Memorandum

To: Board of Trustees, Fresno County Employees' Retirement Association
From: Mike Kamell, CFA, CAIA, Consultant
Date: August 1, 2018
RE: Investment Policy Statement Discussion

The current Investment Policy Statement (IPS) needs to be updated to reflect the changes to the investment program that were discussed during the Asset-Liability Study. Accordingly, Verus has prepared the enclosed redlined version of the current IPS. The objective of this memo is to summarize the proposed changes and solicit further input from the Board prior to the new IPS being finalized. The more substantive changes are summarized below; our intention is to incorporate any feedback into a final version that can be adopted at the September meeting.

1) Section V: Investment Philosophy

This section of the IPS affords the Board the opportunity to communicate the underpinnings driving the investment process to outside stakeholders. As a result of the ongoing discussions during the Asset-Liability Study, we believe it is appropriate to re-visit the language in this section. Accordingly, the new proposed investment philosophy is below; we welcome any discussion or feedback regarding the proposed language.

I. INVESTMENT PHILOSOPHY

1) The Board understands the responsibility to balance the objective of protecting the corpus of the Fund and protecting the purchasing power of assets against erosion by inflation, while at the same time incurring the risk necessary to earn adequate returns required to satisfy the ongoing financial obligations of the Fund. This requires a careful understanding of risk and return trade-offs in an always uncertain investment environment.

2) The Board believes its paramount objective is to satisfy the financial obligations of the Fund, and that investment risk is generally compensated over the long-term. The Board acknowledges that the Fund's objective is to provide retirement security to current and future members and beneficiaries, and that these liabilities are long term in nature. This long-term nature of the Fund's liabilities provides the overall framework from which the Board sets policy and directs the investment of the assets. While there may be periods of time where interim volatility causes the portfolio to depreciate in value significantly, the Board is comfortable assuming risk commensurate with the responsibility to fund the Plan's liabilities.

2) Section VII: Medium Term Performance Objectives

To address the fact that the Board intends to gradually shift the asset allocation towards the new target, the performance benchmarks and targets were moved from the body of the main document to Appendix A.

3) Appendix A: Strategic Asset Allocation, Appendix D: Asset Allocation Glidepath

At the June Board Meeting, the Board expressed a preference to shift from the current 36% public equity target to the new 49% target at a rate of 1% per quarter, with the caveat that the Board may elect to shift at a quicker pace if market conditions create a more attractive entry point.

Appendix A summarizes the starting and ending points, and describes the policy in which the transition will be managed. In summary, the quarterly rebalancing will be done using a combination of synthetic and physical exposure, monitored by the overlay manager (Parametric). FCERA staff will periodically rebalance the physical securities portfolios as necessary.

Appendix D provides a more granular table showing the proposed quarterly targets for each sub-asset class for which the actual exposures will be managed to (as summarized above, and described in Appendix A). This Schedule aligns with the objective of increasing public equity exposure by 1% per quarter.

APPENDIX A – STRATEGIC ASSET ALLOCATION

At the June 6, 2018 Board Meeting, as a result of a comprehensive asset-liability study, the Board of Trustees approved a new target asset allocation. The Board also approved a 1% quarterly re-risking strategy designed to minimize the timing impact of rebalancing the portfolio. The intention of this strategy is to increase the total public equity exposure by 1% per quarter until the Ending Target is reached. A detailed version of this Glidepath Is included as Appendix D – Asset Allocation Glidepath. The beginning and ending targets for this glidepath are summarized below.

Beginning & Ending Targets, Asset Class Benchmarks:

Asset Class	Beginning Target	Ending Target	Benchmark
Domestic Equities	**17%**	**25%**	**Russell 3000 Index**
Large Cap	14%	20%	
Small/Mid Cap	3%	5%	
International Equities	**19%**	**24%**	**MSCI ACWI ex US Index**
International Large	9%	15%	
International Small	3%	3%	
Emerging Markets	7%	6%	
Fixed Income	**31%**	**23%**	**Barclays Global Aggregate Index**
US Credit Fixed Income	5%	4%	
High Yield Fixed Income	5%	3%	
Bank Loans	5%	3%	
Global Sovereign	7%	7%	
Emg Markets Debt Local	5%	3%	
TIPS	4%	3%	
Real Assets	**11%**	**8%**	
Commodities	3%	0%	**DJ UBS Commodity Index**
Real Estate	5%	5%	**NCREIF ODCE Index**
Infrastructure	3%	3%	**NCREIF ODCE Index**
Alternative Investments	**22%**	**20%**	
Hedge Funds	8%	6%	**HFRI FoF Composite Index**
Private Equity	6%	6%	**Russell 2000 Index**
Private Credit	8%	8%	**Barclays US Corp. High Yield Index**
Total	**100%**	**100%**	

Rebalancing Strategy:
The Board wishes to rebalance the portfolio on a methodical and gradual basis while preserving the flexibility to revise the Asset Allocation Glidepath, and the corresponding timing of reaching the Ending Target, dependent on future market conditions. In order to minimize transaction costs while rebalancing, the target exposure will be managed using a combination of physical and synthetic market exposure. With assistance from the Overlay Manager and the Investment Consultant, FCERA Administrator and Staff will be responsible for managing the market exposure relative to the Glidepath specified in Appendix D. The rebalancing is intended to function as follows:

1) The Overlay Manager will adjust its target public equity and public fixed income exposures at the end of each quarter, consistent with the quarterly targets as specified in Appendix D.

2) Consistent with current practice, the Overlay Manager will manage the overall exposure (physical exposure and synthetic exposure) to a 5% relative band using the quarterly targets as specified in Appendix C (e.g. for a 10% target weight, the portfolio would be rebalanced synthetically when the actual exposure is less than 9.5% or greater than 10.5%).

3) The Overlay Manager will notify FCERA Administrator and Staff when the physical exposure deviates from the Glidepath Targets by more than 2%. At such time, Staff will rebalance the portfolio as necessary.

4) Independent of the Overlay Manager notifications discussed above, FCERA Staff will periodically review the current market values relative to the Glidepath Targets and rebalance as necessary, in consultation with the Investment Consultant and Overlay Manager.

Fresno County Employees' Retirement Association
Investment Policy Statement
Schedule D: Asset Allocation Glidepath

Asset Class	Current 6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020	3/31/2021	6/30/2021	Target 9/30/2021
Domestic Equities	**17%**	**18%**	**18%**	**19%**	**19%**	**20%**	**21%**	**22%**	**22%**	**23%**	**23%**	**24%**	**24%**	**25%**
Large Cap	14%	**15%**	15%	15%	15%	**16%**	**17%**	17%	17%	**18%**	18%	**19%**	19%	**20%**
Small/Mid Cap	3%	3%	3%	**4%**	4%	4%	4%	**5%**	5%	5%	5%	5%	5%	5%
International Equities	**19%**	**19%**	**20%**	**20%**	**21%**	**21%**	**21%**	**21%**	**22%**	**22%**	**23%**	**23%**	**24%**	**24%**
International Large	9%	9%	**10%**	10%	**12%**	12%	12%	12%	**13%**	13%	**14%**	14%	**15%**	15%
International Small	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Emerging Markets	7%	7%	7%	7%	**6%**	6%	6%	6%	6%	6%	6%	6%	6%	6%
Total Public Equity	**36%**	**37%**	**38%**	**39%**	**40%**	**41%**	**42%**	**43%**	**44%**	**45%**	**46%**	**47%**	**48%**	**49%**
Fixed Income	**31%**	**30%**	**29%**	**28%**	**27%**	**27%**	**26%**	**25%**	**25%**	**25%**	**24%**	**23%**	**23%**	**23%**
US Credit Fixed Income	5%	5%	5%	5%	**4%**	4%	4%	4%	4%	4%	4%	4%	4%	4%
High Yield Fixed Income	5%	**4%**	4%	4%	4%	4%	**3%**	3%	3%	3%	3%	3%	3%	3%
Bank Loans	5%	5%	**4%**	4%	4%	4%	4%	**3%**	3%	3%	3%	3%	3%	3%
Global Sovereign	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Emg Markets Debt Local	5%	5%	5%	**4%**	4%	4%	4%	4%	4%	4%	**3%**	3%	3%	3%
TIPS	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	**3%**	3%	3%
Real Assets	**11%**	**11%**	**11%**	**11%**	**11%**	**11%**	**11%**	**11%**	**10%**	**10%**	**10%**	**10%**	**9%**	**8%**
Commodities	3%	3%	3%	3%	3%	3%	3%	3%	**2%**	2%	2%	2%	**1%**	**0%**
Real Estate	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Infrastructure	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Alternative Investments	**22%**	**22%**	**22%**	**22%**	**22%**	**21%**	**21%**	**21%**	**21%**	**20%**	**20%**	**20%**	**20%**	**20%**
Hedge Funds	8%	8%	8%	8%	8%	**7%**	7%	7%	7%	**6%**	6%	6%	6%	6%
Private Equity	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Private Credit	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

DISCUSSION DRAFT

FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (FCERA)
INVESTMENT POLICY STATEMENT (IPS)
ON
INVESTMENT POLICIES, GUIDELINES AND PERFORMANCE

I. TABLE OF CONTENTS

II. INTRODUCTION

The Board of Retirement ("Board") of the Fresno County Employees' Retirement Association ("FCERA") administers a pension fund ("Fund") operating primarily under the County Employee Retirement Law of 1937 (California Government Code Sections 31450, et seq.)("CERL"). FCERA provides service and disability retirement, death and survivor benefits to the members of FCERA and their beneficiaries. Benefits are funded by employer and member contributions and investment earnings.

III. PURPOSE

1) The IPS is to serve as a framework for Board policy making and Fund asset allocation as authorized by applicable law. This IPS is intended to allow for sufficient flexibility in the investment process to timely capture market opportunities, while adhering to applicable standards of prudence, diligence and care in executing the investment program.

2) This document sets forth a set of objectives and goals regarding the investment of the Fund assets; the Board's policy on risk/return parameters, including allocation of assets and establishment of investment guidelines; and an overall system of investment policies and practices designed to enable FCERA to meet its benefit obligations in a cost-effective manner over a long time horizon.

IV. RESPONSIBILITIES

The following parties associated with FCERA shall discharge their respective responsibilities in accordance with all applicable fiduciary standards, including: (1) in the sole interest of Plan participants and beneficiaries; (2) with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and of like aims; and in such a manner as to comply with Section 31594, 31595 and other applicable provisions of CERL and (3) by diversifying the investments so as to minimize the risk of large losses.

1) <u>Board</u>: The Board members are fiduciaries and have been entrusted by Government Code Sections 31594-31595 and other applicable law with the duty to manage the investments of the Fund. They are responsible for formulating and adopting investment policies, overseeing the Fund's investment program, obtaining expert investment counseling and monitoring the performance of the firms engaged to invest the assets of the Fund.

2) <u>FCERA Administrator and Staff</u>: The Administrator is the public official appointed by the Board pursuant to section 31522.2 of CERL to administer FCERA's day to day operations, including investment of the Fund, and implementing the policies and objectives of the Board. Staff is appointed pursuant to section 31522.1 of CERL to assist the Administrator in carrying out his or her duties. The duties of the Administrator and Staff under this IPS shall include:

   a) Administering the Fund's investments in a cost-effective manner

b) Directing, managing coordinating and/or reporting on the functions of the Custodian, County Auditor, Investment Consultants, and Investment Managers, as appropriate

c) Evaluating and managing the relationships with the Fund's service providers to ensure that they are providing all services under the service contracts

d) Portfolio rebalancing, as further provided in this IPS

e) Managing portfolio restructuring resulting from manager changes, in close coordination with Investment Consultants, Investment Managers, and the Custodian

f) Organizing and/or participating in any special research required to manage the Fund more effectively and in response to any questions raised by the Board, and advising the Board on investment matters from the Administration's perspective

3) Investment Managers: The Investment Managers are fiduciaries delegated the responsibility of investment and re-investment of the Plan's assets in accordance with written agreements and supporting guidelines, provided in Appendix B, this IPS, and all applicable laws or regulations. Managers of accounts in publicly traded asset classes or traditional strategies will normally be (1) registered under the Investment Company Act of 1940, (2) registered under the Investment Advisors Act of 1940, (3) a bank, as defined in that Act, or (4) an insurance company qualified under the laws of more than one state to perform the services of managing, acquiring or disposing of plan assets. The Board may also engage other persons or organizations authorized by applicable law or regulation to function as an Investment Manager. It is understood that special oversight and due diligence procedures may be required for Managers not registered under the above Acts.

4) Custodian: The Custodian shall be a qualified banking or trust company and shall be responsible for the following: (1) providing complete global custody and depository services for the designated accounts, (2) managing, if directed by the Board, a Short Term Investment Fund (STIF) for investment of cash, (3) collecting all income and principal realizable and properly report it on the periodic statements, (4) providing monthly and fiscal year-end accounting statements for the Fund, including all transactions; these should be based on accurate security values for both cost and market, (5) managing, monitoring and reporting on a Securities Lending Program if the Board elects to have one; and (6) providing such other services as it may be contractually obligated to provide. The Custodian generally acts on instruction from the Administrator or if permitted by the Board, on instructions from Investment Managers under contract to the Fund.

5) Investment Consultant: The Investment Consultant serves as a fiduciary to the Fund, providing independent information and recommendations directly to the Board. The Investment Consultant is charged with the responsibility of advising the Board on investment policy, asset allocation that is consistent with the Fund's investment objectives and risk tolerance, the selection, evaluation and monitoring of Investment Managers, providing reports and analyses on materials events affecting Investment

Managers, preparing presentations and papers on topical issues and specific investment projects, and providing performance analysis. The Investment Consultant will provide comprehensive asset-liability studies once every 3 to 5 years, as the Board requests The Investment Consultant also provides advice, analytical services and technical assistance to the Administrator for implementing the Board's policies and strategic directives.

V. INVESTMENT PHILOSOPHY

1) The Board understands the responsibility to balance the objective of protecting the corpus of the Fund and protecting the purchasing power of assets against erosion by inflation, while at the same time incurring the risk necessary to earn adequate returns required to satisfy the ongoing financial obligations of the Fund. This requires a careful understanding of risk and return trade-offs in an always uncertain investment environment.

2) ~~The Board recognizes the potentially severe consequences associated with a large loss of the Fund corpus and considers this risk when determining how much overall risk in the Fund's holdings is appropriate at any given time.~~ The Board believes its paramount objective is to satisfy the financial obligations of the Fund, and that investment risk is generally compensated over the long-term ~~and not to be overly influenced by peers, transitory investment theories, or outside interests~~. The Board acknowledges that the Fund's objective is to provide retirement security to current and future members and beneficiaries, and that these liabilities are long term in nature. This long-term ~~These beliefs, coupled with long-term~~ nature of the Fund's liabilities~~,~~ provides the overall framework from which the Board sets policy and directs the investment of the assets. While there may be periods of time where interim volatility causes the portfolio to depreciate in value significantly, the Board is comfortable assuming risk commensurate with the responsibility to fund the Plan's liabilities.

VI. INVESTMENT OBJECTIVES

The Investment Objectives of the Fund shall be:

1) Funding Benefits: to earn a long-term rate of return that will support the obligation to pay all promised benefits.

2) Long-Term Growth of Capital: To emphasize long-term growth of principal while avoiding excessive downside risk. To the extent it is prudent, short-term volatility will be tolerated to the extent it is consistent with the volatility of a comparable risk benchmark.

3) Preserving Purchasing Power: To achieve returns in excess of the rate of inflation over the investment horizon in order to preserve the purchasing power of assets.

4) Maintaining Adequate Liquidity: To assure that funds are available to meet near-term benefit obligations and administrative and investment expenses of the Fund.

5) Long-term Perspective: The Investment Objectives for this Fund will be for the asset value, exclusive of contributions or withdrawals, to grow over the long run and earn, through a combination of investment income and capital appreciation, a rate of return (time-weighted total return) in excess of the benchmarks established for the medium term (3 years) and long term (5 years), net of fees.

VII. MEDIUM TERM PERFORMANCE OBJECTIVES

1) ~~Return performance of the~~ Total Fund performance compounded over a 3-5 year term is expected to exceed the compounded return of a custom~~, weighted~~ index ~~constructed of the following components:~~reflecting the asset class benchmarks and allocation weights as specified in Appendix A.

   ~~31% Barclays Global Aggregate Bond Index~~
   ~~17% Russell 3000 Index~~
   ~~19% MSCI ACWI Ex-US~~
   ~~8% HFRI Fund of Funds Composite Index~~
   ~~6% Russell 2000 Index~~
   ~~8% Barclays US Corp. High Yield Index~~
   ~~8% NCREIF Open-End Diversified Core (ODCE) Index Net~~
   ~~3% Dow Jones UBS Commodity Index~~

2) "Active" Investment Managers are expected to exceed their respective assigned benchmark returns.

3) For purposes of Total Fund valuation, Private Equity, Private Credit, and Closed End Real Estate performance will be lagged by one quarter and neutralized.

4) The committed but yet-to-be-invested portion of Private Equity shall be benchmarked against the Russell 2000 Index.

5) The committed but yet-to-be-invested portion of Private Credit shall be benchmarked against the Barclays US Corp. High Yield Index.

VIII. LONG TERM PERFORMANCE OBJECTIVES

1) The total Fund's long term performance objective is to meet or exceed the actuarial assumed rate of return as set by the Board from time to time.

IX. ASSET ALLOCATION

1) The Board adopts and implements an asset allocation policy that is predicated on a number of factors, including: (1) An actuarial valuation of the Fund's assets and liabilities, including funded status, contributions and benefit payments; (2) historical and expected long-term capital market risk and return characteristics; (3) an assessment of future

economic conditions, including inflation and interest rate levels; and (4) the current and projected funded status of the plan.

2) Appendix A contains the Strategic Asset Allocation targets along with the allowable ranges, and shall serve as the guideline for maintaining Fund investment allocations.

X. GENERAL INVESTMENT GUIDELINES

The Board intends to allow the Investment Managers full discretion, subject to the terms of this IPS, the applicable agreement(s) and guidelines with FCERA, and applicable law.

1) Private Markets Investments: Allocations to illiquid asset classes such as private equity/credit, infrastructure, and real estate cannot be altered meaningfully from quarter-to-quarter as they can be for publicly traded securities such as equities and bonds. Capital is committed to these asset classes over a multi-year period to ensure appropriate diversification of risks across vintage years and strategy type. Capital is drawn down for these investments on a staggered basis as investment opportunities present themselves. The capital invested in these asset classes and returns thereon are returned over time as earnings are realized on the investments or they are liquidated. As a result, once committed, the Board has only limited control over allocations to these asset classes in the short-term.

   The Investment Consultant will conduct regular commitment pacing studies to ensure that the capital committed to these asset classes approximate the target allocation as closely as practicable, with due consideration to diversification by type and vintage year. FCERA Staff will periodically forecast capital calls and distributions from private market investments to better manage the liquidity of the Fund. As these investments mature it is expected that allocations to these asset classes will be within the ranges specified in Appendix A.

2) Liquidity: The Administrator and Staff are charged with assuring sufficient liquidity to timely fund benefit payments and pay administrative and investment expenses while minimizing transaction and market opportunity costs. Cash flow forecasting and portfolio rebalancing activities will incorporate liquidity considerations, and the Administrator will regularly apprise the Board of related actions or plans, and seek input from the Board and\or the Investment Consultant, as needed.

3) Rebalancing: The objective of portfolio rebalancing is to mitigate the risk exposure of the Fund when asset allocations deviate from policy targets due to capital market environments, manager performance, or capital flows. Portfolio rebalancing shall be conducted in order to meet the following objectives:

   a) Maintain the long-term strategic asset allocation and risk targets as set forth in Appendix A. In meeting this objective, the costs associated with rebalancing must be balanced against the need to maintain the desired strategic allocation targets.

b) To satisfy liquidity needs and properly stage asset moves required for significant portfolio adjustments due to investment mandate changes that are either underway or anticipated due to a Board-approved change to the target asset allocation.

c) To add value to the overall portfolio through the use of tactical actions, the aim of which is to take advantage of uncommon market pricing opportunities caused by significant market dislocations.

d) The Administrator, in conjunction with the advice of the Investment Consultant, is responsible for executing all rebalancing activities, seeking as needed, guidance from the Investment Consultant and the Board.

In order to minimize the need for physical rebalancing, the Board has retained an overlay manager to implement synthetic rebalancing (refer to Overlay Investment Guidelines).

4) <u>Proxy Voting</u>: Voting of proxies in stocks held by the Fund will be done in a manner which is in the best financial and economic interests of the Fund and its beneficiaries by those best able to make such assessments. While the Board reserves the right to vote proxies at its discretion, it will generally delegate such decisions to its Investment Managers. Investment Managers must exercise due diligence in ascertaining the facts and circumstances of the matter being voted on. Investment Managers are required to report their proxy voting activities to the Administrator on an annual basis. The Board may engage a proxy-voting service to assist it in prudently exercising its rights.

5) <u>Environmental, Social and Governance Investing</u>: The Board may consider investing in, or divesting from, investments that are expected to accrue benefits in the area of economic development, environment, health, corporate governance and other social or moral issues. However, these investment determinations must satisfy applicable "costlessness" standards, including that their expected risk adjusted returns and associated costs shall not be more costly to the Fund than comparable investment actions absent the expected environmental, social or corporate governance characteristics.

6) <u>Trading and Execution</u>: Investment Managers shall use their best efforts to obtain execution of orders through responsible brokerage firms at the most favorable prices and competitive commission rates. California law limits and requires disclosures regarding prime brokers and "soft-dollar" transactions and Investment Managers are expected to comply with the law. Recognizing the primary importance of best execution, an Investment Manager may accept the instructions of the Board to place transaction orders with a particular broker-dealer firm provided that such instruction is in writing and contains the Boards' representation that such instructions are permitted by the Fund's underlying instruments, are in the interests of FCERA participants and beneficiaries, and will not result in a violation CERL.

7) <u>Transition Management</u>: Transition Management is a useful tool to mitigate transition costs and manage market exposure risks associated with certain changes to the Fund's asset allocation. It is the responsibility of the Investment Consultant to advise the

Administrator and the Board which transitions are appropriate candidates for Transition Management. The Administrator, in conjunction with the advice of the Investment Consultant, has the authority to select the Transition Management vendor and manage the transition process.

8) Securities Lending: The Board may authorize the execution of a Securities Lending Program to be performed by the Custodian in conformance with the Custodial Agreement. The program will be monitored and reviewed by Administrator, with particular attention to the liquidity, duration and risk characteristics of the associated collateral pool. Securities lending is intended primarily to offset costs of custody; secondly as a means to efficiently deploy idle security holdings of the Fund to obtain incremental gains thereon. The Board does not deem securities lending to be an investment strategy per se. The design, management and oversight of this activity shall reflect these policies.

XI. INVESTMENT PERFORMANCE REVIEW AND EVALUATION

1) The Board shall review the investment results of the Fund at least on a quarterly basis. Performance comparisons will be made against the various benchmarks established for the Fund and each Investment Manager as set forth in this IPS and the Investment Manager Agreements.

2) The Board, with the assistance of the Investment Consultant, shall periodically evaluate developments affecting each Investment Manager. This evaluation should include: changes in ownership, personnel turnover, adherence to investment style and philosophy, relative peer performance, co-investor confidence and any other qualities that the Board deems appropriate. This evaluation should also include an assessment as to whether each Investment Manager has operated within the parameters established by the consultant and reported to the Board on a quarterly basis.

3) The Board shall hold each Investment Manager accountable for the performance of the assets over which the manager exercises discretion or control. If an Investment Manager fails to accomplish its investment objectives over a market cycle (typically at least ~~three to~~ five years), the Board may notify the Investment Manager in writing that it has failed to accomplish its performance objectives and that the Board has placed them on probation. The Board will continue to monitor the investment results until it determines whether removal of probation or termination of the Investment Manager is warranted. To assist in the evaluation, the Board will maintain a "watch list". This watch list will include the following "flags" that will be monitored on an ongoing basis:

   a) Manager has underperformed the benchmark index more than half the time over the last 20 quarters.

   b) Manager has returned less than 105% of the benchmark index over a three-year period (110% for equity managers).

c) Manager has underperformed the 50th percentile in the appropriate style universe in more than two of the last five years of consecutive returns.

d) Manager's Sharpe Ratio is worse than the 50th percentile in an appropriate style universe for the five-year period.

e) Managers Information Ratio is worse than the 50th percentile in an appropriate style universe for the five-year period.

f) Manager experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership, or any other reason that raises concern.

The Board reserves the right to terminate Investment Managers at any time, with our without cause, in the best interests of the Fund.

4) Each Investment Manager shall disclose to the Board all major changes in its organization, operations, or investment philosophy as soon as possible, but not later than fourteen (14) days following the change. Each Investment Manager shall disclose to the Board any legal, regulatory or other actions affecting its business or operations as soon as possible, but not later than seven (7) days following knowledge of the action. All Investment Managers who are registered investment advisors must present updated SEC ADV-2 forms on an annual basis to the Board, within thirty (30) days of filing the forms with the Securities Exchange Commission.

5) The Board has approved a Placement Agent Disclosure Policy in compliance with California law. Each Investment Manager shall comply at all times with all of the provisions of the Placement Agent Disclosure Policy.

XII. ADMINISTRATIVE PRACTICES

1) <u>Communication and Reporting of Investment Managers</u>: The Investment Managers are responsible for frequent and open communication in writing with the Board on all significant matters pertaining to investment policies and the management of the Fund's assets. Each Investment Manager must include a copy of their individual portfolio guidelines along with the quarterly report. Investment Managers are required to advise the Board in writing of any violation or any need for changes to the portfolio guidelines.

2) <u>Compensation of Investment Managers</u>: Each Investment Manager retained by the Fund shall be compensated quarterly by a formula contained in the Investment Manager Agreement. No Investment Manager retained by the fund shall receive a payment of commission or other fees on a particular investment transaction. Further, each Investment Manager must disclose to the Board any indirect compensation received in addition to its fees as a result of servicing the Fund.

3) Brokerage Disclosure: Each Investment Manager retained by the Fund shall provide a written quarterly report detailing the name of each brokerage institution which received commissions from the Fund as the result of the discretionary trading authority bestowed upon the Investment Manager by the Board. Investment Managers shall provide to the Board a commission report detailing the name of the brokerage firm, the number of shares, average cost per share traded, and the commissions paid.

4) Fiduciary Responsibility: Each Investment Manager is expected to agree in writing that they are subject to and performing their duties consistent with the full responsibilities of a fiduciary under CERL and appropriate federal and state laws. Each Investment Manager shall maintain in full force and effect the levels of insurance and bonding required by their Investment Manager Agreements.

5) Specific Disclosures regarding Fees and Expenses: California Assembly Bill 2833 (AB2833) requires a public pension or retirement system to require limited partnerships, limited liability companies or similar legal structures (hereafter referred to as Alternative Investment Vehicles – AIVs) to make specific disclosures regarding fees and expenses, for contracts entered into, extended, renewed, or amended on or after January 1, 2017. Consistent with requirements relating to public records, the plan must disclose, at least annually, the information received in connection with the AIVs at an open public meeting. The intent of AB2833 is to increase the transparency regarding the character and amounts of fees paid by a public pension fund to AIVs. The following information is required by each AIV:

    a) The fees and expenses that the retirement system pays directly to the AIV, the fund manager, or related parties subject to the agreement.

    b) The pro rata share of fees and expenses not included in paragraph (a) that are paid from the AIV to the fund manager or related parties.

    c) The public fund's pro rata share of carried interest distributed to the fund manager or related parties.

    d) The public fund's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the AIV to the fund manager or related parties.

    e) Any additional information described in Government Code 6254.26 subdivision (b)

"Alternative Investments" means an investment in a private equity fund, venture fund, hedge fund or absolute return fund.

"Alternative Investment Vehicle" means the limited partnership, limited liability company or similar legal structure through which a public investment fund invests in an alternative investment.

"Carried Interest" means a share of the profits of a private equity fund that is due to the fund manager or general partner.

"Fund Manager" means the general partner, managing manager, advisor or other person or entity with primary investment decision-making authority

All AIV managers with new, renewed, extended, amended contracts on or after January 1, 2017 will be required to comply with the disclosure requirements. FCERA will request all existing AIV managers voluntarily comply with the disclosures. FCERA encourages AIV managers utilize the Institutional Limited Partners Association (ILPA) Reporting Template provided in Appendix C.

XIII. POLICY REVIEW

The Board shall review this Investment Policy Statement at least every three (3) years, ensuring it remains relevant and appropriate. This Policy may be amended from time to time by majority vote of the Board.

XIV. POLICY HISTORY

The Board of Retirement approved and adopted this policy on June 1, 2011, March 19, 2014, June 3, 2015, November 2, 2016, June 7, 2017, ~~and~~ August 2, 2017, and September 5, 2018.

XV. Secretary's Certificate

I, Donald Kendig, the duly appointed Secretary of the Fresno County Employees' Retirement Association, hereby certify the adoption of this Policy.

~~August~~ September ~~2~~5, ~~2017~~2018

Date of Action:

By: Retirement Administrator

APPENDIX A – STRATEGIC ASSET ALLOCATION

APPENDIX A ~~-~~– STRATEGIC ASSET ALLOCATION

At the June 6, 2018 Board Meeting, as a result of a comprehensive asset-liability study, the Board of Trustees approved a new target asset allocation. The Board also approved a 1% quarterly re-risking strategy designed to minimize the timing impact of rebalancing the portfolio. The intention of this strategy is to increase the total public equity exposure by 1% per quarter until the Ending Target is reached. A detailed version of this Glidepath Is included as Appendix D – Asset Allocation Glidepath. The beginning and ending targets for this glidepath are summarized below.

Beginning & Ending Targets, Asset Class Benchmarks:

Asset Class	Beginning Target	Ending Target~~Minimum~~	Benchmark
Domestic Equities	**17%**	**25%~~12%~~**	**Russell 3000 Index**
Large Cap	14%	20%	
Small/Mid Cap	3%	5%	
International Equities	**19%**	**24%~~14%~~**	**MSCI ACWI ex US Index**
International Large	9%	15%	
International Small	3%	3%	
Emerging Markets	7%	6%	
Fixed Income	**31%**	**23%~~26%~~**	**Barclays Global Aggregate Index**
US Credit Fixed Income	5%	4%	
High Yield Fixed Income	5%	3%	
Bank Loans	5%	3%	
Global Sovereign	7%	7%	
Emg Markets Debt Local	5%	3%	
TIPS	4%	3%	
Real Assets	**11%**	**8%**	
Commodities	3%	0%~~2%~~	**DJ UBS Commodity Index**
Real Estate	5%	~~3%~~5%	**NCREIF ODCE Index**
Infrastructure	3%	~~1%~~3%	**NCREIF ODCE Index**
Alternative Investments	**22%**	**20%**	
Hedge Funds	8%	6%~~6%~~	**HFRI FoF Composite Index**
Private Equity	6%	6%~~N/A~~	**Russell 2000 Index**
Private Credit	8%	~~N/A~~8%	**Barclays US Corp. High Yield Index**
Total	**100%**	**100%**	

~~Notes: 1) The cash requirements of the Fund will be classified under Fixed Income.~~

~~2) Asset allocation targets, and any rebalancing transactions, should give first priority to maintenance of broad asset group targets, and then sub-class targets. Target ranges are set broadly for flexibility when needed. Rebalancing actions will normally occur before portfolio weights are displaced to those levels.~~

Rebalancing Strategy:

The Board wishes to rebalance the portfolio on a methodical and gradual basis while preserving the flexibility to revise the Asset Allocation Glidepath, and the corresponding timing of reaching the Ending Target, dependent on future market conditions. In order to minimize transaction costs while rebalancing, the target exposure will be managed using a combination of physical and synthetic market exposure. With assistance from the Overlay Manager and the Investment Consultant, FCERA Administrator and Staff will be responsible for managing the market exposure relative to the Glidepath specified in Appendix D. The rebalancing is intended to function as follows:

1) The Overlay Manager will adjust its target public equity and public fixed income exposures at the end of each quarter, consistent with the quarterly targets as specified in Appendix D.

2) Consistent with current practice, the Overlay Manager will manage the overall exposure (physical exposure and synthetic exposure) to a 5% relative band using the quarterly targets as specified in Appendix C (e.g. for a 10% target weight, the portfolio would be rebalanced synthetically when the actual exposure is less than 9.5% or greater than 10.5%).

3) The Overlay Manager will notify FCERA Administrator and Staff when the physical exposure deviates from the Glidepath Targets by more than 2%. At such time, Staff will rebalance the portfolio as necessary.

4) Independent of the Overlay Manager notifications discussed above, FCERA Staff will periodically review the current market values relative to the Glidepath Targets and rebalance as necessary, in consultation with the Investment Consultant and Overlay Manager.

APPENDIX B – SUPPORTING MANAGER GUIDELINES