



## **REQUEST FOR PROPOSALS FOR**

## **HEDGE FUND CONSULTING**

**FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
(FCERA)**

**DATE: OCTOBER 10, 2015 (OCTOBER 20, 2015 UPDATE)**

**DEADLINE FOR SUBMISSION: NOVEMBER 20, 2015 AT 4:00 PM PACIFIC TIME**

# **FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (FCERA)**

## **Request for Proposals for**

## **Hedge Fund Consulting Services**

### **Table of Contents**

- I. Introduction
- II. Scope of Work
- III. Submission Requirements
- IV. Evaluation and Selection Criteria
- V. Schedule
- VI. Terms and Conditions for Receipt of Proposals
- VII. Contract Requirements

### **Appendices:**

- A. RFP Questions
- B. Form of Consulting Agreement
- C. FCERA's Investment Policy Statement – June 3, 2015
- D. FCERA's Asset Liability Study – April 2013
- E. FCERA's Asset Allocation Implementation – April 2, 2014

## **I. Introduction**

The Fresno County Employees' Retirement Association ("FCERA") is a public defined benefit plan for employees of Fresno County, California and certain districts within the County. The ten (nine voting and one alternate) member FCERA Board ("Board") has plenary authority and fiduciary responsibility for the investment of monies and administration of the Retirement System. FCERA stewards approximately \$4 billion in assets, invested through a diversified portfolio of public and private equity, commodities, real estate, hedge funds, and public and private debt holdings. Generally, the Board meets twice a month, on the first and third Wednesday, in noticed public meetings to, among other things, set policy, review investment performance, and consider new investment opportunities. Investment related matters are generally heard during the first meeting in the month. The Board and Retirement System conduct all investment activities in accordance with applicable laws and investment policies and procedures adopted by the Board, and in the sole interest of members and their beneficiaries. For more information about FCERA, go to <https://www.fcera.org>.

FCERA currently has approximately 4% of its investment portfolio (approx. \$150 million) invested in a commingled hedge fund-of-funds strategy. By action of FCERA's governing Board of Retirement, FCERA intends to invest an additional 4% of its portfolio in additional hedge fund strategies.

As described further in this Request for Proposals ("RFP"), FCERA is soliciting proposals to provide comprehensive full-retainer hedge fund investment consulting advice and services to the Board and FCERA. Through this Request for proposal ("RFP"), FCERA seeks to obtain information from, evaluate and eventually select one or more specialty consultants in which to advise on 8% of its portfolio. Respondents to this RFP may be fund-of-funds managers proposing a discretionary or non-discretionary specialty hedge fund consulting relationship, or may be discretionary or non-discretionary specialty hedge fund consultants. The firm must have deep experience with fund of hedge fund or direct hedge fund investing strategies. The firm will serve in a fiduciary capacity and must acknowledge in writing the firm's fiduciary status, without qualification. In all cases, the firm and its consultants must offer advice to the Board and FCERA solely in the interest of Retirement Association members and their beneficiaries.

The content of responses to this RFP shall be considered a public. Responders may not impose any confidentiality requirements on FCERA.

The contract anticipated under this RFP will have an initial term of three (3) years. In addition, FCERA shall have two (2) options to extend the term of the agreement for a period of one (1) year each option, which FCERA may exercise in its sole and absolute discretion.

Thank you for providing a timely response to this RFP.

## **II. Scope of Work**

The general scope of work for this RFP is to provide non-discretionary professional consulting services related to all aspects of investing in hedge funds; however, discretionary professional consulting will be considered during the proposal and respondent review process. Specifically, the successful firm will demonstrate extensive experience and superior capability for providing hedge fund investment consulting services to institutional investor clients, preferably public pension systems, of comparable size to or larger than FCERA, including but not limited to investment policy development and compliance, portfolio construction, initial manager research

and selection, on-going manager research and due diligence, risk management, performance reporting, and Trustee education for investing in hedge funds. The following are examples of the duties FCERA expects the hedge fund consultant or fund of hedge fund manager to perform:

**A. Policy Duties:**

- Provide recommendations concerning investment goals, policies, guidelines and procedures.
- Provide recommendations regarding fund of hedge fund and direct investment strategies and structures.
- Provide recommendations concerning the process for manager research, selection, and subsequent due diligence.
- Provide recommendations concerning proxy voting policies and guidelines.
- Provide recommendations concerning risk management strategies.
- Provide recommendations concerning compliance monitoring.

**B. Investment Manager Selection and Oversight Duties:**

- Provide recommendations on how the Board and staff may enhance their manager research, selection, and subsequent due diligence of external managers.
- Provide due diligence on prospective investment managers.
- Provide investment recommendations on manager selection and portfolio construction.
- Provide compliance monitoring of investment managers.
- Provide access to analytical software and tools.
- Provide recommendations on cost containment.
- Provide recommendations concerning manager guidelines and benchmark selection.
- Provide recommendations on risk management strategies.

**C. Performance Measurement Duties:**

- Provide benchmark evaluation, implementation, and analysis.
- Compare hedge fund investment performance to custom policy benchmarks.
- Compare hedge fund investment performance to the hedge fund performance of other public plans.

**D. Training, Education and Client Relations Duties:**

- Attend approximately 12 regular monthly Board meetings, generally the first Wednesday of the month, except for the Board offsite generally held the third Wednesday or Thursday of October, as well as Committee and special Board meetings as needed.
- Provide quarterly reporting.
- Coordinate effectively with the Retirement System's general investment consultant and specialty consulting firms, as may be retained from time to time.
- Provide investment education and training on a periodic basis.
- Provide assistance on special projects as needed.
- Participate in workshops or meetings on specific issues designated by the Board.
- Provide support for operational issues between meetings.
- Respond to inquiries between meetings in an appropriate and timely manner.

- Share all firm research, including white papers, and provide access to the firm's research staff.
- Report any significant changes in the firm's organizational structure and staffing in a timely manner.
- Make no changes in the assigned consultant team without FCERA's express approval.
- Ensure that consultant personnel identified by FCERA submit assuming office, annual and leaving office (as applicable) Statements of Economic Interests (Form 700s) with FCERA.

**E. Accounting and Recordkeeping Duties:**

- Given that the Retirement Association has limited accounting resources and the establishment of a direct hedge fund investment program would entail an exponential increase in accounting duties, provide an outsourced, consolidated accounting service for the hedge fund investment allocations.

The hedge fund consultant may also be asked to provide other services as required by the Board and staff.

**III. Submission Requirements**

**A. Blackout Period**

For the duration of the RFP process, the Retirement System and Board will enter into a "blackout period" during which communications and meetings between parties interested in or actually responding to the RFP ("Proposers") and Retirement System staff and Board members is prohibited. This blackout period is effective upon approval of the development and issuance of this RFP by the Board, which occurred September 2, 2015, and continues until either the RFP review and evaluation process is completed and a contract is executed with the selected Proposer or the search process is otherwise ended by the Board.

This blackout period will enable FCERA and the Board to treat all Proposers fairly during the RFP selection process and permit the review and evaluation of the responses to be fair and unbiased.

Blackout conditions are outlined below:

1. Proposers are to refrain from communications with Retirement System staff and Board members. Communications include meetings, telephone conversations, letters, and email.
2. The following communications are permitted during the blackout period: written requests submitted as provided in Section V(B)(2) of this RFP; interviews scheduled by FCERA as part of the RFP evaluation process; and presentations scheduled before the Board for interviewing one or more Proposer as part of the RFP evaluation and selection process.
3. Proposers may meet with Retirement System staff or a Board member only if (a) the meeting is limited to discussions that are unrelated to this RFP, the Proposer's services that are covered by this RFP, or the Proposer's response to the RFP and (b) both the employee/Board member and the Proposer provide advance written notice of the meeting and the subject of the meeting to the FCERA Executive Director. The Executive Director will retain the written notices regarding any such meetings, and may request written confirmation after the meeting regarding the subjects discussed.

4. Nothing in this blackout period shall limit a Proposer who is currently engaged by FCERA as a service provider from participating in meetings and communications with FCERA employees and Board members required to effectively conduct the business and services under the existing engagement, as long as the topics in Section III(A)(3) above are not discussed.

If a Proposer has any questions regarding the blackout period, the Proposer should submit the question in writing as provided by Section V(B)(2) of this RFP.

## **B. Time and Place for Submission of Proposals**

The deadline for electronic and printed submission of proposals is November 20, 2015 at 4:00 p.m. Pacific Time. One (1) complete proposal, along with an electronic copy on CD or USB or via email, must be sent to:

Donald C. Kendig, CPA  
Retirement Administrator  
Attn: Hedge Fund Consultant RFP  
Fresno County Employees' Retirement Association  
1111 H Street  
Fresno, CA 93721  
Email: [dkendig@co.fresno.ca.us](mailto:dkendig@co.fresno.ca.us)

Late or incomplete submissions will not be considered. Both hard and electronic version must be received before the deadline. Postmarks will not be considered in judging the timeliness of submissions. Proposals that are submitted by fax will not be considered. Timely submission of only an electronic version or only the hard copy versions of the proposal is insufficient to timely submit the proposal.

## **C. Transmittal Letter**

An individual who is authorized to bind the Proposer contractually must sign a transmittal letter, which is an integral part of the proposal. The transmittal letter must indicate the signer is authorized to bind the Proposer. **A response with an unsigned transmittal letter will be rejected.** This transmittal letter must include the following:

1. The Proposer's name, address, telephone, facsimile number and website address.
2. The Proposer's Federal Employer Identification Number and Corporate Identification Number, if applicable.
3. The name, title or position, and telephone number of the individual signing the transmittal letter.
4. The name, title or position, and telephone number of Proposer's primary contact for the RFP, if different from the individual signing the transmittal letter.
5. A statement expressing the Proposer's willingness to perform the services as described in this RFP, and an acknowledgement that Proposer agrees to be a fiduciary to the Board, FCERA and FCERA's members and their beneficiaries.
6. A statement expressing the Proposer's availability of staff and other required resources for performing all services and providing all deliverables under the RFP.
7. A certification that all fees and conditions stated in the proposal are firm for a period of 180 days from the deadline for submission of proposals and that the quoted prices are genuine and not the result of collusion or any other anti-competitive activity.

8. A statement that Proposer has reviewed the schedule in Section V(A) of this RFP, and will ensure that all of Proposer's key personnel are available for interviews, site visits, and Board meetings.
9. A certification that no officer, employee or agent of FCERA and no Retirement Board member has any known personal or pecuniary interest, direct or indirect, in the contract contemplated by this RFP or the proceeds thereof.
10. A statement that identifies any personal, professional or financial relationships between Proposer and its officers and employees and any Retirement Board member or FCERA officer or employee.
11. A statement that Proposer acknowledges that materials submitted pursuant to this RFP are public records. See Section V(B)(9) of this RFP.
12. A description of Proposer's professional relationships involving FCERA, the State of California and any of its political subdivisions for the past five (5) years from the date of Proposer's proposal, together with a statement explaining why such relationships do not constitute a conflict of interest.

#### **D. Format and Content of Proposals**

Completeness, brevity, and clarity are important. Proposers should submit all information requested in this RFP and do so in the specified format. Responses not meeting format requirements or that are incomplete may be rejected. Providing incomplete or misleading data may lead to disqualification of the Proposer.

Proposer's response to this RFP must be organized in the format listed below.

1. Transmittal Letter;
2. Statement demonstrating that the Proposer satisfies the minimum qualifications under Section IV(A) of this RFP and a brief description regarding whether Proposer possesses the desired qualifications under Section IV(B);
3. Response to RFP questions in Appendix A; and
4. Additional information or attachments required in Appendix A.

In addition, Proposers must submit the required vendor form. See RFP Section VII(B).

#### **IV. Evaluation and Selection Criteria**

##### **A. Minimum Qualifications – Unless otherwise specified, the Proposer must meet the minimum qualifications as of November 20, 2015.**

A Proposer must meet all of the following minimum qualifications, to FCERA's satisfaction:

1. The firm must have at least \$10 billion in hedge fund consulting or fund of hedge fund assets.
2. The firm must have provided hedge fund consulting or fund of hedge fund services for at least the past five years.
3. The firm must have at least ten employees responsible for conducting investment due diligence, operational due diligence, and portfolio construction on hedge funds.
4. The firm's investment professionals must possess at least 100 years of aggregate investment experience.

5. At least one key professional member of the firm proposed for the FCERA account must have a minimum of ten years of experience in reviewing advisor/manager agreements and other documents associated with investment for institutional clients.
6. The firm must carry Errors and Omissions (“E&O”) Insurance coverage or must have applied for such coverage by the submission date of the proposal. E&O insurance will be required throughout the duration of the contract.

The determinations of whether a Proposer satisfies the minimum qualifications is solely and exclusively within the judgment of FCERA. Any proposal that does not demonstrate that the Proposer meets these minimum requirements by the deadline for submittal of proposals will be considered non-responsive and will not be eligible for consideration or award of the contract.

## **B. Desired Qualifications**

Below is a list of desired qualifications for the hedge fund consultant:

1. Several clients with total plan assets of \$10 billion or greater for the past five years or more.
2. Deep global research capabilities. Demonstrated ability to research hedge fund managers in a wide array of strategies, including but not limited to: U.S., Non-U.S. Developed, Emerging Markets, and Global strategies; equity long-short; event driven; relative value; global macro; CTA; activist; and multi-strategies.
3. Sophisticated asset allocation and risk management practices.
4. At least ten investment professionals devoted to hedge fund research, portfolio construction, reporting, and monitoring.
5. The firm’s investment professionals have an average of at least ten years of experience.
6. The firm has systems and technology needed to manage and advise clients with a plan of FCERA size and complexity.
7. The firm has the depth and breadth across multiple asset classes to assist in managing and advising a client of FCERA’s size and complexity with respect to hedge funds in a portfolio context.
8. E&O coverage of \$10,000,000.

## **C. Selection Criteria**

Staff will evaluate the proposals generally in accordance with the criteria itemized below.

- |  |     |
|--|-----|
| 1. Business and Organization:                                      | 10% |
| -Business structure  |     |
| -Ownership structure   |     |
| -Conflict of interest issues                                       |     |
| -References  |     |
| 2. Personnel:  | 25% |
| -Depth of personnel devoted to hedge fund investing                |     |
| -Experience of personnel devoted to hedge fund investing           |     |
| -References  |     |
| 3. Manager Research and Portfolio Construction                     | 25% |
| -Depth of manager investment research                              |     |
| -Depth of operational due diligence                                |     |
| -Breadth of manager research across sub-strategies and geographies |     |



- Approach to portfolio construction of a multi-manager program
  - References
4. Risk Management 20%
    - Approach to investment policy, guidelines, and procedures
    - Ongoing monitoring and due diligence of hedge fund managers
    - Approach to manager transparency
    - Insightful performance reporting, attribution analysis, and risk analytics
    - Comprehensive risk management systems, practices and reports
    - References
  5. Fees 10%
    - Cost on absolute basis (with and without outsourced accounting)
    - Experience in negotiating lower fees with hedge fund managers
  6. Other 10%
    - Experience and skill in Board presentations and working with Staff
    - Education materials of value to the Board and Staff
    - Proven innovation; creative solutions that are subsequently adopted by others
    - Warranties
    - Insurance, legal and contracting issues
    - Client service

Following the evaluation of the written proposals by Staff, and approval of up to three (3) finalist Proposers by the Board, Staff and up to three members of the Board ("Site Visit Team") may conduct site visits to the finalist Proposers' offices. Proposers should review the schedule in Section V(A) below, and ensure that all of Proposer's key personnel will be available for any scheduled interviews, site visits, and Board meetings. (Proposers do not need to attend the meeting when the Board approves the RFP finalists.) During the site visits, interviews will consist of standard questions asked of each Proposer as well as specific questions regarding each individual proposal. Following the site visits, FCERA may invite the most highly qualified Proposer(s) to an oral interview with the Board, and the Board must ultimately approve retention of a winning firm.

Fees and any other charges or costs are an important factor in the evaluation of the proposals. However, FCERA is not required to choose the lowest cost Proposer. FCERA will select the Proposer that, in FCERA's sole discretion, best meets the requirements of this RFP and serves the total needs of the Board, the Retirement System and Retirement System members and their beneficiaries.

-- Continued on the following page. --

## V. Schedule

### A. Schedule of Events (all dates subject to change)

Action	Responsibility	Date (subject to change)
RFP issued	FCERA	October 10, 2015
Deadlines for Proposers to submit all requests per RFP Section V(B)(2)	Proposers	October 20, 2015
FCERA posts responses to Proposer requests on website	FCERA	October 30, 2015
Deadline to submit proposals	Proposers	November 20, 2015
Staff recommendation and Board approval of up to three (3) finalist Proposers	Staff and Board	December 16, 2015
Interviews and possible site visits of finalist Proposers	FCERA Site Visit Team and Proposers	December 2015 and January 2016
Oral Board interviews and Board approval of successful Proposer	FCERA	February 3, 2016
Contract negotiations completed	Staff and Proposer	March 2, 2016
Hedge fund consultant begins services to FCERA	Hedge Fund Consultant	March 2, 2016

### B. Explanation of Events

1. The RFP will be posted on the FCERA website at [www.fcera.org](http://www.fcera.org). In addition, the RFP will be released to a list of potentially qualified firms as determined by FCERA. All firms meeting the minimum qualifications, as stated in Section IV(A) of this RFP, are welcome to participate.
2. Any requests for interpretation or clarification of RFP procedures, requirements or the questions in Appendix A must be emailed to Donald C. Kendig, CPA ([dkendig@co.fresno.ca.us](mailto:dkendig@co.fresno.ca.us)) not later than 5:00 p.m. Pacific Time on October 20, 2015. FCERA will only respond to requests for interpretation or clarification of RFP procedures, requirements or the questions in Appendix A. This opportunity to seek interpretation or clarification of the RFP is not an opportunity to ask general questions, for example, questions seeking organizational or operational information or investment opinion. FCERA has included with this RFP the information it believes Proposers should consider in preparing a proposal and the information FCERA is interested in receiving from Proposers.

3. FCERA will respond to all timely requests for interpretation or clarification of the RFP by October 20, 2015. Responses will be posted on FCERA's website by October 30, 2015.
4. FCERA may modify the RFP, prior to the submission deadline, by issuing addenda prior to November 16, 2015, which will be posted on FCERA's website. Each Proposer is responsible for ensuring that its proposal reflects any and all addenda issued by FCERA prior to the submission deadline regardless of when the proposal is submitted. Therefore, FCERA recommends that each Proposer consult the website frequently, through November 16, 2015, to determine if the Proposer has downloaded all addenda.
5. In preparing their responses, Proposers should rely only on written material concerning this RFP issued by FCERA.
6. See RFP Section III(B) for the time and place requirements for Proposers to submit their proposals. **FCERA will not grant any exceptions to the submission requirements.**
7. Oral interviews of the finalist Proposers, if determined appropriate by FCERA, will be scheduled at FCERA's office at 1111 H Street, Fresno, California 93721. Onsite interviews of the finalist Proposers may also be requested by FCERA. FCERA expects that Proposer's personnel who would be assigned to the FCERA account will attend both oral interviews and onsite interviews. FCERA reserves the right to change the dates for these interviews at any time for any reason.
8. Staff anticipates conducting finalist interviews and successful firm selection by the Board at its February 3, 2016 meeting. FCERA expects that the recommended Proposer's team will attend the Board meeting and make a presentation to the Board regarding its proposal.
9. Submissions will be public documents. Any material that the Proposer considers "Business-Confidential" should be so marked, but confidentiality is not guaranteed.

### **C. Contract Award**

After Board approval, staff will commence contract negotiations with the selected Proposer. The selection of any proposal shall not imply acceptance by FCERA of all terms of the proposal, which may be subject to further negotiations and approvals before FCERA may be legally bound thereby. If a satisfactory contract cannot be negotiated in a reasonable time, FCERA, in its sole discretion, may terminate negotiations with the initially selected Proposer and begin contract negotiations with the next runner up Proposer.

## **VI. Terms and Conditions for Receipt of Proposals**

### **A. Errors and Omissions in RFP**

Proposers are responsible for reviewing all portions of this RFP. Proposers are to notify FCERA promptly, by email to Donald C. Kendig, CPA ([dkendig@co.fresno.ca.us](mailto:dkendig@co.fresno.ca.us)), if the Proposer discovers any ambiguity, discrepancy, omission, or other error in the RFP. Any such notification should be directed to FCERA promptly after discovery, but in no event later than October 20, 2015 at 5:00 p.m. Pacific Time. Modifications and clarifications will be made by addenda as provided in RFP Section VI(D) below.,

## **B. Inquiries Regarding RFP**

Inquiries regarding the RFP and all requests for written modification or clarification of the RFP must be submitted by email to:

Donald C. Kendig, CPA  
Retirement Administrator  
Fresno County Employees' Retirement Association  
Email: [dkendig@co.fresno.ca.us](mailto:dkendig@co.fresno.ca.us)

## **C. Objections to RFP Terms**

Should a Proposer object on any ground to any provision or legal requirement set forth in this RFP, the Proposer must, not more than ten calendar days after the RFP is issued, provide written notice by email to Donald C. Kendig, CPA ([dkendig@co.fresno.ca.us](mailto:dkendig@co.fresno.ca.us)) setting forth with specificity the grounds for the objection. The failure of a Proposer to object in the manner set forth in this paragraph shall constitute a complete and irrevocable waiver of any such objection.

## **D. Addenda to RFP**

FCERA may modify the RFP, prior to the submission deadline, by issuing addenda prior to November 16, 2015, which will be posted on FCERA's website. Each Proposer is responsible for ensuring that its proposal reflects any and all addenda issued by FCERA prior to the submission deadline regardless of when the proposal is submitted. Therefore, FCERA recommends that each Proposer consult the website frequently, through November 16, 2015, to determine if the Proposer has downloaded all addenda.

## **E. Term of Proposal**

Submission of a proposal signifies that the proposed services and prices are valid for 180 calendar days from the proposal due date and that the quoted prices are genuine and not the result of collusion or any other anti-competitive activity.

## **F. Revision of Proposal**

A Proposer may revise a proposal on the Proposer's own initiative at any time before the deadline for submission of proposals. The Proposer must submit the revised proposal in the same manner as the original. A revised proposal must be received on or before the proposal submission deadline.

In no case will a statement of intent to submit a revised proposal, or commencement of a revision process, extend the submission deadline for any Proposer.

At any time during the proposal evaluation process, FCERA may require a Proposer to provide oral or written clarification of its proposal. FCERA reserves the right to make an award without further clarifications of proposals received.

## **G. Errors and Omissions in Proposal**

Failure by FCERA to object to an error, omission, or deviation in the proposal will in no way modify the RFP or excuse the Proposer from full compliance with the specifications of the RFP or any contract awarded pursuant to the RFP.

## **H. Financial Responsibility**

FCERA accepts no financial responsibility for any costs incurred by a Proposer in responding to this RFP. Submissions of the RFP and associated materials will become the property of FCERA and may be used by FCERA in any way deemed appropriate.

## **I. Reservations of Rights by FCERA**

The issuance of this RFP does not constitute an agreement by FCERA or the Board that any contract will actually be entered into by FCERA. FCERA expressly reserves the right at any time to:

1. Waive or correct any defect or informality in any response, proposal, or proposal procedure;
2. Reject any or all proposals;
3. Cancel the pending RFP at any point in the process;
4. Reissue a Request for Proposals;
5. Prior to submission deadline for proposals, modify all or any portion of the selection procedures, including deadlines for accepting responses, the specifications or requirements for any materials, equipment or services to be provided under this RFP, or the requirements for contents or format of the proposals;
6. Procure any materials, equipment or services specified in this RFP by any other means; or
7. Determine that no project or consultant retention will be pursued.

## **J. No Waiver**

No waiver by FCERA of any provision of this RFP shall be implied from any failure by FCERA to recognize or take action on account of any failure by a Proposer to observe any provision of this RFP.

# **VII. Contract Requirements**

## **A. Standard Contract Provisions**

The successful Proposer will be required to enter into a contract substantially in the form of the form of Consulting Agreement attached hereto as Appendix B. Failure to timely execute the contract, or to furnish any and all certificates, bonds or other materials required in the contract, shall be deemed an abandonment of a contract offer. FCERA, in its sole discretion, may select another Proposer or take other action regarding the RFP and contract, and may proceed against the original selectee for damages.

## **B. Required Vendor Form**

Before FCERA can award any contract to Proposer, the Proposer must submit an IRS Form W-9 (Request for Taxpayer Identification Number and Certification).

The Proposer must submit this form at the time the Proposer submits its proposal. If it is not submitted when the Proposer submits its proposal, the proposal may be determined to be non-responsive and rejected.

Even if a Proposer has previously completed and submitted the required forms to the Retirement System, the Proposer must do so again to ensure a complete file regarding this RFP.

## **APPENDIX A – RFP QUESTIONS**

### **A. Warranties**

1. Does your firm warrant that it maintains, or has applied for by the due date of the RFP, an Errors and Omissions Insurance policy providing prudent coverage for negligent acts or omissions and that such coverage is applicable to Manager's actions under the Contract? E&O insurance is required throughout the duration of the assignment.
2. Does your firm warrant that all the information and statements in this RFP are complete and true? Any statement or claim found to be incomplete, misleading or false will be grounds for immediate disqualification or dismissal and may be subject to legal action.
3. Does your firm warrant that it is compliant with the CFA Institute Performance Presentation Standards? If not, please explain.
4. Does your firm warrant that it is an SEC registered investment advisor or exempt from registration? If exempt, please explain the nature of the exemption.
5. Does your firm warrant that it will be directly responsible for the management of the account, and all personnel responsible for the account will be employees of the firm?
6. Does your firm warrant that the proposal for services and prices are valid for 180 calendar days from the proposal due date and that the quoted prices are genuine and not the result of collusion or any other anti-competitive activity?
7. Does your firm state affirmatively that it will comply with the provisions contained in the sample contract, attached as Appendix B?
8. Does your firm warrant that it has not engaged the services of a placement agent (as defined in California law) to assist it in responding to this RFP or otherwise communicating on the firm's behalf with FCERA?

### **B. Contact Information**

9. Please provide the following contact information:

Firm Name:

Contact's Name:

Contact's Title:

Contact's Address:

Contact's E-mail Address:

Contact's Phone Number:

Contact's Facsimile Number:

Firm's Internet (www) Address:

### **C. Legal and Regulatory**

10. Has your firm or any employee at your firm (or ex-employee while employed at your firm) ever been involved in litigation where an allegation of a breach of fiduciary responsibility was made. If yes, please explain.
11. Has your firm been involved in an investigation or enforcement action by a regulatory agency? If yes, please explain.
12. Have any employees of your firm, or ex-employees while employed at your firm, been involved in litigation, investigation, or enforcement action by a regulatory agency or other legal proceedings related to investment activities. If yes, please explain.
13. Have any employees of your firm, or your firm itself, been involved in any other litigation? Please explain.

### **D. Business**

14. Does your firm provide benefits to domestic partners of employees? If yes, describe. If no, indicate whether your firm would adopt such benefits if it were selected for this assignment.
15. Have there been any material developments – such as changes in ownership, personnel, business – over the past five years? Describe such developments and emphasize the impact the changes on the services requested.
16. Discuss any prospective changes in ownership, personnel, or the business over the next 12 months.
17. Describe the business objectives of your firm with respect to future growth, including the services requested. Comment on any present or planned area of emphasis expected in the future.
18. Does your firm or any affiliated entities offer any investment products (such as fund of funds)? If so, respond to the following questions:
  - a) Describe such strategies that are offered by your firm and the current assets under management in each fund.
  - b) Which investment professionals are involved in the management of such funds?
  - c) What procedures and policies are in place to ensure any conflicts of interest between the funds and needs of consulting clients are avoided? What conflicts cannot be avoided and how are these managed?



## E. Organization and Personnel

19. Please provide the following information:

- a) An overview of the firm, including its history and any special expertise or experience that would be relevant to the FCERA.
- b) A description of the ownership structure of the firm, including the parent company and any affiliated companies, joint ventures, and strategic alliances. If any near-term changes to the firm's corporate or organizational structure are anticipated, please note them.
- c) A list of firm owners (from largest to smallest with respect to ownership) and their ownership percentages. Please include individuals and all other entities.

20. Please list all office locations and the number of investment professionals and support staff working in each office. Please specify which office will primarily serve the FCERA relationship.

21. Please provide a table showing the total number of clients and their total, average, and median account as noted below by total plan assets and hedge fund assets.

- a) Public plans;
- b) Endowments and Foundations;
- c) Corporate clients;
- d) Individuals;
- e) Other clients (please describe what constitutes other clients);
- f) Total clients.

22. List the 20 largest clients as of June 30, 2015, the type of account, size of the hedge fund portfolio, and inception date of your relationship to the client. Please also provide each client's total assets. If you are unable to provide detailed information, please provide the type of account and the approximate size of the hedge fund portfolio.

23. Please list the total number of professionals in the firm in each of the following categories for the past five years. For 2015, please list the names of all individuals currently employed by the firm, by category. *Please also indicate the percentage of time spent on each function.* Please explain any material changes in staffing over the past five years.

June 30,	2011	2012	2013	2014	2015
Total Consultants or FoF					
Hedge Fund Consultants or HFoF					
Capital Market Research					
Investment Manager Research					
Economists					
Analytics/Reporting					
Total Investment Staff					

Firm Management					
Legal					
Compliance					
Other Professional Staff					
Total Professional Staff (sum)					
Marketing					
Accounting					
Administration					
Other					
Total Staff					

June 30,	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Asset Allocation					
Capital Markets Research					
Public Equity					
Fixed Income					
Private Equity					
Real Estate					
Real Assets					
Hedge Funds					
Other Investment Research					
Total Investment Research					

24. Please list the names of employees acting in the role of Lead Consultant, Consultant, Fund of Hedge Fund Manager, or Analyst that left the firm in 2010-11 through 2014-15.
25. If the firm anticipates any type of near-term changes in its professional staffing, please indicate the nature of such changes.
26. When hiring consultants and analysts, what are the qualifications, skills, and experiences that the firm generally requires? Please also describe your recruitment practices.
27. What key strengths or competitive advantages does the firm possess?
28. Discuss the tradeoffs of your firm's attributes and how you minimize the downside and maximize the positives of an attribute. For example, if your firm is very large, what disadvantages does that create, what are its strengths, and how are you able to minimize the potential downside of a very large organization. If your firm is smaller, what disadvantages does that create, what are its strengths, and how do you minimize the potential downside of having a more resource-constrained team.

29. Discuss your organization's compensation and incentive program. How are professionals evaluated and rewarded and by whom? What incentives are provided to attract and retain superior individuals? If equity ownership is possible, on what basis is it determined and distributed?
30. List any hedge fund mandates that have been lost from July 1, 2010 to the date of submission of the RFP. State the name or type of account, the size of the account at termination, and the reasons for the loss.

#### **F. Resources Dedicated to FCERA**

31. Please identify the individual(s) who would perform the requested services for the FCERA. Please state the number of clients each individual is responsible for. What percentage of time do you expect each individual will provide to FCERA? For each person, please also provide a biography as well as the following information (*in the specified format*):

Name:

Title:

Expected role:

Total years of institutional investment experience:

Total years of institutional investment consulting experience:

Total years with the firm:

Total current number of assigned accounts:

Name, plan type, length of relationship, and size of each assigned client account:

Role for each assigned account (ex. Lead Consultant, Support Consultant):

32. Please explain how the team dedicated to the FCERA account would function, including lead hedge fund consultant or fund of funds manager, back-up, and support services.
33. Please describe the firm's procedures in the event that key personnel assigned to this account leave the firm, are unable to serve, or are able to serve in a reduced capacity.
34. Please describe the firm's experience and capabilities for providing education to public pension plan Trustees and staff. Provide examples of materials used in recent educational forums.

#### **G. Conflicts of Interests**

35. Does the firm or an affiliate of the firm serve as an investment manager for clients? If yes, please explain the rationale for the relationship. Please also discuss how you avoid the potential appearance of a conflict of interest.

36. Does the firm or an affiliate of the firm provide a fund of funds to clients or to non-clients? If yes, please explain the rationale for the fund. Please also discuss how you avoid the potential appearance of a conflict of interest.
37. Does the firm or an affiliate of the firm act as a securities broker-dealer? If yes, please provide the most recent "focus report" (X-17A5) the firm or the affiliate filed with the Securities and Exchange Commission.
38. Does the firm and/or any affiliates accept soft dollars as a method of payment for services provided?
39. Please list the percentage of revenues the firm's ultimate parent company received for the 12-months ended June 30, 2015, from the following sources: (Total must equal 100%.)
- a) Revenues from investment managers:
  - b) Revenues from brokerage activity:
  - c) Revenues from plan sponsor clients:
  - d) Revenues from other sources: (Please specify)
40. Please list the total revenue the firm and that of each of its affiliates received directly or indirectly from investment managers for auditing, actuarial, benefits, or any other work for the 12-months ended December 31, 2014.
41. Please list the dollar value of revenues, commissions or any other benefits the ultimate parent company received (or a brokerage affiliate received – please specify) as a result of any type of brokerage activity for the 12-months ended December 31, 2014.
42. For the 12-months ended December 31, 2014, please list the names of all investment management firms from which the firm, each of its affiliates, and the ultimate parent company of the firm has received any compensation. Please state the dollar amounts received from each entity.
43. Would the firm be willing to disclose, annually or upon client request, the dollar amount and nature of all material beneficial relationships, that the firm or any affiliate of the firm, engages in with investment manager clients? If not, please explain.
44. Please describe the firm's conflict of interest policy. If the firm, its affiliates, or the ultimate parent company provides investment management services, brokerage services, or services to investment managers, please include an explanation of how this policy, and any other measures taken by the firm, limit the likelihood that the client could receive investment advice that is not completely objective.
45. Please explain in detail any potential conflicts of interest that would be created by the firm's representation of the FCERA. Please include any activities of affiliated or

parent organizations as well as other client relationships that may affect services to the FCERA.

## **H. Technology and Communication Resources**

46. Please describe the firm's technology capabilities and relate them to the firm's consulting services or fund of hedge fund products. Do you provide any custom computer-based analytical or research tools to the firm's clients? If so, please elaborate.
47. Please describe the firm's communication technology capabilities. How does the firm use technology to share and leverage information resources across the organization?

## **I. Investment Consulting**

### **Investment Philosophy:**

48. Describe the overall investment philosophy of the firm toward manager research, manager selection, portfolio construction, risk management, and ongoing due diligence related to a hedge fund/absolute return strategy.
49. Do you prefer hedge fund managers: A- With large, sophisticated organizations, or smaller, more focused businesses?; B – Manage many strategies or just a few?; C – Managers with large research staffs or more focused staffs?; D – Managers who are generalists or specialists?; E – Managers who run concentrated portfolios or who own many dozens or hundreds of securities?; F – Constrained strategies or giving managers extra flexibility?
50. Do you have a preference for or away from equity-long short, event driven, relative value, multi-strategy, global macro, U.S., Non-U.S. Developed, Emerging Markets, or any strategy or sub-strategy? Please explain.
51. Do you have a preference for or away from fundamental, technical, or quantitative managers?
52. What is roughly the number of managers you would envision for a hedge fund portfolio? How do you guard against concentration at the portfolio level? How do you guard against over-diversification at the portfolio level?
53. Are there common beliefs that underpin the firm's view on hedge funds? Please explain.
54. What is your expected return and volatility for a hedge fund portfolio over a 10-year period?

**Investment Research:**

55. Please describe the firm's capabilities for monitoring and reporting on market trends, both as they relate to hedge funds as well as other aspects of the capital markets.
56. Please describe the firm's process for monitoring and reporting on market trends, for both hedge funds as well as other segments of the capital markets.
57. Please provide several examples of White Papers or other works of your own original analysis of hedge funds as well as the capital markets.
58. Discuss your thoughts on the capital markets over the past 20 years, including events such as the evolution of the emerging markets, the technology bubble, the credit bubble and the Great Recession, and the subsequent recovery.
59. What are your current views on the capital markets? In addition to any other comments you wish to convey, please state your thoughts on the risks and opportunities on the following subjects: 1 – Valuations; 2 – Inflation and deflation risks; 3 – The United States, Europe, Japan, China, and the Emerging Markets; 4 – Expected economic growth; 5 – Risks, including how you expect them to play out and how you are recommending that portfolios be positioned from both a strategic and tactical perspective; 6 – Projected asset class returns, including a brief explanation as to why your projected returns vary from long-term averages.
60. Please list and describe the specific analytical tools and/or software used by the firm with regard to the items noted below. Briefly discuss your experience in each, with a more detailed reply devoted toward hedge funds tools and software.
  - a) Capital Market & Economic Research
  - b) Asset/Liability Modeling
  - c) Asset Allocation
  - d) Public Equity
  - e) Fixed Income
  - f) Private Equity
  - g) Real Estate
  - h) Real Assets
  - i) Hedge Funds
  - j) Other Specialty Strategies
  - k) Performance Measurement/Attribution
  - l) Risk management/measurement
  - m) Other (please specify)

**Idea Generation:**

61. Provide examples of when your firm advocated a strategy or course of action that was proactive, not commonly practiced by others at the time of your recommendation, and the result of your proposal.
62. Provide three examples of an idea that you recommended which proved to be a disappointment. Why was the idea not successful? What did you learn from the experience?
63. What is the firm's philosophy toward idea generation and a willingness to take a differentiated risk? Does the firm promote a willingness to take differentiated risks that are not widely practiced by others, or does the firm prefer to a more mainstream approach and wait until an idea is accepted by many others?

**Investment Due Diligence:**

64. Please describe your firm's:
  - a) Process for conducting investment due diligence on hedge fund managers?
  - b) What quantitative and qualitative factors are examined?
  - c) How important are onsite meetings? On average how many meetings, including onsite meetings, does your firm conduct prior to recommending a manager?
  - d) What factors in the investment due diligence evaluation are particularly important in recommending a hedge fund manager?
  - e) Describe your firm's process for monitoring managers after they have been hired? On average how often are subsequent onsite meetings conducted?
65. For the calendar years ended 2010 thru 2014:
  - a) Approximately how many phone meetings did the firm hold with hedge fund managers?
  - b) Approximately how many in-person meetings did the firm hold with hedge fund managers (do not include those meetings held at client conferences or educational forums)?
  - c) Approximately how many onsite meetings did the firm hold with hedge fund managers? Please also summarize by various types of hedge fund strategies.
  - d) In what countries did such onsite meetings take place? Please list the approximate number of onsite meetings by country.
  - e) Approximately how many meetings does the firm hold with a prospective manager before you recommend them? Approximately how long does such due diligence take?
66. Please describe the firm's experience and capability for assessing a hedge fund manager's investment performance. What key criteria does the firm consider in evaluating a hedge fund manager?

67. Please describe the manner in which external resources are used in the research process. Describe how the firm utilizes internal and external research? Please describe internal and external systems/databases used.
68. Regarding manager performance:
- a) How important is past performance?
  - b) How often have you recommended managers that have underperformed in the years before you recommended them?
  - c) What factors cause your firm to recommend terminating a hedge fund manager?
  - d) How often have you recommended retaining a manager who has underperformed over the past three years? Five years? Why did you do so?
  - e) How often have you recommended terminating a manager that has outperformed recently? Why did you do so?
  - f) Have you recommended terminating a manager shortly after recommended them? Under what circumstances would you do so?
  - g) Do you track the performance of managers after you have recommended terminating them? What have been the results?
69. Describe how benchmarks are chosen or developed and how performance is compared to similar portfolios. Describe your thoughts on the relevance of benchmarks in measuring a manager's performance and its relevance in achieving a plan's risk and return objectives.
70. What benchmarks do you commonly recommend or use?
71. What are your expected excess returns over the benchmark that you expect to achieve?
72. What is the expected tracking error of the actual hedge fund portfolio versus the benchmark that you expect?
73. What is the expected beta versus the MSCI ACWI of a hedge fund portfolio that you expect to recommend?
74. What is the expected volatility (standard deviation) of a hedge fund portfolio that you expect to recommend?
75. Describe how performance measurement data is presented at a Board meeting. Do you prefer to provide performance data at a composite level, at the manager level, or in some other manner?
76. Please describe the firm's methods for identifying and evaluating emerging or minority hedge fund firms. How many emerging or minority owned hedge fund managers have you recommended over the past five years?



77. Please furnish three complete manager research evaluations including any summary ratings or scoring.

**Operational Due Diligence:**

78. What factors do you evaluate in the following areas of an operational due diligence? Please provide as much detail as you think would be helpful.

79. What factors in an operational due diligence are you most concerned about?

80. When faced with a hedge fund manager you believe is exceptional, what factors in an operational due diligence would cause you to not invest with the manager?

**Risk Management:**

81. How do you manage and monitor market, factor, manager, and other risks in a hedge fund portfolio? Do you utilize holdings, returns-based, or manager furnished factor-based risk management process? Discuss in detail your risk management practices.

82. How do you approach the issue of transparency of a hedge fund manager? What level of transparency do you require?

83. What are your thoughts on requiring managers to furnish holdings-based security level data on a lagged basis of, for example, 90 days after month-end?

84. How do you manage headline risk related to hedge fund managers?

85. Discuss your practices in detail regarding how you guard against fraudulent managers.

86. Have you ever recommended a hedge fund manager who was subsequently accused of fraudulent activity? Discuss such experiences in detail, including who was the manager, the name of the clients, what was the amount of investment and how much money did your clients lose.

87. Have you ever recommended termination of a manager or specifically recommended a client not invest in a hedge fund manager who was subsequently accused of fraudulent activity? Discuss such experiences in detail, including the name of the manager and how much money you saved your client.

88. Please provide a risk report for a hedge fund manager and for a multi-manager hedge fund portfolio.

89. Does your firm warrant that it has not engaged the services of a placement agent (as defined in California law) to assist it in responding to this RFP or otherwise communicating on the firm's behalf with FCERA?

**Other Consulting Services:**

90. Please describe how the firm would advise a client regarding minimizing trading costs, both on an ongoing basis and during a manager transition.
91. Please discuss the firm's views on performance-based fees, asset-based fees, flat fees (with or without performance bonuses) or any other fee structures you recommend for use with hedge fund managers.
92. Please discuss the firm's experience in reducing fees charged by hedge funds. Please provide us with realistic expectations regarding manager fees.
93. Please describe the firm's experience and capability for providing policy guidelines for an absolute return program for a defined benefit plan.
94. Please describe the firm's experience and capability for monitoring a hedge fund manager's compliance to client guidelines and policies.

**Additional Information:**

95. What common mistakes do consultants, plan sponsor staffs, and Boards of plan sponsors make when investing in hedge funds?
96. How do you insure that your firm guards against mistakes consultants may frequently make? What suggestions do you have for the staff of plan sponsors so that they avoid or minimize their mistakes? What recommendations do you have for Boards of plan sponsors so they minimize or avoid their own mistakes?
97. Please provide a fee quote for the services requested in Section II – Scope of Work in the RFP. Please provide **one** fee for all services including and outsourced accounting function assumed by your firm. Please also provide a fee schedule broken down by each specific service.
98. Please state how the firm, as a consultant, expects to add value to the FCERA over the next three to five years. For example, will it be through manager selection, portfolio construction, cost containment, education, etc.
99. Please suggest a methodology for measuring your firm's performance as a hedge fund consultant.

**J. Requested Materials and Additional Information**

100. In addition to any materials requested in the questions listed above, please include the following documents in your proposal.

- a) A corporate organization chart (showing the consulting firm, parent and all affiliates and subsidiaries).
- b) The biographies of the firm's professional staff, including education, investment and consulting experience, and the year they joined the firm.
- c) A current company Annual Report.
- d) A copy of the firm's mission statement, statement of values, and code of ethics.
- e) Current firm policies related to conflicts-of-interest.
- f) Most recently filed SEC Form ADV, Parts I and II.
- g) A copy of the firm's standard marketing brochure that describes the firm's processes and services.
- h) Any other information you feel would be necessary to gain a complete understanding of the firm or the services it provides.

## **K. References**

- 101. Provide the organization name, address, telephone number, contact name and title for at least five existing clients (preferably at least two of whom should be U.S. public funds). Indicate the length of your relationship and asset size for each reference. Not including references will be considered non-responsive.
- 102. Provide the organization name, address, telephone number, contact name and title for at least five hedge fund investment managers who can discuss your manager research. Indicate the length of your relationship and asset size for each reference. Not including references will be considered non-responsive.
- 103. Provide the organization name, address, telephone number, contact name and title for three *former* clients (preferably at least one of whom should be U.S. public funds). If three accounts are not available, please explain why. Indicate the length of your relationship and asset size for each former client listed. Not including references, or an explanation in lieu, will be considered non-responsive.

## APPENDIX B

# CONSULTING AGREEMENT BETWEEN FRESNO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION AND [\_\_\_\_\_]

THIS Consulting Agreement (this "Agreement") is made this \_\_\_\_ day of \_\_\_\_\_, 2015 in the County of Fresno (the "County"), State of California, by and between: [\_\_\_\_\_] ("Consultant") and the Fresno County Employees' Retirement Association (the "Retirement Association").

## RECITALS

WHEREAS, the Retirement Association is a duly established and existing public retirement system created under the County Employees Retirement Law of 1937;

WHEREAS, the Fresno County Retirement Board (the "Retirement Board") has plenary authority and fiduciary responsibility for investment of monies and administration of the Retirement System;

WHEREAS, the Retirement Board, through the Retirement Association, seeks to retain non-discretionary investment consulting services for the Retirement Association's hedge fund investment portfolio (the "Proposed Services");

WHEREAS, the Retirement Association issued a request for proposal with respect to the Proposed Services ("RFP"), and as a result of the competitive selection process in connection with that RFP (the "RFP Process"), the Retirement Association recommended, and the Retirement Board approved, selection of Consultant to provide the Proposed Services based on Consultant's representations during the RFP Process; and

WHEREAS, Consultant represents and warrants that it is qualified to perform the services required by the Retirement Association under this Agreement;

Now, THEREFORE, in consideration of the promises and mutual covenants herein contained, Consultant and the Retirement Association do hereby agree as follows:

- 1. Term of the Agreement.** The term of this Agreement shall be from [\_\_\_\_\_, 2016 to \_\_\_\_\_, 2019]; *provided, however*, that the Retirement Association shall have two (2) options to extend the term of the Agreement for a period of one (1) year each option, which the Retirement Association may exercise in its sole, absolute discretion.
- 2. Engagement.** The Retirement Association hereby engages Consultant, and Consultant hereby accepts such engagement, to provide non-discretionary investment consulting

services to the Retirement Association for its alternative investments portfolio in accordance with the terms and conditions of this Agreement, the Investment Policy, Objectives and Guidelines for the Retirement Association attached hereto as Exhibit A (the “Investment Policy Statement”), and applicable federal, state and local laws.

3. **Services.** Consultant agrees to perform the non-discretionary investment consulting services for the Retirement Association’s investment portfolio described in the Schedule of Services attached hereto as Exhibit B and incorporated by reference as though fully set forth herein (the “Described Services”). Additional services will be provided only upon and in accordance with a written request by the Executive Director of the Retirement Association (the “Executive Director”) or designee acting on behalf of the Retirement Association (the “Additional Services,” together with the Described Services, the “Services”).

4. **Compensation.**

- (a) **Fees.** For the full performance and the completion of the Services, Consultant shall be compensated as set forth in the Fee Schedule attached hereto as Exhibit C and incorporated by reference as though fully set forth herein (the “Fees”). The Fees include the compensation for professional services as well as travel and other out-of-pocket expenses, printing, delivery, secretarial and clerical support services and any other costs incurred as may be necessary to perform the Services in a professional manner. No charges shall be incurred under this Agreement nor shall any payments become due to Consultant until reports, services, or both, required under this Agreement are received from Consultant and approved by the Retirement Association as being in accordance with this Agreement. The Retirement Association may withhold payment to Consultant in any instance in which Consultant has failed or refused to satisfy any material obligation provided for under this Agreement. In no event shall the Retirement Association be liable for interest or late charges for any late payments.
- (b) **Fee Ceiling.** In no event shall the annual compensation amount under this Agreement exceed \_\_\_\_\_ Dollars [\$\_\_\_\_\_].
- (c) **Payment Does Not Imply Acceptance of Services.** The granting of any payment by the Retirement Association, or the receipt thereof by Consultant, shall in no way lessen the liability of Consultant to replace unsatisfactory Services, although the unsatisfactory character of such Services may not have been apparent or detected at the time such payment was made. Services that do not conform to the requirements of this Agreement may be rejected by the Retirement Association and in such case must be replaced by Consultant without delay.

5. **Fiduciary Responsibility.** Consultant represents and warrants that it is duly registered as an investment adviser under the Investment Advisers Act of 1940, as amended (the “Advisers Act”), and will be registered as an investment adviser under the Advisers Act at all times while the Retirement Association receives the Services. Consultant represents

and warrants that it has delivered to the Retirement Association, at least five (5) business days prior to the date of this Agreement, Parts 1A and 2 of Consultant's Form ADV (the "Disclosure Statement"). Consultant further represents and warrants that it will deliver to the Retirement Association: (a) a copy of the Disclosure Statement it files with the Securities and Exchange Commission annually, within thirty (30) days of filing and (b) copies of any amendments to the Disclosure Statement it files with the Securities and Exchange Commission, within thirty (30) days of filing. Consultant acknowledges that this Agreement places it in a fiduciary relationship with the Retirement Association. As a fiduciary, Contractor shall discharge each of its duties and exercise each of its powers (as those duties and powers are defined herein) with the competence, care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the course of any enterprise of like character and with like aims, in conformance with the California Constitution, Article XVI, Section 17, California Government Code Sections 31594 and 31595 and with the customary standard of care of a professional investment consultant providing services to a United States employee pension trust (the "Prudent Expert Standard of Care"). Consultant shall cause any and all of its employees, agents and representatives providing services in connection with this Agreement to exercise the same Prudent Expert Standard of Care.

Consultant acknowledges that, to comply with the above-described Prudent Expert Standard of Care, it must maintain independence from all interests other than the interests of the Retirement Association members and beneficiaries, as those interests are expressed by the Retirement Board. Consultant further acknowledges that the Retirement Association staff acts as the agent for the Retirement Board in its relationship with Consultant, but is subordinate to the Retirement Board and cannot direct Consultant to consider interests contrary to those expressed by the Retirement Board. Consultant warrants that it will not delegate its fiduciary responsibilities under this Agreement.

Within the context of providing the Services, Consultant's analysis may address tax, legal or other considerations related to various investment strategies or investments. However, Consultant shall not provide or otherwise be responsible for the provision of tax advice or legal counsel. Consultant shall act in an investment advisor capacity only.

## **6. Disclosures.**

- (a) **RFP.** Consultant represents and warrants that its statements, dated [\_\_\_\_], in its response to the RFP, are true and correct.
- (b) **Disclosure of Interest.** Consultant shall fully and promptly disclose to the Retirement Association: (i) its direct or indirect financial interests in any investment opportunity that it may recommend to the Retirement Association in providing the Services; (ii) with respect to any potentially oversubscribed investment opportunity that Consultant recommends to the Retirement Association, whether Consultant is also recommending such investment opportunity to other clients of Consultant (and the amounts thereof) or otherwise

assisting other clients of Consultant in such investment opportunity, regardless of whether such other clients proceed with the investment opportunity; and (iii) any other fact or relationship which would compromise or materially affect its ability to faithfully perform its duties under this Agreement.

- (c) **Intellectual Property.** The Services and deliverables that Consultant provides under this Agreement shall not infringe upon any patent rights, copyright, trade secret or any other proprietary right or trademark, or any other intellectual property rights of any other third party.

**7. Personnel.**

- (a) **Qualified Personnel.** Work under this Agreement shall be performed only by competent personnel under the supervision of and in the employment of Consultant. Consultant will comply with the Retirement Association's reasonable requests regarding assignment of personnel, but all personnel, including those assigned at the Retirement Association's request, must be supervised by Consultant. Consultant shall commit adequate resources to complete the services within the schedule specified in this Agreement.
- (b) **Key Personnel.** The Retirement Association may designate in writing, from time to time, that certain personnel of Consultant are "key personnel." Consultant shall immediately notify the Retirement Association in writing of any changes in key personnel within its organization.

**8. Invoices.** Consultant shall submit invoices for the Services in a form acceptable to the Retirement Association, along with an itemized statement of Services, at the end of each quarter. Consultant shall send invoices to:

Investment Fee Processing  
Fresno County Employees' Retirement Association  
1111 H Street  
Fresno, CA 93721

Consultant shall also send electronic copies of such invoices to:  
FCERAinvestments@co.fresno.ca.us.

The Retirement Association from time to time may specify another recipient or address for invoices by written notice to Consultant in accordance with Section 19 of this Agreement.

**9. Taxes.** Consultant shall have the sole obligation to pay any taxes, including without limitation payroll taxes and California sales and use taxes, levied upon or as a result of this Agreement, or the services delivered pursuant under this Agreement.

**10. Independent Contractor.**

- (a) **Independent Contractor Status.** In performing the Services, Consultant or any agent or employee of Consultant shall be deemed at all times to be an independent contractor and is wholly responsible for the manner in which it performs the services and work under this Agreement. Consultant or any agent or employee of Consultant shall not have employee status with the Retirement Association, nor be entitled to participate in any plans, arrangements, or distributions by the Retirement Association pertaining to or in connection with any retirement, health or other benefits that the Retirement Association may offer its employees. Consultant or any agent or employee of Consultant is liable for the acts and omissions of itself, its employees and its agents. Consultant shall be responsible for all obligations and payments, whether imposed by federal, state or local law, including, but not limited to, FICA, income tax withholdings, unemployment compensation, insurance, and other similar responsibilities related to Consultant's performing services and work, or any agent or employee of Consultant providing same. Nothing in this Agreement shall be construed as creating an employment or agency relationship between the Retirement Association and Consultant or any agent or employee of Consultant.
- (b) **Payment of Taxes.** If any governmental authority should, nevertheless, determine that Consultant is an employee for purposes of collection of any employment taxes, then the Retirement Association's payment obligations hereunder shall be reduced so that the aggregate amount of payments directly to the Consultant and to the applicable governmental authority does not exceed the maximum amount specified in Section 4 of this Agreement. Consultant shall refund any amounts necessary to effect that reduction.

**11. Insurance.** Without in any way limiting Consultant's liability pursuant to Section 12 of this Agreement, Consultant must maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages:

- (a) worker's compensation, in statutory amounts, with employers' liability limits not less than \$1,000,000 each accident;
- (b) commercial general liability insurance with limits not less than \$1,000,000 each occurrence, including without limitation combined single limit for bodily injury and property damage, including contractual liability, personal injury, products, completed operations and hired and non-owned automobiles; and
- (c) professional or fiduciary indemnity (errors and omissions) insurance in the aggregate minimum of \$10,000,000.

Regarding workers' compensation, Consultant hereby agrees to waive subrogation which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. The workers' compensation policy shall be endorsed with a



waiver of subrogation in favor of the Retirement Association for all work performed by the Consultant, its employees, agents and subcontractors.

All evidence of insurance shall specify this Agreement and shall be accompanied by a written statement from the insurer that the Retirement Association shall be given at least thirty (30) days advance written notice of any material modification or termination of any policy of insurance.

Should any of the required insurance be provided under a claims-made form, Consultant shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three (3) years beyond the termination of this Agreement, to the effect that, should occurrences during the contract term give rise to claims made after termination of this Agreement, those claims shall be covered by the claims-made policies.

Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in a general annual aggregate limit, the general annual aggregate limit shall be double the occurrence or claims limits specified above in this Section 12.

Should any required insurance lapse during the term of this Agreement, the Retirement Association will not process requests for payment originating after the lapse until the Retirement Association receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, the Retirement Association may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

Before commencing any operations under this Agreement, Consultant shall furnish to the Retirement Association certificates of insurance, in form and with insurers satisfactory to the Retirement Association, evidencing all coverages set forth above, and shall furnish complete copies of policies promptly upon the Retirement Association's request. Failure by Consultant to procure or maintain the insurance described in this Section 12 shall constitute a material breach of this Agreement upon which the Retirement Association may immediately terminate this Agreement for default effective on the date of such breach.

Approval of the insurance by the Retirement Association shall not relieve or decrease the liability of Consultant under this Agreement.

- 12. Indemnification.** Consultant shall indemnify and save harmless the Retirement Association and the Retirement Board, and their officers, agents and employees from, and, if requested, shall defend them against any and all loss, cost, damage, injury, liability, and claims thereof for injury to or death of a person, including employees of Consultant or loss of or damage to property, arising directly or indirectly from Consultant's (a) breach of any representation or warranty made by Consultant in this Agreement, (b) breach of any covenant, agreement or obligation of the Consultant contained in this Agreement, including without limitation breach of fiduciary duty, breach of the Standard of Care, breach of trust or breach of confidentiality or (c) performance of

this Agreement, including, but not limited to, Consultant's use of facilities or equipment provided by the Retirement Association or others, regardless of the negligence of, and regardless of whether liability without fault is imposed or sought to be imposed on the Retirement Association, except to the extent that such indemnity is void or otherwise unenforceable under applicable law in effect on or validly retroactive to the date of this Agreement, and except where such loss, damage, injury, liability or claim is the result of the active negligence or willful misconduct of the Retirement Association and is not contributed to by any act of, or by any omission to perform some duty imposed by law or agreement on Consultant, its subcontractors or either's agent or employee. The foregoing indemnity shall include, without limitation, reasonable fees of attorneys, consultants and experts and related costs and the Retirement Association's costs of investigating any claims against the Retirement Association. In addition to Consultant's obligation to indemnify the Retirement Association, Consultant specifically acknowledges and agrees that it has an immediate and independent obligation to defend the Retirement Association from any claim which actually or potentially falls within this indemnification provision, even if the allegations are or may be groundless, false or fraudulent, which obligation arises at the time such claim is tendered to Consultant by the Retirement Association and continues at all times thereafter. Consultant shall indemnify and hold the Retirement Association harmless from all loss and liability, including attorneys' fees, court costs and all other litigation expenses for any infringement of the patent rights, copyright, trade secret or any other proprietary right or trademark, and all other intellectual property claims of any person or persons in consequence of the use by the Retirement Association, or any of its officers or agents, of articles or services to be supplied in the performance of this Agreement.

- 13. Limitation on Liability of the Retirement Association.** The Retirement Association's payment obligations under this Agreement shall be limited to the payment of the compensation provided for in Section 4 of this Agreement. Notwithstanding any other provision of this Agreement, in no event shall the Retirement Association be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including but not limited to, lost profits, arising out of or in connection with this Agreement or the services performed in connection with this Agreement.

**14. Default; Remedies.**

- (a) Each of the following shall constitute an event of default ("Event of Default") under this Agreement:
- (1) Consultant fails or refuses to perform or observe any term, covenant or condition contained in any of the following sections of this Agreement:
    - (A) Section 10 (Taxes);
    - (B) Section 11 (Insurance);
    - (C) Section 18 (Proprietary or Confidential Information);
    - (D) Section 23 (No Assignment or Subcontracting);

- (E) Section 25 (Drug-Free Workplace); and
  - (F) Section 32 (Compliance with Laws).
- (2) Consultant fails or refuses to perform or observe any other term, covenant or condition contained in this Agreement, and such default continues for a period of ten (10) days after written notice thereof from the Retirement Association to the Consultant;
- (3) Consultant (A) is generally not paying its debts as they become due, (B) files, or consents by answer or otherwise to the filing against it of, a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction, (C) makes an assignment for the benefit of its creditors, (D) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers of Consultant or of any substantial part of Consultant's property or (E) takes action for the purpose of any of the foregoing; or
- (4) a court or government authority enters an order (A) appointing a custodian, receiver, trustee or other officer with similar powers with respect to Consultant or with respect to any substantial part of Consultant's property, (B) constituting an order for relief or approving a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction or (C) ordering the dissolution, winding-up or liquidation of Consultant.
- (b) On and after any Event of Default, the Retirement Association shall have the right to exercise its legal and equitable remedies, including, without limitation, the right to terminate this Agreement or to seek specific performance of all or any part of this Agreement. In addition, the Retirement Association shall have the right (but no obligation) to cure (or cause to be cured) on behalf of Consultant any Event of Default; Consultant shall pay to the Retirement Association on demand all costs and expenses incurred by the Retirement Association in effecting such cure, with interest thereon from the date of incurrence at the maximum rate then permitted by law. The Retirement Association shall have the right to offset from any amounts due to Consultant under this Agreement or any other agreement between the Retirement Association and Consultant all damages, losses, costs or expenses incurred by the Retirement Association as a result of such Event of Default and any liquidated damages due from Consultant pursuant to the terms of this Agreement or any other agreement.
- (c) All remedies provided for in this Agreement may be exercised individually or in combination with any other remedy available hereunder or under applicable laws, rules and regulations. The exercise of any remedy shall not preclude or in any way be deemed to waive any other remedy.

- 15. Termination for Convenience.** The Retirement Association shall have the option, in its sole discretion, to terminate this Agreement, at any time during the term hereof, for convenience and without cause. The Retirement Association shall exercise this option by giving Consultant written notice of termination (the “Termination Notice”). The Termination Notice shall specify the date on which termination shall become effective.

Upon receipt of the Termination Notice, Consultant shall commence and perform, with diligence, all actions necessary on the part of Consultant to effect the termination of this Agreement on the date specified by the Retirement Association and to minimize the liability of Consultant and the Retirement Association to third parties as a result of termination. All such actions shall be subject to the prior approval of the Retirement Association. Such actions shall include, without limitation, the cessation of performance of all services under this Agreement on the date(s) and in the manner specified by the Retirement Association, the completion of performance of any service that the Retirement Association designates to be completed prior to the date of termination specified by the Retirement Association or such other actions as directed by the Retirement Association. Consultant agrees to cooperate with the Retirement Association to ensure an orderly termination process.

Within thirty (30) days following the termination date specified by the Retirement Association, Consultant shall submit to the Retirement Association an invoice, which shall provide details of all activities and services rendered through the date of termination.

- 16. Rights and Duties upon Termination.** This Section 16 and the following sections of this Agreement shall survive termination of this Agreement:

- (a) Section 4(c) (Payment Does Not Imply Acceptance of Services);
- (b) Section 9 (Taxes);
- (c) Section 10 (Independent Contractor);
- (d) Section 11 (Insurance);
- (e) Section 12 (Indemnification);
- (f) Section 13 (Limitation on Liability of the Retirement Association);
- (g) Section 18 (Proprietary or Confidential Information);
- (h) Section 20 (Ownership of Results);
- (i) Section 21 (Works for Hire);
- (j) Section 22 (Audit and Inspection of Records);
- (k) Section 27 (Modifications);
- (l) Section 28 (Administrative Remedy);
- (m) Section 29 (California Law; Venue);
- (n) Section 30 (Construction);
- (o) Section 31 (Entire Agreement); and
- (p) Section 34 (Severability).

Subject to the immediately preceding sentence, upon termination of this Agreement, this Agreement shall terminate and be of no further force or effect. Consultant shall transfer

title to the Retirement Association, and deliver in the manner, at the times, and to the extent, if any, directed by the Retirement Association, any work in progress, completed work and other materials produced as a part of, or acquired in connection with the performance of this Agreement, and any completed or partially completed work which, if this Agreement had been completed, would have been required to be furnished to the Retirement Association.

17. **Conflict of Interest.** Through its execution of this Agreement, Consultant acknowledges that it is familiar with the provisions of Section 87100 et seq. and Section 1090 et. seq. of the Government Code of the State of California, and certifies that it does not know of any facts that constitute a violation of those provisions and agrees that it will immediately notify the Retirement Association if it becomes aware of any such fact during the term of this Agreement.
18. **Proprietary or Confidential Information.** Consultant understands and agrees that, in the performance of the work or services under this Agreement or in contemplation thereof, Consultant may have access to private or confidential information which may be owned or controlled by the Retirement Association and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to the Retirement Association. Consultant agrees that all information disclosed by the Retirement Association to Consultant shall be held in confidence and used only in performance of the Agreement. Consultant shall exercise the same standard of care to protect such information as a reasonably prudent consultant would use to protect its own proprietary data.
19. **Notices.** Unless otherwise indicated elsewhere in this Agreement, all written communications sent by the parties may be by U.S. mail, e-mail (with confirmation of receipt) or by fax (with confirmation of receipt), and shall be addressed as follows (or to such other recipient or address as either party from time to time may specify in writing to the other party in accordance with this notice provision):

To the Retirement Association:

Retirement Administrator  
Fresno County Employees' Retirement Association  
1111 H Street  
Fresno, CA 93721  
Fax: (559) 457-0318  
E-mail: FCERAINvestments@co.fresno.ca.us

To Consultant: [\_\_\_\_\_]

21. **Ownership of Results.** Any interest of Consultant or its subcontractors, in drawings, plans, specifications, blueprints, studies, reports, memoranda, computation sheets, computer files and media or other documents prepared by Consultant or its subcontractors in connection with services to be performed under this Agreement, shall become the

property of and will be transmitted to the Retirement Association in a useable format (including electronic format) upon demand by the Retirement Association; *provided, however*, Consultant may retain and use copies for reference and as documentation of its experience and capabilities. The Retirement Association shall have the unrestricted authority to publish, disclose, distribute or otherwise use in whole or in part any reports, data or other materials prepared under this Agreement, crediting Consultant as the source.

22. **Works for Hire.** If, in connection with services performed under this Agreement, Consultant or its subcontractors create artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, blueprints, source codes or any other original works of authorship, such works of authorship shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of the Retirement Association. If it is ever determined that any works created by Consultant or its subcontractors under this Agreement are not works for hire under U.S. law, Consultant hereby assigns all copyrights to such works to the Retirement Association, and agrees to provide any material and execute any documents necessary to effectuate such assignment. With the prior written approval of the Retirement Association, Consultant may retain and use copies of such works for reference and as documentation of its experience and capabilities.
23. **Audit and Inspection of Records.** Consultant agrees to maintain and make available to the Retirement Association, during regular business hours, accurate books and accounting records relating to its work under this Agreement, including copies of all invoices. Consultant will permit the Retirement Association to audit, examine and make excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. Consultant shall maintain such data and records in an accessible location and condition for a period of not less than five (5) years after final payment under this Agreement or until after final audit has been resolved, whichever is later. The State of California or any federal agency having an interest in the subject matter of this Agreement shall have the same rights conferred upon the Retirement Association by this Section 21.
24. **No Assignment or Subcontracting.** The services to be performed by Consultant under this Agreement are personal in character and Consultant shall perform the work contemplated with resources available within its own organization. Neither this Agreement nor any duties or obligations hereunder may be assigned, subcontracted or delegated by Consultant without prior written consent of the Retirement Association.
25. **Non-Waiver of Rights.** The omission by either party at any time to enforce any default or right reserved to it, or to require performance of any of the terms, covenants, or provisions hereof by the other party at the time designated, shall not be a waiver of any such default or right to which the party is entitled, nor shall it in any way affect the right of the party to enforce such provisions thereafter.

26. **Drug-Free Workplace.** Consultant acknowledges that pursuant to the federal Drug-Free Workplace Act of 1988 (the “Drug-Free Workplace Act”), the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited on Retirement Association premises. Consultant agrees to comply with the Drug-Free Workplace Act. Any violation of this Section 26 shall be deemed a material breach of this Agreement.
27. **Compliance with Americans with Disabilities Act.** Consultant acknowledges that, pursuant to the Americans with Disabilities Act of 1990, as amended (the “ADA”), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Consultant shall provide the services specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Consultant agrees not to discriminate against persons with disabilities in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Consultant, its employees, agents or assigns will constitute a material breach of this Agreement.
28. **Modifications.** This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved in the same manner as this Agreement.
29. **Administrative Remedy.** All disputes, controversies or claims arising under or relating to this Agreement shall be settled by the Executive Director. The Executive Director’s decision shall be deemed an exhaustion of all administrative remedies. However, the Executive Director’s decision shall not preclude resorting to judicial remedy.
30. **California Law; Venue.** The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in Fresno, California.
31. **Construction.** All section headings in this Agreement are for reference only and shall not be considered in construing this Agreement. Terms such as “hereunder” or “herein” refer to this Agreement as a whole. Terms such as “include” or “including” shall be deemed followed by the words “without limitation.” References to consents, approvals, determinations or other decisions of the Retirement Association shall refer to the sole judgment of the Retirement Association.
32. **Entire Agreement.** This Agreement contains the entire agreement between the parties, and supersedes all other oral or written provisions. The attached Exhibits A, B and C are a part of this Agreement.
33. **Compliance with Laws.** Contractor shall keep itself fully informed of the County’s Charter, codes, ordinances and regulations of the County and of all state, and federal laws in any manner affecting the performance of this Agreement, and must at all times comply

with such local codes, ordinances, and regulations and all applicable laws as they may be amended from time to time.

- 34. Services Provided by Attorneys.** Any services to be provided by a law firm or attorney must be reviewed and approved in writing in advance by the Retirement Association. No invoices for services provided by law firms or attorneys, including without limitation, as subcontractors of Consultant, will be paid unless the provider received advance written approval from the Retirement Association.
- 35. Severability.** Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired thereby, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.
- 36. Cooperative Drafting.** This Agreement has been drafted through a cooperative effort of both parties, and both parties have had an opportunity to have the Agreement reviewed and revised by legal counsel. No party shall be considered the drafter of this Agreement, and no presumption or rule that an ambiguity shall be construed against the party drafting the clause shall apply to the interpretation or enforcement of this Agreement.
- 37. Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be an original, but all of which counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first referenced above.

**FRESNO COUNTY  
EMPLOYEES' RETIREMENT  
ASSOCIATION**

[\_\_\_\_\_]

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_  
Chair of the Board

Name: \_\_\_\_\_  
Title: \_\_\_\_\_



**EXHIBIT A**

**INVESTMENT POLICY STATEMENT**

**EXHIBIT B**

**SCHEDULE OF SERVICES**

**TO TRACK RFP REQUIREMENTS**

**EXHIBIT C**

**FEE SCHEDULE**

**TO TRACK PROPOSER'S FEE PROPOSAL, AS NEGOTIATED WITH THE  
RETIREMENT ASSOCIATION**

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

**I. TABLE OF CONTENTS**

---

I. TABLE OF CONTENTS .....	1
II. INTRODUCTION .....	2
III. PURPOSE.....	2
IV. RESPONSIBILITIES .....	2
V. INVESTMENT PHILOSOPHY.....	4
VI. INVESTMENT OBJECTIVES .....	4
VII. MEDIUM TERM PERFORMANCE OBJECTIVES .....	5
VIII. LONG TERM PERFORMANCE OBJECTIVES .....	5
IX. ASSET ALLOCATION .....	5
X. GENERAL INVESTMENT GUIDELINES.....	6
XI. INVESTMENT PERFORMANCE REVIEW AND EVALUATION .....	8
XII. ADMINISTRATIVE PRACTICES .....	9
XIII. POLICY REVIEW.....	9
XIV. POLICY HISTORY.....	9
XV. Secretary’s Certificate .....	10
APPENDIX A - STRATEGIC ASSET ALLOCATION .....	11
APPENDIX B – SUPPORTING MANAGER GUIDELINES .....	12

## 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) Board: 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) FCERA Administrator and Staff: 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 not to be overly influenced by peers, transitory investment theories, or outside interests. These beliefs, coupled with long-term nature of the Fund's liabilities, provide the overall framework from which the Board sets policy and directs the investment of the assets.

## **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 compounded over a 3-5 year term is expected to exceed the compounded return of a custom, weighted index constructed of the following components:
- 31% Barclays Global Aggregate Bond Index
  - 17% Russell 3000 Index
  - 19% MSCI ACWI Ex-US
  - 8% HFRI Fund of Funds Composite Index
  - 6% Russell 3000 Index + 250 basis points per year
  - 8% Barclays Aggregate Index + 250 basis points per year
  - 8% NCREIF Open-End Diversified Core (ODCE) Index
  - 3% Dow Jones UBS Commodity Index
- 2) “Active” Investment Managers are expected to exceed their respective assigned benchmark returns.
- 3) The yet-to-be-invested portion of Hedge Funds shall be benchmarked against the weighted return of 20% Russell 3000 Index and 80% Barclays Aggregate Index.
- 4) The committed but yet-to-be-invested portion of Private Equity shall be benchmarked against the Russell 3000 Index.
- 5) The committed but yet-to-be-invested portion of Private Credit shall be benchmarked against the Barclays Aggregate Index.
- 6) The committed but yet-to-be-invested portion of Infrastructure shall be benchmarked against the Barclays Aggregate Bond 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 utilize portfolio rebalancing 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. In meeting this objective, the asset allocation may be set within allowable ranges as set forth in Appendix A.
  - 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. Transition management services may be obtained as set forth under item G below.
- 4) Proxy Voting: 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) Environmental, Social and Governance Investing: 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) Trading and Execution: 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) Transition Management: 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 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. The Board reserves the right to terminate Investment Managers at any time, with or 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) Communication and Reporting of Investment Managers: 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) Compensation of Investment Managers: 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.

## **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**

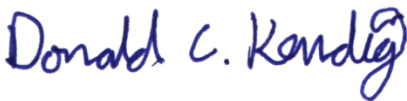
The Board of Retirement approved and adopted this policy on June 1, 2011, March 19, 2014 and June 3, 2015.

**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.

June 3, 2015

***Date of Action:***



***By: Retirement Administrator***

## APPENDIX A - STRATEGIC ASSET ALLOCATION

Asset Class	Target	Minimum	Maximum	Benchmark
<b>Domestic Equities</b>	<b>17%</b>	<b>7%</b>	<b>27%</b>	<b>Russell 3000 Index</b>
Large Cap	14%			
Small/Mid Cap	3%			
<b>International Equities</b>	<b>19%</b>	<b>9%</b>	<b>29%</b>	<b>MSCI ACWI ex US Index</b>
International Large	9%			
International Small	3%			
Emerging Markets	7%			
<b>Fixed Income</b>	<b>31%</b>	<b>21%</b>	<b>41%</b>	<b>Barclays Global Aggregate Index</b>
US Credit Fixed Income	5%			
High Yield Fixed Income	5%			
Bank Loans	5%			
Global Sovereign	7%			
Emg Markets Debt Local	5%			
TIPS	4%			
<b>Real Assets</b>	<b>11%</b>			
<b>Commodities</b>	<b>3%</b>	<b>0%</b>	<b>6%</b>	<b>DJ UBS Commodity Index</b>
<b>Real Estate</b>	<b>5%</b>	<b>0%</b>	<b>10%</b>	<b>NCREIF ODCE Index</b>
<b>Infrastructure</b>	<b>3%</b>	<b>0%</b>	<b>6%</b>	<b>NCREIF ODCE Index</b>
<b>Alternative Investments</b>	<b>22%</b>			
<b>Hedge Funds</b>	<b>8%</b>	<b>3%</b>	<b>13%</b>	<b>HFRI FoF Composite Index</b>
<b>Private Equity</b>	<b>6%</b>	<b>0%</b>	<b>10%</b>	<b>Russell 3000 + 250 bps</b>
<b>Private Credit</b>	<b>8%</b>	<b>3%</b>	<b>13%</b>	<b>Barclays Aggregate + 250 bps</b>
<b>Total</b>	<b>100%</b>			

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.

## **APPENDIX B – SUPPORTING MANAGER GUIDELINES**

**APPENDIX B – SUPPORTING MANAGER GUIDELINES**  
**(Last updated May 2015)**

**I. TABLE OF CONTENTS**

---

I.	TABLE OF CONTENTS.....	13
II.	DOMESTIC EQUITY MANAGER GUIDELINES .....	15
A.	ARONSON + JOHNSON + ORTIZ, LP.....	16
B.	KALMAR INVESTMENTS INC.....	18
C.	STATE STREET GLOBAL ADVISORS .....	20
D.	SYSTEMATIC FINANCIAL MANAGEMENT, L.P. ....	22
E.	WADDELL & REED INVESTMENT MANAGEMENT COMPANY .....	24
III.	INTERNATIONAL EQUITY MANAGER GUIDELINES .....	26
A.	ARTISAN .....	27
B.	MONDRIAN EMERGING MARKETS EQUITY FUND, LIMITED PARTNERSHIP .....	29
C.	MONDRIAN INTERNATIONAL SMALL CAP EQUITY FUND, LIMITED PARTNERSHIP .....	30
D.	RESEARCH AFFILIATES INTERNATIONAL EQUITY FUND .....	31
IV.	GLOBAL FIXED INCOME MANAGER GUIDELINES .....	33
A.	BRANDYWINE GLOBAL.....	34
B.	EATON VANCE INVESTMENT MANAGERS .....	37
C.	LOOMIS SAYLES & COMPANY .....	39
D.	THE NORTHERN TRUST COMPANY .....	43
E.	PACIFIC INVESTMENT MANAGEMENT COMPANY (PIMCO) .....	44
F.	STATE STREET GLOBAL ADVISORS .....	46
G.	WESTERN ASSET MANAGEMENT COMPANY.....	47
V.	OPEN END REAL ESTATE MANAGER GUIDELINES.....	51
A.	INVESCO REALTY, INC.....	52
VI.	HEDGE FUND MANAGER GUIDELINES .....	53
A.	GROSVENOR INSTITUTIONAL PARTNERS, L.P. ....	54
VII.	COMMODITIES MANAGER GUIDELINES .....	55
A.	INVESCO TRUST COMPANY.....	56
VIII.	CLOSED END PRIVATE MANAGER INFORMATION .....	57



---

A.	<b>Real Estate</b> .....	58
1.	TA Associates Realty IX .....	58
B.	<b>Private Equity</b> .....	58
1.	Landmark Equity Partners XIV .....	58
2.	New Mountain Partners III .....	58
3.	Hamilton Lane VI .....	58
4.	Warburg Pincus Equity Fund X .....	58
5.	Blackstone Equity IV .....	59
6.	Warburg Pincus Equity Fund VIII .....	59
7.	Landmark Equity X .....	59
8.	New Mountain Partners .....	59
9.	Warburg Pincus Equity Partners .....	59
C.	<b>Private Credit</b> .....	59
1.	GSO European Debt Fund .....	59
2.	CarVal Credit Value Fund III .....	59
3.	Colony Distressed Credit III .....	60
4.	Oaktree Opportunities IX .....	60
5.	KKR Mezzanine Partners .....	60
6.	Angelo Gordon VII .....	60
7.	Colony Distressed Credit .....	60
8.	Lone Star Fund IV .....	60
9.	TCW Shop IV .....	61
10.	TCW Shop III .....	61
D.	<b>Infrastructure</b> .....	61
1.	IFM Infrastructure Fund .....	61

## **II. DOMESTIC EQUITY MANAGER GUIDELINES**

A. ARONSON + JOHNSON + ORTIZ, LP

Separate Account Large Capitalization Value Equity Assignment

**1. Investment Assignment**

Aronson+Johnson+Ortiz, LP will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Aronson+Johnson+Ortiz, LP will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Aronson+Johnson+Ortiz, LP shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Aronson+Johnson+Ortiz, LP will be for the asset value exclusive of contribution 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 long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the Russell 1000 Value Index as well as the median equity return in a representative large cap value performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Equity Securities:** The securities shall be comprised of common stocks, convertible and non-convertible preferred stocks, convertible debt securities, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. exchanges. The investment manager may also use exchange-traded funds such as S&P Depositary Receipts ("spyders") for the purpose of short-term equitization of unused funds, including cash in the account due to a contribution or pending withdrawal.

**Derivatives:** Investment in derivative securities is prohibited.

**Diversification:** The securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No more than 7% of the equity portfolio may be invested in one equity security at market.

**Prohibited Investments:** The portfolio will not engage in investment transactions involving stock options, short sales, purchase on margin, letter stocks, private placement securities, and commodities. No investments shall be made in foreign securities, except American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. exchanges. Further, no investment transactions shall occur outside the United States and no asset of the Fund shall be held outside the jurisdiction of the United States District Courts.

**Quality and Marketability:** Common and convertible preferred stocks should be listed on either the New York Stock Exchange, American Stock Exchange, NASDAQ system, or national market exchange which have adequate market liquidity relative to the size of the investment. Further, no single equity position in the portfolio may comprise more than 5% of the company's total market capitalization.

Quality and security should be emphasized over maximum return in all short-term cash investments. Investment managers will have discretion as to the types of securities used except that all commercial paper obligations purchased must have minimum respective ratings of P-2 by Moody's or A-2 by Standard & Poor's.

**Capitalization:** The weighted average market capitalization of the portfolio should not fall below \$5 billion.

**Volatility:** It is expected that the volatility of the investment manager's portfolio will be reasonably close to the volatility of the customized policy index defined in the Investment Objective section of the Investment Policy Statement.

#### 4. Statement of Acknowledgement

As an authorized representative of Aronson+Johnson+Ortiz, LP provider of investment management services of the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Aronson+Johnson+Ortiz, LP and agree on behalf of Aronson+Johnson+Ortiz, LP to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

B. KALMAR INVESTMENTS INC.

Separate Account Small Capitalization Growth Equity Assignment

**1. Investment Assignment**

Kalmar Investments Inc. will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Kalmar Investments Inc. will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Kalmar Investments, Inc. shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Kalmar Investments Inc. 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 benchmark established for the long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the Russell 2000 Growth Index as well as the median equity return in a representative small cap style performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees, to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Equity Securities:** The securities shall be comprised of common stocks, convertible and non-convertible preferred stocks, convertible debt securities, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. and Canadian exchanges.

**Derivatives:** Investment in derivative securities is prohibited.

**Diversification:** The securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No more than 8% of the equity portfolio may be invested in one equity security at market.

**Prohibited Investments:** The portfolio will not engage in investment transactions involving stock options, short sales, purchase on margin, letter stocks, private placement securities, and commodities. No investments shall be made in foreign securities, except American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. and Canadian exchanges. Further, no investment transactions shall occur outside the United States and no asset of the Fund shall be held outside the jurisdiction of the United States District Courts.

**Quality and Marketability:** Common and convertible preferred stocks should be listed on either the New York Stock Exchange, American Stock Exchange, NASDAQ system, or

national market exchange which has adequate market liquidity relative to the size of the investment. Further, no single equity position in the portfolio may comprise more than 5% of the company's total market capitalization.

Quality and security should be emphasized over maximum return in all short-term cash investments. Investment managers will have discretion as to the types of securities used except that all commercial paper obligations purchased must have minimum respective ratings of P-2 by Moody's or A-2 by Standard & Poor's.

**Capitalization:** The weighted average market capitalization of the portfolio will at all times fall between the range of 75% to 200% of the weighted average market capitalization of the Russell 2000 Index. Should the portfolio fall outside of this range, Kalmar is expected to notify the Board within 90 days.

**Volatility:** It is expected that the volatility of the investment manager's portfolio will be reasonable close to the volatility of the customized policy index defined in the Investment Objectives section of the Investment Policy Statement.

#### **4. Statement of Acknowledgement**

As an authorized representative of Kalmar Investments Inc. provider of investment management services to the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Kalmar Investments, Inc. and agree on behalf of Kalmar Investments Inc. to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

C. STATE STREET GLOBAL ADVISORS

Commingled Large Cap Passive Equity Assignment

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

The State Street Global Advisors will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. State Street Global Advisors shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for State Street Global Advisors will be for the asset value exclusive of contribution 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) that match the benchmarks established for the long term (5 years). Long Term Performance Objectives: The total equity segment of the portfolio is to match the performance of the S&P 500 Index.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise. With respect to the investment guidelines proposed, it is understood that State Street Global Advisors has been hired to manage a fully replicated passively managed index portfolio. The universe of eligible investments is therefore identical to the list of index constituents as determined by the index provider selected by the Fresno County Employees' Retirement Association. If the guidelines became in conflict with the universe of eligible investments as defined by the comparative index, the investment manager needs to notify the client in writing of the changes and prepare the necessary changes to this addendum.

**Allowable Securities:** The portfolio shall be solely comprised of units of the SSgA S&P 500 Flagship Fund (the "Fund"). Further, the investment policies, proxy voting policies and expenses of the Fund shall be governed by the Declaration of Trust (as amended) for the State Street Bank and Trust Company Investment Funds for Tax Exempt Retirement Plans, as well as the State Street Bank and Trust Company Investment Funds for Tax Exempt Retirement Plans Amended Fund Declaration for the S&P 500® Flagship Securities Lending Fund

**4. Statement of Acknowledgement**

As an authorized representative of the State Street Global Advisors provider of investment management services of the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of the State Street Global Advisors and agree on behalf of the State Street Global Advisors to conduct the investment management services in accordance with the terms of this addendum to the Investment Policy Statement as set by the Board of Trustees.

**5. Commingled Vehicle Election**

The Association's investment in the SSgA S&P 500 Flagship Fund is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.



D. SYSTEMATIC FINANCIAL MANAGEMENT, L.P.

Separate Account Small Capitalization Value Equity Assignment

**1. Investment Assignment**

Systematic Financial Management, L.P. will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Systematic Financial Management, L.P. will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Systematic Financial Management, L.P. shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Systematic Financial Management, L.P. 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 benchmark established for the long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the Russell 2500 Value Index as well as the median equity return in a representative small cap style performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees, to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Equity Securities:** The securities shall be comprised of common stocks, convertible and non-convertible preferred stocks, convertible debt securities, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. and Canadian exchanges.

**Derivatives:** Investment in derivative securities is prohibited.

**Diversification:** The securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No more than 8% of the equity portfolio may be invested in one equity security at market at time of purchase.

**Prohibited Investments:** The portfolio will not engage in investment transactions involving stock options, short sales, purchase on margin, letter stocks, private placement securities, and commodities. No investments shall be made in foreign securities, except American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. and Canadian exchanges. Further, no investment transactions shall occur outside the United States and no asset of the Fund shall be held outside the jurisdiction of the United States District Courts.

**Quality and Marketability:** Common and convertible preferred stocks should be listed

on either the New York Stock Exchange, American Stock Exchange, NASDAQ system, or national market exchange which has adequate market liquidity relative to the size of the investment. Further, no single equity position in the portfolio may comprise more than 5% of the company's total market capitalization.

Quality and security should be emphasized over maximum return in all short-term cash investments. Investment managers will have discretion as to the types of securities used except that all commercial paper obligations purchased must have minimum respective ratings of P-2 by Moody's or A-2 by Standard & Poor's.

**Capitalization:** The Manager uses a blend of smaller companies ranging in market capitalization for the portfolio from approximately \$100 million to \$10 billion at the initiation of the position. During some market conditions, the weighted average market capitalization of the portfolio may fall outside this range.

**Volatility:** It is expected that the volatility of the investment manager's portfolio will be reasonable close to the volatility of the customized policy index defined in the Investment Objectives section of the Investment Policy Statement.

#### **4. Statement of Acknowledgement**

As an authorized representative of Systematic Financial Management, L.P. provider of investment management services to the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Systematic Financial Management, L.P. and agree on behalf of Systematic Financial Management, L.P. to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

E. WADDELL & REED INVESTMENT MANAGEMENT COMPANY

Separate Account Large Capitalization Growth Equity Assignment

**1. Investment Assignment**

Waddell & Reed Investment Management Company (“Waddell & Reed”) will be given full discretion within the scope of these mutually agreed upon investment guidelines. Waddell & Reed will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Waddell & Reed shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Waddell & Reed will be for the asset value exclusive of contribution 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 long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the Russell 1000 Growth Index as well as the median equity return in a representative large cap growth performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Equity Securities:** The securities shall be comprised of common stocks, convertible and non-convertible preferred stocks, convertible debt securities, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and foreign securities traded on U.S. exchanges.

**Diversification:** The securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No more than the greater of 7% or 2% over a security’s weighting in the Russell 1000 Growth index, at market, may be invested in one equity security in the portfolio.

**Prohibited Investments:** The portfolio will not engage in investment transactions involving stock options, short sales, purchase on margin, letter stocks, private placement

securities, and commodities. No investments shall be made in foreign securities, except American Depositary Receipts (ADRs) Global Depositary Receipts (GDRs), and foreign securities traded on U.S. exchanges. Further, no investment transactions shall occur outside the United States and no asset of the Fund shall be held outside the jurisdiction of the United States District Courts.

**Quality and Marketability:** Common and convertible preferred stocks should be listed on either the New York Stock Exchange, American Stock Exchange, NASDAQ system, or national market exchange which have adequate market liquidity relative to the size of the investment. Further, no single equity position in the portfolio may comprise more than 5% of the company's total market capitalization.

**Capitalization:** The weighted average market capitalization of equities should not fall below \$10 billion.

**Volatility:** It is expected that the volatility of the investment manager's portfolio will be reasonably close to the volatility of the customized policy index defined in the Investment Objective section of the Investment Policy Statement.

#### **4. Statement of Acknowledgement**

As an authorized representative of Waddell & Reed, provider of investment management services to Fresno County Employees Retirement Association, I hereby acknowledge receipt on behalf of Waddell & Reed and agree on behalf of Waddell & Reed to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

### **III. INTERNATIONAL EQUITY MANAGER GUIDELINES**

A. ARTISAN

**1. Investment Guidelines**

- a. The Account shall be invested at the discretion of Artisan Partners with regard to individual security selection, subject to compliance with the Employee Retirement Income Security Act of 1974, as amended, if applicable, and these guidelines.
- b. Holdings will generally consist of publicly traded corporate equities (including common and preferred stocks, warrants, and depositary receipts) of companies across a broad capitalization range.
- c. Investments generally will be made in non-U.S. companies.<sup>1</sup>
- d. Holdings outside developed equity markets will generally be limited to a maximum of ten percent (10%) of the value of the Account at the time of purchase. For the purposes of this guideline, developed equity markets are the component countries of the MSCI EAFE® Index plus Canada, Luxembourg and the United States.
- e. The Account will generally be diversified across a minimum of eighteen (18) countries. The maximum allocation to any one country will not generally exceed thirty percent (30%) of the value of the Account at the time of purchase.
- f. Investment in any one industry will not generally exceed twenty-five percent (25%) of the value of the Account at the time of purchase.
- g. No single security will exceed five percent (5%) of the market value of the Account at the time of purchase or ten percent (10%) of the market value of the Account at any time.
- h. The Account may not employ leverage, purchase securities on margin, or sell securities short.

---

<sup>1</sup> For purposes of testing compliance with this investment restriction, Artisan Partners uses a third party classification system (currently MSCI) to classify a company as U.S. or non-U.S. That classification system depends generally on a company's place of organization, headquarters, trading and business operations. Because those characteristics may not point to the same country, a company may be classified as a U.S. company even though it is organized or has substantial business operations outside the U.S., or may be classified as non-U.S. even if it is organized or trades or has substantial business operations in the U.S. Country classifications may change over time. For more information, see Artisan Partners' Form ADV.

- i. The Account may not purchase securities in private placements other than securities privately placed under Rule 144A or another similar private placement exemption and equity-linked instruments described below.
- j. The Account will not invest in derivative instruments, including futures and options, except the Account may invest in the equity-linked instruments described below, hedge currency as described below and acquire, receive, retain and exercise warrants, rights or similar instruments attached to portfolio securities.
- k. The Account may invest up to ten percent (10%) of the market value of the Account at the time of purchase in listed or over-the-counter un-leveraged, equity-linked instruments; provided, however, that the Account will not invest more than five percent (5%) of the market value of the Account at the time of purchase in such instruments issued by a single counterparty.
- l. Currency hedging may, but is not required to, be utilized to protect the Account's value in U.S. dollars.
- m. The cash portion of the Account shall be invested in such short-term investment funds as FCERA designates from time to time. Cash will not generally exceed five percent (5%) of the value of the Account.
- n. The limitations in items d, e, f, g, k and m, above will not be applied to securities purchases made in connection with the initial funding of the Account or the investment of any subsequent contribution to the Account in order to replicate Artisan Partners' model portfolio in its non-U.S. growth investment strategy.

B. MONDRIAN EMERGING MARKETS EQUITY FUND, LIMITED PARTNERSHIP

Limited Partnership Emerging Markets International Equity Assignment

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

Mondrian Investment Group, Incorporated ("Mondrian") will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Mondrian shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Mondrian 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 benchmark established for the long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the MSCI Emerging Markets Free Index as well as the median emerging markets equity return in a representative performance universe.

**3. Allowable Securities**

The investment shall be solely comprised of shares of the Mondrian Emerging Markets Equity Fund, Limited Partnership. Investments made by Mondrian Investment Group (US), Inc. must be consistent with the Mondrian Emerging Markets Equity Fund, L.P.'s Offering Memorandum.

**4. Commingled Vehicle Election**

The Association's investment in Mondrian Emerging Markets is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.



C. MONDRIAN INTERNATIONAL SMALL CAP EQUITY FUND, LIMITED PARTNERSHIP

Limited Partnership Small Cap International Equity Assignment

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

Mondrian Investment Group, Incorporated ("Mondrian") will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Mondrian shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Mondrian 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 benchmark established for the long term (5 years).

**Long Term Performance Objectives:** The total equity segment of the portfolio is to exceed the MSCI World Ex-US Small Cap Index as well as the median equity return in a representative performance universe.

**3. Allowable Securities**

The investment shall be solely comprised of shares of the Mondrian International Small Cap Fund, Limited Partnership. Investments made by Mondrian Investment Group (US), Inc. must be consistent with the Mondrian International Small Cap Equity Fund, L.P.'s Offering Memorandum.

**4. Commingled Vehicle Election**

The Association's investment in Mondrian Small Cap International fund is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.

D. RESEARCH AFFILIATES INTERNATIONAL EQUITY FUND

International Equity Assignment

**1. Investment Assignment**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Equity Securities:** Equity securities shall be restricted to those issues listed on the major local-country stock exchanges as well as American Depositary Receipts (ADRs), and Global Depositary Receipts (GDRs). The markets that Research Affiliates can invest in are those within the Morgan Stanley Capital International Europe, Australia, and Far East (MSCI EAFE) Index as well as Bermuda, Canada, and Cayman Islands.

**Derivatives:** Investment in derivative securities is prohibited.

**Diversification:** The securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No more than 5% of the equity portfolio may be invested in one equity security at market.

**Prohibited Investments:** The portfolio will not engage in investment transactions involving stock options, short sales, purchase on margin, letter stocks, private placement securities, and commodities without the written consent of the Association.

**Quality and Marketability:** Common and convertible preferred stocks should be listed on a major local country exchange which have adequate market liquidity relative to the size of the investment. Further, no single equity position in the portfolio may comprise more than 5% of the company's total market capitalization.

Quality and security should be emphasized over maximum return in all short-term cash investments. Investment managers will have discretion as to the types of securities used except that all commercial paper obligations purchased must have minimum respective ratings of P-2 by Moody's or A-2 by Standard & Poor's.

**Capitalization:** The weighted average market capitalization of the portfolio should not fall below \$1 billion.

**Volatility:** It is expected that the volatility of the investment manager's portfolio will be reasonably close to the volatility of the customized policy index defined in the Investment Objectives section of the Investment Policy Statement.

## **2. Description of the Account**

The strategy applies an enhanced version of our patented Research Affiliates Fundamental Index® (the "Fundamental Index®") strategy to international developed markets (non-U.S.) companies. The Fundamental Index® strategy attempts to capture the benefits of indexing and avoid the performance drag associated with cap-weighting by selecting and weighting stocks in an index using fundamental measures of company size (e.g., cash flow, book value, sales and dividends). The Fundamental Index® strategy incorporates additional factors (e.g., quality of earnings, financial distress, etc.) along with more frequent rebalancing in comparison to a passive indexing strategy.

The Fundamental Index® strategy is both defined and weighted by using financial indicators of the value of large publicly traded non-U.S. companies issuing equity securities. Such financial indicators may include book value, sales, revenue, earnings, earnings per share, income, income growth rate, dividends, dividends per share and other financial or demographic data. Basing selection of the index securities on data relating to the intrinsic worth of the issuing companies offers investors a means to participate in a market or market segment with different risk characteristics than are otherwise offered by traditional indexed funds. The Account's strategy uses its additional screens to expand the selection process.

#### **IV. GLOBAL FIXED INCOME MANAGER GUIDELINES**

A. BRANDYWINE GLOBAL

Separate Account Global Investment-Grade Sovereign Fixed Income Assignment

**1. Investment Assignment**

Brandywine Global will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Brandywine Global will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Brandywine Global shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Brandywine Global 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 long term (5 years).

**Long Term Performance Objectives:** The Total Portfolio is to exceed the Citigroup World Government Bond Index (unhedged), as well as the median return in a representative fixed income performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Permissible Investments:** Debt obligations issued or guaranteed by sovereign governments, supranational or multinational entities, and Australian states or Canadian provinces. The investment universe shall consist of countries or currencies included in the Citigroup World Government Bond Index or specified in the "Diversification" section.

Eligible commingled investment vehicles include interests in privately and publicly offered commingled investment vehicles advised by Brandywine Global or its affiliates ("Investment Products"), with the understanding that FCERA will not pay any additional management fee for such investment, and provided any investment in such Investment Products are consistent with these Investment Guidelines.

Eligible cash equivalents include commercial paper, short-term investment fund designated by FCERA, and eligible fixed income instruments with a maturity of less than one year.

**Derivatives:** Permissible derivative instruments include forwards, futures, options, and swaps. At its discretion, Brandywine may hedge all, some, or none of the portfolio's currency exposure. Brandywine may also cross hedge currency positions, but may not be net short any currency, or long more than 100% of the portfolio. Brandywine shall not use derivatives to increase portfolio risk above the level that could be achieved in the portfolio using only traditional investment securities. Under no circumstances will the portfolio manager undertake an investment that is non-covered or leveraged to the extent that it would cause portfolio duration to exceed limits specified herein.

**Diversification:** The fixed income securities should be well diversified to avoid undue exposure to any single economic sector or individual security. Individual country or currency exposures typically will not exceed at purchase:

	Country Allocation	Currency Allocation
<u>North America</u>		
United States	0% - 65%	0% - 100%
Canada	0% - 25%	0% - 25%
<u>Europe</u>		
Euro		0% - 70%
Germany	0% - 40%	
France	0% - 40%	
Italy	0% - 30%	
Belgium	0% - 20%	
Netherlands	0% - 20%	
Spain	0% - 20%	
<u>Other Europe</u>		
United Kingdom	0% - 40%	0% - 40%
Denmark	0% - 20%	0% - 20%
Sweden	0% - 20%	0% - 20%
<u>Pacific Rim</u>		
Japan	0% - 60%	0% - 60%
New Zealand	0% - 10%	0% - 10%
Other Countries contained in the WGBI Index (each):	0% - 15%	0% - 15%

	Country Allocation	Currency Allocation
Other Non-WGBI Countries (each): rated A or better by an NRSRO*	0% - 10%	0% - 10%
Other Non-WGBI Countries (each): rated BBB or better rating by an NRSRO*	0% - 5%	0% - 5%
Other Non-WGBI Countries (in aggregate): Below A rating by all NRSRO* and BBB or better rating by an NRSRO*	0 – 20%	0% - 20%
NRSRO means one of the following Nationally Recognized Statistical Rating Organizations: Standard & Poor's Rating Services, Moody's Investor Service, and Fitch, Inc. Ratings for country and currency include sub-categories or graduations therein and are determined by the local currency long-term debt ratings assigned by NRSROs.		

**Quality and Marketability:** Fixed income securities and cash in the portfolio shall have a weighted average rating of A- or better according to the methodology used by the Barclays Capital Global Bond Indices. All investments shall be of investment grade quality at time of purchase, as determined by an NRSRO. Brandywine Global may continue to hold instruments that are downgraded in quality subsequent to their purchase if, in the opinion of Brandywine Global, it would be advantageous to do so.

**Duration:** The portfolio duration shall be limited to a range of 1 – 10 years.

**Market Movement:** If any of the parameters described above are breached (except those that are to be determined at the time of purchase), as a result of market movements, capital additions or withdrawals or other events not within the control of Brandywine Global, Brandywine Global shall have a reasonable period of time, not to exceed three months, to bring the portfolio into compliance with the applicable investment guidelines.

#### 4. Statement of Acknowledgment

As an authorized representative of Brandywine Global, provider of investment management services to the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Brandywine Global and agree on behalf of Brandywine Global to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

B. EATON VANCE INVESTMENT MANAGERS

Commingled Senior Floating Rate Assignment

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

The Eaton Vance Investment Managers will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Eaton Vance Investment Managers will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Eaton Vance Investment Managers shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Eaton Vance Investment Managers will be for the asset value exclusive of contribution 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) that match the benchmarks established for the long term (5 years).

**Long Term Performance Objectives:** The portfolio is to exceed the performance of the S&P/LSTA Leveraged Loan Index as well as exceed the median return in a representative style performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The portfolio shall be solely comprised of shares of the Eaton Vance Investment Managers' Senior Floating Rate Assignment (the "Fund"). Investments made by Eaton Vance Investment Managers must be consistent with the Fund Declaration.



#### **4. Commingled Vehicle Election**

The Association's investment in Eaton Vance Investment Managers Senior Floating Rate Fund is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the Fund.

C. LOOMIS SAYLES & COMPANY

Separate Account High Yield Full Discretion Fixed Income Assignment

**1. Investment Assignment**

Loomis Sayles & Company will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Loomis Sayles & Company will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Loomis Sayles & Company shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Loomis Sayles & Company 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 long term (5 years).

**Long Term Performance Objectives:** The Total Portfolio is to exceed the Barclays US Corporate High Yield Index, as well as the median return in a representative fixed income performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Permissible Investments:** Public or private debt obligations issued or guaranteed by U.S. or foreign issuers, including but not limited to corporations, governments (including their agencies, instrumentalities and sponsored entities), supranational entities, partnerships and trusts, and such obligations may be issued at fixed, variable, adjustable or zero coupon rates or convertible into equity instruments; preferred, hybrid, mortgage or asset-backed instruments issued by any of the above-named entities; common stocks; and foreign currency exchange contracts including non-deliverable forward foreign exchange contracts and cross hedges.

Eligible commingled investment vehicles include interests in privately and publicly offered commingled investment vehicles, including those advised by Loomis Sayles or its

affiliates. Investments in commingled investment vehicles shall not be subject to any guidelines or restriction included herein, with the exception of the credit quality, country, duration and currency restrictions. In applying these restrictions, the credit quality, country, duration and currency of the applicable commingled funds will be used and not the credit qualities, country, durations and currencies of the underlying instruments in the commingled funds.

Eligible cash equivalents include commercial paper, short-term investment fund designated by Client, and eligible fixed income instruments with a maturity of less than one year.

At the time of purchase, the account may invest up to 5% of the market value of the portfolio in common stock, up to 15% in convertible instruments, up to 5% in non-US Dollar denominated corporate instruments, and up to 15% in securitized instruments (including individual securities as well as any investment in a commingled vehicle such as the Loomis Sayles Full Discretion Institutional Securitized Fund).

Up to 45% of the portfolio may be invested in off-benchmark sectors (defined broadly as any sector or instrument type that is not included in the benchmark).

**Derivatives:** The investment manager shall not use derivatives to increase portfolio risk above the level that could be achieved in the portfolio using only traditional investment securities. Moreover, the portfolio manager will not use derivatives to acquire exposure to changes in the value of assets or indexes that by themselves would not be purchased for the portfolio. Under no circumstances will the portfolio manager undertake an investment that is non-covered or leveraged to the extent that it would cause portfolio duration to exceed limits specified herein. The portfolio manager will report on the use of derivatives on a quarterly basis to the Board of Trustees.

Credit derivative products can be used in the portfolio as substitutes for cash investments to manage default risk and credit exposure. These products include single-name Credit Default Swaps (CDS) and Credit Default Swap index products. Single name CDS will be assigned the characteristics of the reference entity and will factor into any compliance test that would evaluate the underlying reference instrument, such as credit quality, country, currency, issue and industry limits set forth above. CDS Index products will not be subject to the limitations stated herein.

Eligible derivatives instruments also include contracts to buy or sell futures on instruments, indices, interest rates and currencies ("Futures"); structured notes, including currency-, credit- and index-linked notes; forward contracts for instruments, indices, interest rates and currencies; swap contracts for instruments, indices, interest rates and currencies ("Swaps"); put and call options on instruments, indices, interest rates, Futures, Swaps and currencies.

To manage the duration and yield curve exposure of the portfolio, Loomis Sayles may use Futures to create exposures to securities, currencies, indices or any other financial instruments that are permitted under the investment guidelines and restriction of the portfolio, and subject to any limits and constraints on such permissible investments. Loomis Sayles will not use futures contracts for borrowing purposes and will not limit the extent to which it uses Futures for risk management purposes.

**Diversification:** The fixed income securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. No instrument, except instruments issued or guaranteed by the U.S. Government, its agencies, or instrumentalities or government sponsored entities, or any permissible commingled fund, will comprise more than 5% of the market value of the portfolio, as determined at the time of purchase.

Furthermore, no industry, as defined by Barclays, except instruments issued or guaranteed by the U.S. Government, its agencies or instrumentalities or government sponsored entities will comprise more than 25% of the market value of the portfolio, as determined at the time of purchase.

**Prohibited Investments:** Investment in non-US sovereign issuers and senior loans is prohibited.

**Quality and Marketability:** There is no minimum credit quality requirement for any instrument. If the ratings assigned to an instrument by Standard & Poor's, Moody's, and/or Fitch are not the same, the highest rating of these rating agencies will be used. If an instrument is not rated by Standard & Poor's, Moody's, and/or Fitch, the equivalent rating determined by the Loomis Sayles Research Department will be used.

Loomis Sayles may continue to hold instruments that are downgraded in quality subsequent to their purchase if, in the opinion of Loomis Sayles, it would be advantageous to do so.

**Conversion:** Notwithstanding the foregoing, the portfolio may receive instruments prohibited or not contemplated herein through the conversion, exchange, reorganization, corporate action or bankruptcy of an otherwise permissible investment. Loomis Sayles may hold or dispose of these investments at its discretion.

**Duration:** The effective duration of the fixed income portfolio shall not exceed the duration of the Barclays US Corporate High Yield Index by more than 5 years.

**Market Movement:** If any of the parameters described above are breached (except those that are to be determined at the time of purchase), as a result of market movements, capital additions or withdrawals or other events not within the control of Loomis Sayles, Loomis Sayles shall have a reasonable period of time, not to exceed three months, to bring the portfolio into compliance with the applicable investment guidelines.

#### **4. Statement of Acknowledgment**

As an authorized representative of Loomis Sayles & Company, provider of investment management services to the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Loomis Sayles & Company and agree on behalf of Loomis Sayles & Company to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

D. THE NORTHERN TRUST COMPANY

Commingled Barclays Aggregate Index Fund

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

The Northern Trust Company will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. The Northern Trust Company will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. The Northern Trust Company shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for The Northern Trust Company will be for the asset value exclusive of contribution 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) that match the benchmarks established for the long term (5 years).

**Long Term Performance Objectives:** The portfolio is to match the performance of the Barclays US Aggregate Index.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The portfolio shall be solely comprised of shares of the Northern Trust Company Collective Aggregate Bond Index Fund (the "Fund"). Investments made by The Northern Trust Company must be consistent with the Fund Declaration.

**4. Commingled Vehicle Election**

The Association's investment in The Northern Trust Company's Collective Aggregate Bond Index Fund is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.

E. PACIFIC INVESTMENT MANAGEMENT COMPANY (PIMCO)

Separate Account Emerging Local Bond Investment Assignment

**1. Investment Assignment**

The Manager will have full discretion within the guidelines to invest in the currencies of, or in fixed income instruments denominated in the currencies of, emerging markets. While the Manager generally defines an “emerging market” as any non-US country, excluding those that have been classified by the World Bank as high-income OECD countries for the past consecutive five years, the Manager retains broad discretion to invest in additional countries based on its assessment of their development phase. Unless otherwise stated below, the following guidelines will be applied at the time of purchase.

**2. Manager Objectives**

Benchmark: JPMorgan GBI-EM Global Diversified, unhedged

**Portfolio Duration Range** + / - 2 years relative to benchmark duration

*Portfolio duration and benchmark duration will be calculated using PIMCO’s duration models*

**3. Credit Quality Minimums**

The Manager will apply quality ratings using the higher of Moody’s, S&P or Fitch. If an issue is not rated by one of these rating agencies, then the Manager will determine a rating.

<u>Minimum Issue Quality:</u>	CCC- Rating
<u>Minimum Average Portfolio Credit Quality:</u>	BB- Rating
<u>Minimum Commercial Paper Quality:</u>	A2/P2/F2

Should an issue be downgraded below these minimums, the Manager will determine the appropriate action (sell or hold) based on the perceived risk and expected return.

**4. Transaction Types**

Purchases and sales may be transacted for regular or deferred/forward settlement, including repos & reverse repos. Hedging, spread, and income generating strategies may include the use of short sales. The Manager may, but is not required to, hedge exposure to non-U.S. currencies. Currency spot and forward transactions can be used as a means of hedging or taking active currency exposure within risk limits specified.

Transactions Types Explicitly Prohibited: None

## 5. Asset Types and Investment Vehicles

The Manager will have discretion to invest in the following sectors:

- Sovereign debt
- Corporate securities
- Non-US Dollar-denominated Securities (including local currency securities)
- Bank Loans
- Privately placed securities (including 144As)
- Certificates of deposit
- Repos/ Reverse repos/Sell/Buybacks (only for taxable accounts)
- Structured Notes and Credit Linked Notes
- Yankee, Euro and Global Bonds
- Asset-Backed Securities
- Convertible Securities
- Futures and Forwards
- Options, Caps and Floors
- Swaps and swaptions, including Total Return Swaps
- Credit Default Swaps (Buy Protection and Sell Protection)
- Short sales
- Foreign Currency (naked currency, including deliverable and non-deliverable forwards)
- PIMCO Pooled Funds

Asset Types/Vehicles Explicitly Prohibited:                      None

## 6. Concentration Limits

The Manager will limit the concentrations within the portfolio to the following:

Single sovereign/quasi-sovereign issuer/issue: Benchmark weight +/- 20%

Single corporate issuer/issue (excludes quasi-sovereigns\*): 5%

\*A quasi-sovereign is defined as: the debt of any institution considered by the Manager to be owned, controlled, sponsored or guaranteed by a federal or national government.



F. STATE STREET GLOBAL ADVISORS

Commingled TIPS Index Fund

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

The State Street Global Advisors will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. The State Street Global Advisors will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. The State Street Global Advisors shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for State Street Global Advisors will be for the asset value exclusive of contribution 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) that match the benchmarks established for the long term (5 years).

**Long Term Performance Objectives:** The portfolio is to match the performance of the Barclays Capital US Treasury Inflation Protected Securities ("TIPS") Index as well as the median equity return in a representative style performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The portfolio shall be solely comprised of shares of the State Street Global Advisors TIPS Index NL Fund (the "Fund"). Investments made by State Street Global advisors must be consistent with the Fund Declaration.

**4. Commingled Vehicle Election**

The Association's investment in State Street Global Advisors TIPS Index NL Fund is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.

G. WESTERN ASSET MANAGEMENT COMPANY

Separate Account Investment Grade Credit Assignment

**1. Investment Assignment**

Western Asset Management Company will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. Western Asset Management Company will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Western Asset Management Company shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Western Asset Management Company 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 long term (5 years).

**Long Term Performance Objectives:** The Total Portfolio is to exceed the Barclays Capital Credit Index as well as the median return in a representative fixed income performance universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Fixed Income Securities:** Any of the following fixed income securities, denominated in USD or non-USD, and their futures or options derivatives, individually or in commingled vehicles, subject to credit, diversification and marketability guidelines below, may be held outright and under resale agreement (REPO):

- a. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal agencies or U.S. government-sponsored corporations and agencies (for the avoidance of doubt, U.S. agency structured product is prohibited);

- b. Obligations of U.S. and non-U.S. corporations such as convertible and non-convertible notes and debentures, loan participations, preferred stocks, commercial paper, certificates of deposit and bankers acceptances issued by industrial, utility, finance, commercial banking or bank holding company organizations;
- c. Securities defined under Rule 144A and Commercial Paper defined under Section 4(2) of the Securities Act of 1933;
- d. Common stock, warrants or rights issued in exchange of, or as part of, a bond or bond unit;
- e. Obligations, denominated in U.S. dollars or foreign currencies, including, but not limited to: the securities of emerging market corporate issuers, international agencies, supranational entities, foreign governments (or their subdivisions or agencies), foreign currency exchange-related securities, warrants and forward contracts;
- f. Taxable and tax exempt obligations issued or guaranteed by U.S. local, city and state governments, instrumentalities and agencies;
- g. Non-U.S. dollar securities may be held on a currency hedged basis. To this end, the portfolio may invest in currency exchange transactions on a spot or forward basis;

**Derivatives:** Futures, swaps, forwards, options on swaps, and options on forwards are permitted. The investment manager shall not use derivatives to increase portfolio risk above the level that could be achieved in the portfolio using only traditional investment securities. Moreover, the portfolio manager will not use derivatives to gain exposure that would not otherwise be permitted in the portfolio. Under no circumstances will the portfolio be leveraged. Moreover, the portfolio duration will not exceed +/- 10% of benchmark duration. The portfolio manager will report on the use of derivatives on a quarterly basis to the Board of Trustees.

No more than 5% of the portfolio will be invested in original futures margin and option premiums, exclusive of any in-the-money portion of the premiums. Short (sold) options positions will generally be hedged with cash, cash equivalents, current portfolio security holdings, or other options or futures positions.

**Diversification:** The fixed income securities should be well diversified to avoid undue exposure to any single economic sector, industry, or individual security. To this end, the following limits will apply. Except for obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies and investments in commingled vehicles, no more than 5% of the fixed income portfolio based on market value shall be invested in securities of any one issuing entity at the time of purchase. Up to 20% of the portfolio may be invested in non-USD denominated

securities, fully hedged back to the US Dollar. Up to 25% of the portfolio may be invested in global sovereign bonds (excluding United States Treasury and Agency bonds).

**Prohibited Investments:** Investments in emerging market sovereign debt (USD denominated and foreign currency denominated) and bank loans are prohibited.

**Quality and Marketability:** In all categories emphasis will be on investment grade securities. Holdings are subject to the following limitations:

Quality and security should be emphasized over maximum return in all short-term cash investments. Investment managers will have discretion as to the types of securities used except that all commercial paper obligations purchased must have minimum respective ratings of P-2 by Moody's or A-2 by Standard & Poor's.

A minimum of 95% of the portfolio will be invested in investment grade securities at time of purchase and up to 5% of the portfolio can be invested in below investment grade securities (including downgrades). Security ratings will be determined as follows. If a security is rated by Moody's, S&P, and Fitch, then the middle rating of the three agencies will apply. In the event that the security is rated by two of the agencies, and the third is non-rated, then the lower rating of the two agencies will apply. If only one agency assigns a rating, then that rating will apply. Securities not covered by the standards noted above will normally be, in the judgment of Western Asset Management, at least equal in credit quality to the criteria implied in those standards.

In the event downgraded securities cause a breach of the Investment Guidelines, Western Asset Management may continue to hold the positions but will not make any further purchases to increase the position while the breach remains.

For securities with legal final maturities of 270 days or less, Western Asset Management may use the underlying credit's short term ratings as proxy for establishing the minimum credit requirement.

Futures and options contracts will be limited to liquid instruments actively traded on major exchanges or, if over-the-counter for options, executed with major dealers.

**Volatility:** It is expected that the volatility of the portfolio will be reasonably close to the volatility of the Barclays Capital Credit Index over a market cycle. The duration of the fixed income portfolio shall not exceed the duration of the Barclays Capital Credit Index by more than 10% .

**Market Movement:** If any of the parameters described above are not to be determined at the time of purchase and are not met as a result of market movements, capital additions or withdrawals, or other events not within the control of the investment

manager, the investment manager shall have a reasonable period of time, not to exceed 30 days, to bring the portfolio into compliance with the foregoing investment guidelines.

#### **4. Statement of Acknowledgment**

As an authorized representative of Western Asset Management Company, provider of investment management services to the Fresno County Employees' Retirement Association, I hereby acknowledge receipt on behalf of Western Asset Management Company and agree on behalf of Western Asset Management Company to conduct the investment management services in accordance with the terms of this addendum as well as the Investment Policy Statement as set by the Board of Trustees.

## **V.OPEN END REAL ESTATE MANAGER GUIDELINES**

A. INVESCO REALTY, INC.

Invesco Core Real Estate Fund – U.S.A., L.P.

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

Invesco Realty, Inc. will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. The Invesco Realty, Inc. will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Invesco Realty, Inc. shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Invesco Realty, Inc. will be for the asset value exclusive of contribution 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) that exceed the benchmarks established for the long term (5 years) and exceed the 50<sup>th</sup> percentile in a representative peer universe.

**Long Term Performance Objectives:** The portfolio is to exceed the performance of the NCREIF-ODCE Index and exceed the 50<sup>th</sup> percentile in a representative peer universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The portfolio shall be solely comprised of shares of the Invesco Core Real Estate Fund – U.S.A., L.P. (the "Fund"). Investments made by Invesco Realty, Inc. must be consistent with the Fund Declaration.

**4. Commingled Vehicle Election**

The Association's investment in the Invesco Core Real Estate Fund – U.S.A., L.P. is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.

## **VI. HEDGE FUND MANAGER GUIDELINES**



A. GROSVENOR INSTITUTIONAL PARTNERS, L.P.

Hedge Fund of Funds

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

Grosvenor Capital Management, L.P. ("Grosvenor") will be given full discretion within the scope of these mutually agreed upon investment guidelines. Grosvenor shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Grosvenor 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 long term (5 years).

**Long Term Performance Objectives:** The Total Portfolio is to exceed the return of the HFRI FoF Composite Index.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The limited partnership agreement of Grosvenor Institutional Partners, L.P. shall govern the investment of the Grosvenor Institutional Partners, L.P. Fund. The allowable securities shall be solely comprised of those investments made by the limited partnership.

Investments made by Grosvenor Institutional Partners, L.P. Fund must be consistent with the Agreement regardless of whether such Agreement is consistent with the Investment Policy Statement.

## **VII. COMMODITIES MANAGER GUIDELINES**

A. INVESCO TRUST COMPANY

Invesco Balanced-Risk Commodity Trust – U.S.A., L.P.

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

**1. Investment Assignment**

Invesco Trust Company will be given full discretion within the scope of the Fresno County Employees' Retirement Association's Investment Policy Statement and this addendum. The Invesco Trust Company will be responsible for reviewing these guidelines with the Board of Trustees at least annually to assure they remain prudent. Invesco Trust Company shall discharge its management in a prudent manner, always keeping the best interest of the participants clearly in mind.

**2. Investment Objectives**

The investment objectives for Invesco Trust Company will be for the asset value exclusive of contribution 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) that exceed the benchmarks established for the long term (5 years) and exceed the 50<sup>th</sup> percentile in a representative peer universe.

**Long Term Performance Objectives:** The portfolio is to exceed the performance of the Bloomberg Commodity Index and exceed the 50<sup>th</sup> percentile in a representative peer universe.

**3. Investment Guidelines**

It is the intention of the Board of Trustees to allow the investment manager full investment discretion within the scope of these mutually agreed upon investment guidelines. The investment manager must adhere to the following investment guidelines unless explicitly authorized in writing by the Board of Trustees to do otherwise.

**Allowable Securities:** The portfolio shall be solely comprised of shares of the Invesco Balanced-Risk Commodity Trust – U.S.A., L.P. Investments made by Invesco Realty, Inc. must be consistent with the Fund Declaration.

**4. Commingled Vehicle Election**

The Association's investment in the Invesco Core Real Estate Fund – U.S.A., L.P. is made through a commingled vehicle. Therefore, the Association's investment guidelines do not govern the investment process of the fund.

## **VIII. CLOSED END PRIVATE MANAGER INFORMATION**

## CLOSED END, PRIVATE MANAGER INFORMATION

*(All guideline information for this allocation provided by FCERA's investment consultant, Verus.)*

The following investment managers are regulated by contracts and side-letters negotiated by FCERA's legal counsel and approved by the Board of Trustees. The list includes all closed end, private managers dealing in real estate, private equity, private credit and infrastructure. Each strategy attempts to provide superior risk-adjusted returns by generally adhering to the following fund strategies:

### A. **Real Estate**

#### 1. TA Associates Realty IX

The \$1.8B value added, closed-end commingled fund was created to invest in a portfolio of well-located office, industrial, retail and multifamily properties diversified across multiple primary markets throughout the United States.

### B. **Private Equity**

#### 1. Landmark Equity Partners XIV

The fund is a \$2.0B fund-of-funds formed to acquire private equity partnerships interests and direct investments primarily through secondary market transactions. The fund is diversified across more than 3,000 underlying company investments with varying vintage years, geographical locations and industry categories.

#### 2. New Mountain Partners III

The \$5.1B fund specializes in upper middle market buyouts within in the United States. The fund has an emphasis on fostering growth and business building, rather than high risk or high leverage strategies.

#### 3. Hamilton Lane VI

HLPEV VI is a private equity fund-of-funds that was formed to provide investors with exposure to a well-diversified PE portfolio. The overall portfolio's largest investment strategy is mid-sized buyout followed closely by co-investment.

#### 4. Warburg Pincus Equity Fund X

WP PE X is \$15.1B Fund that specializes in venture, growth equity, buyouts, and recapitalization transactions. The investments are globally diversified across many sectors, but the fund has a focus on energy, technology, telecommunications, consumer and industrial transactions.

5. Blackstone Equity IV

Blackstone Capital IV is a \$7.8B fund that focuses on leveraged buyouts, middle market investments, take-privates and rescue finance transactions. The fund is globally diversified across various underlying investments and sector categories.

6. Warburg Pincus Equity Fund VIII

WBPE VIII is a \$5.3B Fund that specializes in venture, growth equity, buyouts, and recapitalization transactions. The investments are globally diversified across many sectors, but the fund has a focus on energy, technology, telecommunications, consumer and industrial transactions.

7. Landmark Equity X

The fund is a \$2.0B fund-of-funds formed to acquire private equity partnerships interests and direct investments primarily through secondary market transactions. The fund is diversified across more than 1,000 underlying company investments with varying vintage years, geographical locations and industry categories.

8. New Mountain Partners

The \$770M fund specializes in upper middle market buyouts within in the United States. The fund has an emphasis on fostering growth and business building, rather than high risk or high leverage strategies.

9. Warburg Pincus Equity Partners

The Fund that specializes in venture, growth equity, buyouts, and recapitalization transactions. The fund had investments that were globally diversified across many sectors, however is currently in a liquidation trust vehicle.

C. **Private Credit**

1. GSO European Debt Fund

The \$2B Fund was established to take advantage of a secular shift in the European corporate lending environment. GSO will seek to fill this void in the direct lending space caused by the decreasing amount of bank loans to non-financial corporations due to new regulations.

2. CarVal Credit Value Fund III

The \$2B Fund was established to focus on stressed/distressed middle market transactions primarily in the US with less than 40% of transactions happening in Europe and emerging markets. The portfolio will focus primarily of loans, corporate securities, structured credit and shipping.

3. Colony Distressed Credit III

The \$1B Fund was established to focus on loan acquisitions, high yield originations and rescue capital & recapitalizations with a focus on transactions within the United States and Western Europe. Due to the changing regulatory environment in Europe, this fund has a higher emphasis on Western Europe than past Colony Funds.

4. Oaktree Opportunities IX

The \$5B distressed debt fund seeks to provide relatively high income for its investors while avoiding capital losses though an emphasis on senior and secured debt. The low-turnover fund focuses on public bonds or bank debt, large to mid-cap companies in broad range of industries. The Fund is broadly diversified across the U.S. and Western Europe.

5. KKR Mezzanine Partners

The \$1B distressed debt Fund was established to focus on financing third-party transactions, attempting to take advantage of a climate in which financial turmoil and new regulations has restricted bank lending. The Fund is globally diversified, but is focused primarily on the United States and Europe.

6. Angelo Gordon VII

The \$1B distressed debt Fund was established to deliver relatively high income to its investors while avoiding capital losses by focusing on the top of the capital structure and utilizing no leverage. The portfolio management team also attempts to add value by staying active throughout the restructuring/bankruptcy process and diversifying their portfolio across the globe.

7. Colony Distressed Credit

The \$1.5B Fund was established to invest in a diversified portfolio primarily consisting of performing, sub-performing and non-performing loans and other distressed real estate opportunities. They employ a bottom-up contrarian approach to many opportunities paying special attention to intrinsic value and mispricings in the marketplace.

8. Lone Star Fund IV

The \$4.2B Fund was formed to create a diversified portfolio of secured and unsecured non-performing loans, real estate and financially oriented and real estate-rich operating companies. The Fund was focused South East Asia but also held assets in the United States and Europe.

9. TCW Shop IV

TCW Shop IV was a mezzanine focused real estate fund; the Fund is in liquidation.

10. TCW Shop III

TCW Shop III was a mezzanine focused real estate fund; the Fund is in liquidation.

**D. Infrastructure**

1. IFM Infrastructure Fund

The \$8B Fund was established to invest in core infrastructure assets predominantly in Australia, Europe and North America. The fund is broadly diversified across various assets such as airports, waterways, telecom and hot water supply related transactions.





## **ASSET LIABILITY STUDY**

**Fresno County Employees' Retirement Association**

**April 2013**

WURTS  ASSOCIATES

SEATTLE | 206.622.3700  
LOS ANGELES | 310.297.1777  
[www.wurts.com](http://www.wurts.com)

# TABLE OF CONTENTS

---

## INTRODUCTION

- History
- Assumptions
- Baseline Projections: If everything goes according to plan

*Tab I*

---

## RISK & DRAWDOWNS

- They Happen More Often Than You Think
- Sustainability & Future Contribution Levels

*Tab II*

---

## PORTFOLIO CONSTRUCTION PROCESS

- Limitations of Mean-Variance Optimization
- New Lenses for analyzing Portfolios

*Tab III*

---

## STOCHASTIC MODELING

- Funded Status
- County Contributions

*Tab IV*

---

## CONCLUSION & NEXT STEPS

*Tab V*

---

## APPENDIX: 2013 CAPITAL MARKET ASSUMPTIONS

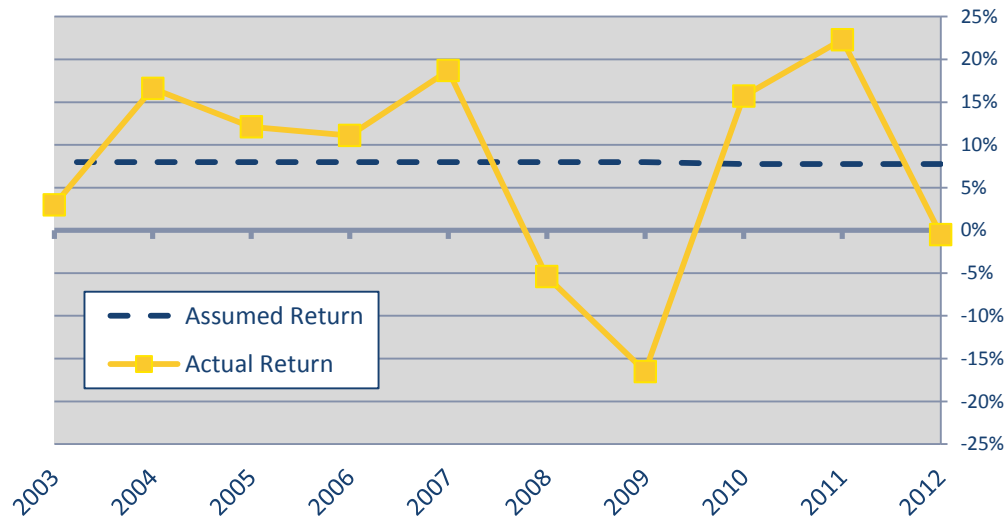
*Tab VI*

---

# INTRODUCTION

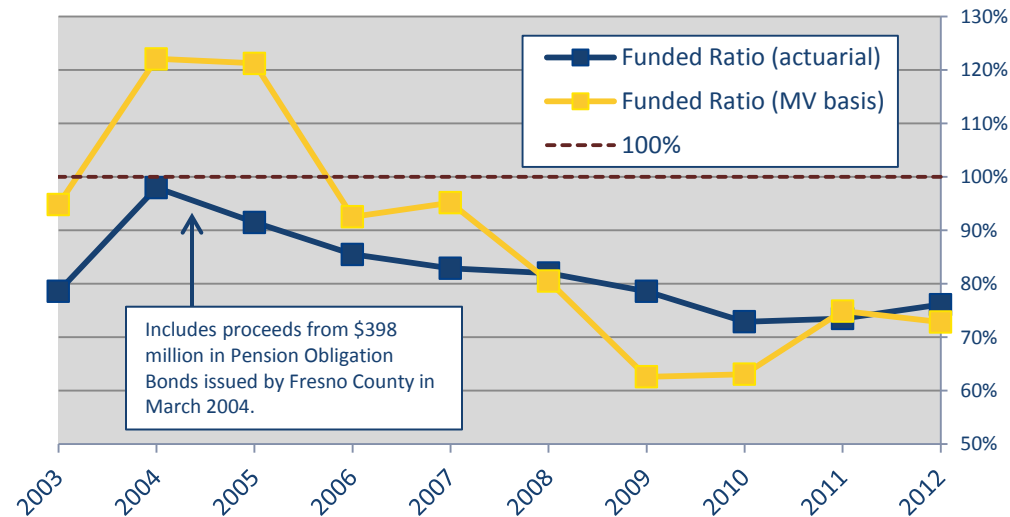
# HISTORICAL PERFORMANCE

## Assumed Vs. Actual Returns



- Fiscal year returns have been volatile. The Plan has outperformed the assumed rate in 6 of the last 10 years.
- Annualized return for the 10 years ended June 30, 2012 was 7.0% net of investment expenses, 75 bps below the current assumption.

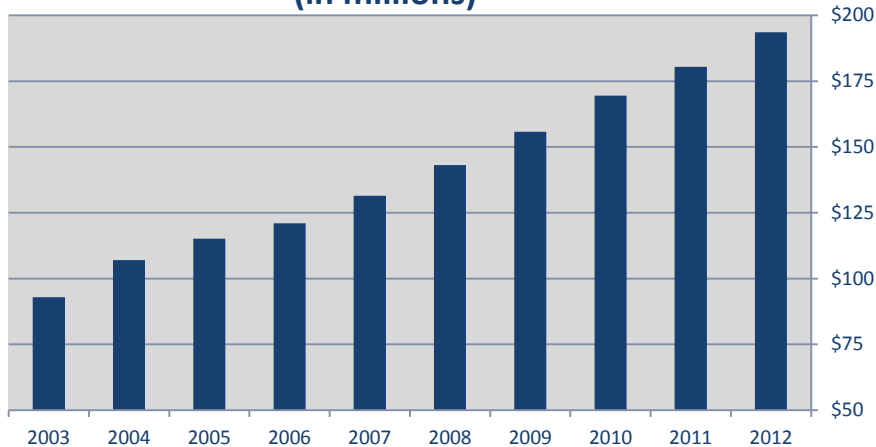
## Funded Ratio



- Actuarial funded status uses a smoothed market value, mitigating volatility of returns.
- Despite this, the amortization of large losses in 2002 and 2009 have caused the funded status to trend downward.

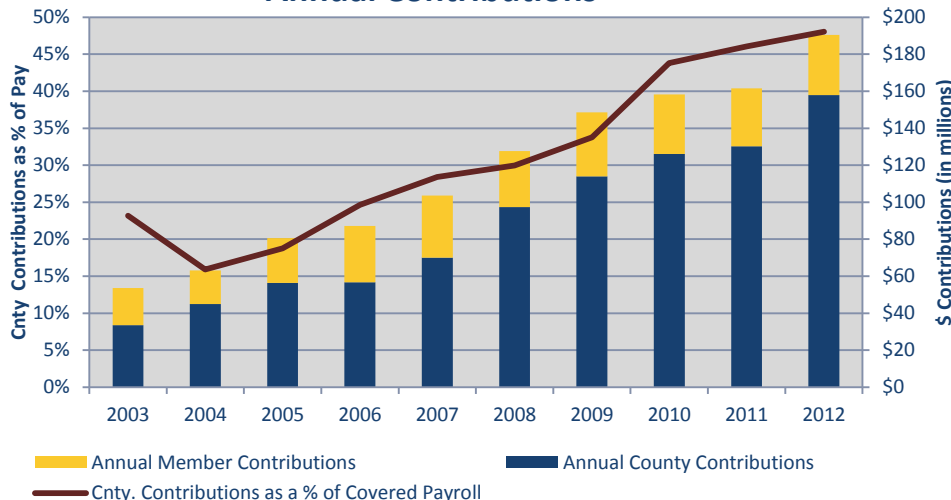
# HISTORICAL CASH FLOWS

**Total Benefits Paid  
(in millions)**



- Total benefits paid continue to increase each year, averaging an 8.5% annual growth rate over the last 10 years.

**Annual Contributions**



- This has been funded through increased County contributions (on an absolute basis as well as relative to payroll.)
- As of 6/30/2012, the County contributions as a percentage of payroll was 48%.

## Member Contributions:

The contribution rate is dependent on the membership tier, and calculated so that the accumulation of basic contributions will be sufficient to fund an annuity at retirement that is equal to a portion of average final compensation.

---

## County Contributions:

### *Normal Cost:*

The annual contribution rate that, if paid annually from first year of membership to the year of retirement, would accumulate the amount necessary to fully fund the member's retirement benefits.



### *Contribution to the Unfunded Actuarial Accrued Liability:*

The annual contribution rate that if paid annually over the UAAL amortization period, would accumulate the amount necessary to fully fund the UAAL.

# BASELINE PROJECTIONS: IF EVERYTHING GOES TO PLAN...

Before examining different portfolios we want to set expectations for what the future holds.

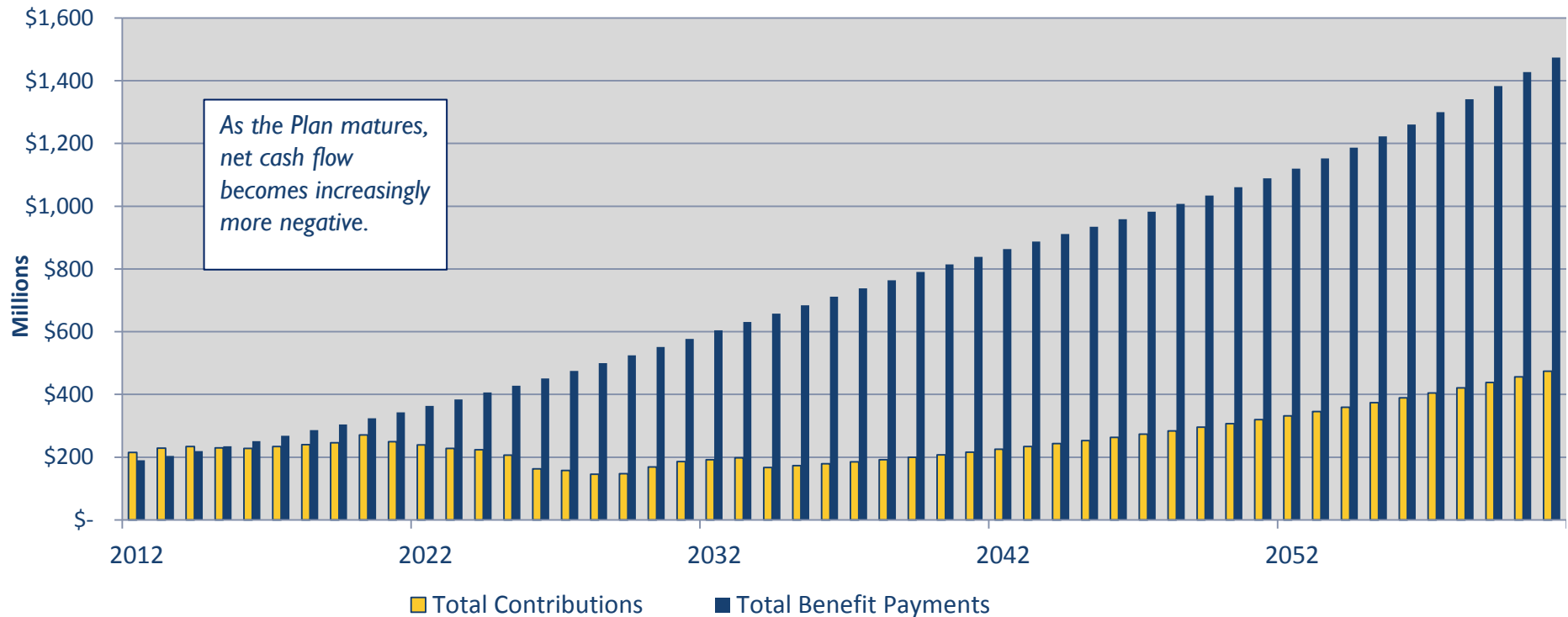
## Assume:

- The investments return meets the current assumed rate of 7.75%, net of fees and administrative costs, each year. (we will alter this assumption in later trials).
- Inflation is 3.5% per year.
- Actual contributions are in line with recommended contributions
- This projection includes the new tier 4 rates, effective for contributions for the 2012/2013 fiscal year and forward, using formulas as prescribed in Section 31676.1.

## What is the impact on:

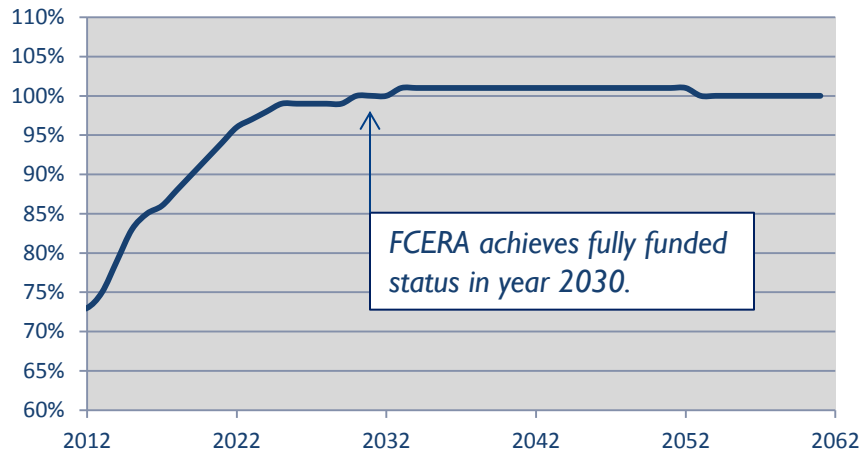
1. Future Funded Status?
2. Employer Contributions?
3. Contributions as a % of Pay?

### Benefits & Contributions



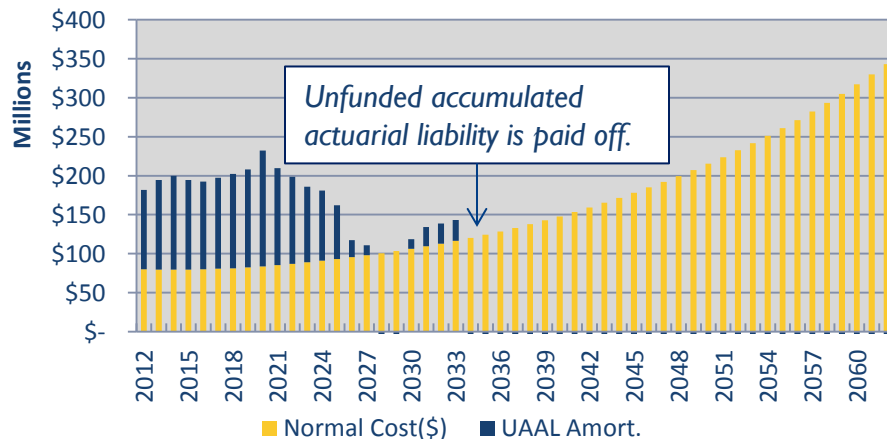
# BASELINE PROJECTIONS: IF EVERYTHING GOES TO PLAN...

## Market Value Funded Ratio



- Funded status is projected to increase from 71.8% to 100% in 18 years.<sup>1</sup>

## Breakdown of County Contribution

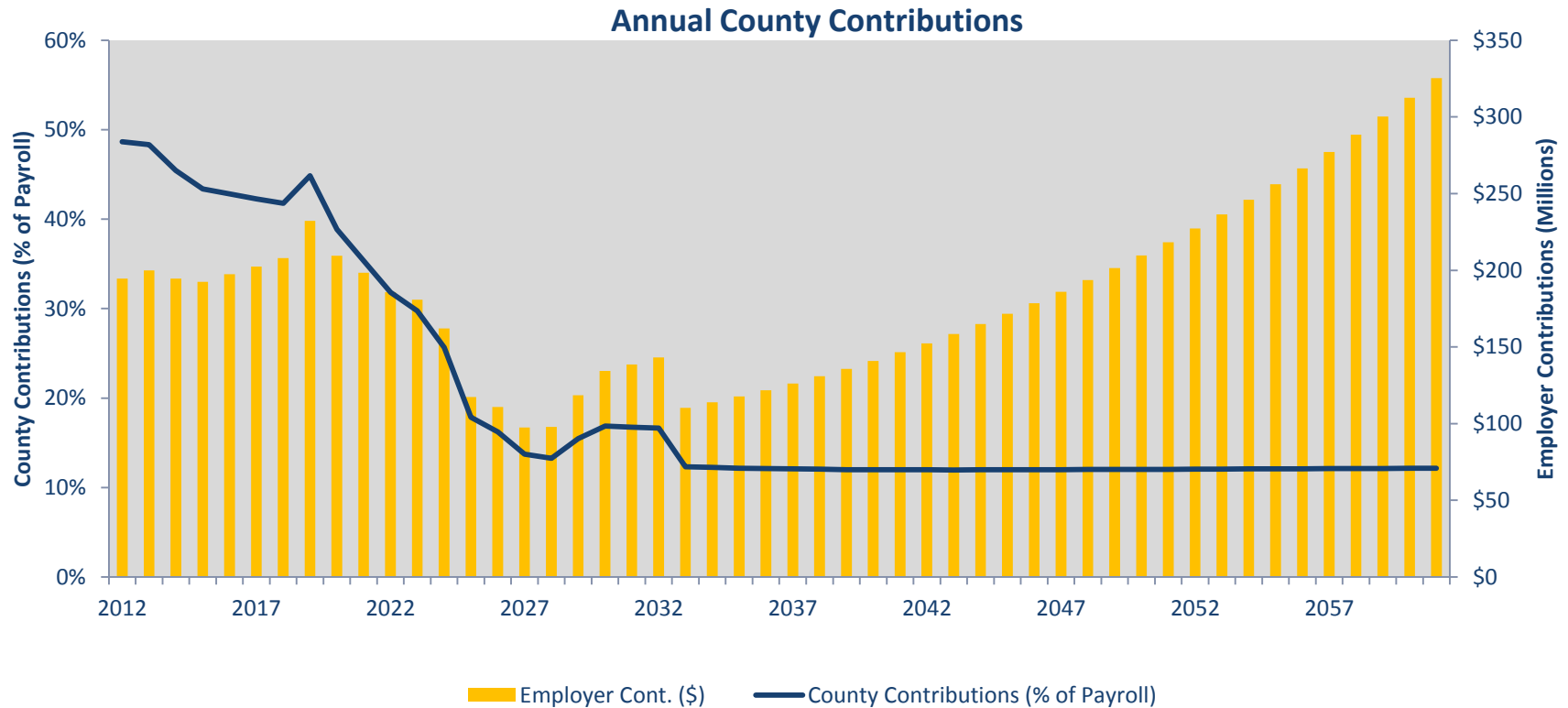


- Since we assume that in all future years, actual returns will equal assumed returns, there are no further accruals to the UAAL.
- The existing UAAL is fully amortized by 2033. After this, the County contributions only consist of the normal cost component.
- Normal cost increases with inflation and wage growth.

<sup>1</sup> As of 6.30.12. The funded status using the actuarial value of assets is 76.1%.



## BASELINE PROJECTIONS: IF EVERYTHING GOES TO PLAN...

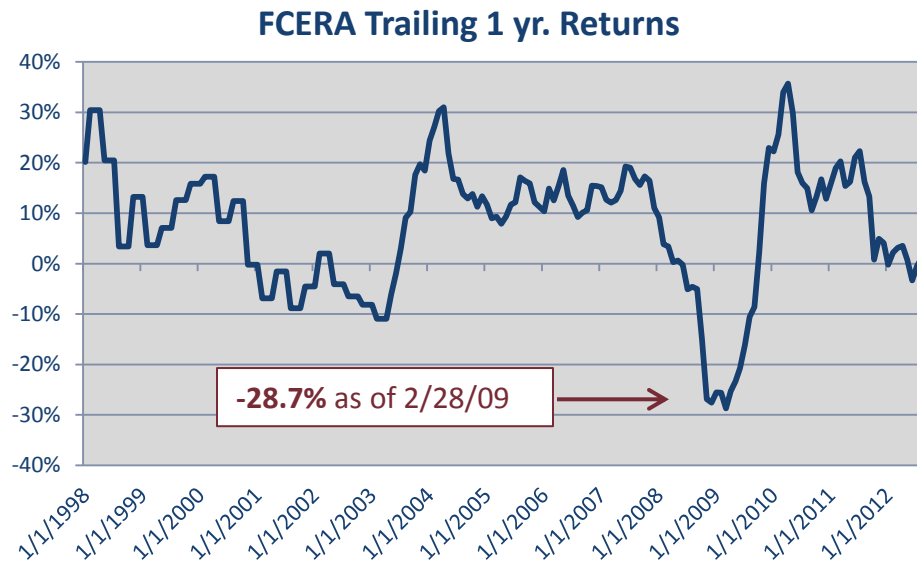


- While the dollar amount of contributions do go up, contributions relative to payroll trends down.
- This is due to projected payroll increasing approximately 4%/year.

## RISK & DRAWDOWNS

## HISTORICAL DRAWDOWNS

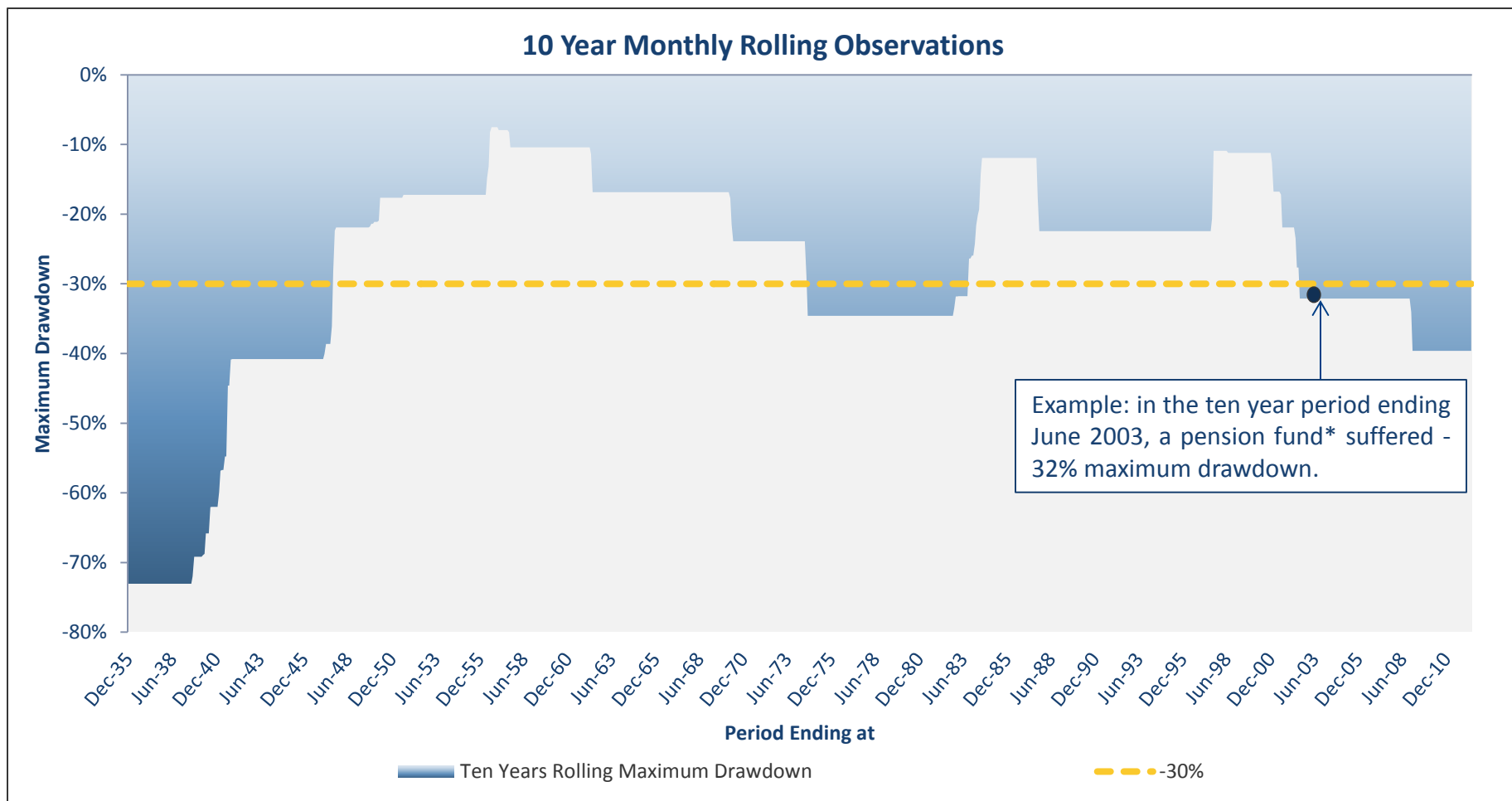
- While the baseline projection suggests that the health of the Plan will trend upwards, this is dependent on the Plan earning the assumed rate of return every year.
- In reality, we know that returns are very volatile, and driven by large swings in global equity markets:



- FCERA experienced a 28.7% drawdown for the 12 months ended February 2009.
- This drawdown was the primary factor contributing to the Plan not achieving the assumed return for the trailing ten years ending 6.30.12.
- To illustrate, if the plan earned 0% in the 2009 plan year, the 10 year trailing return would have been 9.1%, meaningfully higher than both the 7.75% assumption and the actual return of 7.0%.

*Was the 2008 drawdown really a “100 year storm” or can we expect it to happen again?*

# DRAWDOWNS HAPPEN MORE OFTEN THAN YOU THINK

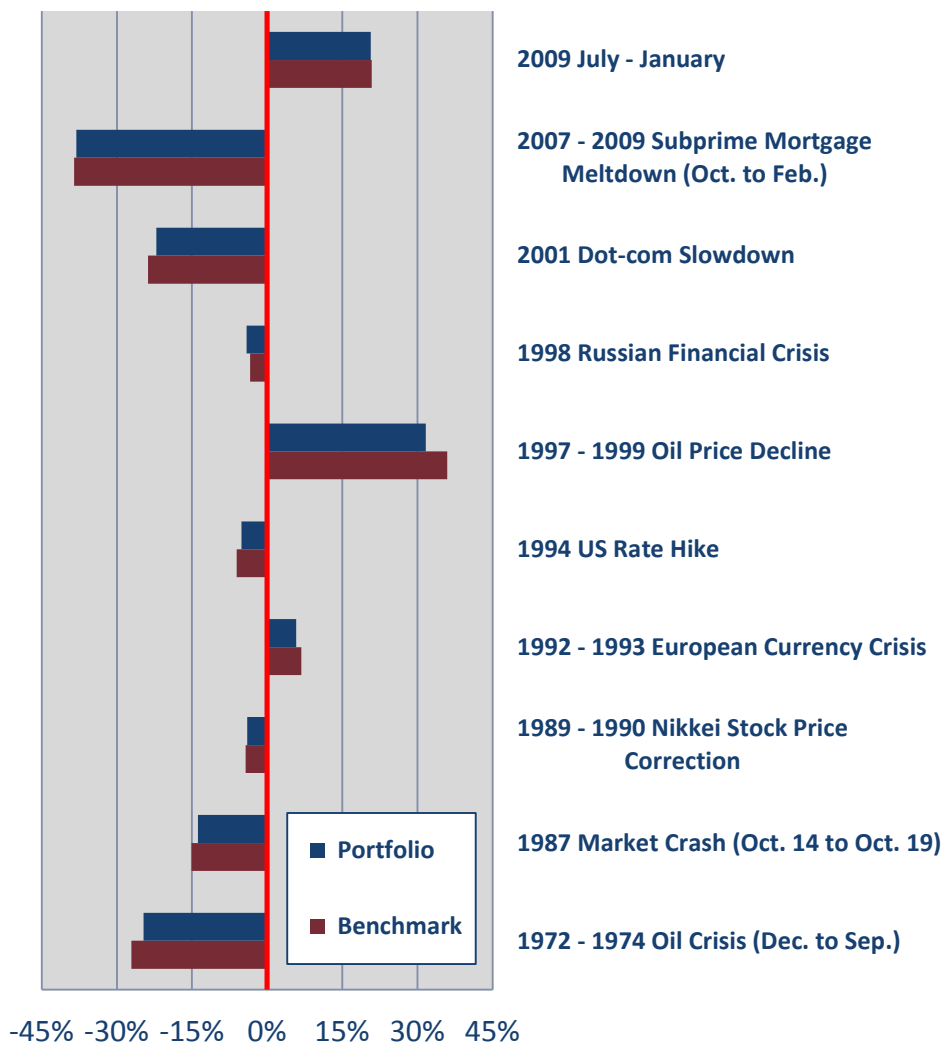


Average Max Drawdown in a Ten Year Period	-23%
Probability of Suffering a Drawdown of -30% in Any Ten Year Period	45%

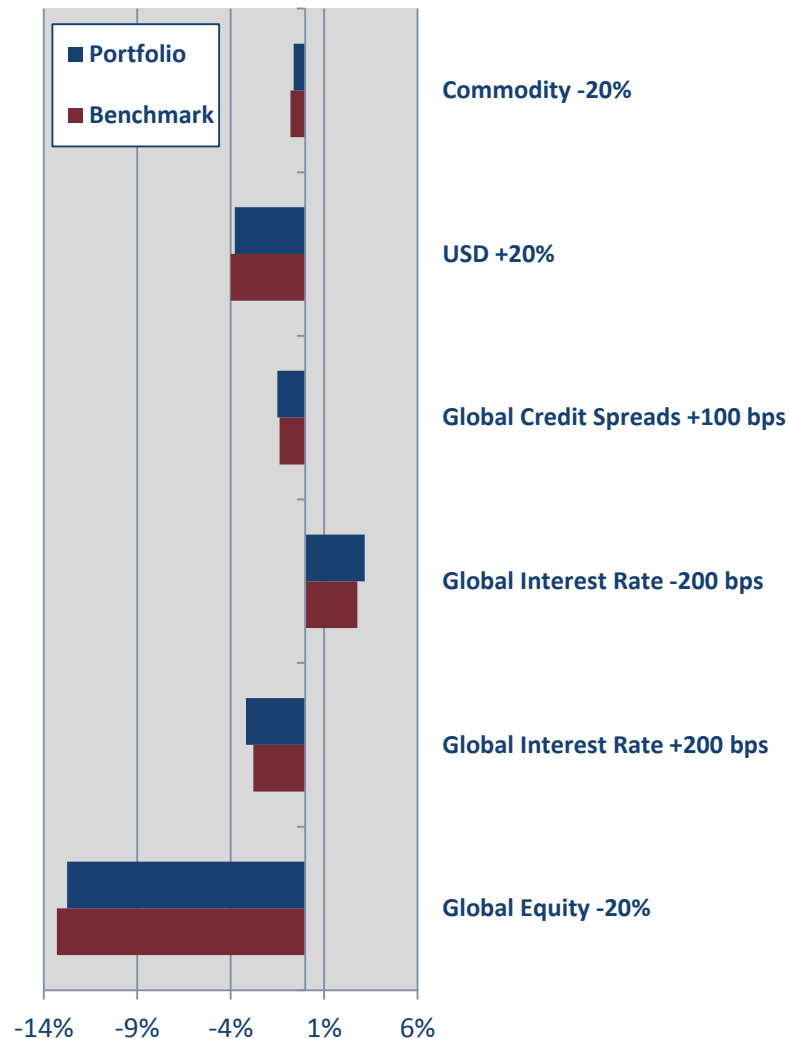
\*Typical pension fund risk equivalent asset allocation portfolio with ~14% ex-ante volatility.

# ESTIMATING FCERA TAIL RISK

## Tail Risk - Scenario Analysis

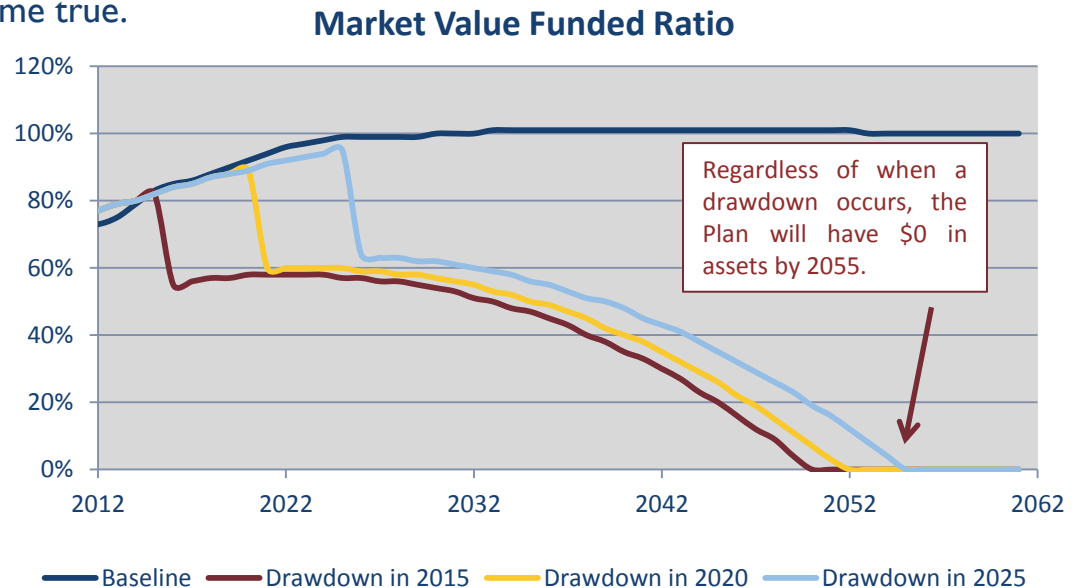


## Tail Risk - Stress Testing



## CAN FCERA AFFORD ANOTHER 2008?

- We can say with a reasonable degree of confidence that FCERA is likely to experience another large drawdown with the current allocation. But when?
  - 2015...Possibly?
  - 2020...Seems Reasonable?
  - 2025...Not that far-fetched?
- Assumptions:
  - County Contributions are capped at the current recommended amount (\$184 million/year<sup>1</sup>).
  - Investments earn the assumed rate of return of 7.75% every year except for one year with a 28% drawdown.
  - All other actuarial assumptions come true.
- Impact:
  - Future drawdowns severely impact funded status given the maturity of the Plan (negative cash flows – see page 7).



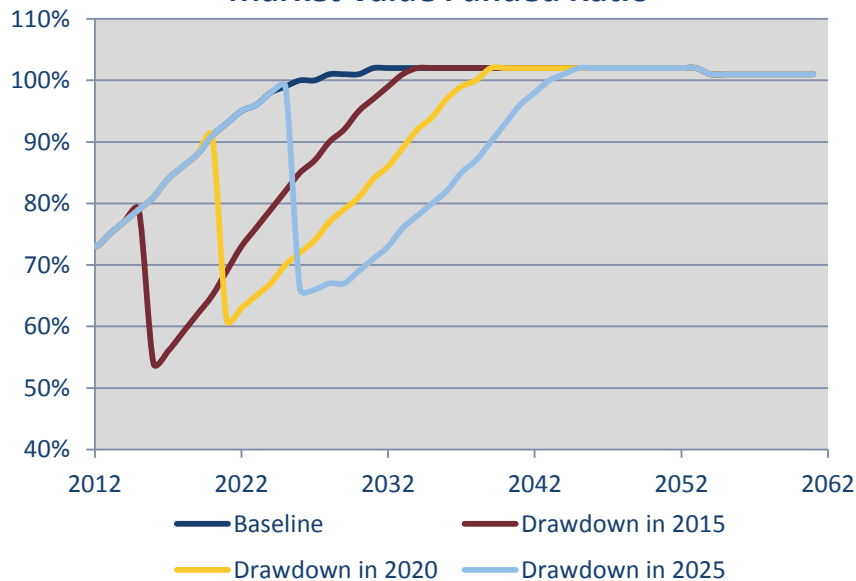
Note: Wurts & Associates is uncertain if the \$184 million contribution is in fact the maximum the County can contribute. We can update our analysis to reflect a higher maximum contribution rate if the Board prefers to alter this assumption.

<sup>1</sup> The recommended amount for the Plan year ending 6/30/2013, as determined in the 6/30/2011 actuarial valuation.

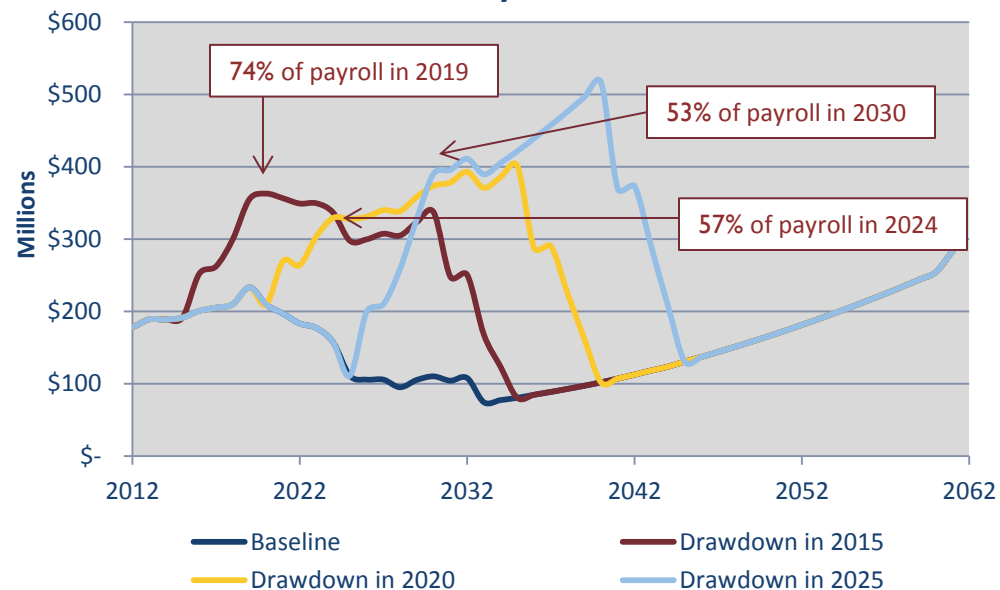
## SOLVENCY & DRAWDOWNS

- Assuming the County can meet all future recommended contributions, the Plan can still achieve fully funded status, albeit 10-20 years later.
- After all, any funded ratio can be repaired through higher capital contributions.
- Contributions are projected to reach as high as 70% of payroll in 2019 if the Plan experiences another 28% drawdown near or before 2015.
- The subsequent drawdowns all result in contributions as a percentage of payroll that are greater than the current level.

### Market Value Funded Ratio



### Annual County Contributions



## Compound Return

- 10 Years at 10% return produces an annualized return of **10%**

What would be the annualized return if on the 10<sup>th</sup> year the portfolio experiences a -30% return?

## The Importance of Limiting Drawdowns

- 9 years at 10% return plus a one year return of -30% produces an annualized return of **5.14%**



Its easy to focus on endpoints in terms of funded status/contributions, etc.

But there are other qualitative considerations to think about that can happen along the way:

1. To what extent does a near term event impact the County's ability to borrow in municipal markets?
2. To what extent do funding concerns impact the tax base or future growth prospects for the County?
3. To what extent does the health of the Pension impact employee recruitment, morale, and retention?

## SUMMARY: DRAWDOWNS

- We know that large drawdowns occur roughly once every ten years.
- When we encounter another drawdown event, FCERA can either:
  1. Increase County contributions (*may not be feasible*)
  2. Allow the Plan to eventually experience much higher contributions and much lower funded status (*may not be acceptable*)

*How can we structure the portfolio differently to mitigate large drawdowns?*

# PORTFOLIO CONSTRUCTION PROCESS

## PEER RISK: FRESNO VS. SACRS PLANS

- FCERA returns have been relatively similar to other SACRS Plans:

U.S. Equity: 10 Years	
Median of SACRS Counties:	5.8%
Standard Deviation:	0.46%
<b>FCERA:</b>	<b>5.9%</b>

Domestic Fixed Income: 10 Years	
Median of SACRS Counties:	6.9%
Standard Deviation:	0.86%
<b>FCERA:</b>	<b>6.8%</b>

International Equity: 10 Years	
Median of SACRS Counties:	6.5%
Standard Deviation:	0.69%
<b>FCERA:</b>	<b>6.5%</b>

Total Fund: 10 Years	
Median of SACRS Counties:	6.5%
Standard Deviation:	0.76%
<b>FCERA:</b>	<b>7.3%</b>



~68% of SACRS Counties had plan-level investment returns between 5.7% and 7.2%

- All Counties have employed the same method of portfolio construction, the same definition of diversification, and the same constrained minimum variance portfolio using an efficient frontier.
- The 0.76% standard deviation comprises differences in both asset allocation and manager selection.
- All of the time and energy spent managing managers, style tilts, administrative issues, etc., has resulted in remarkably little differentiation.

- Portfolios were constructed by optimizing asset classes to identify those mixes that maximized returns for a given level of risk, as defined by standard deviation.

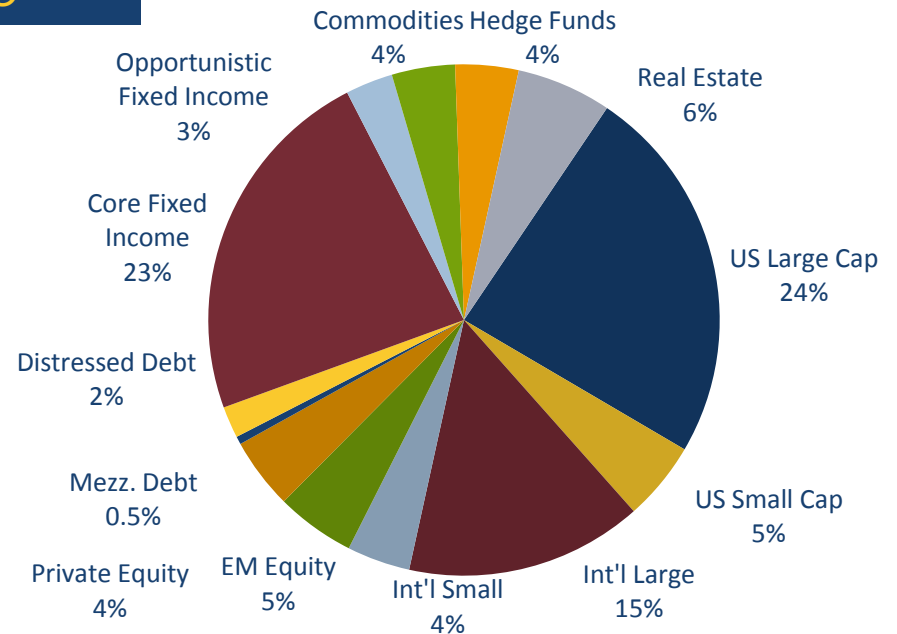
### Major inputs:

- Expected Return
  - Expected Standard Deviation
  - Expected Correlations
- 
- The underlying principles of Mean Variance Optimization (“MVO”) are sound... “Diversification is a free lunch.” However:
    - MVO requires an accurate prediction of expected returns, volatility (standard deviations), and correlations.
    - MVO assumes markets are normally distributed. (hint: they are not, more on this later)
    - MVO assumes correlations remain constant over time.

The result is that MVO is not an effective tool for modeling the devastating effects of drawdowns.

# FCERA CURRENT PORTFOLIO

	Current Policy <sub>1</sub>	CMA's (10 Yr)*
Large Cap US Equity	24	6.3
Small/Mid Cap US Equity	5	6.9
<b>Total Domestic Equity</b>	<b>29</b>	
International Large	15	8.0
International Small	4	8.3
Emerging Markets	5	9.6
<b>Total Int'l Equity</b>	<b>24</b>	
<b>Total Equity</b>	<b>53</b>	
US Core Fixed Income	19	2.0
Emerging Markets Debt - Local	3	5.7
TIPS	4	2.2
<b>Total Fixed Income</b>	<b>26</b>	
Commodities	4	4.3
Real Estate	6	5.6
<b>Total Real Assets</b>	<b>10</b>	
Liquid Alts/HFoF	4	5.4
Private Equity/VC	7	9.9
<b>Total Non-Public Investments</b>	<b>11</b>	
<b>Total Allocation</b>	<b>100</b>	



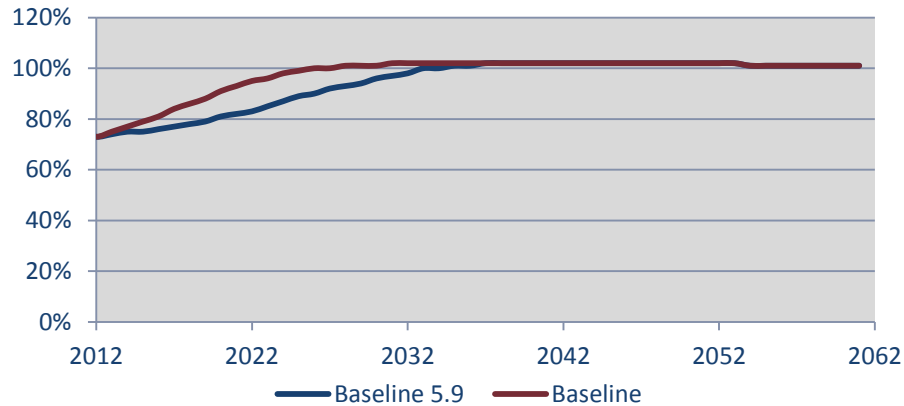
Fresno County ERA	
Expected 10 Year Return	
Mean Variance Optimizer Analysis	
Forecast 10 Year Return	5.9
Volatility (Standard Deviation)	10.8
Sharpe Ratio	0.30

\* See appendix for details regarding Wurts' Capital Market Assumptions.

- Wurts & Associates uses a 10 year time horizon, whereas the actuarial assumed rate covers the entire life of the Plan.
- Forecasting is difficult to begin with. However, we prefer a 10 year time frame because it is long enough for markets to correct themselves but short enough to use tangible data points.
- In Wurts' judgment it is reasonable to assume a lower rate of return for the next decade and a higher rate of return thereafter.
  - It is problematic to try and construct a portfolio that is projected to achieve 7.75% in the current low return environment. Doing so would require the Plan to assume an unacceptable level of risk.
  - It is Wurts' philosophy that FCERA should take less risk given the low return environment when risk-premia are less compensated (see Appendix for analysis of current valuation levels)

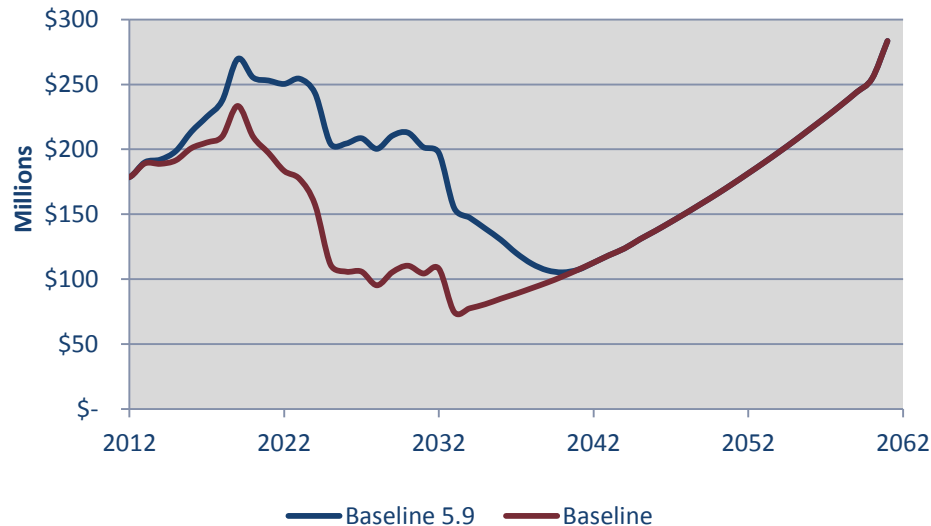
# IMPACT ON UNDERPERFORMING ASSUMED RATE

## Market Value Funded Ratio

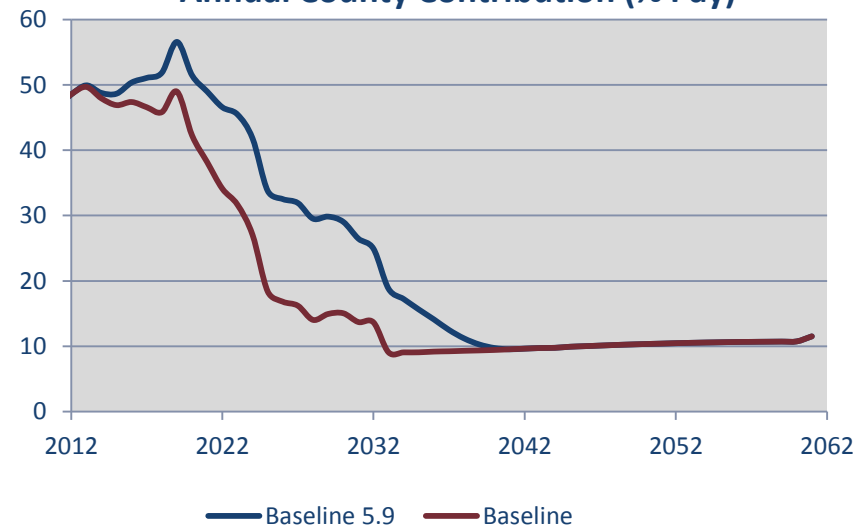


*Assumes the Plan's investments earn 5.9% for the next 10 years, and the actuarial assumed rate thereafter.*

## Annual County Contribution



## Annual County Contribution (% Pay)





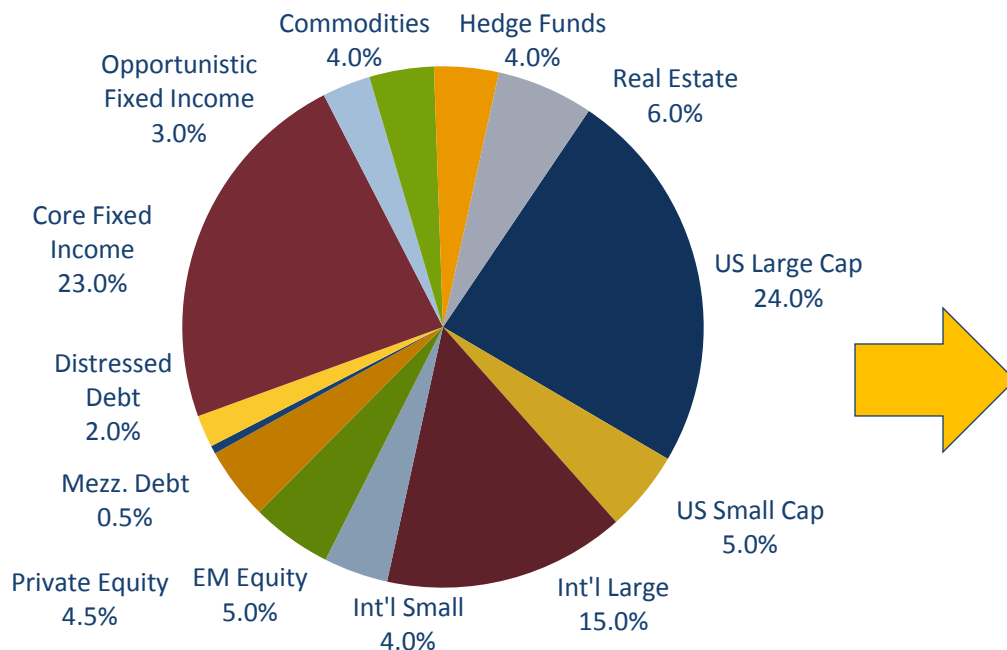
## S U M M A R Y

- I. The UAAL is the primary reason why County contributions are greater than 40% of payroll. The current UAAL is the result of the Plan's investments experiencing large drawdowns.
- II. The current portfolio was constructed using MVO, just like most other SACRS Plans.
- III. While MVO is a necessary tool in that it is a simple way of comparing different portfolios, it does not adequately address the risk of large drawdowns. Large drawdowns can threaten the financial viability of mature plans.
- IV. Inevitably, another tail event will occur in the future. When it does, the UAAL will be negatively affected, and the Plan will need to increase contributions to ensure sustainability. This risk needs to be factored into the asset liability review.

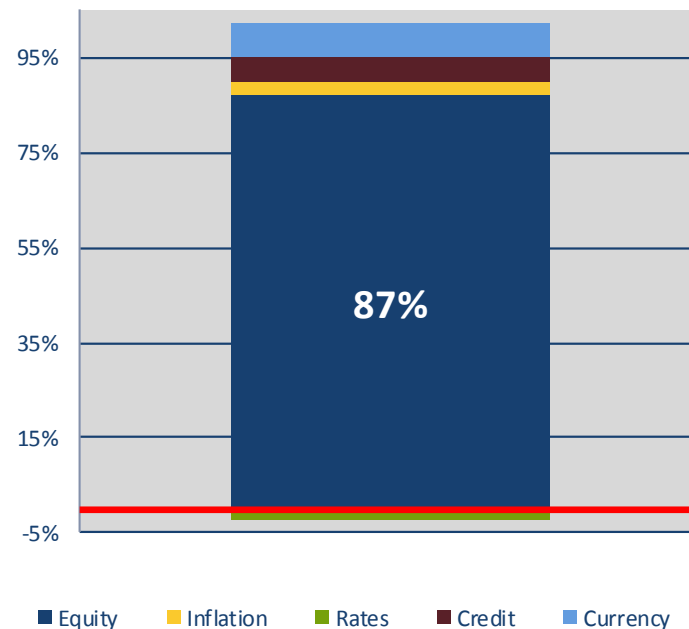
1. Understand the sources of risk.
2. “**Win by not losing**” – Mitigate large drawdowns.
3. Supplement MVO with other methods of forecasting portfolios:
  - Risk Decomposition
  - Economic Diversification
  - Stress-testing & Scenario Analysis
4. The alternative: **A Risk-Diversified Portfolio**

# DIVERSIFICATION OF RISKS

FCERA Existing Allocation



FCERA Risk Decomposition



Asset-diversified, but...

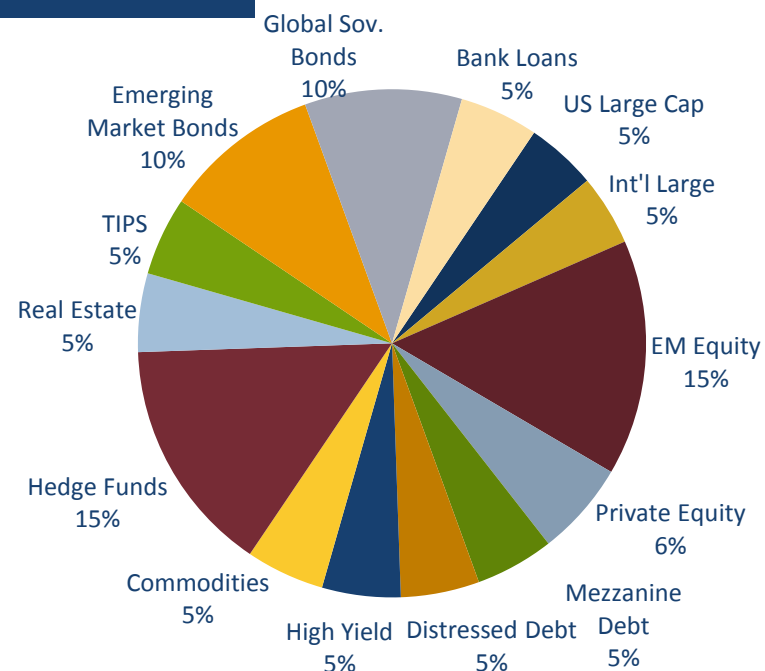
Risk diversified?

*Because many assets are inextricably tied to the risks embedded in global equity markets and that risk is greater than other type of risk, an MVO-constructed portfolio derives the majority of its risk from equities.*

- The MVO Portfolio was diversified by assets, but not risk factors.
- We propose a risk-diversified portfolio that is projected to achieve the same rate of return as the current portfolio.
- The key tenets of the risk-diversified approach:
  - Reduces the absolute level of expected volatility.
  - Diversified the sources of return (beta) to be more dependent on contractual cash flows, and less dependent on capital appreciation.
  - Effectively reduces equity risk.
  - This beta diversification makes the portfolio less susceptible to large drawdowns.

# THE RISK-DIVERSIFIED PORTFOLIO

	Risk-Diversified Portfolio	CMA's (10 Yr)*
Large Cap US Equity	4.5	6.3
<b>Total Domestic Equity</b>	<b>4.5</b>	
International Large	4.5	8.0
Emerging Markets	15	9.6
<b>Total Int'l Equity</b>	<b>19.5</b>	
<b>Total Equity</b>	<b>24</b>	
High Yield Fixed Income	5	4.9
Bank Loans	5	4.1
Global Bonds - Sovereign	10	2.2
Mezzanine Debt	5	5.9
Distressed Debt	5	5.9
Emerging Markets Debt - Local	10	5.7
TIPS	5	2.2
<b>Total Fixed Income</b>	<b>45</b>	
Commodities	5	4.3
Real Estate	5	5.6
<b>Total Real Assets</b>	<b>10</b>	
Hedge Funds	15	5.4
Private Equity/VC	6	9.9
<b>Total Non-Public Investments</b>	<b>21</b>	
<b>Total Allocation</b>	<b>100</b>	



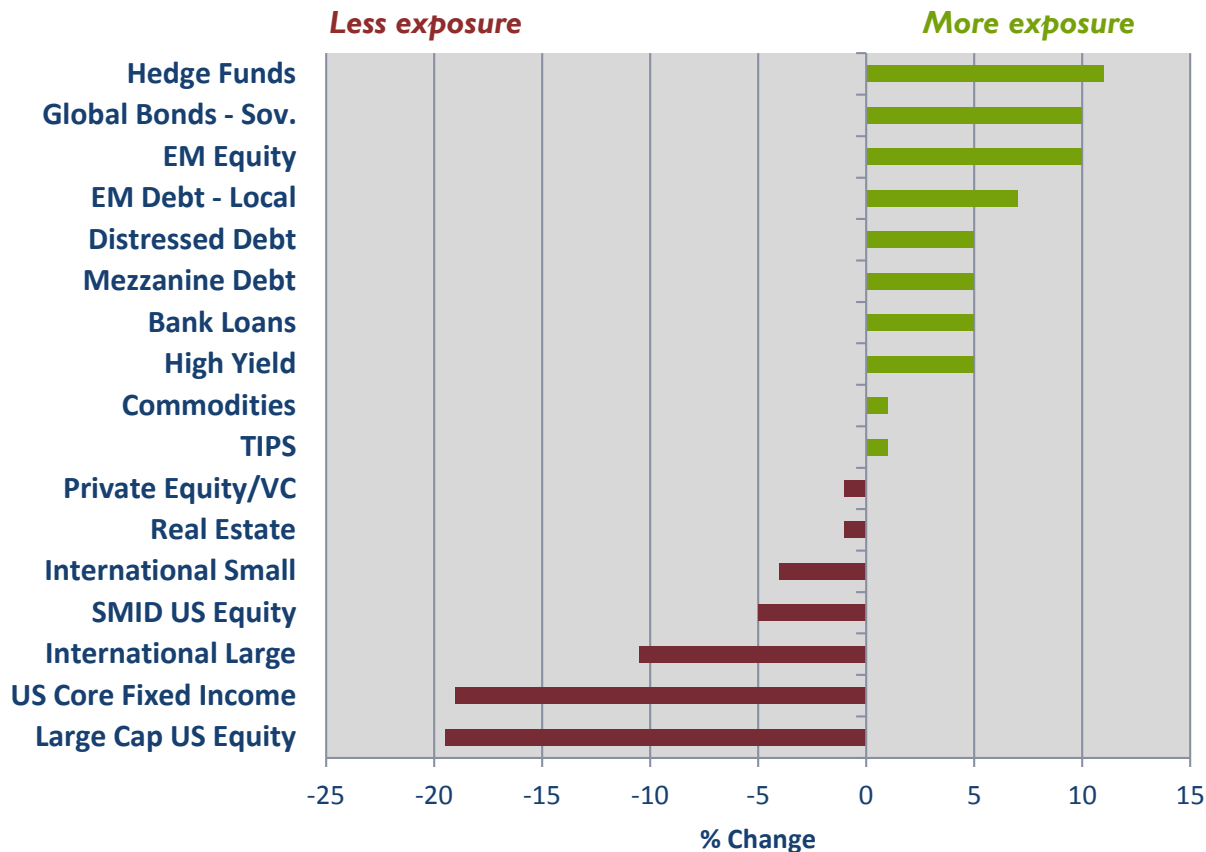
Risk-Diversified Portfolio	
Expected 10 Year Return	
Mean Variance Optimizer Analysis	
Forecast 10 Year Return	5.9
Standard Deviation	8.8
Sharpe Ratio	0.36

\* See appendix for details regarding Wurts' Capital Market Assumptions.

## A RELATIVE COMPARISON

- The new portfolio has the same expected return, but achieves a **19% reduction** in the expected volatility of returns.
- Some asset class exposures are eliminated completely. Likewise, the risk-diversified mix includes new asset classes.

### Relative to the current mix, the risk-diversified mix has:



#### New Asset Classes\*

- + Global Sovereign Bonds
- + High Yield
- + Bank Loans
- + Mezzanine Debt
- + Distressed Debt

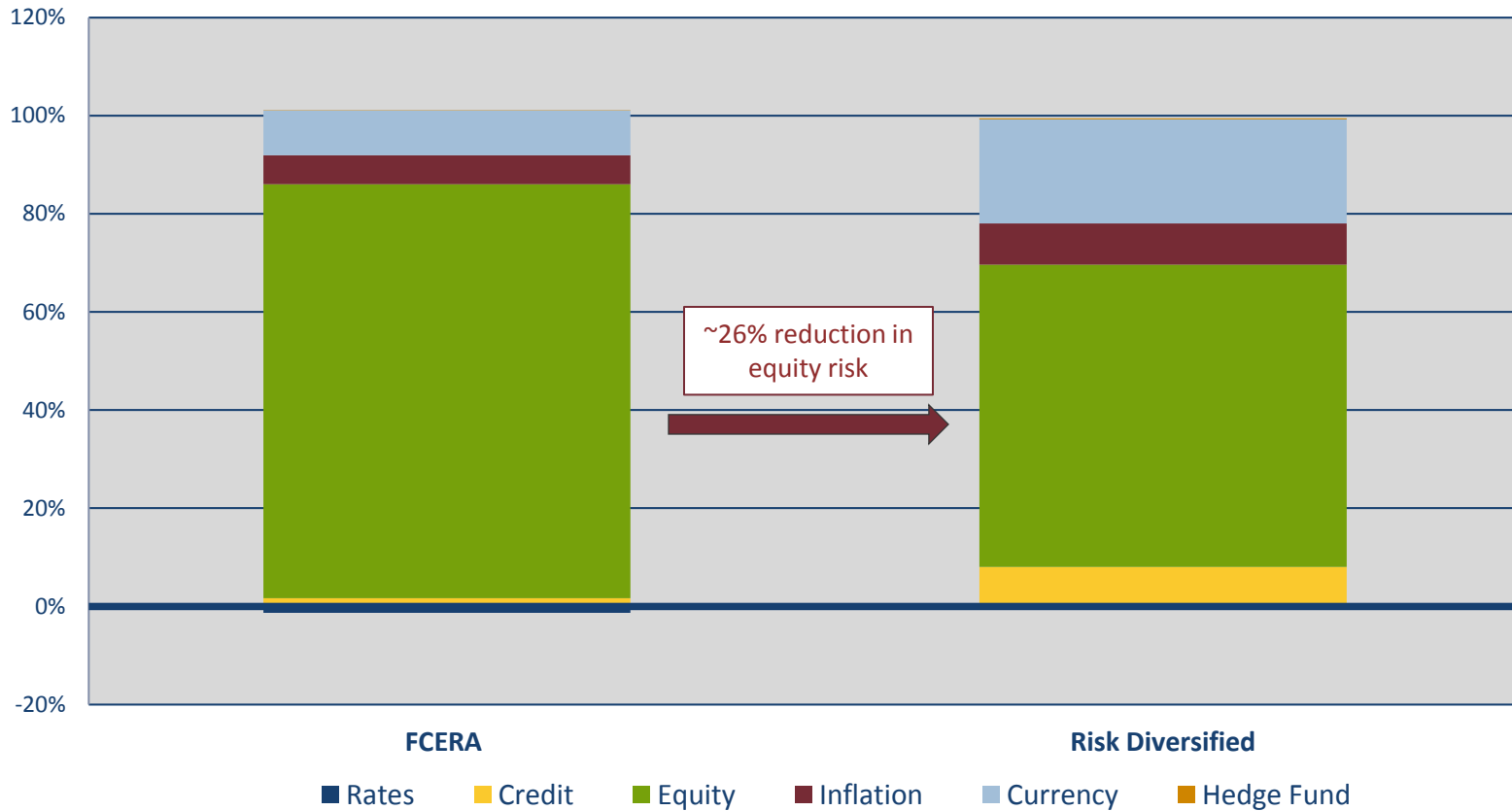
#### Eliminated Asset Classes

- U.S. Core Fixed Income
- SMID Equity
- International Small Cap

\* Note that this distinction applies to the policy allocation. FCERA has exposure to these asset classes, either as a subset of the private equity allocation, or as a result of the underlying tactical allocations made by investment managers.

# DIVERSIFICATION OF RISK FACTORS

Risk Contribution by Risk Factor



Because of the need to earn a reasonable return we still need a significant exposure to the equity risk factor. Still, the direct exposure to equities is meaningfully reduced.

## CAN WE FURTHER MITIGATE EQUITY RISK?

### Current Mix

- Asset-diversified but not risk-diversified.
- A good portfolio if economic prosperity continues indefinitely, but susceptible to large drawdowns because of high equity exposure.

### Risk-Diversified Mix

- Achieves greater diversification of risk factors.
- Should mitigate the extent of large drawdowns by reducing the equity risk.

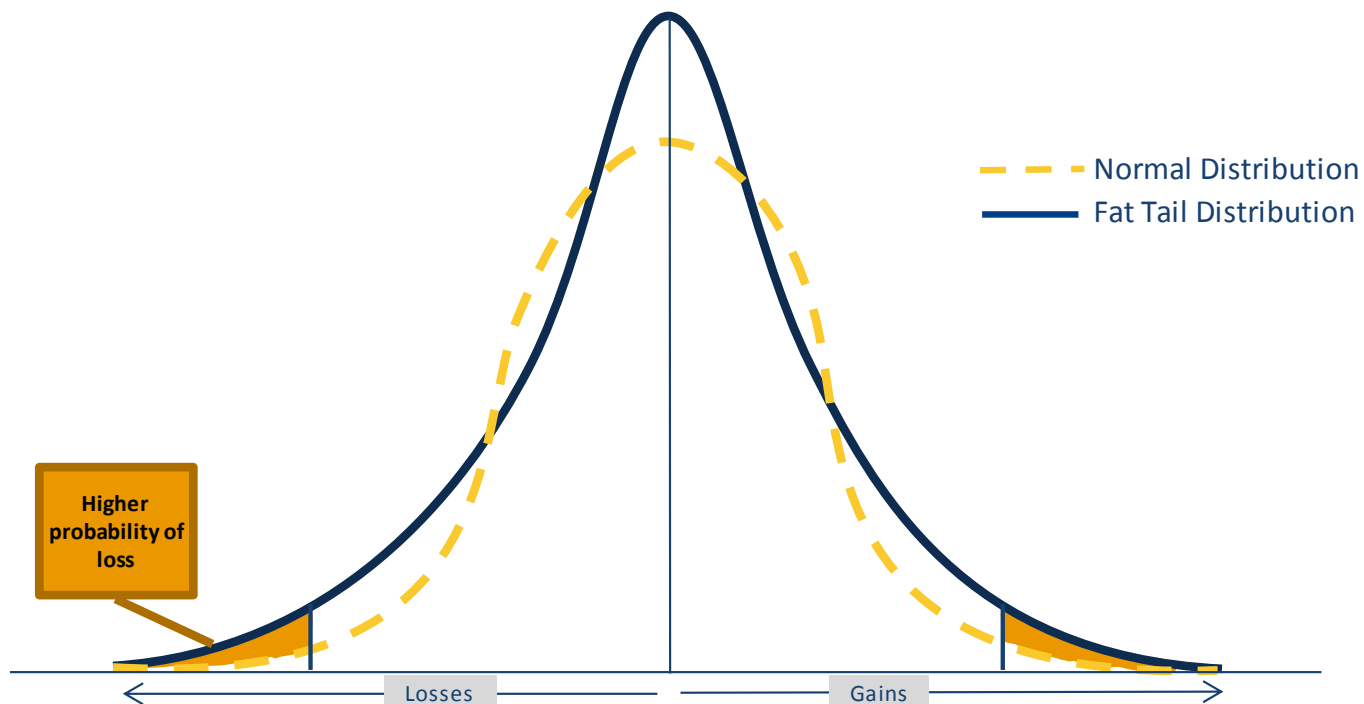
### Risk-Diversified + Tail Risk Hedge

- Overlay the risk-diversified mix with a dedicated tail risk hedging program.
- Further mitigates the negative effects of large drawdowns.



## WHAT IS TAIL-RISK?

Tail-risks are extreme events which translate into financial market moves of at least **three standard deviations** from their mean.



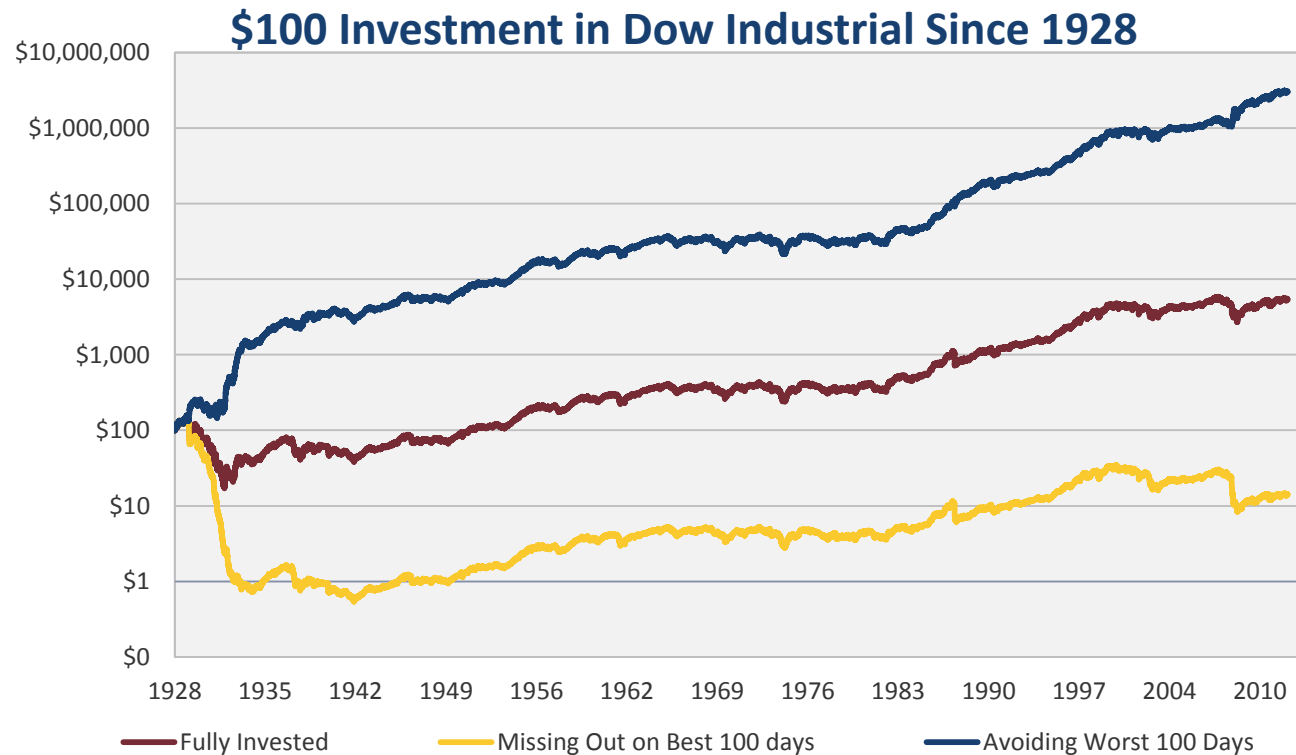
Dow Jones Industrial Average 1928 - 2012 (21,130 Trading Days)

Daily Movement +/-	Implied Frequency of Occurrence	Actual Occurrence	Error Factor
>3%	57 days	1027 days	18 X
>4%	1 day	493 days	493 X
>8%	1 in 1,003,561,397,831,590 yrs.	48days	Large

Source: Dow Jones, Bloomberg, Wurts

From 1928 – 2012, a \$100 investment in the Dow Jones Industrial would have:

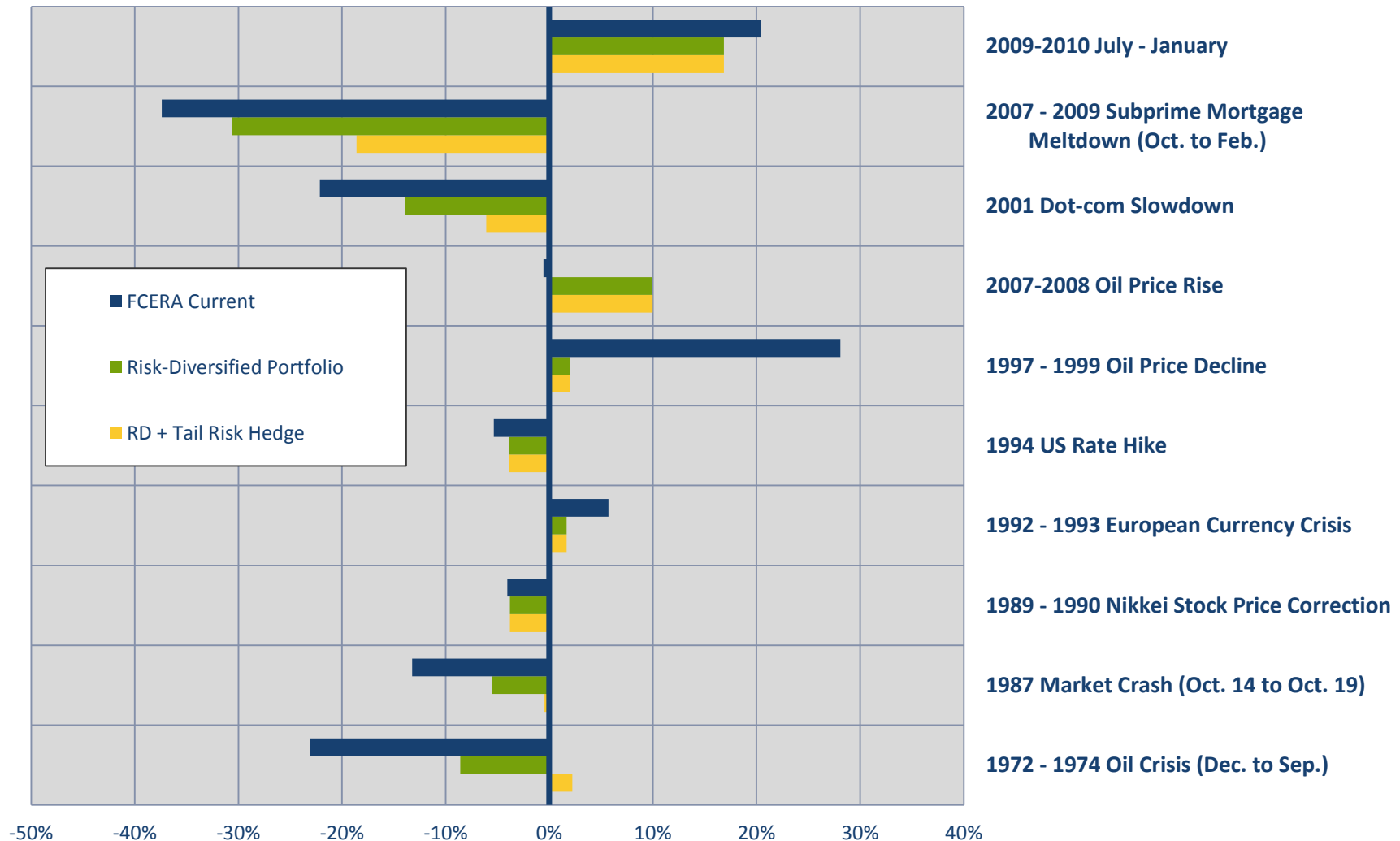
- Increased by 5,349% by staying full invested throughout
- Decreased by 99.9% by missing the best 100 days
- Increased by 14,218% by avoiding the 100 worst days



- Hedging is best thought of as insurance (reducing risk against a negative event)
  - Does not prevent the negative event, but reduces the event's impact
  - Occurs both in everyday life and in investment portfolios
    - Housing insurance
    - Car insurance
    - Life insurance
    - Tail-risk hedging
- Investment hedging is more complicated:
  - When to hedge (the premium is constantly changing)
  - Which instruments to use (asset class correlations changing)
  - What type of hedge
- Tail-risk hedging requires an experienced specialist to manage
  - Amount of information can be overwhelming
  - Experience is necessary to know when to enter and exit a hedge
  - Knowledge of what instruments and types of hedges to execute

# TAIL-RISK: SCENARIO ANALYSIS

## Tail Risk - Scenario Analysis


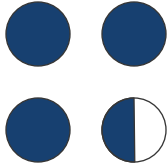
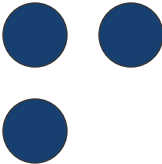
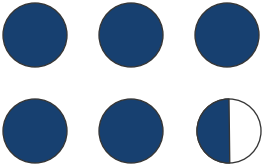


# TAIL-RISK: STRESS TESTS




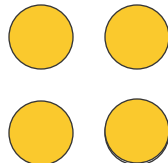
Tail Risk - Stress Tests



## FCERA Portfolio

<i>Falling Growth</i> <i>Rising Inflation</i> 	<i>Rising Growth</i> <i>Rising Inflation</i> 
<i>Falling Growth</i> <i>Falling Inflation</i> 	<i>Rising Growth</i> <i>Falling Inflation</i> 

## Diversified Risk Portfolio

<i>Falling Growth</i> <i>Rising Inflation</i> 	<i>Rising Growth</i> <i>Rising Inflation</i> 
<i>Falling Growth</i> <i>Falling Inflation</i> 	<i>Rising Growth</i> <i>Falling Inflation</i> 

By holistically examining how different assets behave in different economic regimes, we can build a portfolio that relies less on economic growth and prosperity for success.

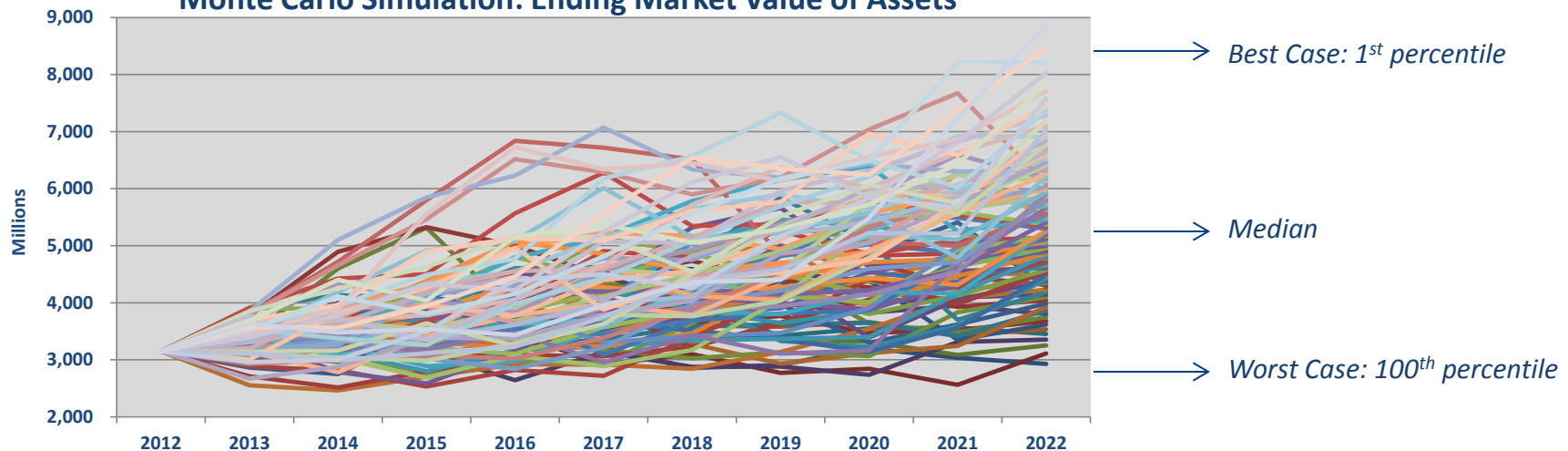
This is achieved not only through a focus on cash-flows, but also through greater geographic diversification. The portfolio is less directly impacted by the ebbs & flows of the U.S. economy.

# STOCHASTIC MODELING

# AN INTRODUCTION TO STOCHASTIC MODELING

- Wurts & Associates partnered with Winklevoss Technologies to generate forecasts of FCERA's key metrics.
- The model incorporates:
  - Wurts & Associates' 2013 capital market assumptions
  - Liabilities as calculated by Segal.
  - FCERA's contribution & benefits policies
- By compiling the results, we can compare the 1<sup>st</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, & 100<sup>th</sup> percentile outcome for each year, for each of the three strategies under consideration, with 5,000 independent trials.
- **An important caveat:** *Each trial is a simulated random outcome; the randomness is determined by a normal distribution curve. As we have previously discussed, while this may help us determine a “most likely outcome”, it understates the magnitude or probability of tail risk.*

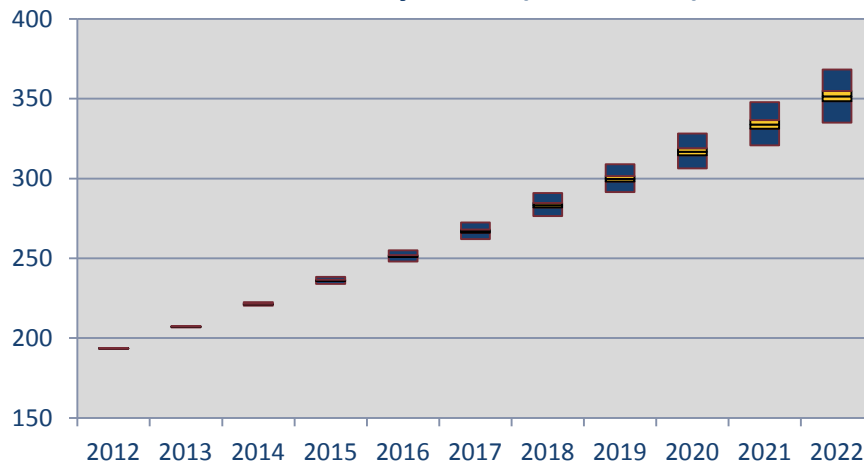
**Monte Carlo Simulation: Ending Market Value of Assets**



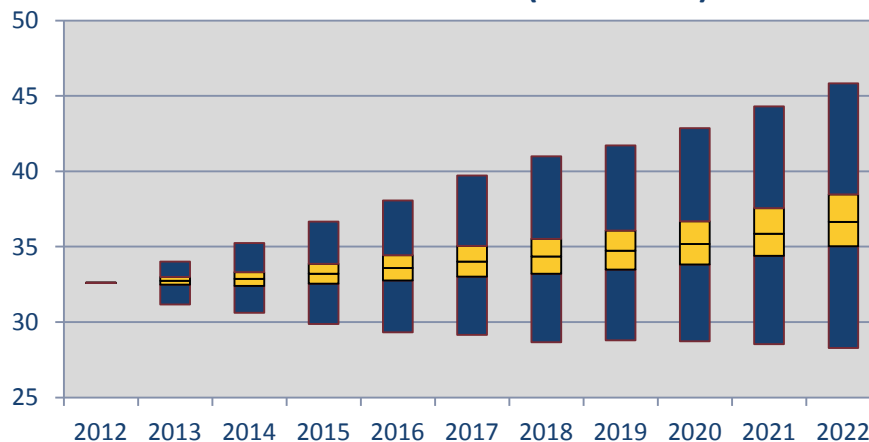


# STOCHASTIC MODELING

Benefit Payments (in millions)



Member Contributions (in millions)



- Regardless of the asset allocation, benefit payments are expected to increase.
- Benefit payments were \$193.5 million for the 2012 plan year, \$13.5 million more than the prior year.
- Depending on inflation and demographics, benefits are expected to be between \$341 & \$373 million in 2021 (roughly double the current levels).
- Member contributions are also independent of the asset allocation.
- Member contributions were \$32.6 million for the 2012 Plan year and \$32.3 million for the 2011 Plan year.
- The potential variance in member contributions is driven by future annuity costs as well as final year compensation (refer to slide 7 for the contribution policy).



# STOCHASTIC MODELING: RESULTS

5 Year Forecast (2017)		FCERA Current Portfolio	Risk-Diversified Mix	Difference (\$)	Difference (%)	Risk-Diversified + Tail Risk Hedge	Difference (\$)	Difference (%)
Annual County Contributions	Median	\$216	\$216	\$0	0%	\$216	\$0	0%
	Best Case	\$0	\$0	\$0	0%	\$0	\$0	0%
	Worst Case	\$429	\$375	(\$54)	-13%	\$336	(\$93)	-22%
Actuarial Funded Status	Median	80%	80%	n/a	0%	80%	n/a	0%
	Best Case	141%	133%		-8%	132%		-9%
	Worst Case	39%	49%		10%	57%		18%

10 Year Forecast (2022)		FCERA Current Portfolio	Risk-Diversified Mix	Difference (\$)	Difference (%)	Risk-Diversified + Tail Risk Hedge	Difference (\$)	Difference (%)
Annual County Contributions	Median	\$236	\$232	(\$4)	-2%	\$230	(\$6)	-3%
	Best Case	\$0	\$0	\$0	0%	\$0	\$0	0%
	Worst Case	\$594	\$536	(\$58)	-10%	\$498	(\$96)	-16%
Actuarial Funded Status	Median	85%	86%	n/a	1%	86%	n/a	1%
	Best Case	245%	189%		-56%	184%		-61%
	Worst Case	43%	49%		6%	53%		10%
Present Value of Future County Contributions (10 years)	Median	\$1,676	\$1,676	\$0	0%	\$1,675	(\$1)	0%
	Best Case	\$627	\$658	\$31	0%	\$662	\$35	0%
	Worst Case	\$2,694	\$2,513	(\$181)	-7%	\$2,412	(\$282)	-10%

## County Contributions:

- The median outcomes are relatively consistent across all three portfolios.
- The worst-case scenarios are vastly improved, reducing the maximum potential contribution by 10-20%.

## Funded Status:

While the actuarial funded status forecasting does differ under different investment portfolios, there are two reasons why it does not illustrate the range of outcomes effectively:

- A poor investment return is amortized through actuarial smoothing policies.
- A poor investment return is subsidized through higher contributions.

Still, we do observe some differences in the range of outcomes under each scenario.

- Under worst-case scenarios, funded status improves anywhere from 8-17%.
- The median outcome under the different portfolios is relatively homogeneous.
- Because the risk-diversified portfolios benefit less from very large equity rallies, we do sacrifice some upside.

## CONCLUSION & NEXT STEPS

## PROS & CONS

Issue	FCERA Current Portfolio	Risk-Diversified Portfolio	Risk-Diversified Portfolio with Tail-Risk Hedge
Expected return	5.9%	5.9%	6.4% (8.5% increase likely offset by hedging costs)
Standard deviation of returns	10.83%	8.77% (19% reduction)	8.15% (25% reduction)
Diversification	Asset-diversified	Risk-Diversified. Reduction in equity-risk, focus on cash-flow investments, and greater geographic diversification	Risk-Diversified. Reduction in equity-risk, focus on cash-flow investments, and greater geographic diversification
Up-Market Capture	Strong performance in bull markets.	The portfolio should perform well, but not to the extent of the current portfolio.	The portfolio should perform well, but not to the extent of the current portfolio.
Down-Market Capture	Large drawdowns in bear markets.	Underperform by less than current portfolio.	The portfolio may experience some underperformance but the magnitude of drawdowns will be materially reduced.
Employer Contributions	Very volatile	Range of potential outcomes is reduced. The worst-case contribution level is reduced by 15% in 5 years and 11% in 10 years.	Range of potential outcomes is reduced. The worst-case contribution level is reduced by 20% in 5 years and 19% in 10 years.
Peer Risk	Minimal. Portfolio is relatively consistent with other SACRS counties.	Significant. Board may be uncomfortable with a new approach, which is materially different from peers. Risk of "failing unconventionally."	Significant. Board may be uncomfortable with a new approach, which is materially different from peers. Risk of "failing unconventionally."
Funded Status	Very volatile	The worst-case funded status expected to improve by 12% in 5 years and 8% in 10 years.	The worst-case funded status is expected to improve by 17% in 5 years and 15% in 10 years.

## NEXT STEPS

June 2013 Meeting

Late 2013?

Continue with an  
MVO Portfolio

Asset Allocation Review

*Revisit the current portfolio relative to 2013 assumptions and efficient frontier. Likely to result in modest changes in allocations and potentially new asset classes.*

- Revised Investment Policy
- Potential Manager Searches for new asset classes.
- Rebalancing as needed.

Shift from an  
MVO  
portfolio to a  
risk-based  
approach?

*Do the benefits  
outweigh the risk of  
being materially  
different from peers?*

June – September 2013

Move towards a Risk-  
Diversified Portfolio

Further  
Education on  
Risk-Diversified  
Portfolio & Tail  
Risk Hedging

*Wurts & Associates would propose further education regarding how a risk-diversified approach works, with particular emphasis on various tail risk hedging programs.*

Asset  
Allocation  
Review

*Modest adjustments to the risk-diversified mix to incorporate liquidity analysis.*

- Revise Investment Policy
- Manager searches for new asset classes.
- Rebalancing as needed.

# APPENDIX

## **ASSET ALLOCATION IMPLEMENTATION**

**Fresno County Employees' Retirement Association**

**April 2, 2014**



SEATTLE | 206.622.3700  
LOS ANGELES | 310.297.1777  
[www.wurts.com](http://www.wurts.com)



## EXECUTIVE SUMMARY

In December 2013 the Board approved a more risk-diversified allocation (Mix B) following the 2013 Asset Liability Study. The new Investment Policy Statement (“IPS”), reflecting the updated asset allocation, was approved at the mid-March 2014 meeting.

In implementing the new Policy, the most immediate task is to **minimize total risk** by reducing equities. However, managers have not yet been identified for the new mandates that will receive the proceeds from the equity liquidation.

- The Hedge Fund program will be reviewed mid/late 2014.
- Infrastructure and Private Equity/Credit will fund over a number of years even after the managers are selected.

To affect the reduction in equity risk and minimize cost, Wurts & Associates recommends parking the assets for the unfunded Hedge Fund\*, Infrastructure and Private Credit in a Barclays Aggregate Index Fund.

Unfunded Private Equity, as well as a portion of unfunded Hedge Fund\*, can be parked with the current active domestic equity managers, reducing the amount that would need to be liquidated.

\* The portion of unfunded Hedge Fund parked in equity and fixed income reflects Hedge Fund’s sensitivity to each of those asset classes.

# REBALANCE EQUITY RISK TO NEW POLICY

To bring down the equity risk exposure of the Plan:

- 1) Reduce the exposures to Large Cap, Small Cap and International Equity.
- 2) Additional assets to existing mandates – EM Equity, TIPS and EM Debt. (Brings allocations to target)
- 3) Fund a Barclays Aggregate Index Fund to “park” assets for unfunded Hedge Fund, Infrastructure and Private Credit

As a result of these trades, the broad asset classes will be at or near the new target allocations.

	Current	Target (adjusted for unfunded)	Rebalance (%)	New Allocation	Difference
Large Cap Equity	25.0	14.0	-8.2	16.8	
Small Cap Equity	5.6	3.0	-2.1	3.5	
Total Domestic Equity	30.6	17.0	-10.3	20.3	
<i>Unfunded Private Equity</i>		2.5			
<i>20% Unfunded Hedge Fund</i>		0.8			
Adjusted Domestic Equity	30.6	20.3	-10.3	20.3	0.0
International Equity	21.5	12.0	-9.5	12.0	0
EM Equity	4.1	7.0	2.9 #2	7.0	0
<b>Total Equity</b>	<b>56.2</b>	<b>39.3</b>	<b>-16.9</b>	<b>39.3</b>	<b>0.0</b>
Core Plus - Current Managers	21.3			21.3	21.3
New Fixed Income (HY, Global, BL, Credit)		22.0		0	-22.0
<i>80% Unfunded Hedge Fund</i>		3.4			
<i>Unfunded Infrastructure</i>		3.0			
<i>Unfunded Private Credit</i>		6.5			
<i>Passive BC Agg Mandate</i>		12.9	12.6 #3	12.6	-0.3
TIPS	1.5	4.0	2.5	4.0	0
EMD	3.2	5.0	1.8 #2	5.0	0
<b>Total Fixed Income</b>	<b>26.0</b>	<b>43.9</b>	<b>16.9</b>	<b>42.9</b>	<b>-1</b>
Real Estate	4.5	5.0		4.5	-0.5
Commodities	3.2	3.0		3.2	0.2
Funded Private Equity	3.5	3.5		3.5	0
Funded Private Credit	1.5	1.5		1.5	0
Funded HF	3.8	3.8		3.8	0
Cash	1.3	0.0		1.3	1.3
<b>Total Alternatives</b>	<b>17.8</b>	<b>16.8</b>	<b>0</b>	<b>17.8</b>	<b>1.0</b>
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>0</b>	<b>100.0</b>	<b>0</b>

### Equities:

- The current lineup will remain intact as each managers' allocation is reduced on a pro rata basis.
- Anticipate an in-depth review of the domestic equity program once other allocations have been met.

### Fixed Income:

- Eaton Vance and IFM bank loans finals presentations (April 2014).
- The Current Core Plus Allocation (21.3%) is managed by three firms. Wurts' Manager Research Group is evaluating the suitability of these managers to fill the High Yield, Global Sovereign, and Credit allocations (May 2014)
- The assets that are currently in Core Plus will be used to fund these new mandates (total of 22%).

### Private Markets:

- Hedge Fund program will be reviewed in the second half of 2014.
- Additional commitments to Private Equity and Private Credit to be funded over the next several years.
- Consideration of active management in Commodities allocation (late 2014).

# TRACKING ERROR ANALYSIS

# TRACKING ERROR ANALYSIS

*Definition: The standard deviation of the difference between the rate of return of a portfolio and its benchmark.*

Active management will create tracking error.

In addition, using broad benchmarks for the Plan's specific asset class mandates will create tracking error due to different underlying asset class exposures than the broad benchmarks.

Wurts & Associates expects the most tracking error in Hedge Funds and Fixed Income and the least in Domestic Equities.

FCERA Tracking Error Analysis					
Asset Class	Target Allocation	% of Asset Class	Weight in Benchmark	Over/Underweight	Benchmark
<b>Domestic Equities</b>	<b>17%</b>	<b>100%</b>	<b>100%</b>		<b>Russell 3000 Index</b>
Large Cap	14%	82%	92%	-	Russell 1000
Small/Mid Cap	3%	18%	8%	+	Russell 2000
<b>International Equities</b>	<b>19%</b>	<b>100%</b>	<b>100%</b>		<b>MSCI ACWI ex US Index</b>
International Large	9%	47%	70%	-	MSCI EAFE
International Small	3%	16%	10%	+	S&P Developed ex US Small Cap
Emerging Markets	7%	37%	20%	+	MSCI Emerging Mkts
<b>Fixed Income</b>	<b>31%</b>	<b>100%</b>	<b>71%</b>		<b>Barclays Global Aggregate Index</b>
US Credit Fixed Income	5%	16%	17%	=	Barclays US Credit
High Yield Fixed Income	5%	16%	0%	+	Barclays US Corporate High Yield
Bank Loans	5%	16%	0%	+	Credit Suisse Leveraged Loan
Global Sovereign	7%	23%	51%	-	Barclays Global Trsy Ex US Hdg
Emg Markets Debt Local	5%	16%	3%	+	JPM EMBI Global Diversified
TIPS	4%	13%	0%	+	Barclays US Treasury US TIPS
<b>Real Assets</b>	<b>11%</b>				
Commodities	3%				DJ UBS Commodity Index
Real Estate	5%				NCREIF ODCE Index
Infrastructure	3%				NCREIF ODCE Index
<b>Alternative Investments</b>	<b>22%</b>				
Hedge Funds	8%				20% RU 3000 / 80% BC Agg*
Private Equity	6%				Russell 3000 + 250 bps
Private Credit	8%				Barclays Aggregate + 250 bps
<b>Total</b>	<b>100%</b>				
* The uninvested portion of HFs is benchmarked against the weighted return of 20% Russell 3000 and 80% Barclays Aggregate, while the invested portion is benchmarked against the HFRI FOF Composite Index.					

## TRACKING ERROR - EQUITIES

Minimal historical tracking error between the Domestic Equity Portfolio and the Russell 3000 Index

- The underweight to Large Cap does not create much tracking error.

	<u>Russell 3000</u>	<u>FCERA Domestic EQ Portfolio</u>
Annualized Return:	12.0%	12.1%
Standard Deviation:	15.6%	15.6%
Sharpe Ratio:	0.62	0.62
<b>Historical Tracking Error:</b>	<b>0.13%</b>	

Historical Data since January 1979 (first common date of indices)

FCERA Domestic EQ Portfolio targets 92% Large Cap and 8% Small Cap.

Moderate historical tracking error between the International Equity Portfolio and the MSCI ACWI ex US Index

- Relative to the benchmark, the Plan's underweight to International Large Cap in favor of International Small Cap and Emerging Markets will create tracking error.

	<u>MSCI ACWI ex US</u>	<u>FCERA Intl EQ Portfolio</u>
Annualized Return:	6.1%	6.9%
Standard Deviation:	17.8%	17.8%
Sharpe Ratio:	0.21	0.26
<b>Historical Tracking Error:</b>	<b>2.04%</b>	

Historical Data since July 1989 (first common date of indices)

FCERA Intl EQ Portfolio targets 70% Intl Large Cap, 10% Intl Small Cap and 20% Emerging Markets.

## TRACKING ERROR – FIXED INCOME

Significant historical tracking error between the Fixed Income Portfolio and the Barclays Global Aggregate Index

- Over/underperformance of the benchmark will be driven in large part by the difference in the composition of the Fixed Income Portfolio and its benchmark.
- The Barclays Global Aggregate Index comprises of investment grade issues only (vs. high yield) and does not include floating rate instruments (vs. bank loans) and inflation-linked bonds (vs. TIPS).
- However, the Fixed Income Portfolio is expected to have better risk-adjusted returns relative to the Index.**

	<u>BC Global Aggregate</u>	<u>FCERA FI Portfolio</u>
Annualized Return:	5.5%	6.7%
Standard Deviation:	5.7%	4.7%
Sharpe Ratio:	0.54	0.91
<b>Historical Tracking Error:</b>	<b>5.30%</b>	

Historical Data since May 1997 (first common date of indices)

FCERA FI Portfolio targets 12.9% TIPS; 16.1% each US Credit, High Yield, Bank Loans, EMD; and 22.6% Global Sovereign.

<b>BC Global Agg Composition as of 12/31/13</b>		
<b>Sovereign</b>		<b>53.6</b>
	Developed	51.0
	EM	2.6
<b>Govt-related</b>		<b>13.4</b>
<b>Corporates</b>		<b>17.2</b>
	Inv grade	17.2
	Below Inv grade	0.0
	EM	0.0
<b>Securitized</b>		<b>15.8</b>
	ABS	0.2
	CMBS	0.5
	Covered	0.8
	MBS	14.3
<b>Total</b>		<b>100.0</b>

## TRACKING ERROR – HEDGE FUNDS

Significant historical tracking error between Hedge Fund Portfolio and the HFRI Fund of Fund Composite Index

- The Hedge Fund Portfolio is defined as 20% Russell 3000 Index and 80% Barclays Aggregate Index, reflecting the equity beta of the HFRI FoF Composite Index. The 20/80 weighted index will be used to benchmark Unfunded Hedge Fund as defined in the IPS.
- The 20/80 weighted index does not reflect the underlying composition of the HFRI FoF Composite, creating the tracking error.

	<u>HFRI FOF Composite</u>	<u>FCERA Hedge Fund Portfolio</u>
Annualized Return:	7.3%	7.3%
Standard Deviation:	5.7%	4.4%
Sharpe Ratio:	0.86	1.11
<b>Historical Tracking Error:</b>	<b>5.54%</b>	

Historical Data since January 1990 (first common date of indices)