that DFPF investments are prudently managed.
 - b. The IAC will advise regarding the search and selection process for investment managers and other matters that the Board may request.
 - c. All investment related agenda materials for the Board will be made available to the IAC.
 - d. The IAC will meet as needed, but at least quarterly, to discuss the investment program and provide insight and recommendations to Staff and Consultant.
 - e. The IAC Chair will report to the Board regarding IAC activity as well as investment-related concerns and recommendations.
 - f. Any IAC member may address the Board to communicate investment related concerns.

- g. IAC members are fiduciaries to DPFP.

C. Executive Director

1. The Executive Director is authorized to administer the operations and investment activities of DPFP under policy guidance from the Board;
2. Is authorized to manage investments approved by the Board including authority to enter into contract amendments including fund extensions, act with regard to investment governance issues and engagement of advisors as needed;
3. Manages the day to day operations of DPFP;
4. Oversees and reports to the Board on investment and due diligence processes and procedures;
5. Approves/declines all Staff travel related to investment manager on-site due diligence; and
6. Approves Investment Staff recommendations for presentation to the IAC and Board.
7. The Executive Director is a fiduciary to DPFP.

D. Investment Staff

1. The Investment Staff (Staff) has primary responsibility for oversight and management of the investment portfolio. Staff is responsible for investment manager due diligence and recommendations, portfolio implementation consistent with the Board approved asset allocation, and assessment of the Consultant(s);
2. Helps the Board and the IAC to oversee Investment Managers, Consultant(s), Custodian, and vendors;
3. Reports to Executive Director through the Chief Investment Officer;
4. Works closely with the Investment Consultant(s);
5. Notifies Consultant in writing of rebalancing needs and recommended implementation;
6. Coordinates the preparation and annual review of the IPS;
7. Prepares Staff Investment Manager recommendations, submits Staff and Consultant(s) recommendations to Executive Director for review;
8. After Board approval of investment, Staff approves Investment Manager Strategy guidelines which will be outlined in the Investment Manager agreements, as applicable;
9. Monitors all investments, Investment Managers and investment-related vendors;
10. Accounts for and reviews all external management fees and investment expenses; and
11. Ensures all fiduciaries to DPFP are aware of their fiduciary obligations annually.³

³ Verification of this may be through contract, agreement, or annual fiduciary acknowledgement letter.

E. Consultant(s)

1. The Consultant(s) provides independent investment expertise to the Board, IAC, and Staff;
2. Reports to the Board and works closely with Staff;
3. Monitors and reports qualitative and quantitative criteria related to Investment Managers and aggregate portfolio activity and performance;
4. Recommends annually to Board strategic asset allocation targets, ranges, and benchmarks for asset classes;
5. Documents asset allocation recommendations with asset class performance expectations including standard deviation, expected return and correlations for each asset class used by DPFP;
6. Reviews asset class structures periodically as required by the IPS and recommends improvements to the Board.
7. Establishes and follows due diligence procedures for Investment Manager candidate searches;
8. Conducts screens and searches for Investment Manager candidates;
9. Assists in the selection process and monitoring of Investment Managers;
10. Reviews and recommends Investment Managers and peer groups to IAC and Board;
11. Documents and delivers to Staff written recommendations on Investment Manager new hire, hold and termination reviews;
12. Recommends benchmark and appropriate asset class and sub-allocation for investment managers;
13. Approves and verifies in writing each of Staff's rebalancing recommendations and implementation;
14. Monitors the diversification, quality, duration, and risk of holdings as applicable;
15. Assists Staff in negotiation of terms of vendor contracts; and
16. Prepares quarterly investment reports, which include the information outlined in Appendix C.
17. Any Investment Consultant is a fiduciary to DPFP and this responsibility must be acknowledged in writing.

F. Investment Managers

1. Public Investment Managers
 - a. Acknowledge in writing acceptance of the objectives, guidelines, and standards of performance;
 - b. Invest the assets of DPFP in accordance with its objectives, guidelines and standards;

- c. Exercise full discretionary authority as to all buy, hold and sell decisions for each security under management, subject to the guidelines established in the Investment Management Agreement or applicable contract;
- d. Send trade confirmations to the Custodian;
- e. Deliver monthly report to Consultant(s)/Staff describing portfolio asset class weights, investment performance, security positions, and transactions;
- f. Adhere to best execution and valuation policies;
- g. Inform Staff and Consultant, as soon as practical, in writing of any breach of investment guidelines, ethics violations or violations of self-dealing;
- h. Inform Staff and Consultant as soon as practical, in writing, of any significant changes in the ownership, organizational structure, financial condition, personnel staffing, or other material changes at the firm; and
- i. Act as a fiduciary to DPFP. All separate account investment managers are fiduciaries to DPFP and this responsibility must be acknowledged in the contract for services.

2. Commingled Fund Investment Managers

- a. Provide the objectives, guidelines, and standards of performance of the fund;
- b. Provide a report detailing fund performance and holding on a monthly basis or as agreed by DPFP;
- c. Prices and fair market valuations will be based on reference to liquid markets, or obtained from an independent service provider if the assets held by the fund cannot be reasonably valued by reference to liquid markets;
- d. The investment manager of the commingled fund must act as a Fiduciary to the commingled fund.
- e. Mutual funds where the investment advisor or manager of the mutual fund is subject to the Investment Company Act of 1940 meet the requirements of this subsection 2.

3. Private Investment Managers

- a. Provide objectives, strategy guidelines, and standards of performance as evidenced in investment manager, operating, or partnership agreement;
- b. Ensure that financials statements undergo annual audits and that investments are reported at fair market value, as outlined in the Investment Management, Partnership, or Operating Agreement(s);
- c. Communicate to Staff any material changes in the ownership or management of the firm, and or the stability of the organization;
- d. Inform Staff, as soon as practical, in writing of any breach of investment guidelines, ethics violations or violations of self-dealing.

G. Custodian

1. Safe keep and hold all DFPF's assets in the appropriate domestic accounts and provide highly secure storage of physical stock certificates and bonds such that there is no risk of loss due to theft, fire, or accident;⁴
2. Maintain separate accounts by legal registration;
3. Arrange for timely execution and settlement of Investment Manager securities transactions made for DFPF;
4. Proactively reconcile transactions and reported values to Investment Manager statements;
5. Provide for receipt and prompt crediting of all dividend, interest and principal payments received as a result of DFPF portfolio holdings or securities lending activities;
6. Monitor income receipts to ensure that income is received when due and institute investigative process to track and correct late or insufficient payments, including reimbursement for any interest lost due to tardiness or shortfall;
7. At the direction of the Staff, expeditiously transfer funds into and out of specified accounts;
8. Timely collection of income, including tax reclaim;
9. Prompt and accurate administration of corporate actions, including proxy issues; and
10. Manage securities lending.

Section 6 Strategic Asset Allocation and Rebalancing

Note: The investment portfolio is undergoing a transition from a legacy allocation with substantial exposure to illiquid private market assets to a more traditional allocation profile. In October 2018, the Board approved a new long-term asset allocation, recognizing that implementation would be subject to the gradual unwinding of private market assets. In November 2018, the Board approved an asset allocation implementation plan to prioritize the reallocation of cash distributions from private market assets. Initial variances to long-term allocation targets may be quite large but are expected to gradually diminish. Rebalancing ranges have been established to accommodate current variances to target and will be tightened over time as appropriate.

A. Asset Allocation

1. The strategic asset allocation establishes target weights and rebalancing ranges for each asset class and is designed to maximize the long-term expected return of the Fund within an acceptable risk tolerance while providing liquidity to meet cash flow needs.
2. A formal asset allocation study will be conducted as directed by the Board, but at least every three years.

⁴ Electronic transfer records at the Depository Trust Company ("DTC") are preferred.

3. Asset allocation targets will be reviewed annually for reasonableness in relation to significant economic and market changes or to changes to the investment objectives.
4. Asset class descriptions are provided in Appendix A.
5. The approved asset allocation is included in Appendix B.

B. Asset Class Structure

1. The asset class structure establishes the investment manager roles that will be used to implement the asset allocation.
2. The asset class structure will emphasize simplicity and cost control and toward that end will employ the minimum number of managers necessary to assure appropriate diversification within each asset class.
3. Asset class structures will be reviewed periodically, approximately every two years.
4. Any changes to the asset class structure must be approved by the Board.

C. Rebalancing

1. In general, cash flows will be allocated to move asset classes toward target weights and shall be prioritized according to the Asset Allocation Implementation Plan detailed in Appendix B1.
2. Staff shall submit a rebalancing recommendation to the Consultant at least annually based on consideration of the entire portfolio, and additionally as soon as practicable when an asset class breaches an established rebalancing range or when deemed prudent by Staff or Consultant.
3. The allocations to Cash and Short-Term Investment Grade bonds are designed to provide liquidity during periods of investment market stress and are not required to be rebalanced to target if deemed prudent by Staff and Consultant.
4. Rebalancing recommendations should consider expected future cash flows, investment liquidity, market volatility, and costs.
5. Transition management shall be used when prudent to minimize transition costs.
6. Staff is responsible for implementing the rebalancing plan following Consultant approval.
7. Rebalancing recommendations and activity shall be reported to the Board and the IAC.

D. Private Market Provisions

1. DPFP will not commit capital to any direct private market investments or co-investments that are tied to a single company. This restriction does not prevent DPFP from holding direct investments that result from the dissolution of a private market fund
2. DPFP will not commit capital to any private market fund if such commitment would likely result in DPFP holding greater than a 10% interest in the fund.

3. DPFP will not commit capital to any private market fund if such commitment exceeds 2% of the total market value of the DPFP investment portfolio.
4. DPFP will not commit to any private market fund if total commitments to related funds (e.g. fund family) exceeds 4% of the total market value of the DPFP investment portfolio.
5. The Board and Staff may consider and approve sales of private assets for less than the current net asset value of the asset reported to the Board. Factors affecting such a decision would include prices obtained after marketing the asset, liquidity, or overallocation to the relevant asset class.

Section 7 Investment Manager Search, Selection, and Monitoring

A. Investment Manager Search and Selection

1. The selection of investment managers will utilize a robust process to ensure an open and competitive universe, proper evaluation and due diligence, and selection of candidates that are best able to demonstrate the characteristics sought in a specific search.
2. Investment manager searches shall be based on one or more of the following reasons:
 - a. Changes to the approved asset allocation;
 - b. Changes to the approved asset class structure; or
 - c. Replacement for terminated manager or manager of concern.
3. The IAC will advise regarding the search and selection process for investment managers
4. Staff and Consultant shall define and document the search process, including evaluation criteria, prior to initiating the search process.
5. Each investment manager hiring recommendation shall be supported by a rationale that is consistent with the pre-established evaluation criteria.
6. Each hiring recommendation will generally include the following information:
 - a. A description of the organization and key people;
 - b. A description of the investment process and philosophy;
 - c. A description of historical performance and future expectations;
 - d. The risks inherent in the investment and the manager's approach;
 - e. The proper time horizon for evaluation of results;
 - f. Identification of relevant comparative measures such as benchmarks and/or peer samples;
 - g. The suitability of the investment within the relevant asset class; and
 - h. The expected cost of the investment.

7. Alternative Investments

The Board has adopted the definition of “Alternative Investments” as outlined in Appendix D, which will be reviewed as part of the due diligence process for any new investment. Pursuant to Section 4.07 of Article 6243a-1, the vote of eight trustees is required to approve any Alternative Investment.

B. Investment Monitoring

1. Staff and Consultant(s) are responsible for ongoing monitoring of all Investment Managers using qualitative and quantitative factors as appropriate.
2. Qualitative factors may include:
 - a. Consistent implementation of philosophy and process;
 - b. Ownership changes or departure of key personnel;
 - c. Assets under management at the firm and product level;
 - d. Conflicts of interest;
 - e. Material litigation or regulatory challenges involving the investment manager;
 - f. Adequate reporting and transparency; and
 - g. Material client-servicing problems.
3. Quantitative factors may include:
 - a. Long-term (3-5 years) performance relative to assigned benchmarks;
 - b. Unusually large short-term performance variance (over or under); and
 - c. Risk metrics such as volatility, drawdown, and tracking error.
4. Staff and the Consultant will highlight Investment Manager concerns to the IAC and the Board and recommend an appropriate course of action.

Section 8 Risk Management

Staff will work within the parameters of this Investment Policy Statement to mitigate the risk of capital loss. By implementing this Policy, the Board has addressed:

- A. Custodial Risk for both public and private holdings;⁵
- B. Interest Rate Risk through fixed income duration and credit monitoring;⁶
- C. Concentration and Credit Risk through asset allocation targets and ranges, rebalancing, and the monitoring of investment guidelines.

⁵ Please review Custodian responsibilities in Section 5.

⁶ Please review Annual Review of IPS and Investment Manager strategy guidelines reviewed and approved by Staff.

Section 9 Furthermore, through this Policy, Staff has established the necessary criteria to monitor the Custodian, Consultant(s), and Investment Managers, such that DFPF controls and manages interest rate, custody, concentration, and credit risks. Approval and Effective Date

The Investment Policy Statement was originally adopted by the Board on April 14, 2016 and was subsequently amended and adopted on the following dates.

December 14, 2017
January 10, 2019

APPROVED on January 10, 2019 by the Board of Trustees of the Dallas Police and Fire Pension System.

/s/ William F. Quinn

William F. Quinn
Chairman

Attested:

/s/ Kelly Gottschalk

Kelly Gottschalk
Executive Director

Appendix A – Asset Class Descriptions

DPPF investment assets are prudently diversified to optimize expected returns and control risks. Assets can generally be categorized into four functional categories of Growth, Income, Inflation Protection, and Risk Mitigation

A. Growth Assets

1. Role: Capital appreciation, primary driver of long-term total return
2. Investment Approach: Growth assets generally represent equity or equity-like interests in current and future income streams and capture long-term economic growth trends throughout the world.
3. Risk Factors: The cost of the high expected long-term returns is higher expected volatility. Growth assets are highly sensitive to economic conditions and are subject to potential loss during economic downturns, rising/unexpected inflation, and rising interest rates.
4. Asset Classes
 - a. **Global Equity** represents publicly traded stock holdings of companies across the globe. Liquidity is a key benefit as stocks can be traded daily. Foreign currency volatility can be a source of risk and return.
 - b. **Emerging Market Equity** represents publicly traded stock holdings of companies located in or highly dependent on developing (emerging) countries. Emerging market equity is expected to capture the higher economic growth of emerging economies and provide higher long-term returns than global equity coupled with higher volatility. Foreign currency volatility can be a source of risk and return.
 - c. **Private Equity** refers to investments in private companies (direct investments) or funds that hold investments in private companies or securities that are not typically traded in the public markets. Frequently these investments need “patient” capital to allow time for growth potential to be realized through a combination of capital investment, management initiatives, or market development. Private equity is expected to provide higher long-term returns than global equity, but illiquidity is a key risk as investment contributions may be locked up for several years.

B. Income Assets

1. Role: Current income and moderate long-term appreciation
2. Investment Approach: Income assets are generally fixed claims on assets or income streams of an issuer (e.g. government, corporation, asset-backed securities).
3. Risk Factors: The primary risk for Income assets is the failure of the borrower to make timely payments of interest and principal (credit risk) and the price volatility related to credit risk. Bonds with greater credit risk (i.e., bonds with lower credit ratings) are typically less liquid than higher quality bonds.

4. Asset Classes

- a. **Global Bonds** includes sovereign and corporate debt issued by countries and companies located throughout the world in local currency and U.S. dollars. Expanding the investable universe beyond the U.S. provides a diversified source of returns.
- b. **Bank Loans** are like high yield bonds in that both represent debt issuers with higher credit risk. Compared to high-yield bonds, bank loans typically have higher seniority in the capital structure, which has historically resulted in much higher recovery following default.
- c. **High Yield Debt** refers to bonds with higher credit risk and lower credit ratings than investment-grade corporate bonds, Treasury bonds and municipal bonds. Because of the higher risk of default, these bonds pay a higher yield than investment grade bonds.
- d. **Emerging Market Debt (EMD)** refers to bonds issued by developing countries or corporations based in developing countries. EMD bonds can be denominated in U.S. Dollars or local currency. The primary risk factor is credit quality, but interest rates and foreign currency are also factors.
- e. **Private Debt** refers to non-bank direct lending arrangements. Features are similar to bank loans with somewhat higher credit risk and yields. Investments are typically structured in a private market vehicle with limited liquidity. Private debt may be included within the private equity asset class in the strategic asset allocation.

C. **Inflation Protection (Real Assets)**

1. Role: Current income, inflation protection, diversification
2. Investment Approach: Generally, ownership in physical assets.
3. Risk Factors: Real Assets may not provide the desired inflation protection. Loss of principal is also a risk. Foreign assets are also subject to currency movements against the U.S. dollar.
4. Asset Classes
 - a. **Real Estate** includes investments in office buildings, apartments, retail, raw land, and development projects.
 - b. **Natural Resources** broadly refers to anything mined or collected in raw form but may include assets subject to further processing. Typical assets include permanent and row crops, timber, minerals, and metals.
 - c. **Infrastructure** refers to investments in physical systems that support world economies. Typical investments include transportation, communication, utilities (electricity, gas, water, sewage).

D. Risk Mitigation

1. **Role:** Liquidity to fund benefit payments and other cash flow needs, capital preservation, modest current income, diversification to growth assets.
2. **Investment Approach:** Cash equivalents or high-quality domestic bonds.
3. **Risk Factors:** Risks are substantially lower for risk mitigation assets but may include modest exposure to credit or interest rates (duration).
4. **Asset Classes**
 - a. **Cash Equivalents**
 - b. **Short Term Investment Grade Bonds** have moderate interest rate risk.
 - c. **Investment Grade Bonds** including bonds and notes issued by the U.S Treasury, U.S. Government Agencies, state and local municipalities, corporations, or other issuers with similar conservative risk profiles. Risk factors include duration and credit.

Appendix B – Strategic Asset Allocation and Rebalancing Ranges

Asset Class	Policy Benchmark	Target Weight ¹	Minimum Weight	Maximum Weight
Equity		55%		
Global Equity	MSCI ACWI IMI Net	40%	18%	48%
Emerging Markets Equity	MSCI Emerging Markets IMI Net	10%	0%	12%
Private Equity	Cambridge Associates US Private Equity Index 1Q Lag	5%	N/A ³	N/A ³
Fixed Income		35%		
Cash	91 Day T-Bills	3%	0%	5%
Short Term Investment Grade Bonds	Bloomberg Barclays US Treasury 1-3 Year	12%	5%	15%
Investment Grade Bonds ²	Bloomberg Barclays Aggregate	4%	2% ²	6%
High Yield Bonds	Bloomberg Barclays Global High Yield	4%	2%	6%
Bank Loans	S&P/LSTA Leveraged Loan	4%	2%	6%
Global Bonds	Bloomberg Barclays Global Aggregate	4%	2%	6%
Emerging Market Debt ²	50% JPM EMBI/ 50% JPM GBI-EM	4%	2% ²	6%
Private Debt	Barclays Global HY + 2% (Rolling 3 Mo.)	0%	N/A ³	N/A ³
Real Assets		10%		
Real Estate	NCREIF Property Index 1Q Lag	5%	N/A ³	N/A ³
Natural Resources	NCREIF Farmland Total Return Index 1Q Lag	5%	N/A ³	N/A ³
Infrastructure	S&P Global Infrastructure (Rolling 3 Mo.)	0%	N/A ³	N/A ³
Total		100%		

1 – The investment portfolio is undergoing a transition from a legacy allocation with substantial exposure to illiquid private market assets to a more traditional allocation profile. In October 2018, the Board approved a new long-term asset allocation, recognizing that implementation would be subject to the gradual unwinding of private market assets. In November 2018, the Board approved an asset allocation implementation plan to prioritize the reallocation of cash distributions from private market assets. Initial variances to long-term allocation targets may be quite large but are expected to gradually diminish. Rebalancing ranges have been established to accommodate current variances to target and will be tightened over time as appropriate.

2 – At the time of IPS adoption allocations to Investment Grade Bonds and Emerging Market Debt were below the minimum weight. The investment manager hiring for Investment Grade Bonds had not been completed and the Emerging Market Debt allocation was under review by the Board. These allocations will be funded in accordance with the asset allocation implementation plan in detailed in Appendix B1.

3 – Rebalancing Ranges are not established for illiquid asset classes.

Appendix B1 – Asset Allocation Implementation Plan

The investment portfolio is undergoing a transition from a legacy allocation with substantial exposure to illiquid private market assets to a more traditional allocation profile. In October 2018, the Board approved a new long-term asset allocation, recognizing that implementation would be subject to the gradual unwinding of private market assets. In November 2018, the Board approved the following implementation plan to prioritize the reallocation of cash distributions from private market assets.

Order of Reallocation

Allocate up to Target, then proceed to next asset class
1. Safety Reserve – Cash
2. Safety Reserve – Short-Term Investment Grade Bonds
3. Global Equity, only if current exposure is less than 22% of DPF ¹
4. Emerging Market Equity, only if current exposure is less than 2.5% of DPF ²
5. Investment Grade Bonds
6. Global Bonds
7. Bank Loans
8. High Yield Bonds
9. Global Equity above 22%, contributions limited to 6% per year.
10. Emerging Markets Debt
11. Emerging Markets Equity above 2.5%, contributions limited to 2.5% per year
12. Private Real Estate (aggregate illiquid exposure must be under 20%)
13. Private Equity (aggregate illiquid exposure must be under 15%)

1 – Global Equity target weight is 40%. If current exposure is more than 22% proceed to next asset class in the matrix. The reallocation framework is designed to maintain at least the mid-2018 exposure to public equity, prior to increasing fixed-income exposure.

2 – Emerging Market Equity Target weight is 10%. If current exposure is more than 2.5% proceed to next asset class in the matrix. The reallocation framework is designed to maintain at least the mid-2018 exposure to public equity, prior to increasing fixed-income exposure.

Appendix C – Investment Consultant Reporting Requirements

The investment consultant is required to provide the Board with quarterly investment information for portfolio monitoring purposes. Generally, these are as follows:

Quarterly (due in advance of the meeting)

1. DFPF's actual asset allocation relative to its target asset allocation as defined in Appendix B.
2. DFPF's return relative to its Policy Benchmark return and other public pension funds.
3. DFPF's risk adjusted returns relative to the policy and other public pension funds.
4. Asset class performance relative to the benchmarks as defined in Appendix B.
5. Individual Investment Manager returns relative to their stated benchmark.
6. Report will specifically acknowledge any underperforming Investment Managers.
7. Any reportable events affecting any of DFPF's Investment Managers.
8. Private Markets reports which covers Private Debt, Private Equity, Infrastructure, Real Assets and Real Estate.

Appendix D – Alternative Investments

Alternative Assets means any investment that is not a Traditional Asset.

Traditional Assets include:

1. Common Stocks: publicly traded securities representing ownership in a corporation; also known as publicly-traded equity. Examples include publicly traded equity shares of public companies, REITs, and ADRs. Regional examples include shares of companies domiciled in the US, non-US developed markets and emerging markets.
2. Bonds: publicly-traded securities, the holders of which serve as creditors to either governmental or corporate entities. Examples include government bonds and corporate bonds, including senior bank loans. Regional examples include US government issued bonds, non-US international developed market issued bonds, and emerging market issued bonds. Credit examples include investment grade bonds and non-investment grade bonds (e.g. high yield bonds and bank loans).
3. Cash Equivalents: short-term investments held in lieu of cash and readily convertible into cash within a short time span. Examples include CDs, commercial paper, and Treasury bills.

Though an exhaustive list is not included, some of the defining characteristics of Alternative Assets and their vehicles include:

1. Private ownership vehicles
2. Liquidity-constrained, and a lock-up of capital for extended time periods (one-year or longer)
3. Use of leverage
4. Ability to take short positions
5. Use of derivatives

The Board recognizes that certain investments may have characteristics and underlying securities that could be classified as both a Traditional and Alternative Investment. On any new investment recommendation, Staff and Consultant will categorize an investment as either Alternative or Traditional based on these criteria, with a focus on liquidity of the investment, for the Board's consideration.