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New Mexico Legislative Council Service

Fiduciary Review of the

Public Employees Retirement Association

February 28, 2010

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TABLE OF CONTENTS

- Appendix A – Examples of Board Responsibilities for a Board Charter
- Appendix B – Examples of Responsibilities for Individual Board Members for a Board Member Position Description
- Appendix C – Useful Reports for an Investment Committee
- Appendix D – Sample CIO Position Description
- Appendix E - Sample Accountability Matrix for Key Investment Responsibilities
- Appendix F – Use of Third Party Marketers/Placement Agents by PERA
- Appendix G – List of Interviews and Documents Reviewed

Introduction

The State of New Mexico Legislative Council Service (LCS) and the State Board of Finance (BOF) retained Ennis, Knupp & Associates, Inc. (EnnisKnupp) to conduct an independent operational and fiduciary review of the governance, organizational structure, current policies, procedures, and practices of the Public Employees Retirement Association (PERA). EnnisKnupp, an independent consulting firm that specializes in reviewing investment portfolios and governance frameworks, was selected through a competitive bidding process. EnnisKnupp has extensive experience working with public retirement systems on the topics outlined in the scope of work section, contained in the request for proposal.

Purpose

LCS sought an independent evaluation of the adequacy of PERA's policies. Additionally, LCS viewed the review as an opportunity to evaluate the roles and responsibilities of those at PERA with investment or oversight responsibilities. Analysis compared current PERA practices to both those of industry standards and to those of best practices. The review focused exclusively on investment activities and did not include a review of practices and policies related to benefits administration.

An "industry standard" is a generally accepted way of doing business used by state investment boards and public retirement systems, while a "best practice" is typically viewed as the experience-tested or emerging optimal standard. The "best practice" for an organization is ascertained by examining how a particular function is carried out and then determining if a different course of action or methodology would enhance the process. The optimal standard for one organization may not be appropriate for another. Each practice must be tailored to suit a particular organization. To appreciate the importance of "best practices" it is essential to recognize the difference between a function merely being performed adequately and a function being performed in the most effective and efficient manner—the distinction is analogous to the differentiation between being good and being great.

To make this determination, EnnisKnupp relied upon a combination of factors, including acknowledged industry standards (e.g., ERISA, UPIA, UMPERSA, AICPA, IIA, CFA Institute, Stanford Law School),[1] secondary research from reputable industry sources (e.g., NASRA, NCTR, DOL, SEC),[2] empirical facts gained from performing similar reviews of other public retirement systems, and the extensive experience of our Fiduciary Services team and other consultants in the firm.

[1] ERISA: Employee Retirement Income Security Act; UPIA: Uniform Prudent Investor Act; UMPERSA: Uniform Management of Public Employee Retirement Systems Act; AICPA: American Institute of Certified Public Accountants; IIA: Institute of Internal Auditors, CFA Institute: Centre for Financial Market Integrity Code of Conduct for Members of a Pension Scheme Governing Body; Stanford Law School: The Stanford Institutional Investors' Forum Committee on Fund Governance Best Practice Principles.
[2] NASRA: National Association of State Retirement Administrators; NCTR: National Council on Teacher Retirement; DOL: Department of Labor; SEC: Securities and Exchange Commission.

Scope of Review

In this review, we refer to the Public Employees Retirement Association as “PERA.” The governing body of PERA is referred to as “the Board,” and the trust fund assets are referred to as “the fund.” The scope of work for this review included two areas:

1. Governance and Organizational Structure – includes composition and size of the Board, terms of service on the Board, expertise of the Board members, Board responsibilities, ethical considerations and compliance, delegation by the Board, staff responsibilities, staff qualifications and adequacy, budget, and financial resources.

2. Policies, Procedures, and Practices – includes asset allocation, asset classes, rebalancing of assets, investment goals and risk tolerances, written investment policy statement, manager structure, selection of investment managers and custodian, alternative investments, benchmarks, compensation of managers, role and qualification of placement agents, and performance reporting.

Findings and analysis are articulated in each section. In addition, we made conclusions and offered recommendations to bring PERA inline with best practices. The recommendations state our independent advice about what current practices or policies ought to change.

Methodology

EnnisKnupp conducted the following review from October 2009 to January 2010, using the following process:

- Document review – EnnisKnupp submitted document requests to the LCS Project Coordinator and PERA staff, and they responded promptly. The reports, policies, statutes, and other documents reviewed are listed in Appendix G.
- Interviews – After reviewing the documents referred to above, EnnisKnupp interviewed Board members on the Investment Committee, key PERA staff, and select service providers. We interviewed certain individuals numerous times. The list of interviewees is also found in Appendix G.
- Findings – The pertinent facts relevant to PERA’s governance, organizational structure, policies, procedures, and actual practices were based on documents received and confirmed with staff and outside service providers.
- Analysis – The EnnisKnupp team of consultants met internally and debated issues, challenged assumptions, discussed alternatives, and incorporated the firm’s best thinking into the analysis.
- Recommendations – The EnnisKnupp team and the peer reviewers discussed preliminary recommendations for each area under review. We made sure recommendations were consistent and could be implemented.
- Drafting – A draft of the report was reviewed by all members of the EnnisKnupp team and the facts were double-checked with the appropriate and relevant sources. A draft was submitted to the LCS Project Coordinator and PERA staff for their review and discussion.

- Presentation of the report – Refinements were made to the draft and this final report was presented to the PERA Board, the LCS, and the BOF in January 2010.

Acknowledgements

EnnisKnupp thanks the LCS, PERA Investment Committee members, staff, and outside service providers for their time and effort in answering questions and providing materials for this review. We relied upon these parties for information and received prompt responses to our requests. We especially want to thank the Executive Director and staff of PERA for being very accommodating in meeting with us, participating in conference calls, and verifying facts and current practices.

Disclaimer

This fiduciary review was limited to those topics outlined in the preceding table of contents. This was not an all-encompassing review of the entire PERA operation. This review provides reasonable assurance that the practices we discussed in our findings are accurate. This was not an investigation and should not be construed as an absolute guarantee that all reviewed practices fully meet fiduciary standards.

Our findings and recommendations were based upon information we received from third parties, including but not limited to, PERA's Investment Committee members, PERA staff, legal counsel, investment consultants, and PERA's custodian bank. Due to the scope and timeframe proposed for this review, we did not independently verify all facts; however, we did request that all sources review the facts we relied upon for our analysis.

The opinions and recommendations expressed in this report reflect the independent judgment of EnnisKnupp. No one associated with the LCS or PERA attempted to unduly influence the scope, findings, analysis, conclusions, or recommendations expressed in this report.

This report dated February 28, 2010 contains technical corrections and replaces the original report dated January 11, 2010.

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Overview of Governance and Organizational Structure

The governance and authority of public retirement systems are ordinarily established through state laws, administrative regulations, and internal policies created by the systems. The laws and regulations generally impose fiduciary duties of loyalty and prudence on the governing bodies to act solely in the interest of the retirement systems' beneficiaries and to act as an expert would act in carrying out their responsibilities. The internal policies usually clarify how the overall responsibility is to be handled by the boards. Boards that govern the systems are not expected to have the expertise to perform every function, particularly in the investment area. They are, however, expected to operate at a policy level, prudently delegate to those with the appropriate expertise, and monitor those delegations prudently.

Well-run public retirement systems, like private sector corporations, are dependent upon sound governance. In a general sense, "governance" refers to the method by which an entity is directed and controlled. Research has shown that poorly governed corporations typically underperform, whereas corporations with good governance practices have stronger performance,[3] and the same can be said for public retirement systems. The importance of sound governance for public retirement systems today cannot be overstated. The memberships and general public deserve to know that business is being conducted in a fair, open, and efficient manner and that those on the boards and staff take their responsibilities seriously. Best practices are to ensure accountability, transparency, legal compliance, effectiveness, and efficiency into a governance framework.

Findings and Analysis

Our findings and analysis for issues related to the governance, organizational structure, staffing, and resources of PERA were based upon our review of relevant statutes, policies, procedures, meeting minutes, contracts, consultant reports, and discussions with members of the Board and staff. We discussed issues and debated our analysis internally as we made comparisons to industry standards and best practices. Each topic addressed below begins with background information on the subject, followed by industry standards and best practices, and PERA-specific information pertaining to the topic.

Composition and Size of the Board

The governing body of a public retirement system is usually a board of trustees, selected in a variety of ways: (1) elected by members of the system;[4] (2) appointed by a government official or governmental entity (e.g., the governor, the legislature, the mayor); or (3) by being an ex-officio member as a result of holding a

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[3] Wilshire study of the "CalPERS Effect." Steven L. Nesbitt, Long-Term Rewards From Shareholder Activism: A Study of the "CalPERS Effect," J. of Applied Corp. Fin. (Winter 1994). and Steven L. Nesbitt, The "CalPERS Effect": A Corporate Governance Update, July 19, 1995. The 1994 and 1995 studies were more extensive and supported Wilshire's initial 1992 study indicating that a company's stock performance seemed to improve as a result of good governance.

[4] Members can include active members in the system or retirees.

particular public office (e.g., treasurer, attorney general, secretary of state). In rare instances the highest fiduciary body is a sole trustee, instead of a board.[5]

While there is no model for the optimal size or make-up of public retirement boards, it is common for them to include board members from the retirement systems' most significant stakeholders: the members, retirees, and their contributing employers. Larger boards sometimes prove to be difficult to manage in terms of coordinating meetings and maintaining focus, while smaller boards sometimes suffer from a limited perspective.

A recent survey conducted by the National Association of State Retirement Administrators (NASRA) in April 2009 highlights the number and types of members serving on public retirement boards.

NASRA Survey Results – Board Size

Average Number of Board Members	Median Number of Board Members	Highest Number of Board Members	Lowest Number of Board Members
9.6	9	19	5

NASRA Survey Results – Board Composition

Percent of systems with one or more appointed Board Member(s)	Percent of systems with one or more elected Board Member(s)	Percent of systems with one or more ex-officio Board Member(s)	Percent of systems with at least one of each type of Board Member
90%	67%	72%	38%

In our view, if all board members are acting as fiduciaries, it should not matter whether they are active members of the system, retirees, elected officials, or individuals outside of the system. Best practices are simply that they act in the best interest of the retirement system and for the sole benefit of its members.

New Mexico law[6] determines the PERA Board composition and states that the Board has the ultimate fiduciary responsibility for PERA. The Board is made up of twelve members consisting of the Secretary of State, the State Treasurer, four members under the state coverage plan, four members under the municipal coverage plan, and two retired members.[7] Although Board members join in different ways, their fiduciary responsibility to the members and beneficiaries of PERA is identical. The composition of the Board is diverse, and while the size of the Board is slightly larger than the industry average, it does not appear that its size has negatively impacted the functions of the Board.

[5] Examples include New York, North Carolina, Michigan, and Connecticut.
[6] Public Employees Retirement Act, NMSA 1978, Sections 10-11-1, et seq. (1999), the Judicial Retirement Act, NMSA 1978, Sections 10-12B-1 et seq. (1997), the Magistrate Retirement Act, NMSA 1978, Sections 10-12C-1 et seq. (1997) the Volunteer Firefighters Retirement Act, NMSA 1978, Section 10-11A-1 et seq. (1997) and the Deferred Compensation Act, NMSA 1978, Sections 10-7A-1 et seq.
[7] NMSA 1978 10-11-130. Retirement board; authority; membership

Board Terms of Service

The terms of service for board members is usually set forth in statutes. The average term for appointed board members is four years,[8] while terms for ex-officio board members extend to the end of their terms of elected office. There are no clear best practices with regard to term lengths. Staggered terms are best practices. In our experience, many board members believe that it takes about three years to feel comfortable in their fiduciary role. Given this information, short-term lengths are not advisable.

It is our experience that there are typically no limitations to the number of terms that may be served by a board member; however, a few systems have term limits for elected or appointed board members.

PERA's elected Board members have staggered four year terms and serve until their successors have qualified to take over the position.[9] In actual practice, this means until the successors are sworn in. The ex-officio Board members serve until the end of their term in office. The terms of service for PERA Board members are inline with common practice.

The Board Chair and Vice-Chair are elected annually by members of the Board for one year terms, without term limits. This, too, is a common practice and has appeared to work well for PERA.

Board Members Expertise

In recent years, much attention has been focused on the expertise of board members of public retirement systems. This, we believe, is due to the overall market downturn, the widely publicized unfunded liabilities of many systems nationwide, and also to the increasingly complex investment vehicles in which systems invest. The complexities of the portfolios and the fiduciary requirement to prudently invest the assets impose a continuing responsibility on board members and staff alike to stay abreast of the trends and ever-evolving best practices among institutional investors.

The need for "appropriately qualified, experienced individuals" as part of a board's composition is endorsed as a best practice by the Stanford Institutional Investors' Forum Committee on Fund Governance.[10] Ideal board members possess knowledge of institutional investment practices, understanding of benefits administration, an appreciation of fiduciary responsibilities, and the ability to manage actual or perceived conflicts of interest. Lack of experience and knowledge can be a concern if board members become overly reliant on consultants and staff and do not apply adequate oversight, which potentially could lead to liability. While it is not necessary for all of the board members to be experts in all areas, collectively the board should possess the necessary skills to carry out its duties and responsibilities.[11]

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[8] National Education Association survey, Characteristics of Large Public Education Pension Plans, December 2006 and independent research conducted by other industry organizations.
[9] NMSA 1978, Sections 10-11-130.
[10] The Stanford Institutional Investors' Forum: Committee on Fund Governance: Best Practice Principles. Peter Clapman, Chair. (Published May 31, 2007 in cooperation with the Stanford Law School, Stanford Program in Law, Economics and Business, the Rock Center for Corporate Governance, and the Stanford Law School Fiduciary College).
[11] Ibid.

From a national perspective, at least one-third of the states and the District of Columbia have a requirement that one or more members have professional experience.[12] The experience required often relates to finance, investments, or actuarial practices. When an investment expertise requirement is set in law, some view it as a positive factor, enhancing the ability of the board to oversee the investment activities of the staff and the advice of the investment consultants. On the other hand, some view set expertise requirements as creating increased potential for conflicts of interest if the board members are brokers, investment managers, third party marketers, or those who make their livelihood from institutional investors. The best practices for investment experts who serve on the boards are for them to be fully aware of the potential for conflicts of interest and avoid conflicts wherever possible. When avoidance is not possible, then full timely disclosure and recusal from voting is the best course of action.

In our experience many trustees who are appointed as experts actually have limited or no experience managing or overseeing large institutional portfolios, particularly pension funds with long-term liabilities. Some have experience with smaller portfolios of individual investors, which is helpful but not entirely relevant.

Whether board members have relevant experience or not, most will not have had exposure to all aspects of a complex public retirement system. For this reason, best practices among public retirement systems now include much more intensive new board member orientation than ever before for all new members, regardless of their backgrounds. Orientations are best if they are comprehensive, held before the board members take their seats, and customized for the particular retirement system and the individuals' knowledge base. Topics to be covered are wide-ranging and include everything from the history and purpose of the organization, to fiduciary responsibility, prudent investor standards, actuarial concepts, benefits and services, asset liability modeling, setting asset allocation, asset class definitions, risk management, due diligence in selecting managers, setting benchmarks, evaluating investment performance, reporting responsibilities, custodian bank services, the operating budget, current topics in the industry, and much more.

The New Mexico statute governing PERA does not set any specific expertise requirement for Board members. The best practices for those boards without in-depth investment expertise are to delegate duties to staff or consultants with the requisite expertise and be educated enough on the issues to be effective in monitoring the functions they have delegated. It is also a prudent practice, albeit a rare one, for members of investment committees to have special orientations and additional training tailored to their role in investments.

As of July 2009, all PERA Board members are required to have at least eight hours of education pertaining to "pension fund investing, fiduciary obligations, or ethics."[13] The Board members take their responsibilities very seriously and attend educational sessions on investments offered by the staff and consultants.

[12] See, National Education Association, *Characteristics of Large Public Education Pension Plans*, December 2006. The information related to the board membership is not limited to education pension funds.
[13] NMSA 1978, § 10-11-133(F)2009.

Additionally, they carefully choose to attend high value conferences where trends in the investment arena are discussed among other trustees and industry experts.

The Board's policy is for each member to attend two educational opportunities per year. The Executive Director has the responsibility to provide all Board members with a list of upcoming seminars, professional educational conferences, and other events that will assist Board members in overseeing the investments of PERA. These educational opportunities have been reviewed for quality and content to ensure the benefits received from attendance are commensurate with the costs incurred.[14]

It is important for PERA Board members to avail themselves of educational opportunities given that they are held to the "prudent investor" standard as soon as they come on the Board.

Furthermore, PERA has a policy that requires all new Board members to attend a New Board Member Orientation, which is a half-day session devoted to areas of fiduciary responsibilities, member services overview, internal audit, and investments. Best practices would be for a longer orientation and one in which investments alone is discussed for at least a half day. PERA does not provide a separate orientation for incoming members of the Investment Committee, which is not unusual; however, a tailored, customized orientation for Investment Committee members would be a best practice.

Along with investment education, training on the fiduciary responsibilities of a public retirement system governing board is just as important because the fiduciary standard is the highest standard imposed by law. PERA's General Counsel provides incoming Board members with an hour of training devoted to fiduciary education, which is part of the New Board Member Orientation. In addition, Board members are given fiduciary training periodically by the General Counsel. As fiduciary issues arise during meetings throughout the year, the General Counsel takes the opportunity to explain the application of fiduciary law. Best practices are to hold annual fiduciary training sessions which highlight current topics in the public retirement arena and relate them to the duties of the Board. These sessions are often several hours in length and involve General Counsels, consultants, and outside fiduciary counsels for the systems.

Board Responsibilities

The New Mexico Constitution vests sole and exclusive fiduciary responsibility for administration and investment of the trust assets in PERA[15] and the Public Employees Retirement Act broadly defines the duties of PERA, including investing in accordance with the Uniform Prudent Investor Act, and being indemnified by the state for all liability in the performance of their duties.[16]

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[14] Board members are strongly encouraged to attend educational sessions provided by the International Foundation of Employee Benefit Plans. In particular the Board members are encouraged to attend the Investment Institute and acquire the Certificate of Achievement in Public Pension Policy (CAPPP), a rigorous four day training requiring 10 to 12 tests to acquire the certification.
[15] New Mexico State Constitution, Section 22B.
[16] NMSA 1978, § 10-11-130 and §10-11-132.

The Prudent Investor Act gives wide latitude to the fiduciaries it covers, but it does not grant immunity for those who are negligent and breach their fiduciary duties of prudence or loyalty.[17] In the private sector, ERISA's section 410(a) imposes strong personal liability on any person considered a "fiduciary" in violation of their duties, including negligent behavior. ERISA does not apply to public pension funds, but the governing laws of many public funds are modeled after ERISA. The Uniform Management of Public Employee Retirement Systems Act (UMPERSA), an effort by the Commissioners on Uniform State Laws to impose consistent fiduciary standards among public funds, also imposes personal liability on trustees or other fiduciaries for a breach of fiduciary responsibility. We have been informed that in New Mexico the legal interpretation of the statutes covering PERA provides that the Board members are covered by the Tort Claims Act or have indemnification or even immunity. In our opinion, such coverage, indemnification, or immunity lessens the seriousness of a violation and diminishes the high fiduciary responsibility and liability standards intended by the drafters of the Uniform Prudent Investor Act. In other states,[18] where the potential for personal liability exists, the members of the governing bodies of public funds have accepted the potential for personal liability as a reasonable trade-off for having the ability to operate under Modern Portfolio Theory and act as a prudent investor.

It is common and best practices for the governing statues to provide a definition of who is a fiduciary and impose duties of loyalty and care. The governing laws for PERA do not provide a definition of fiduciary. Thus, while it can be inferred that Board members of PERA are fiduciaries, since they are vested with sole and exclusive fiduciary duty in the Constitution, the laws do not explicitly state that the Public Employees Retirement Act does not define others who may be fiduciaries (e.g., the CIO and investment managers). To be consistent with common and best practices, the statutes would include a definition of who is a fiduciary. The definition should include anyone that exercises discretionary authority or control with respect to the management or disposition of PERA assets, the administration of PERA, or anyone that renders investment advice for a fee or other compensation, direct or indirect, with respect to any PERA assets or has the authority or responsibility to do so.

Generally, the responsibilities of public retirement boards are only briefly, and often incompletely, stated in governing statutes. Rarely do the statutes cover all the details associated with fiduciary responsibilities. Such is the case with the law governing PERA; the Board's duties are very broadly described. In some systems, written board charters are established to reflect the board's consensus about their scope of responsibilities and operating procedures. Board charters cannot exceed the authority set in statutes or otherwise violate legal restrictions. In some cases, they incorporate relevant statutes by reference. The Board may benefit from guidance from the CFA Institute about the proper role of a governing board when updating governance policies.[19]

In Appendix A we include examples of responsibilities that could be included in a board charter to more fully explain the actual role of the Board.

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[17] Generally a fund is allowed to use trust assets to purchase fiduciary insurance.
[18] Examples include Colorado, Illinois, Nebraska, and West Virginia.
[19] Code of Conduct for Members of a Pension Scheme Governing Body, CFA Institute 2008.

In addition to a board charter, or sometimes in place of it, well-run public retirement systems compile major policies in a board governance manual for reference and orientation purposes. In the chart below we compare the contents of a comprehensive governance manual to the contents of PERA's document entitled "Board Policies and Procedures" dated March 29, 2001. It compares favorably in most ways and has been valuable to PERA. It is more comprehensive and organized than many others of its kind; however, the last time the document was updated was September 2002.

Below we indicate with a checkmark those best practice items which are included in PERA's document.

Checklist for a Governance Manual	PERA's Board Policies and Procedures
Introduction to governance policies	✓ Best practice
Purpose	
Description of the purpose of the manual	✓ Best practice
Brief Overview	
History of the Association	Not included
Creation by law	✓ Best practice
Statistical information	Included in a separate document
Organizational chart	Included in a separate document
Overview of outside service providers	Included in a separate document
Members of the Board	
Names, pictures, and terms	Included in a separate document
Contact information	Included in a separate document
Calendar of Meetings and Events	
Meeting schedule	Included in a separate document
Educational sessions	✓ Best practice
Board Responsibilities	
Board authority and duties	✓ Best practice
Accountability chart	Not included
Board orientation and education requirements	Included in a separate document
Board self-evaluation process	Not included
Executive Director evaluation process	✓ Best practice
Board Meeting Protocol	
Agenda setting	✓ Best practice
Organization of discussion items	Not included
Consent agenda	✓ Best practice
Information-only items	Not included
Rules of order	Not included
Board Seats and Position Descriptions	
Board member position description	Limited
Board member election and appointment processes	Included in a separate document
Board chair position description	✓ Best practice

Board vice-chair position description	✓ Best practice
Board officer election process	✓ Best practice
Board Committees and Assignments	
Process for establishing committees	✓ Best practice
Audit and Budget committee	No existing charter
Disability Review committee	No existing charter
Investment committee	No existing charter
Legislative committee	No existing charter
Rules and Administration committee	No existing charter
Committee evaluation process	None existing
Board Policies	
Ethics policy	✓ Best practice
Conflicts of interest policy	✓ Best practice
Investment policy	Included in a separate document
Private placement agent policy	None existing
Communication policy	✓ Best practice
Audit policy	None existing
Funding policy	✓ Best practice
Trustee education policy	✓ Best practice
Legislative policy	✓ Best practice
Board travel policy	✓ Best practice
Board expense reimbursement policy	✓ Best practice
Staff compensation policy	None existing
Strategic Plan	
Current strategic plan	✓ Best practice
Progress reports	Not included
Strategic planning process	Included in a separate document
Miscellaneous	
Board application/election forms	Not included
Financial disclosure/conflicts of interest forms	Included in a separate document
Educational opportunities	Included in a separate document
Retirement industry periodicals and websites	Not included
Expense reimbursement form	Included in a separate document
Executive Director position description	✓ Best practice

A few policies listed in the previous chart and committee charters are not presently included in the "Board Policies and Procedures" or available in a separate document. Creating and incorporating these would result in a more comprehensive governance manual. Through the process of creating committee charters, the Board clarifies responsibility and accountability. The best committee charters include the following:

- Purpose
- Authority
- Composition
- Governance
- Meeting frequency
- Responsibility
- Staff assistance
- Reporting requirements

With regard to individual board member responsibilities, we believe PERA's "Board Policies and Procedures" could be enhanced by either augmenting certain sections or by adding to it. For example, section II. C. 1 through 6 could be expanded into a full board member position description. A position description, if carefully conceived and drafted, succinctly communicates to existing board members, as well as to external stakeholders and others interested in serving on the board, the expectations for individual board members. In Appendix B we include examples of responsibilities that could be included in a board member position description.

If a detailed position description is created and made available during the board member election process, the voting membership will better understand and appreciate the type of individuals who can best serve in this high level fiduciary capacity. While it is a great honor to serve on the PERA Board, it is not merely an honor. It is a major time commitment and requires a certain aptitude for complex issues, the courage to ask tough questions, and the ability to take action when it is called for.

PERA has created position descriptions for the Board Chair and Vice-Chair, which is a best practice. PERA has also addressed the expectations for committee chairs in its policies.[20] The position descriptions express the Board members' expectations for each position, and document the authority voluntarily given to them by the Board.

The Board is required to hold four regular meetings each year[21] in addition to any special or emergency meetings that the Chair or any three members may call. In the event a member is not able to attend four consecutive meetings, they are considered to have resigned. The actual practice by the PERA Board is to hold regularly scheduled monthly meetings, as well as periodic special meetings and board retreats. The Investment Committee and other committees of the Board usually meet monthly. The attendance is generally very strong for all of these meetings, with the exception of 1 member who has missed over 20 meetings in the past 2 years. Some other public funds allow ex-officio board members to send designees to

[20] New Mexico Public Employees Retirement Association Board Policies and Procedures, Adopted March 29, 2001.
[21] NMSA 1978, § 10-11-130.

board meetings, which is not allowed at PERA. Designees that participate in orientation and training and regularly attend meetings can contribute much and be very effective board members. The Investment Committee meets monthly for approximately three hours to address investment related items pertaining to the fund. The previously mentioned two day Board retreats also focus on investment issues.

Ethical Considerations and Disclosure

Conflict of interest and ethics policies define the guidelines boards and staffs are to use when conducting business for the system. Best practices in this area are clear; fiduciaries are to avoid conflicts of interest (actual or perceived) if possible. If avoidance is not possible, they are to disclose conflicts promptly, refrain from discussing the issues, and recuse themselves from voting on matters where conflicts exist.

Written policies clearly stating ethical expectations are necessary so that individual interpretations do not lead to unintended violations. In our experience, the best policies adopted by public retirement systems tend to be stricter than the policies of other industries due to the public scrutiny and fiduciary status of the boards.

Policies often contain restrictions on gifts from parties with whom the system does business. For example, some policies allow trustees and staff members to accept meals from current vendors in connection with educational sessions, while others permit attendance at meals, but require trustees and staff attendees to pay for their own expenses. Some policies go even further, prohibiting attendance at any meals or entertainment in order to avoid even the appearance of undue influence. A best practice that highlights the importance of ethical conduct is to require annual affirmations from trustees declaring that they have reviewed, understand, and agree to comply with the code of ethics.

PERA has adopted Standards of Conduct (the Standards), which are included in its “Board Policies and Procedures” document. We found that most of the items addressed in the Standards are inline with common and best industry practices. They provide guidelines on the following areas: conduct; prohibited transactions and acts; conflicts of interest; financial conflicts and disclosure; gifts, contributions, disclosures, and solicitations; confidential information; outside employment and other outside activity; subsequent employment; and procurement oversight.

Each Board member and the Executive Director are required to submit an annual disclosure statement[22] to the Secretary of State. The disclosure statement addresses a number of issues, including their personal financial interests that may cause a conflict, financial interests of family members in PERA transactions, and any payments (direct or indirect) received related to PERA business. This type of reporting is a good practice; however, the Board (not merely the Secretary of State) also needs to be aware of any conflicts of interest that individual Board members may have. This is partially accomplished as the Board members submit gift report forms. Neither the disclosures reported to the Secretary of State nor the gift report forms are reviewed by the Board or staff. It is important for the Board and Audit Committee to be aware of any conflicts of interest, disclosures, or violations of the gift policy.

[22] Board members and the Executive Director are required to submit updated disclosure forms within 45 days of any trigger events, as stated in the Standards of Conduct.

Gifts have caused problems for several public retirement systems, due to the actual or perceived conflict of interest that results from accepting anything of value from a current or potential service provider. As such, some public retirement systems have instituted a strict no gift policy. More common, however, is the practice of setting per occurrence and annual limits on gifts. PERA has followed this latter approach, and the gift limit is $50 for a single gift and $150 total in a calendar year. These levels are consistent with common industry standards. PERA further limits gifts by restricting Board members from accepting anything of value[23] from current or potential contractors with PERA. This is a strict policy, but one which we believe protects the Board from actual or perceived conflicts of interest.

The Standards state that third parties "may" be required to disclose gifts they have given, or been asked to give, to Board members.[24] The current language suggests that third party disclosure is not always mandatory. It would be advisable to update the policy to require all gifts, entertainment, and meals above a minimal threshold be disclosed by vendors and outside service providers annually. This is an emerging best practice.[25]

Political contributions have also been an issue receiving attention in the industry recently. The SEC is considering whether investment advisers should be prohibited from providing advisory services to a government client for two years after making a political contribution of more than $250. The Standards stipulate that contributions from specified parties cannot exceed $25. It is a good practice to set such limits, but some funds have gone even further by disclosing contributions made by service providers to statewide elected officials or board members when any vote involving that service provider is before the board.[26] This is a best practice, but not a common one.

The Standards go beyond the ethics policies of many other public pension funds by addressing outside employment issues. The Standards prescribe outside employment or other outside activities that must be avoided while serving as a Board member or the Executive Director. It also states that Board members may not accept employment with any business or individual who contracts with PERA within one year after leaving the Board.

The Standards set several communication protocols, notably a "quiet period" between potential vendors and Board members and staff. The Standards stipulate that during a procurement process, there is to be no communication concerning any topic with the Board or staff members, except as described in the procurement document. This is in conformance with best practice and serves to protect the Board from potential conflicts of interest.

Overall the Standards are comprehensive; however, unless compliance is monitored and enforced, and violations are addressed, the Standards fall short of best practices. The first step toward compliance is to ensure that all parties have read and understand the Standards. Requiring Board members to acknowledge

[23] Anything of value includes food, drink, gifts, compensation, tickets, complimentary passes, contributions, reimbursements for travel or any other activity that is not permitted in NMSA 1978, § 10-11-130.1.
[24] The staff's Standards of Conduct include this same requirement.
[25] CalSTRS and OhioPERS have adopted such a policy.
[26] CalSTRS has adopted such a policy.

in writing that they have read, understand, and will comply with the Standards would be a best practice. Annual training on the Standards and disclosure requirements would also be beneficial.

Some public retirement systems have their general counsel, internal auditor, compliance officer, or inspector general monitor compliance with ethics policies and standards. Because of co-fiduciary liability, where the breach by one fiduciary may cause liability for another, we do not believe that PERA's current practices of having individuals be responsible for monitoring their own compliance is sufficient. It is best practice for an identified person on staff to work with the Board's Audit Committee in reviewing and monitoring compliance.

The "Board Policies and Procedures" outlines enforcement activities related to compliance with the Standards and other Board policies, as well as sanctions for when policies are violated. The policy calls for the Board to respond to any policy violations or fiduciary breaches. By a majority vote, the Board can also authorize an investigation conducted by an investigator. It is best to assign a specific entity or person the responsibility for oversight. Furthermore, authorizing the Board to conduct an investigation into ethical breaches is a good practice.

The policy allows for the Board, after the investigation and a hearing, to vote to remove a member from the Board.[27] This type of authority is uncommon. Typically a public retirement board has very limited or no ability to remove a board member from their seat. Such authority, though, empowers the Board to address its own behavior. A Board member can also be sanctioned by the Board. Sanctions include formal reprimand and public censure, suspension from participation on the Board, restitution to repay assets that have been dissipated because of that Board member's behavior, or repayment of the value of a gift. In this regard PERA's ability to take action for breaches of fiduciary duty exceeds those of many other boards.

Delegation by the Board

Fiduciaries are not only allowed to delegate certain tasks but they are expected and encouraged to do so.[28] Boards, especially those made up of volunteers, cannot reasonably be expected to fulfill every function the retirement system is responsible to perform, particularly in the area of investments. To meet fiduciary standards, boards must be prudent in their delegations. This means they must carefully assign work only to those who are qualified to handle it and their delegations must be clear and unambiguous. Furthermore, they must engage in ongoing monitoring to ensure that those to whom they have delegated certain tasks are actually fulfilling their responsibilities as expected. The fiduciary duty of prudence is always present even when boards assign work to other entities.

Most board delegations related to investments are made to subcommittees of the boards, internal staffs, or outside service providers, including investment consultants and investment managers. While oftentimes delegations are only made verbally, best practices are for major delegations to be documented so that all parties share the same understanding about who has what responsibilities. Clear and documented lines of

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[27] Public officers or ex-officio Board members cannot be removed by a vote from the Board; they can only be removed by impeachment. NMSA 1978, § 10-16-14(D) & § 10-16-11(C).
[28] *Donovan v. Cunningham*, 716 F.2d 1455, 1467 (5th Cir. 1983).

authority and communication of delegated responsibilities enable all who are involved to acknowledge their roles and responsibilities.

a. Delegation to the Investment Committee

Investment related tasks are often delegated to investment committees. Investment committees provide a systematic way to focus in-depth on important issues, tend to save valuable time for boards, and help board members develop greater investment expertise. In our experience, 75% of public retirement systems use some form of an investment committee. In a recent survey, the average size of an investment committee was seven, ranging from three to twelve members.[29] The size and composition of an investment committee can vary among funds and can even change over time at the same retirement system. We know of no reliable research that defines the optimal size of an investment committee. A few public retirement systems add outside “experts” to their investment committees who are not members of the board,[30] and at least one system uses only staff.[31] It is uncommon to have an investment committee that includes both board and staff.

The frequency in which investment committees meet ranges from an as-needed basis to monthly, with the average being seven times per year.[32]

The duties of investment committees often include such things as recommending asset allocations, approving active and passive strategies, evaluating the use of internal versus external management, selecting and reviewing investment managers, appointing and reviewing custodians, recommending and reviewing investment consultants, and reviewing certain parts of the comprehensive annual financial reports.

PERA’s Investment Committee is made up of six Board members, which is a reasonable size when compared with similar systems. The Board Chair appoints committee members and the chair, based on the expressed desires of individual Board members and the value of periodic rotation to provide exposure to different Board responsibilities.[33] While not done currently, the Board Chair may also appoint individuals who are not members of the PERA Board to committees.[34] We have seen the value of bringing on outside non-voting experts to investment committees at some funds. This, however, is not commonplace and may be unnecessary if investment consultants are actively engaged with the Board members, educating them and empowering them so they can ask the tough questions about the portfolio.

The roles and responsibilities of the Investment Committee are described to a limited degree in the policies adopted by the Board. In order to fulfill its fiduciary oversight responsibilities, the Investment Committee

[29] 2008 NASRA survey of investment committee composition; average size for 10 statewide funds was 6.8.
[30] Kentucky Teachers’ Retirement System and Commonwealth of Massachusetts Pension Reserves Investment Management Board.
[31] State of Wisconsin Investment Board.
[32] NASRA 2003 survey regarding frequency of investment committee meetings.
[33] Board Policies and Procedures.
[34] NMSA 1978, Sections 10-11-130, designate committees and designate committee members, including individuals who may not be members of the association.

must receive sufficient reporting and information form the staff, investment consultants, and other parties. We have attached in Appendix C a sample list of information that an investment committee may receive and review as it monitors the investment program.

b. Delegation to the Evaluation Committee

Some systems have specialty sub-committees of the investment committee that focus on a particular asset class, particularly when it is a new asset class for the system. While additional committees can be useful, an overuse of committees can invite the board into day-to-day management functions that are more appropriately assigned to the staff.

PERA uses an ad hoc request for proposal (RFP) Evaluation Committee in the selection process for new investment managers. The PERA Board Chair, with the advice of the Investment Committee, appoints an evaluation committee for each RFP. The size of the Evaluation Committee is at the discretion of the Board Chair with the advice of the Chief Investment Officer. The Evaluation Committee may include members of the Board, the Executive Director, and PERA staff. This committee takes on the responsibility of reviewing every semi-finalist response, scoring them, and making recommendations to the full Board about who to hire.

This type of committee is not common among public retirement systems. The composition of the Committee being both Board and staff somewhat blurs the line between PERA's governance and management and Board members spend significantly more time in details than do other boards; however, it appears to be working well for all involved. If the continuing use of this committee is expected, then a written committee charter would be useful.

c. Delegation to the Internal Staff

Delegations at public retirement systems primarily flow from the boards to the executive directors, who in turn, delegate tasks to the rest of the staff. Investment committees may also delegate investment-related tasks to the chief investment officers. Delegations to staff, like delegations to committees, are best made with some degree of formality and in writing.

Generally, when boards delegate investment matters to staffs, documentation exists in one or more of these ways: (1) job descriptions; (2) investment policies; (3) directives made at board or committee meetings and recorded in meeting minutes; (4) strategic planning goals and annual business plans; or (5) statements of delegation or an accountability matrix. Best practices are for these documents to explicitly describe the delegations, and to make sure they are not contradictory or ambiguous about who has responsibility for certain functions and who has oversight for them.

The job description for the PERA Executive Director, contained in the "Board Policies and Procedures" address most areas of importance: duties, authority, delegation, communications, and performance evaluation for the Executive Director and staff. While there is no specific reference to investments, the description states that the Executive Director is a fiduciary and has the duty to utilize his power loyally, equitably, and with prudence in managing the property of the PERA trust for the benefit of the Association's members according to the terms of the trust.

The most comprehensive document describing the Chief Investment Officer (CIO) position is contained in a recruiting document, which addresses minimum qualifications, knowledge, skills, and ability. A comprehensive job description details the essential requirements of the job and the types of duties it includes so that employees understand what is expected of them, and how their position fits within the broader organization. The best job descriptions also define the results that are expected from the employee.

The CIO role is also described to some degree in the Investment Policy, but having a comprehensive position description for the CIO would be most beneficial to PERA especially given the fact that it is currently recruiting to fill the position. We have attached in Appendix D a sample CIO position description which includes general responsibilities, duties, and qualifications that can serve as a template for creating a formal position description.

PERA Board and Investment Committee meeting minutes clearly show investment-related delegations made to staff and include supporting documentation. This is a best practice.

PERA has an agency-wide strategic plan, created annually in conjunction with the operating budget. The plan addresses goals, objectives, and performance measurements related to investments and benefits administration functions. The strategic plan should align with the goals listed in the investment policy statement. PERA provides quarterly updates to the Legislative Finance Committee and the Department of Finance and Administration detailing results versus the performance benchmarks.

PERA does not have a statement of delegation, nor an accountability matrix, which is not unusual. Most systems also do not have these types of documents. Recently, however, some large systems have benefited from using an accountability matrix to clarify and document roles and responsibilities. This is an evolving best practice. We have attached a sample accountability matrix in Appendix E.

d. Delegation to the Service Providers

When public retirement boards delegate to outside service providers, the delegations are most often made in contracts that contain the scope of work and fees for services. Typically, contracts are executed by executive directors or board chairs after receiving close review by chief investment officers, investment consultants, and legal counsel. The terms of the contracts vary to some degree but best practices are for contracts to impose fiduciary standards on investment managers and consultants to the extent of the services they provide, and give the retirement systems quick termination rights without cause.

PERA has retained R.V. Kuhns & Associates for general investment consulting and Cliffwater LLC, (Cliffwater) for alternative investments consulting. The contracts for each of these consultants outline their responsibilities and acknowledge that each is a fiduciary to PERA. Neither of the investment consultants' contracts acknowledge the standard of care as being the prudent investor, but simply state they will exercise a skill greater than that of an ordinary person. Best practice is for consultants to acknowledge the prudent expert or prudent investor standard imposed upon them. In New Mexico, the prudent investor standard would be appropriate. Language does not exist in the contracts that clearly states whether the consultants are hired by and accountable to the Board or the staff. It is best practice for investment consultants to work closely with staff, but have a direct reporting line to the board so that the board receives independent advice from the consultants.

PERA currently uses 88 different investment managers. Staff verified that there are contracts in place for all managers and that each were reviewed by the CIO and General Counsel before being executed. We reviewed two contracts that PERA staff represented were the standard form used, and we found them to be clear and inline with best practices. Other outside service providers used by PERA include commission recapture agents, a provider of trade execution analysis, transition managers, a securities lending agent, and outside counsel for alternative investments. Staff has confirmed that these contracts are current and have been appropriately executed.

The New Mexico Board of Finance has selected The Northern Trust Company as the custodian bank for PERA, as well as the for the Educational Retirement Board, and the State Investment Council. The Northern Trust contract does not state that it is a fiduciary, which is common if the bank is merely providing record keeping services and no investment management or securities lending.

Staffing

A key element to a successful investment program is staffing - staff roles, skill sets, and size. There is no industry standard in terms of an ideal staffing model, and, therefore, a system's staffing should be based on its purpose, core business functions, and unique circumstances. Staffing decisions in the investments area are often impacted by the type of funds for which the system has responsibility, asset size, asset classes used, internal versus external management, active or passive strategies used, number of managers, roles and responsibilities of outside consultants, and other available resources.

Best practices for attracting and retaining a strong investment staff are to have clearly defined roles and responsibilities. Aside from the issues mentioned with regard to the CIO, PERA has position descriptions for the other eight members of its investment staff.

Several other documents also set forth staff responsibilities. First, the Investment Policy states that the CIO and the investment staff shall manage the portfolio according to the Board's policies, advise and inform the Board about investments, assist with development and review of investment policies, report on the progress of the system meeting its investment objectives, and compare the performance of the portfolio to established benchmarks. Second, the Alternative Investments Operating Procedures defines specific responsibilities and functions of each staff member as they relate to real estate, hedge funds, private equity, and portable alpha. Third, a detailed organizational chart shows the reporting lines of the staff through to the Board.

Best practices and increasingly common practices are for investment staffs to be comprised of individuals with advanced degrees or professional certifications (i.e., MBAs, CFAs, CAIAs, and CPAs).[35] It is also best practices for continuing educations programs, and reasonable career paths given the size of the organization, to be offered to staff members. Of the nine positions on the investment staff (inclusive of the vacant CIO position) four are directly involved with overseeing asset management.[36] Of those four, one staff member has an advanced degree (M.A.) and one is currently pursuing the CFA designation. It is likely that the vacant CIO position will be filled by an employee who also has a professional certification. Five positions on the investment staff serve in an accounting, investment operations, or support role.[37] Of these, one has an advanced degree (M.B.A.) and one has a professional designation (CGFM)[38] Two staff members have taken part in continuing education programs and tuition assistance program. Although career paths are somewhat limited in a small investment department, the staff believes they have plenty of room to grow and advance.

There is no set number or ratio to determine the “right” staff size. Generally, as the assets and complexities within the portfolio grow, so do the number of staff supporting the investment functions. From a process perspective, best practices are for a retirement system to have autonomy in prudently setting staff size regardless of layoffs, hiring freezes, or furloughs imposed upon other public employees who are not serving in a fiduciary capacity. A prudent process is to set staffing levels by identifying the tasks that must be performed and the time required to perform each task. Indicators of whether staffing is adequate involve assessing (1) how often deadlines have to be extended; (2) how well communication is handled with the Board; (3) whether processes and procedures are followed or cut short; (4) whether proper documentation of the investment process is maintained; (5) employees’ expressed concerns about their workloads; (6) increases in the incidence of sick leave; (7) how frequently outsourcing has been necessary; (8) how often employees have to work extended hours; and (9) the level of deferred or forfeited annual leave.

PERA has experienced difficulty in maintaining an adequate staff size. The CIO position has been vacant since September despite the retiring CIO’s notice of his retirement in August. Because PERA does not have the autonomy that some other public retirement systems have, it must wait until it receives permission from the Department of Financial Administration to fill a vacancy before it can advertise and recruit. PERA waited two months before the request for an exemption from the hiring freeze was approved. This is not only an unusual situation but a troublesome one for a fund of PERA’s size.

A national survey by Greenwich Associates in 2008[39] indicates that public retirement systems of comparable size to PERA with a similar investment management structure (all assets externally managed), have an average staff size of 5.8, as compared to PERA’s 4 staff positions for those who oversee asset management. The survey did not specifically indicate the staff sizes of those funds that invest in alternative

[35] MBA: Master of Business Administration; CFA: Chartered Financial Analyst; CAIA: Chartered Alternative Investment Analyst; CPA: Certified Public Accountant.
[36] The four positions involved directly with the oversight of asset management are the CIO (currently vacant) and three Portfolio Managers.
[37] The five positions, according to the position descriptions, that are responsible for accounting, operational matters, or support include the Deputy Investment Officer, three Financial Analysts, and the Executive Secretary.
[38] Certified Government Financial Manager.
[39] Greenwich Associates – 2008 Investment Consulting Business – Market Dynamics Report.

asset classes. We would expect that funds with these types of investments would have a larger-than-average staff size. The survey also indicates an average staff size of 4.6, as compared to PERA's 5 positions for those who provide administrative services, including accounting, investment operations, and support.

	Select and Supervise External Investment Managers			Provide Administrative Services		
	2006	2007	2008	2006	2007	2008
All Public Funds	2.8	2.4	2.6	3.1	2.6	2.4
State	3.5	3.7	4.6	4.5	4.2	3.8
Municipal	2.2	1.7	1.6	1.9	1.6	1.6
Over $5 billion	4.9	4.5	5.8	5.1	4.9	4.6
$1-5 billion	1.6	1.5	1.5	1.5	1.3	1.5
$501 million-$1 billion	1.2	1.1	1.4	1.9	1.1	1.4
$500 million and under	1.3	0.8	0.9	1.5	1.1	1.2

PERA's staff size is inline with industry averages, but is more heavily weighted toward positions providing accounting and operational support. In light of the allocation to alternative investments, it may be beneficial to consider whether additional highly skilled investment professionals are warranted on staff.

Budget and Financial Resources

Operating budgets for public retirement systems are either appropriated by legislatures or set by boards themselves. In nearly all situations the funds for the budgets come directly from the assets of the trusts and not from the general revenue of the states. Having legislatures control or have the right to control the operating budgets for public retirement systems is still common; however, the best practices are for independent boards to have the authority to set budgets. If non-fiduciaries (legislative and executive branches of a state) impose unreasonable restrictions on the budgets, they can hinder or even prevent boards from fulfilling their fiduciary obligations. The real concern is that boards may be so constrained that they cannot support an infrastructure to meet the high fiduciary standards of prudent experts in investing assets, as the law requires.

PERA's operating budget is set by the Board and is subject to the approval of the Legislature. In the past three years PERA has received less than it requested, as illustrated in the following chart.

Year	Budget Amount Requested[40]	Budget Amount Approved
2009	$40,411,400	$39,696,200
2008	$37,529,300	$36,036,100
2007	$27,950,600	$28,129,600

[40] As reported by PERA.

PERA has a process by which budget modifications can be addressed, however, the process takes several months. PERA has been careful to stay within the approved budget and, in fact, has in the past actually spent less than the approved budget. Nevertheless, the process has caused delays and impacted priorities. Budget autonomy is not an "open checkbook" without restrictions. The strongest controls over budgets are already in place with fiduciary duties of prudence and loyalty imposed on boards. Generally, these duties require that boards incur only reasonable and necessary expenses. The duties do not require fiduciaries to incur only the lowest possible costs in operating the retirement system, but costs must be reasonable for the services provided.[41] If fiduciaries spend trust assets on unnecessary or unreasonable expenses, they could be found to have breached their fiduciary duties which could lead to personal liability. The best practice is for boards to have discretion about how to allocate resources in the budget to fulfill the system's responsibilities. Further, best practices are for this to be a transparent exercise, subject to open meetings and open records requirements and readily accessible to all interested parties.

The financial resources required to handle an investment program for a public retirement system are dependent on many factors. Those with the greatest impact are:

- Number of separate trust funds managed
- Types of asset classes used
- Internal versus external management of assets
- Active versus passive strategies
- Division of labor between staff and outside consultants
- Revenue from securities lending to offset expenses
- Soft dollar arrangements, rebates, and commission recapture

PERA's annual operating budget is supported by the trust funds assets and not the general revenue of the State, which is a common practice. The budget for PERA is prepared by the staff and approved by the Board before being sent to the LFC for recommendation to the Legislature for appropriation. The Governor may then sign or veto the budget legislation. As noted earlier, legislative appropriation is no longer the best practice.

In PERA's $37 million operating budget, investment expenses were almost $30 million. PERA's investment related fees and expenses are shown in the following chart.

[41] Marc Gertner, Trustees Handbook: A Basic Text on Labor-Management Employee Benefit Plans (New York: International Foundation of Employee Benefit Plans, 1990).

2008 Investment Related Fees and Expenses[42]	
Fee Category	Amount ($ in 000s)
Total Investment Management Costs	$25,696
Consultants	1,670
Custodian	1,420
Fund Oversight (salaries, expenses)	441
Audit	86
Other (legal, etc)	400
Total Costs	$29,714
Total Basis Points	27 bps

To determine if 27 basis points is a reasonable amount to spend on investment related expenses, PERA relies upon an independent source, CEM. CEM is a recognized leader in analyzing the cost effectiveness of public retirement systems, obtaining standardized information from peers, and comparing results. CEM used 17 peers of a similar size to compare PERA's costs. PERA's cost of 27 basis points is significantly lower than the 54 basis points of the peer average. CEM correctly notes that such a comparison is not entirely useful since funds use different asset classes and strategies. The more meaningful comparison is to a "benchmark cost," which takes into account the amount of assets in each asset class. In that comparison, PERA's costs were also well below the benchmark of 43 basis points.

The CEM survey is an extremely cost effective method for monitoring operating costs. The Board has shown prudent oversight of the system by obtaining the CEM survey and closely monitoring and controlling costs.

In the past PERA, like many other public pension funds, has used a commission recapture program to offset expenses. In such a program, brokers rebate certain commissions that can be used to pay investment related expenses by the fund.[43] Best practices today are to avoid commission recapture programs and instead require managers to seek "best execution" (i.e., best trade based on share price, commission, and available research) on all trades. PERA is in the process of phasing out its use of commission recapture.

Conclusions

We conclude that the size and composition of the PERA Board is common and reasonable. The terms of service are comparable to what other public retirement systems have, and PERA is not experiencing any

[42] Public Employees Retirement Association of New Mexico, 2008 Defined Benefit Investment CEM Survey Results. August 26, 2009. $8.944 billion listed for 2008 assets.

[43] Soft dollars and commission rebates generated by investment managers through trading activities are plan assets, and both plan sponsors and investment managers have fiduciary responsibilities regarding their prudent management and oversight as they do with other plan assets." U.S. Department of Labor Employee Benefits Security Administration Report of the Working Group on soft dollars/commission recapture, Nov. 13, 1997.

problems with the loss of institutional knowledge as the Board turns over. PERA Board members have no term limits, which is not uncommon, and has worked well for PERA.

No statutory expertise requirement exists for the Board members, but statutes require at least eight hours of relevant education. Because of the expertise of the internal experts on staff and the expert external support from the investment consultants, the Board does not need to have in depth portfolio management skills; however, it does need to have enough expertise to be conversant in institutional investing and be able to analyze and question the recommendations of staff and consultants. Board members would benefit from intensive orientation and more ongoing education related to relevant investment issues so that they can effectively monitor the investment program. More experienced and knowledgeable boards can better evaluate information they are given and recommendations that are made.

The Board's responsibilities and delegations are set forth in the "Board Policies and Procedures." This document is fairly comprehensive; however, it could be enhanced with more detail.

The Board appropriately delegates certain responsibilities to the Investment Committee; however, a charter for the Investment Committee is not in place. Having one would help to clarify responsibilities. From time to time, the Board also delegates day-to-day management type activities to an ad hoc Evaluation Committee. While it is unusual to have a board involved with this aspect of the manager search process, the PERA Board members believe the Committee works well and they voluntarily contribute extra time to this effort. PERA would benefit from having a charter for this committee as well.

The organizational structure of PERA is straight-forward and reflects the best practice of the CIO reporting to the Board through the Executive Director. The investment staff members appear to understand their roles and responsibilities. The job descriptions for the Executive Director and CIO are available in some form, although they could be improved to be more accurate.

Delegations to the staff from the Board are primarily documented in Board and Investment Committee meeting minutes. Staff responsibilities are what we would expect for a portfolio of $9 billion with alternative investments and monthly board and committee meetings. The staff size, while small, is supplemented with services provided by the investment consultants. The most critical staffing issue is the recent retirement of the CIO, leaving a vacancy that is being temporarily filled by the Executive Director.

The budget approval process is understood by all stakeholders and while it is workable, it does not reflect the best practice of placing budget authority with the Board and holding the Board members accountable for the reasonableness of the budget and for budget compliance. When compared to peers, PERA's investment costs are low.

Recommendations on Governance and Organizational Structure

Composition and Size of the Board

- None

Terms of Service on the Board

- None

Board Member Expertise

1. Seek a statutory change requiring new board member orientation and more hours of ongoing education, including annual fiduciary training.
2. Provide by policy a specific orientation and formalized ongoing education for Investment Committee members.

Board Responsibilities

3. Examine the intent of the Prudent Investor Act and its application to PERA and determine whether protections, indemnification, or immunity provided under the Public Employees Retirement Act, the Tort Claims Act, and other laws are appropriate.
4. Amend the statute to include a definition of who is a fiduciary
5. Review and update the “Board Policies and Procedures” to be more comprehensive and inline with best practices.
6. Create a detailed position description for Board members and distribute it during the election and appointment process.
7. Evaluate whether an ex-officio member should be allowed to designate a specific person to attend, participate, and vote at meetings.

Ethical Considerations and Disclosure

8. Have the Audit Committee review disclosure forms so that any conflicts of interest or policy violations can be appropriately managed.
9. Modify the Standards of Conduct to require disclosure of gifts, entertainment, and meals by vendors and outside service providers on an annual basis.
10. Require Board members and staff to annually acknowledge in writing that they have read and will comply with their respective Standards of Conduct.
11. Conduct annual training regarding the Standards of Conduct to highlight the importance of ethics and conflicts of interest.
12. Clarify who has responsibility for legal and policy compliance.

Delegation by the Board

13. Consider the value of adding outside non-voting experts to serve on the Investment Committee.
14. Create an Investment Committee Charter, an Evaluation Committee Charter, and an Audit and Budget Committee Charter.
15. Reevaluate the functions of the ad hoc Evaluation Committee in light of the “Board Policies and Procedures” which state that the Board will operate at a governance and not an operational level.

16. Enhance the Executive Director position description to include oversight of investment activities.
17. Create a comprehensive CIO position description.
18. Discuss what value an accountability matrix may have in documenting and clarifying roles and responsibilities.
19. Ensure that investment goals in the strategic plan are inline with those in the investment policy.
20. Enhance the language in the consultants' contracts to emphasize that they are accountable to the Board.

Staffing

21. Seek autonomy in setting staff size for investments, or in the alternative, seek staffing exemptions for critical positions like the CIO.
22. Fill the CIO position as soon as possible.

Budget and Financial Resources

23. Seek budget autonomy but maintain fiduciary standards, transparency, and reporting requirements.
24. Continue to analyze PERA's budget and efficiency using CEM or another reputable source.

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Overview of Policies, Procedures, and Practices

The most critical policies, procedures, and practices related to the investment of assets by public retirement systems ensure that the boards and staffs fulfill their fiduciary responsibility of prudence. Prudence is an ever-evolving standard that has become increasingly high as the investment vehicles and strategies used by institutional investors have become more complex.

The Prudent Investor Rule[44] is not only a common standard imposed on those who invest in public retirement funds, but it is also the optimal standard. It is stricter than the prudent man rule[45] that merely requires fiduciaries to invest assets of others as they would invest their own. The Prudent Investor Rule, on the other hand, says that the actions of fiduciaries will be judged by the care, skill, and diligence that a person acting in a like capacity and familiar with such matters would use under the same circumstances. Essentially this means that the contemporary best practices of other public retirement systems and relevant institutional investors are the appropriate standards not out-dated standards of the past. This standard of prudence is parallel to what is required by federal law[46] of those who manage assets of pension funds in the private sector.

While fiduciaries are not guarantors that every investment decision will be profitable or turn out as expected, they must employ pure, thorough, and scrupulous processes in their decision-making in order to meet the high standards of prudence and avoid personal liability. Anything less is not good enough. Therefore, the policies, procedures, and actual practices of boards, staffs, consultants, and investment managers must reflect sound processes.

Findings and Analysis

Our findings and analysis of issues related to policies, procedures, and actual practices of PERA were based upon our review of internal policies, documents, meeting minutes, contracts, consultant reports, and discussions with members of the Investment Committee, staff, and consultants. We discussed issues and debated our analysis internally as we made comparisons to policies of peers, industry standards, and best practices related to the PERA portfolio.

Asset Allocation

Asset allocation is one of the most important decisions a public retirement board is called upon to make. It is the essential, strategic decision in determining the expected long-term rate of return and risk profile for a portfolio. Boards typically set asset allocation with the assistance and advice of actuaries, investment consultants, and professional staff. Asset allocation decisions are usually reviewed annually but changed less frequently. A shift in the asset allocation is usually made to either increase returns or lower risk, achieve additional diversification, or in some cases, all three.

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[44] NMSA 1978, § 45-7-601.
[45] Restatement of the Law, 3rd, Trusts: Prudent Investor Rule.
[46] Employee Retirement Income Security Act (ERISA) § 404(a)(1)(B), 29 U.S.C. § 1104(a).

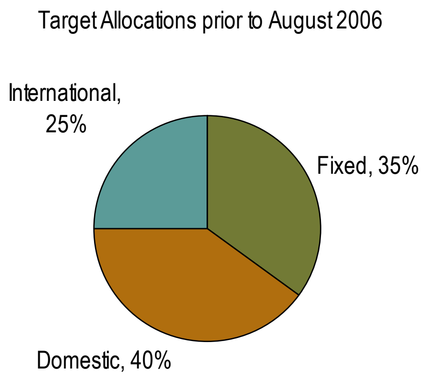
Asset allocation decisions are typically based on either an asset allocation review or an asset liability study. An asset allocation review is an asset-only optimizing exercise based on Modern Portfolio Theory[47] holding that for every combination of a specified group of asset classes there is a portfolio having the highest expected return for a given level of risk.

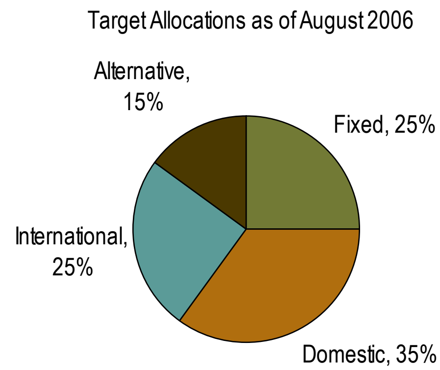
The result of an optimization is a portfolio of asset classes that have the highest level of return for a given level of risk. Assumptions regarding expected return, expected risk as measured by volatility and historical correlations[48] between asset classes are key inputs to this exercise. Highly correlated asset classes have similar returns under the same market conditions, while poorly correlated assets offset each other. The impact of a single asset class can have on a total portfolio is moderated by the inclusion of others. Particular investments or asset classes that by themselves are quite volatile can find a reasonable place in a portfolio with other uncorrelated investments. The optimization exercise identifies these portfolios and provides the decision-makers with a tool to measure their own risk tolerance for certain combinations of asset classes.

While asset allocation reviews are useful in aligning a portfolio with a return goal, they do not take into consideration the liabilities of a pension plan. Results from asset liability studies model anticipated growth rates in liabilities and cash flows, based on a fund's specific benefit formula and demographics. They explore how each asset allocation affects the probability of meeting the fund's actuarial benchmark, funding status, contribution rates, and ability to pay benefits as they come due. By recognizing that a fund's liabilities have certain characteristics and potentially change over time, a consultant can recommend an asset allocation strategy, or set of strategies, that are most likely to maintain or improve the funded status of the plan. An asset liability study provides results that are truly customized to the plan's unique characteristics. Best practices are to have asset liability studies performed every three to five years or when major modifications are made to the benefits offered by the system.

The charts on the following page show the most recent shift in target asset allocations. In August 2006, the Board approved a long-term 15% allocation to an alternative investment portfolio with 5% allocated to absolute return strategies,[49] 5% to private equity, 2.5% to real estate, and 2.5% to real assets.[50]

[47] Modern Portfolio Theory was developed by Harry Markowitz and is outlined in the paper "Portfolio Selection" published in *The Journal of Finance*, Vol. VII, No. 1 in March 1952. Markowitz later received the Nobel Prize in Economics for his work on Modern Portfolio Theory.
[48] Correlation is a measure of the difference in behavior between asset classes.
[49] Absolute Return strategies, per the IPS, will include hedge funds that utilize a wider range of investment techniques (such as leverage, short selling, and derivatives) to achieve their objectives.
[50] Real Assets, per the IPS, can include commodities and timber investments.





The chart below calculates an expected return and risk level for the PERA portfolio. Based on the current target allocations, we calculate PERA's long-term expected return to be 7.4% with a risk level (volatility) of 12.7%.[51]

Asset Classes	Long-Term Policy Target	Long-Term Expected Return[52]	Expected Risk
Total U.S. Equity	35.0%	7.4%	16.8%
Non-U.S. Equity	25.0	7.1	19.1
Fixed Income	25.0	4.8	6.6
Absolute Return[53]	5.0	7.2	10.1
Private Equity	5.0	9.8	32.0
Real Estate	2.5	6.4	11.9
Real Assets	2.5	7.8	24.6
Total	100.0%	7.4%	12.7%

While we estimate that the PERA portfolio will earn a roughly 7.4% return, the uncertainty surrounding this expectation, based on historical volatility of asset classes, is quite large. The table on the following page illustrates the range of expected returns over the next 15 years, along with probabilities of achieving these returns. The results indicated that there is a 34% chance of achieving an 8.0% over the long-term. The 7.4% expected return can be improved if there is outperformance earned by active managers.

[51] R.V. Kuhns also calculated an expected return and risk level for the portfolio, based upon their own capital markets assumptions, which equaled 7.3% (compounded) and 11.2% (one-year holding period), respectively.
[52] EnnisKnupp Second Half 2009 Capital Markets Assumptions.
[53] The Capital Market Assumption for Broad Hedge Funds was used for absolute return.

Percentile Probability	Expected Returns
5.0%	12.9%
25.0%	9.6%
50.0%	7.4%
75.0%	5.2%
95.0%	2.2%

PERA has asset liability studies conducted periodically. The last one was completed by R.V. Kuhns, PERA's generalist investment consultant, with assistance from staff and actuaries from Gabriel Roeder Smith and Company in April 2007. It resulted in a recommendation that PERA maintain the asset allocation that was selected in 2006.

The first investments in alternatives (which include absolute return, real estate, private equity, and real assets) were made in early 2007, with additional funding occurring every quarter. The PERA staff anticipated that it would take three to five years to fully fund the alternatives portfolio by drawing down capital from other investments. As of the end of September 2009, the allocation to alternatives was 10%.

PERA annually reviews its asset allocation with the consultant and staff to determine if it is still inline with the Board's expectations for returns and tolerance for risk. The last asset allocation review was conducted by R.V. Kuhns in April 2009, and discussed again in June 2009. It included an efficient frontier model that illustrated the risk and return characteristics of different asset mixes. The target allocations were not adjusted at that time; however, R.V. Kuhns made several recommendations including accelerating the fulfillment of the 15% allocation to alternative investments and once completed, reviewing the allocation to evaluate if a higher allocation would be warranted. The Board approved moving toward the 15% allocation as soon as possible. The steps PERA took to analyze and adopt a new asset allocation were prudent.

At monthly meetings the Board reviews the actual allocations to each asset class compared to the target allocations it has set. This is a sound practice. Sub-asset class allocations are determined by the CIO, with advice from the consultant and staff, which is not unusual.

In 2002, a large degree of latitude was granted to the CIO to make tactical asset allocation decisions that exceeded the allocation ranges for equities and fixed income. This latitude was granted for approximately two years. Regardless of whether the tactical asset allocation decisions proved beneficial to the fund, the delegation of this authority essentially gave one person so much control, it rendered the asset allocation set by the Board fairly meaningless. Such a delegation is not reflective of common or best practices.

In subsequent years, the Board has given authority to the CIO to make defensive or tactical decisions within the allocation range limits set by the Board so long as they are "based on sound economic information, market and economic theory, and/or other information."[54] It is our understanding that tactical shifts in the asset allocation were not vetted by the Investment Committee until recently.

[54] PERA Investment Policy Statement.

We generally recommend against tactical asset allocation. Best practices are for institutional investors to adopt fixed target allocations for each major asset class along with a relatively narrow range (e.g., +/- 5%) within which the actual allocation is allowed to fluctuate. Any deviations within this range due to cash flows or market movements are generally acceptable, but if allocations fall outside of the established range we advocate rebalancing the investments to get close to the original targets. Our bias against tactical asset allocation, or market timing, is based on both empirical evidence as well as the theoretical difficulty of correctly guessing when the time is right to get out of a market and when to get back in. R.V. Kuhns has also advised against tactical asset allocation, recommending removing the defensive allocation language altogether from the Investment Policy Statement and concentrating on a more disciplined and enhanced rebalancing procedure.

While proper asset allocation for a system ought to be based upon that system's liabilities, cash flow, risk tolerance, and legal restrictions, some systems find it useful to compare their asset allocations to those of other systems. Below we show the actual and target allocations of PERA against the average public fund allocations as reported in Greenwich Associates' 2008 survey of 328 public funds (defined benefit assets only). While a comparison to peers should not drive policy decisions, it can be interesting to know what decisions peers have made.

PERA Target and Actual Allocation as of 6/30/2009 versus Greenwich Average					
Asset Class	2008 Greenwich Average	PERA Target Allocation	Difference from Greenwich	PERA Actual Allocation	Difference from Greenwich
U.S. Equity	36.5%	35.0%	-1.5%	37.7%	1.2%
Non-U.S. Equity	19.7%	25.0%	5.3%	17.6%	-2.1%
Total Public Equity	56.2%	60.0%	3.8%	55.3%	-0.9%
Fixed Income	27.2%	25.0%	-2.2%	30.6%	4.4%
Cash/Other	2.0%	0.0%	-2.0%	5.9%	3.9%
Total Fixed Income	29.2%	25.0%	-4.2%	36.5%	7.3%
Private Equity	6.6%	5.0%	-1.6%	1.6%	-5.0%
Absolute Return/Hedge	1.7%	5.0%	3.3%	5.6%	3.9%
Real Assets	0.0%	2.5%	2.5%	0.4%	0.4%
Real Estate	7.3%	2.5%	-4.8%	0.6%	-6.7%
Total Fund	100%	100.0%	--	100.0%	--

The chart above compares PERA's asset allocation to peers in two different ways – where PERA currently stands and where PERA is headed. When PERA's actual allocations are compared against those of peers, PERA has a similar allocation to total public equity, a higher allocation to fixed income, and a lower allocation to alternatives (private equity, absolute return, real assets, and real estate). One of the most noticeable differences in the alternatives area is a lower allocation to private equity and real estate and a higher allocation to absolute return. The long-term expected risk and return characteristics of PERA's actual allocations result in a lower expected return and risk level compared to peers, due largely to the higher-than-average allocations to fixed income and cash.

PERA's long-term targets are considerably different than the actual allocations. In this regard, compared to actual allocation of peers, PERA's target total equity allocation is higher, the fixed income target is lower than peers, and the total alternatives target is similar. Within the alternatives allocation, however, PERA has a lower target to private equity and real estate in favor of absolute return and real assets. At the total portfolio level, the long-term expected risk and return characteristics of PERA's target allocations are very similar to those of the average peer fund.[55]

Asset Classes

Asset class diversification is a crucial fiduciary responsibility and essential to risk management. Thus, exploring and investing in new asset classes requires thoughtful planning and implementation. Public retirement systems diversify by asset type (stocks, bonds, real estate, etc.) and then further diversify within each asset class according to factors such as sector, credit quality, and geography. In order to achieve appropriate diversification, a program must have an organized and customized approach to investment selection.

In today's institutional investment arena, Modern Portfolio Theory (MPT) is the portfolio management strategy and quantitative method used by investors, including public retirement systems, to achieve a desired rate of return while minimizing risk. Under this theory, the appropriate way to structure a portfolio is to diversify investments among asset classes. No investment is considered, *per se*, imprudent. An investment can be risky in isolation and still be prudent if a particular investment fits within the overall investment portfolio. Asset class correlation is another fundamental tenet of MPT. For example, if one type of investment tends to increase in value during certain market conditions while another one declines, then the overall portfolio is strengthened, and risk can be reduced by including both asset classes.

A program that follows best practices will have a broad range of asset classes, leveraging internal and external resources to generate ideas. It will provide advanced education to board members and staff about the risks and expected returns of various asset classes and strategies before any are introduced into the portfolio. Decisions to include new assets classes are best made by the boards with input from the staff and consultants. Discussions of the positive and negative aspects, as well as the rationale in support of a new asset class, should be documented in board meeting minutes and maintained with any written materials that influenced the board's decision.

PERA's investment policy statement, approved July 2008, outlines the allowable asset classes and types of investments in which PERA may invest[56] so long as their use is in compliance with the Uniform Prudent

[55] Based on EnnisKnupp's capital markets assumptions as of July 2009.
[56] Fund of fund strategies are allowable in any of the asset classes and managers may use derivatives to reduce risk exposure or improve trading efficiency as specified in their agreement. All investments are subject to approval of the PERA Board and contract review by legal.

Investor Act. These asset classes are comparable to those used by other sophisticated institutional investors.

- Equity – Includes both domestic and international preferred stock, common stock, mutual funds, and portable alpha investments.[57]
- Fixed Income – Contains bonds, notes, and other obligations of both domestic and international entities and collateralized obligations.
- Real Assets/Real Estate – Composed of commodities, real estate investment trusts (REITS), real estate partnerships, timber partnerships, and energy partnerships. This allocation incorporates traditional real estate investments, but also allows for investment in energy and infrastructure-related private equity limited partnership interests.
- Absolute Returns – Refers to investments in hedge funds including hedge funds employing market neutral, credit, distressed, event driven, global macro, equity long/short, and multi-strategies.
- Private Equity – Includes investments in both direct private equity investments and limited partnership interests, including a variety of private equity sub-strategies such as buyout, venture capital, and distressed debt.
- Currency – Describes active currency strategies which do not necessarily hedge existing international holdings, instead, seek absolute return through leverage, cross-hedging, emerging markets, and interest rate futures.

Currently, PERA implements its equity strategy with domestic and international mandates. Some institutional investors are moving away from dividing equities into domestic and international categories and instead viewing it as one category of global equities. The economic argument for investing on a global basis is compelling. First, the distinction between U.S.-based and international companies is becoming less important from an investment perspective. Also, the definition of what is a U.S. versus a non-U.S. company is becoming increasingly unclear with non-U.S. companies having operations in the U.S and vice-versa. Also, many companies domiciled in the U.S. derive a significant portion of their revenues overseas just as many large non-U.S. companies receive a large portion of their revenue from U.S. sales.

Another argument for global investing is that that top companies in different industries are located throughout the world. Some are in the U.S. and some are not. For example, the ten largest construction firms in the world are located outside of the U.S. and seven of the ten largest banks are located outside of the United States. Leading information technology firms on the other hand, are largely domiciled in the United States. A global portfolio can disregard country distinctions and select investments notwithstanding the physical location of the company.

We believe it is best to think of global equity as an asset class; where U.S. and non-U.S. equity are “market segments” under the global equity umbrella. Modern Portfolio Theory suggests that the “market portfolio” is the most efficient portfolio (in terms of risk/return trade-off) an investor can hold. The “market portfolio” is a market-cap weighted sum of all available asset classes. Based on this theory, we believe the most efficient

[57] Portable Alpha, as defined by the IPS, is a strategy with a target of earning excess return of 3% above a designated index (i.e. the S&P 500, EAFE, Lehman Aggregate, or other commonly used indexes) by combining the alpha potential of hedge funds with beta exposure acquired through swaps and/or futures.

total equity portfolio is one where U.S. and non-U.S. equity is held in proportions approximating that which is available in the marketplace. This would eliminate the “home country bias” present in many institutional portfolios.

PERA has followed prudent investment processes when selecting new asset classes. By way of example, in 2006, when the Board decided to set an allocation for alternative investments it went through the preparatory steps over a sufficient timeframe in order to become familiar with the asset class. The generalist consultant at that time provided educational sessions, research papers, and discussions on alternative investments. Subsequently, the Board hired a specialty consultant, Cliffwater, to assist the Board with a new policy (“Internal Comprehensive Procedural and Operations Manual for Alternative Investments”) and alternative asset sub-strategy targets. Overall, the Board’s process for entering alternative investments was prudent, well-planned, and inline with best practices. Going forward, if PERA chooses to enter into new asset classes, the Board can look upon this process as an example to follow.

Rebalancing of Assets

A rebalancing process ensures that the strategic asset allocation and resulting risk and return characteristics are maintained. Due to continuous market movements, specific target allocations to an asset class are difficult to maintain, so allowable “ranges” for asset class exposures are typically approved by the board as part of the asset allocation policy. Each approved allocation to an individual asset class may then fluctuate from its expressed target as long as it remains within the allowable range. If a range is exceeded, reallocation of assets or rebalancing is triggered to bring the actual allocation back to its appropriate level. It is common practice for public pension funds to initiate rebalancing either every quarter or every month when the actual allocations exceed the allowable ranges. Often, public pension funds will also use normal cash flows to keep the actual allocation within the ranges.

Rebalancing ranges are set to frame a portfolio that generally maintains the expected return and risk characteristics defined by the asset allocation decision. The ranges are typically expressed as plus or minus a percent around the asset allocation target. If there were no trading costs to rebalance a portfolio, the optimal strategy would be one of continual rebalancing to the target allocations. Ranges are typically no wider than plus or minus 5%. Tighter ranges are often used for asset classes with smaller allocations. Wider ranges are not preferred for two important reasons; (1) a wider range allows for tactical asset allocation, a particularly difficult and not historically successful strategy; and (2) a wider range effectively negates the asset allocation decision by materially changing the expected return and risk profile of the portfolio.

The table on the following page shows PERA’s allocation ranges. Some ranges appear too wide and others are not centered on the targets. Allowable ranges have not yet been set for the long-term targets. These are currently under review by PERA and are expected to be revised when the entire Investment Policy Statement is updated in early 2010.

Asset Class	Minimum	Maximum	Current Target (Per IPS)	Current Allocation[58]	Long-Term Target Allocation
Broad U.S. Equity	32%	48%	40%	37.7%	35.0%
Broad Intl. Equity	20%	30%	25%	17.6%	25.0%
Fixed	25%	40%	35%	30.6%	25.0%
Absolute	0%	0%	0%	5.6%	5.0%
Private Equity	0%	0%	0%	1.6%	5.0%
Real Estate	0%	0%	0%	0.6%	2.5%
Real Assets	0%	0%	0%	0.4%	2.5%
Cash Equivalent	0%	5%	0%	5.9%	0.0%
Totals				100.0%	100.0%

Rebalancing to targets results in a lower benchmark risk than rebalancing to the edge of the range, because the resulting actual allocations will closely match the policy targets. Benchmark risk is defined as tracking error or standard deviation of the difference between actual fund performance and the policy benchmark performance. On the other hand, rebalancing to the target typically incurs a higher cost than rebalancing to the edge of the range.

Standard institutional practice, and EnnisKnupp's recommendation, is to rebalance when actual allocations deviate materially from target allocations, rather than rebalancing at specified time intervals. Actual allocations should be examined monthly or quarterly for rebalancing purposes. Special consideration needs to be given to illiquid asset classes where rebalancing is not possible or is very costly. Our analysis, based on a simulation analysis[59] that randomly generated 10,000 observations from distributions built using our capital markets expectations, indicates that in cases when managers must buy and sell securities in order to rebalance, it is best to do so only to the edge of the range. This superior risk/cost control outcome assumes that actual securities are being bought and sold during the rebalancing procedure (i.e., separate account managers are being instructed to buy/sell securities to affect the rebalance). In cases where a free trade may exist with an index fund manager or the cost of buying/selling shares of a commingled fund or mutual fund is the same no matter the dollar amount, rebalancing back to the policy target is appropriate.

PERA's IPS states that the fund will be rebalanced "at least annually," but the actual practice is for the Board and the CIO to review the allocation status of the fund at least quarterly. The consultant also monitors the portfolio to ensure that at its fully invested amount, the portfolio is within allocation ranges. If the actual allocation to any asset class exceeds the applicable maximum allocation limit or is less than the applicable minimum allocation limit for at least two weeks, then the Board authorizes the CIO and staff to rebalance the portfolio to at least half the distance to the long-term allocation levels.

[58] Current allocation percentages based on 6/30/2009 R.V. Kuhns performance report.
[59] Assumptions for the simulation analysis included: goal of rebalancing to control risk, 5 years of equity and fixed income returns, policy of 70% equity and 30% fixed income, one way trading costs of 24 basis points for equity and 12 basis points for fixed income, portfolio size of approximately $1.2 billion.

We reviewed the fund's quarter-end actual allocations since the beginning of 2006 and, with the exception of two quarters in 2009, they were within the Board's allowable ranges. In the first and second quarters of 2009, the allocation to international equity was below the allowable range and the allocation to cash was above the allowable range. By the end of the third quarter of 2009, the allocations were back within the allowable ranges. We note, however, that the allowable ranges are quite wide, so even though the allocations were within range, they deviated substantially from the Board's targets.

Investment Goals and Risk Tolerance

The investment goals of public retirement systems are different from those of endowments and foundations because retirement systems have liabilities that are set in law. Investment goals can include achieving a specified absolute return (for example, 8%), limiting volatility, earning enough income so that contribution rates do not have to increase, protecting principal, or meeting certain cash flow and liquidity requirements. Investment goals should tie directly to the risk tolerance of the board. The higher a board's tolerance for risk, the higher the goals for returns would be, and the opposite is true as well. When investment returns are strong, boards often do not focus on investment goals and risk tolerances. Difficult markets, however, as we have recently experienced, highlight the importance of these two issues. Many boards have taken a fresh look at their risk tolerances and corresponding investment goals. More than half the respondents to a recent Greenwich Associates survey[60] have reviewed or changed their policies in the last 12 months. Cutting volatility and boosting predictability appeared to be the primary goals.

The PERA Board's stated investment goals, as listed in the IPS, are as follows:

- Adopt a long-term real return objective (RRO) adjusted for inflation (currently 8%)
- Adopt an asset allocation that will most likely meet the RRO
- Minimize volatility
- Minimize costs

We find these investment goals to be reasonable but believe they would be enhanced by explicitly stating that one of the investment goals is to outperform the policy portfolio on a risk adjusted basis. While minimizing volatility is a current goal, and speaks to the issue of risk, it alone is not sufficient. Achieving a commensurate return for the level of risk taken is an important goal for a public pension fund.

The Board's strategic plan states additional investment goals, which we have listed below with our reflections on each.

- *GOAL 1: Invest all funds administered by PERA to maximize the financial returns with an acceptable level of risk.*
  This is an appropriate goal, and speaks to the importance of risk-adjusted performance as previously mentioned.

[60] Greenwich Associates Market Pulse survey of 152 institutions with assets under management greater than $1 billion. Among those participating in the survey were 97 corporate pension funds, 34 public funds, and 21 endowments.

- *GOAL 2: Contract with investment managers whose performance over the last five years ranks them in the upper quartile.*

  This goal places a great deal of emphasis on the past performance of investment managers, which has been shown to have little bearing on future performance. A more appropriate goal may be to contract with managers in which the Board and staff have a high degree of confidence in their skill set and organization.

- *GOAL 3: Improve the gathering, monitoring, and reporting of investment data, contract compliance, and returns of external investment managers.*

  This is an appropriate goal which will benefit the fund.

- *GOAL 4: Implement PERA's new international equity structure with respect to appropriate funding levels for new international equity managers, appropriate use of passive accounts, and other transition factors.*

  This is a reasonable goal, but the Board and staff may want to consider the appropriateness of global equity mandates as the new international equity structure is finalized.

- *GOAL 5: Continue to work closely with PERA's alternative investment consultant, Cliffwater to implement and monitor PERA's alternative investment portfolio.*

  This is an appropriate goal which will benefit the fund.

- *GOAL 6: Obtain approval from the Board for a ten percent allocation to portable alpha hedge funds and then complete the allocation in consultation with Cliffwater.*

  This is an appropriate goal if it is supported by results of the asset liability study and the Board's risk and return preferences.

- *GOAL 7: Continue to work closely with PERA's general consultant, R.V. Kuhns & Associates, to monitor the total portfolio, to recommend changes to the Board as needed, and to implement approved changes to the portfolio.*

  This is an appropriate goal which will benefit the fund.

- *GOAL 8: Develop reliable and user-friendly internal monitoring tools for alternative investments in terms of performance, accounting, and evaluation.*

  This is an appropriate goal which will benefit the fund.

- *GOAL 9: Develop a short-term and long-term staffing and resource plan for the Investment Bureau.*

  This is an appropriate goal which will benefit the fund.

The performance measures in PERA's strategic plan further explain the goals and define success. They include:

- Annualized investment returns greater than 50 basis points over the benchmark for the cumulative five-year period ending June 30, each fiscal year.

- Investment performance to be rated in the top half of a national database of large public pension plans in the U.S. over the cumulative five-year period ending June 30, each fiscal year.

With regard to the first performance measure, the 50 basis points is a target for excess return. A targeted level of excess return can be a reasonable goal, as long is it is based upon the levels of expected tracking or active risk within the portfolio. The more tracking or active risk in a portfolio, the more downside risk. The Board may want to ensure that the goal of 50 basis points of excess return is reasonable given the portfolio structure and manager roster.

The second performance measure, while interesting, is not nearly as relevant or important as exceeding the benchmarks for each asset class and the total portfolio.

PERA's strategic plan also mentions the unfunded actuarial accrued liability and 30-year funding periods as possible performance measures but recognizes that PERA has little control over this measure. Funding periods are more directly impacted by benefit design and contribution levels than by investment returns.

A developing trend in managing large, multi-manager portfolios in the public sector is to specify acceptable levels of active risk through a risk-budgeting tool. Risk-budgeting establishes active risk targets or ranges for each asset class and the total fund. Active risk is a statistical measure of risk that an active manager assumes relative to the benchmark it seeks to beat. It represents the potential return differential between a manager's return and its benchmark, and is the quantitative representation of the latitude that the manager has in attempting to add excess return.

Risk budgets typically specify a cap or range of risk that is allowed for each major publicly-traded asset class as well as for the total fund. Risk budgeting should never be done, however, in isolation. In periods when the market's volatility is higher than normal (as was the case over the last two years), active risk will also be high. As active risk is linked to the market, risk budgeting should take this into account, and any caps or ranges should be reflective of the changing levels of risk in the market.

While PERA is not now doing so, using risk budgeting techniques may assist the PERA Board and staff in setting appropriate risk tolerances for the fund.

Written Investment Policy Statement

An investment policy statement ("IPS") is one of the most important documents of a retirement system's governance framework. The purpose of the IPS is to provide a clear direction for investment program structure and management. It should reflect the investment goals and risk tolerance that the board has agreed upon for the fund. It should also take into account the system's financial and actuarial characteristics and delineate responsibilities and reporting lines for all key parties.

In most jurisdictions, the law does not specifically require pension funds to have a written IPS; however, there are some states and municipalities that do require it of public pension funds. For private sector pension funds, ERISA[61] does not require written investment policy statements; however, the Department of Labor strongly encourages trustees to adopt them. We believe having a well-crafted IPS document is a best practice for all pension plans, public or private. There is no uniform standard for the content or an absolute model to follow. Public retirement industry organizations, however, have provided guidance.[62] This has led to some elements of an investment policy statement that are considered necessary to reflect best practice.

On the following page, we provide a chart that details what we believe to be best practice elements of an IPS. It is common, however, for public funds to have an investment policy statement that is less comprehensive than what is outlined. Some public funds have extensive investment manager guidelines or detailed contract provisions to supplement policies. Some may address various subjects in separate documents. The best practice is to have clear documentation of what is expected and who is responsible. Whether this information is contained in one or more documents is a matter of choice. If multiple documents are used, they should not conflict. Further, a compilation of related policies, with cross-references where needed, promotes effectiveness and efficiency.

We have noted with a check mark (✓) those elements that are already included in PERA's IPS as amended July 31, 2008. We have also noted if an element is located in a separate document, or if enhancement is needed. Overall, PERA's Investment Policy Statement is quite comprehensive, but we do note that it needs to be updated in several respects. R.V. Kuhns will be working with the Board and staff to improve the policy.

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[61] Employee Retirement Income Security Act, 29 USC 1001-1461 (1974).
[62] See for example, The Government Finance Officers Association (GFOA) Recommended Practice, Committee on Retirement and Benefits Administration "Investment Policy Checklist for Pension Funds" 2003.

Investment Policy Statement Subject Areas	
Introduction	
Reference to state law creating the plan with specific reference to investment related sections of the law.	✓ Best practice
Reference to the board's right to have an investment committee and to set policy.	✓ Best practice
Description of intended beneficiaries of the plan (e.g., the plan is created for certain employees and their dependents).	✓ Best practice
Scope (e.g., limited in application to pension fund assets or may include other assets).	✓ Best practice
Statement of Purpose	
Description of the sole or fundamental purpose of the retirement system.	✓ Best practice as documented in "Board Policies and Procedures"
Language describing that plan fiduciaries must act in the sole interest of members and beneficiaries and for the exclusive purpose of providing benefits.	✓ Best practice as documented in "Board Policies and Procedures"
Listing of investment goals that could include	
Preserving the actuarial soundness of the plan in order to meet benefit obligations.	✓ Best practice
Obtaining a long-term rate of return (one or two market cycles), net-of-fees, equal to or in excess of the policy benchmark.	✓ Best practice
Clarification of how investment risks will be managed.	✓ Best practice
Establishment of the risks that may be taken to achieve return goals.	✓ Best practice
Definition of the policy benchmark and asset allocation targets.	✓ Best practice
Reference of the duty to incur only reasonable expenses.	✓ Best practice
Identification of Roles and Responsibilities	
Board of trustees – general and investment related duties.	✓ Best practice
Investment committee – role to make recommendations or final decisions.	✓ Best practice
Internal staff – general and investment related duties, reporting lines, and expectations, particularly as among the Executive Director, Director of Investments, and any other senior investment-related staff (e.g., Legal Counsel, Internal Auditor).	✓ Best practice
Investment consultants – duties, reporting lines, expectations regarding the frequency of communications, and acknowledgement of fiduciary responsibilities.	Clarify reporting lines and communications
Investment managers – duties, acknowledgement of fiduciary responsibilities, and frequency of communication; could incorporate their contractual mandates.	✓ Best practice
Custodian bank – role as custodian or trustee, cash management, performance calculations, etc.	✓ Best practice
Description of other service providers' duties, such as proxy voting, evaluating trading efficiency, portfolio analytics, etc.	✓ Best practice

Investment Policy Statement Subject Areas	
Asset Allocation	
Acknowledgement of its primary importance.	✓ Best practice
Recognition of the allocation's purpose, such as to provide an optimal mix of investments to produce desired returns and meet current and future liabilities, with minimal volatility.	✓ Best practice
Description of frequency and methodology of asset liability modeling and allocation resetting.	Include the need and frequency of asset liability study
Description of permissible asset classes as well as minimum, maximum, and target ranges.	Reevaluate allowable ranges
Standards regarding diversification, including limits to a single issuer, single asset class, economic sector, or country.	✓ Best practice
Asset Class Guidelines and Benchmarks	
Definition of each asset class and rationale for inclusion in the portfolio.	✓ Best practice
Rationale for selected benchmarks, who sets them, and how often they are revisited.	List benchmark selection process and review schedule
Description of any prohibited investments (e.g., short selling, margin, investments precluded by law or regulation).	✓ Best practice
Detailed overview of allowable credit risk in the portfolio (e.g., minimum credit rating for any fixed income investment as determined by a nationally recognized credit rating agency).	✓ Best practice
Rebalancing Policy	
Statement of the purpose of rebalancing (i.e., to ensure that the investment program adheres to its strategic asset allocation).	✓ Best practice
Description of the method used to rebalance (e.g., most cost effective manner, use of excess cash, index strategies as a source, or liquidation of over funded managers).	Provide more details pertaining to the methodology and review frequency
Describe how often the portfolio will be reviewed for rebalancing and whether a fixed threshold or proportional threshold will be used.	✓ Best practice
Monitoring and Reporting	
Statement of purpose for monitoring and reporting (i.e. to ensure compliance with the investment policy and applicable law, to manage risk, and assess manager performance).	✓ Best practice
Description of quarterly reporting for both external managers and other external investment professionals; can include an outline of current strategy and investments, performance vs. benchmark, and portfolio composition relative to the asset allocation policy.	✓ Best practice
Purpose and scope of annual and more frequent reporting.	✓ Best practice
Shareholder Activities	
Description of the proxy voting policy and how votes are cast and recorded.	✓ Best practice as documented in Proxy Policy
Statement of the circumstances under which the board will sign on to or initiate a shareholder proposal.	This subject is not addressed

Investment Policy Statement Subject Areas	
Statement of how (or if) a focus list of underperforming companies will be identified and what communication the board takes to engage companies in dialogue.	✓ Best practice
Description of the process of opting in and out of shareholder class actions.	This subject is not addressed
Identification of core principles of corporate governance (board independence, CEO compensation, access to the proxy, audit committee, etc.).	This subject is not addressed
Delegation	
Statement of delegation to the staff; could incorporate by reference the Executive Director and CIO position descriptions.	✓ Best practice
Alignment of the strategic plan with the annual plan for investments.	Strategic plan located in separate document
Requirement to annually review investment policy statement.	Not required

Manager Structure

In addition to asset allocation, which is the most important determinate of a pension fund's return, manager structure also has a large impact. "Structure" in this context refers to the use of internal and external investment managers, the use of passive index funds and active managers, as well as the number and types of managers used in each asset class.

The IPS states that the assets of PERA, excluding its office building, shall be solely managed by external investment professionals. Given PERA's staff size, collective experience, and recent move into alternative investments, we believe being 100% externally managed is prudent even though it carries with it higher costs.

With regard to active versus passive management of assets, compelling research exists indicating that active management is no easy endeavor. Within an equity or fixed income portfolio, a substantial allocation to index funds serves to anchor the portfolio to the asset class benchmark. The case for passive management is strengthened by the highly efficient nature of the stock and bond markets. Information on publicly-traded companies flows freely and it is difficult for one investor to have a material advantage over another. Also, broadly representative and investable market indices are available. Finally, the cost differential between active and passive equity managers is significant, and since active managers have not consistently beaten the market averages after considering all costs, a diversified, low-cost investment approach is a compelling investment thesis.

The decision of whether to use passive index funds or active managers will directly affect the net investment returns. Generally speaking, passive management is less expensive than active management. Index funds offer low-cost, broadly diversified exposure to an asset class or segment of an asset class. Larger index funds offer economies of scale to their investors since costs associated with managing the funds are spread across a larger asset base. Further, larger index funds that also have a widely diversified base of investors offer their investors the ability to minimize costs associated with trading since an investor's trading order may be offset against that of other investors.

The following chart,[63] prepared and presented by PERA's investment consultant, shows the percentage of PERA assets that are invested actively and passively, as well as the level of external versus internal management, in comparison to peers.

Asset Range	Percentage Actively Managed	Percentage Passively Managed	Percentage Externally Managed	Percentage Internally Managed
Over $20B	77.7%	22.3%	67.1%	33.0%
$10B - $20B	71.4%	28.6%	67.2%	32.8%
$5B – $10B	81.9%	18.1%	97.0%	3.0%
$1B - $5B	87.6%	12.4%	95.2%	4.8%
$500mm - $1B	97.0%	3.0%	100.0%	0.0%
$100mm - $500mm	88.3%	11.7%	98.6%	1.4%
New Mexico PERA	69.1%	30.8%	100.0%	0.0%

PERA uses passive management more extensively than many peers. We believe a material allocation to index funds is appropriate for most public pension funds as investment theory suggests that the average investment fund will underperform a properly constructed benchmark by the amount of its cost of operations. This theory supports the use of active managers when there is considerable confidence in the manager's ability to add value (based upon an assessment of organizational factors and the manager's skill), or there are inefficiencies in the market which can be exploited by active management.

The chart also shows that funds in the $5B to $10B range use more external management than do funds in the $10B to $20B range. PERA, with assets of $9.1 billion as of June 2009, is of a size where some internal management could be feasible. The costs for internal management are lower than external management; however, costs alone should not drive the decision. The ability to consistently and safely achieve an appropriate return net of expenses is the criteria to consider when deciding whether to bring management responsibilities in-house. Internal management requires not only a specialized skill set for the portfolio managers but also sufficient support from investment operations and accounting.

Once decisions regarding internal or external and active or passive management are made, the investment managers must be selected. There is no absolute model to use when determining the most appropriate number of investment managers to use in structuring a portfolio. Fewer managers can result in larger allocations of assets to a manager, which will usually reduce expenses if certain thresholds are met. On the other hand, larger allocations can increase manager-specific risk. Smaller allocations may diversify manager-specific risk, but could result in increased fees and "closet indexing."[64]

[63] Per R.V. Kuhns Public Fund Universe Analysis Report.
[64] Closet indexing is a term used to describe when a portfolio of active managers, when aggregated, essentially creates an index fund, but at active management fee levels.

The chart below summarizes PERA's use of external managers by asset class.

Asset Class	Number of Managers	Percentage of Assets[65]
Large Cap Equities	6	27.3%
Small / Mid Cap Equities	5	10.4%
International Equities	11	17.6%
Fixed Income	5	30.6%
Cash Management	1	5.9%
Real Estate	8	0.6%
Real Assets	8	0.4%
Private Equity	23	1.6%
Absolute Return	20	5.6%

Private equity and absolute return strategies usually employ large numbers of managers despite the relatively small allocations made to these asset classes. The number of managers used in the public markets equity asset classes is on the high side; however, it corresponds with a "style box" approach which is widely used. The style box approach refers to selecting one or more investment managers in each of the major style and capitalization segments of the market (e.g., large cap value, mid cap core, and small cap growth). Another approach to manager structure, and one we prefer, is sometimes referred to as the "whole stock" approach, which typically would result in fewer managers. This approach often starts with a broad index fund as the foundation of the portfolio, which effectively anchors the portfolio to the asset class benchmark. A handful of active managers, believed to have a high level of skill, would then be selected in order to generate excess return.

In June 2009, R.V. Kuhns prepared structure reviews for the U.S. equity, international equity, and fixed income asset classes. Periodically reviewing and then adjusting as warranted the portfolio structure is a good practice.

The result of the reviews was a recommendation to hire additional managers in all three asset classes. These recommendations are based on R.V. Kuhns' research and best thinking. The U.S. equity structure review included a number of recommendations, but one we believe to be especially important relates to the index fund portfolio, which is currently invested in five different index funds, tracking several different segments of the market. R.V. Kuhns has recommended that PERA consolidate the large cap passive exposure in one Russell 1000 Index Fund, as opposed to the value, core, and growth segments it is divided into currently. Addressing the structure of the index fund portfolio is important for the Board, as the "mismatch" between the index fund portfolio and the asset class benchmark has been a material source of underperformance for the fund.

[65] Per 6/30/2009 performance report.

Selection of Investment Managers and the Custodian

In the public pension fund arena, investment managers have historically been selected through a request for proposal (RFP) process. Many public pension funds, like PERA, continue to use a formal RFP process, which often parallels the routine other governmental entities use for purchasing goods and services. From a public policy perspective, such a process is designed to offer equal opportunity for doing business with the government and to ensure fairness in the selection process. Certainly in situations where goods and services are fungible, the process works well as a means to obtain the best price and terms. The RFP process, in theory, opens up the process to a large number of investment managers. We believe, however, that a suitably large number of managers can be considered by using an alternative process that is consistent with the need for fairness.

Approximately 65% of EnnisKnupp's public fund clients have moved to a search process that does not include a formal RFP. Such a process can be done in as quickly as six to eight weeks. In this type of search process, the investment consultant identifies a list of suitable candidates that are appropriate for the mandate, using a manager database as the starting point. Leading investment consulting firms can have from 4,000 – 6,000 managers in their databases. Of those managers, the investment consultant can readily identify, based on their knowledge of the managers and the client's needs, the firms that they believe would be best suited for the mandate.

Many public funds find a search process that does not include a formal RFP to be more efficient as it avoids the delays associated with issuing RFPs and at the same time is equally accessible, transparent, fair, and prudent. Although the PERA currently has the statutory ability to use a search process that does not include an RFP, the Investment Committee has historically used the formal RFP process.

Whether an RFP or an alternative process is used, the most critical aspect of investment manager selection is the due diligence process. The following chart compares the steps in the PERA public equities investment manager due diligence process with those of industry best practices. We indicate with a checkmark (✓) those best practice elements that are included in PERA's process.

Best Practices Public Markets Manager Due Diligence	Current PERA Practice
Screen manager databases	
Identify management firms that meet criteria	✓ Yes
Issue questionnaire	
Review biographies	✓ Yes
Review employee turnover	✓ Yes
Review team additions/departures	✓ Yes
Determine portfolio management responsibilities	✓ Yes
Review philosophy/process	✓ Yes
Identify strategy changes	✓ Yes

Conduct meetings/conference calls	
Ask questions regarding questionnaire response	✓ Yes
Begin assessment of skill	✓ Yes
Determine if manager warrants moving to next stage	✓ Yes
Assess perceived skill (cogent investment thesis, information advantage, unusual insight, talent, sound investment process, sustainability)	✓ Yes
Evaluate trading efficiency	✓ Yes
Assess management fees	✓ Yes
Review consistency of past performance (short-term trends, results v. style, themes, risk-adjusted)	✓ Yes
Determine product fit	✓ Yes
Evaluate product importance	✓ Yes
Review ownership structure (depth and breadth of employee ownership, recent or upcoming changes)	✓ Yes
Evaluate organizational factors (governance, agency issues, compensation structure, clients gained/lost)	✓ Yes
Complete comprehensive profile	✓ Yes
Onsite visit	
Meet portfolio manager(s)	✓ Yes
View trading desk	✓ Yes
Assess administrative issues (SEC action, legal issues, etc.)	✓ Yes
Clarify questions on process/strategy	✓ Yes
Legal review of documents	
Review fees	✓ Yes
Establish guidelines	✓ Yes
Review contract terms	✓ Yes

We found the due diligence process PERA used for public equity managers to be thorough and inline with industry best practices. Staff and consultants have represented to us that the selection for fixed income managers is comparable. The general consultant, R.V. Kuhns, is heavily involved throughout the process and works closely with the staff and Board by assisting in the RFP development,[66] publishing the RFP, acting as a gatekeeper for questions from managers, and assisting in every due diligence call and meeting.

Due diligence procedures can be exemplary, but if they are not well documented, they fall short of best practices. PERA's IPS does not outline due diligence steps in sufficient detail.

[66] The RFP Evaluation Committee plays a significant role in this process, as discussed on page 14.

Documentation of the actual due diligence activities is also important. At PERA, the documentation of ratings, questions, answers, and preliminary decisions are maintained by the staff, consultants, and the Evaluation Committee. This Committee plays a significant role in this process and is responsible for making recommendations to the Board. Board meeting minutes include supporting documentation and reflect the action the Board took based on the recommendations. Maintaining this type of written support for manager selection decisions, evidences the prudent process, which is a best practice. For alternative investments, PERA relies upon Cliffwater to make manager selection recommendations to the Board. Their due diligence and involvement is discussed further in the alternative investments section of this report.

We reviewed a recent search report, prepared by R.V. Kuhns[67] that included recommendations to the Board and Investment Committee, a summary of the search process, all finalist firms, and the candidates. The search report included an analysis of how the mandate would fit within the investment manager structure, which is a good practice. The report also included statistical information on the products under consideration and performance history, but did not include a detailed assessment or analysis of each manager's skill. The best search reports provide useful analysis and discussion of the differences between each manager.

Each finalist candidate was scored on five categories including; (1) organization, background, and staffing (15 points); (2) research, trading, and client service (15 points); (3) investment philosophy and process (25 points); (4) performance and return history (25 points); and (5) fees (20 points). We believe a lower point value (weight) should be assigned to past performance as there is no documented relationship between past performance and future results. Greater emphasis should be placed on the manger's skill and organizational factors that will improve the possibility for a positive income.

In addition to selecting investment managers, many public retirement boards and staffs have some involvement in selecting custodian banks. Custodian banks safeguard pension fund assets and are responsible for arranging settlement of any securities purchased or sold, managing cash transactions, filing securities class action claims, and reporting information to the plan sponsor. The custodian bank often serves as the official "book of record." It is on this information that performance is typically calculated, so ensuring that custodial services are accurate and timely is important. Some custodians also provide other services to clients, such as performance measurement, compliance monitoring, and securities lending.

Custodian banks with sizeable assets benefit from economies of scale and function more efficiently than smaller banks. Further, banks with larger custody businesses accrue more experience and tend to maintain state-of-the-art operations, which is important as the custody business has become an increasingly technology-driven business. Also, banks that derive a significant portion of their revenues from the custody business are likely to be more stable and make the necessary investments to remain competitive.
The best fit for a public retirement system is to use a custodian bank with sufficient experience and expertise with similar organizations in order to meet their specialized needs. Top-tier custodians will also offer high quality client servicing.

[67] Active International (non-U.S.) Emerging Markets Equity Investment Management Services, August 27, 2009.

PERA, like the Educational Retirement Board and the State Investment Council, uses The Northern Trust Company (Northern Trust) as its custodian. The May 2008 contract with Northern Trust covers all three agencies and was negotiated by the Board of Finance pursuant to authority under law.[68] While having an outside department or statewide officeholder select the custodian bank is not unusual, it does not reflect best practices. We believe that as the highest governing fiduciary body responsible for the investment program, the Board should have the ability to freely choose its own custodian and negotiate the scope of responsibilities, the service levels, and fees. Likewise, the Board should be able to extend custodian contracts or terminate them at any time in the best interest of the fund.

Alternative Investments

Alternative investments, as the term is used by PERA, include investments in private markets, namely hedge funds, private equity, real estate, and real assets. The private markets universe offers thousands of investment opportunities, many being quite suitable for public pension funds.

In alternative investments, the best practices are to have detailed strategies that include pre-planned sub-asset class exposures. Portfolios should be constructed over a multi-year period diversified by manager style, strategy, geographic region and other portfolio characteristics.

PERA's decision to invest in alternatives was made after thoughtful, educated consideration by staff, the Board, and upon recommendation by the generalist consultant. Additionally, the investment policy statement provides target allocations for each sub-strategy within Absolute Return, Private Equity, Real Estate, and Real Assets. The allocation and sub strategy targets that comprise the 15% allocation to alternative investments are shown in the table on the following page.

[68] NMSA 1978, § 6-1-1.

Strategy	Allocation Target	Sub Strategy Targets
Absolute Return (Hedge Funds)	5.0%	Market Neutral 5% Credit 15% Distressed 10% Event Driven 20% Equity Long/Short 20% Global Macro 5% Multi Strategy 25%
Private Equity	5.0%	Buyout 55% Venture 20% Non-U.S. 15% Distressed Debt 10%
Real Estate	2.5%	Real Estate LPs 35.5% REITs 12.5% Commodities 12.5% Timber 12.5% Energy LPs 25%
Real Assets	2.5%	Same as Real Estate

This degree of detail ensures discipline in the process as this asset class is funded over time and reflects best practices.

Alternative investments require special due diligence to thoroughly and accurately gauge the quality and risk factors associated with each before a commitment is made. Many alternative investments, like limited partnership interests, can be illiquid. Exit opportunities for these instruments are limited and if exercised, often result in a discount to the fund value.

PERA's investment opportunities for alternative investments could be impacted by New Mexico's open meetings and records acts,[69] which states that all investment related meetings, minutes, and records are open to the public. PERA is in the process of increasing the alternative investments, and opportunities with certain managers could be missed if, as part of the due diligence process, certain proprietary information or investment strategies are disclosed to the public before the investments are made or during the life of the fund. An exemption to this law would allow discussions and materials to be kept confidential. This problem may be more theoretical than real. PERA does not believe that it has missed any valuable opportunities up to this point due to this law.[70]

The steps in the due diligence process should include identifying skilled managers, validating a verifiable track record, assessing the compatibility of the general partnerships (GP's) with issues of investment strategy, reference checks, understanding the group's economics, achieving a comfort level with their decisions, ensuring proper corporate governance, reviewing legal terms and conditions, and making sure

[69] NMSA 1978, § 10-15-1 and NMSA 1978, § 14-2-1.
[70] Examples of states that have limited exemptions to open meetings requirements include Illinois and California.

adequate reporting policies and procedures are in place. Programs can use internal staff or outside consultants, or both to ensure full-coverage during due diligence.

The following chart compares the steps of PERA's due diligence process for alternative investments to those of best practices. Cliffwater completes most of the items listed below as well as performance monitoring and reporting. PERA's due diligence process compares favorably.

Best Practices Due Diligence for Private Market Manager Selection	Current PERA Practice		
	Real Estate	Private Equity	Hedge Funds
Market scan – Completed by Cliffwater			
Screen for available opportunities	✓ Yes	✓ Yes	✓ Yes
Identify appropriate mandates	✓ Yes	✓ Yes	✓ Yes
Deal/fund screening - Completed by Cliffwater			
Initial assessment of portfolio fit and stage	✓ Yes	✓ Yes	✓ Yes
Initial assessment of management experience	✓ Yes	✓ Yes	✓ Yes
Preliminary assessment of strategy	✓ Yes	✓ Yes	✓ Yes
Preliminary due diligence - Completed by Cliffwater			
Summary review of strategy	✓ Yes	✓ Yes	✓ Yes
Assessment of experience of the general partner	✓ Yes	✓ Yes	✓ Yes
Review of track record	✓ Yes	✓ Yes	✓ Yes
Examination of offering documents	✓ Yes	✓ Yes	✓ Yes
Completion of telephone interviews	✓ Yes	✓ Yes	✓ Yes
In-depth due diligence - Completed by Cliffwater			
Interview with investment management team	✓ Yes	✓ Yes	✓ Yes
Contact references	✓ Yes	✓ Yes	✓ Yes
Research of GP's incentives and alignment of interests	✓ Yes	✓ Yes	✓ Yes
Review of public information on the fund/management team	✓ Yes	✓ Yes	✓ Yes
Review track record	✓ Yes	✓ Yes	✓ Yes
Recalculate IRRs for each investment	✓ Yes	✓ Yes	N/A
Recalculate IRRs for each portfolio (net-of-fees and profit participations)	✓ Yes	✓ Yes	N/A
Benchmark IRRs, cash flow multiples, and distributions	✓ Yes	✓ Yes	N/A
Independently analyze performance by strategy	✓ Yes	✓ Yes	✓ Yes
Complete in-depth research report	✓ Yes	✓ Yes	✓ Yes
Assess perceived skill (industry/market opportunity, information advantage, proprietary deal flow, relevant experience, depth of investment talent, quality of co-	✓ Yes	✓ Yes	✓ Yes

investors, stability of strategy, benefit to underlying companies)			
Review of fund size/competing accounts	✓ Yes	✓ Yes	✓ Yes
Review of cost and fees	✓ Yes	✓ Yes	✓ Yes
Assess product fit	✓ Yes	✓ Yes	✓ Yes
Assess ownership	✓ Yes	✓ Yes	✓ Yes
Review partner turnover	✓ Yes	✓ Yes	✓ Yes
Review GP's competing lines of business	✓ Yes	✓ Yes	✓ Yes
Assess firm culture	✓ Yes	✓ Yes	✓ Yes
Review GP's reputation	✓ Yes	✓ Yes	✓ Yes
Assess reporting and risk management platforms	✓ Yes	✓ Yes	✓ Yes
Review financing and counterparty agreements	N/A	N/A	✓ Yes
Review internal process documentation	✓ Yes	✓ Yes	✓ Yes
Assess investor relations capabilities	✓ Yes	✓ Yes	✓ Yes
Legal review and negotiations – Completed by Internal and External PERA legal counsel			
Evaluate key man provisions	✓ Yes	✓ Yes	✓ Yes
Review distribution waterfall	✓ Yes	✓ Yes	N/A
Review claw back provisions	✓ Yes	✓ Yes	N/A
Review side letters	✓ Yes	✓ Yes	✓ Yes
Review investment limitations	✓ Yes	✓ Yes	✓ Yes
Exhaustive review of Limited Partnership Agreement	✓ Yes	✓ Yes	✓ Yes

Cliffwater adds an additional layer of fund manager screening and protection to the process. They have a formal internal process to pre-approve fund managers before they are even recommended to clients. This means that before the PERA Investment Committee reviews an opportunity, the fund manager has already passed through a rigorous due diligence by the investment consultant. In addition, a senior Cliffwater investment professional is present at PERA Investment Committee and Board meetings. This is a highly hands-on approach to client service, while not common, represents best practices.

The staff and Board oversee Cliffwater's investment research and evaluate its consulting recommendations. In order for an investment to be made by PERA, first the Investment Committee and subsequently the Board must approve the fund manager. While this process is more time consuming than many we are aware of, it is a careful one that the Board, staff, and consultant are comfortable with. None believe that they have missed valuable opportunities because of the length of time the process takes.

Benchmarks

Boards set benchmarks and measure actual portfolio performance against them to determine the success of an investment program. Benchmarks are set for the total fund, each asset class, and each individual investment manager. Best practices are for the total fund to be measured against a policy portfolio benchmark, which is a passive representation of the target allocations of the fund. The most appropriate asset class benchmarks and manager benchmarks are those that broadly represent the entire opportunity set in a particular asset class or within a particular manager's mandate. When measuring actual performance against benchmarks, staffs at large public pension funds usually track performance monthly and generally report results to the boards quarterly.

A common secondary measure of performance is a universe ranking. Universe rankings give an understanding of how the fund or asset class portfolio has performed relative to peers. Universe rankings, however, are flawed in that the universe data is often not an "apples-to-apples" comparison. Different institutional investors have different investment objectives and risk parameters and thus may structure their portfolios very differently. Other shortcomings can include inaccurate data (most universes have self-reported returns) and survivorship bias. Survivorship bias exists in manager-level universes because underperforming managers may cease to report their results, skewing the universe returns upward. Because of these shortcomings, the most important performance comparison is against the stated performance benchmark which takes into account the portfolio's asset allocation or manager strategy.

PERA's Investment Policy Statement (IPS) does not contain a total fund benchmark, beyond a listing of return objectives (for example, a total annual return of 8%). The performance reports, however, compare the total fund performance with a policy portfolio, which uses the Board approved-policy targets to construct a weighted average benchmark. This is good practice. It would be best practice for the policy portfolio to be identified as the total fund benchmark in the IPS.

The IPS sets forth performance benchmarks for each asset class, as is common and best practice. The following table shows the benchmark assigned to each asset class in the IPS and used in the performance reports and our assessment of whether they are appropriate.

Asset Class	Benchmark Shown in Performance Reports	Benchmark Per IPS	Assessment
Domestic Equity	Russell 3000 Index	Russell 3000 Index	Appropriate; the Russell 3000 is a broad measure of the U.S. equity market and an acceptable benchmark for a diversified portfolio. The DJ Total Stock Market Index is also often used as a total domestic equity benchmark and would also be appropriate. The IPS and the policy portfolio in the performance reports "match".
Domestic Large Cap	Russell 1000 Index	None indicated	Appropriate; the Russell 1000 is a broad measure of the large cap U.S. equity market and an acceptable benchmark for a diversified large-cap portfolio.
Domestic Small/Mid Cap	Russell 2500 Index	None indicated	Appropriate; the Russell 2500 is an index including both small and mid cap stocks; it is an acceptable benchmark for a diversified small/mid cap portfolio.

Asset Class	Benchmark Shown in Performance Reports	Benchmark Per IPS	Assessment
International Equity	MSCI ACW Ex U.S. Index	MSCI EAFE Index	The MSCI ACW Ex-U.S. Index is a broad measure of developed and emerging international markets, and is an acceptable benchmark for a diversified international equity portfolio. The IPS indicates that the international equity benchmark is the EAFE Index, which is less appropriate for a portfolio that includes emerging markets. The Board has, in fact, recently approved the MSCI ACW Ex-U.S. Index as the asset class benchmark. This change will be reflected in the IPS once it is revised.
International Developed Equity	MSCI EAFE Index	None indicated	Appropriate; the MSCI EAFE Index is a measure of large-cap developed, markets and is an acceptable benchmark for an international equity portfolio focused on these types of markets.
International Emerging Equity	MSCI Emerging Markets Index	None indicated	Appropriate; the MSCI Emerging Markets Index is a broad measure of emerging markets, and is an acceptable benchmark for an international equity portfolio focused on these types of markets.
Total Equity	61.54% Russell 3000/38.46%MSCI ACWI Ex U.S.	None indicated	Appropriate; the percentages reflect the approved policy targets for U.S. and non-U.S. equity.
Domestic Fixed Income	Barclays Capital Aggregate U.S. Bond Index	Barclays Capital Aggregate Bond + 50 basis points, Barclays Capital Aggregate Bond, and Barclays Capital High Yield Index	Appropriate; the Barclays Aggregate U.S. Bond Index is a broad measure of the investment grade bond market and an acceptable benchmark for a core or core-plus portfolio. The IPS indicates different policy benchmarks for different components of the fixed income portfolio, which are not reflected in the policy portfolio.
Private Equity	Venture Economics	Long-Term (5-10 years): Russell 3000 Index Plus 3 percentage Points Medium-Term: Venture Economics Pooled IRR for respective vintage years Short-Term: Incorporated into policy portfolio as	Appropriate; the long-term benchmark of a broad U.S. equity index plus a risk premium of 300 basis points is an acceptable and commonly used benchmark for private equity. The short and medium term benchmarks identified are also appropriate.

Asset Class	Benchmark Shown in Performance Reports	Benchmark Per IPS	Assessment
		actual weight and performance	
Public Real Estate (REITS)	None Indicated	FTSE NAREIT Equity Index	Appropriate; the FTSE NAREIT equity Index is a broad and commonly used benchmark for REITs.
Private Real Estate	None Indicated	NCREIF Property Index Plus 3 Percentage Points	Appropriate; the benchmark adds a premium to the NPI as a result of the risk adjusted returns associated with the value added and opportunistic focus of the private real estate portfolio.
Total Real Estate	NCREIF	CPI + 6%	The most appropriate benchmark would be a weighted benchmark reflecting the allocations to private and public real estate The IPS indicates real estate's benchmark is the CPI + 6%, which we do not believe is appropriate because the portfolio's real estate investments are not typically used as inflation hedge.
Commodities	None indicated	Commodities Index	The IPS does not specify a specific commodities index; we believe the Dow Jones Index is most appropriate.
Timber	None indicated	NCREIF Timberland Index	Appropriate; the NCREIF index is the industry standard benchmark for timber investments.
Absolute Return	LIBOR + 4% (in RVK reports) Various HFRI and industry indexes[71] (in Cliffwater reports)	Long-Term (3-5 years): LIBOR Plus 4 Percentage Points Short-Term: HFRI Funds-of-Funds Composite Index	The LIBOR plus 4%, as identified in the IPS, is a common benchmark for absolute return strategies. We believe a better benchmark is the HFRI Funds-of-Funds Composite Index as it reflects a broad universe of investments and the volatility inherent in the portfolio.

Generally we found most benchmarks to be appropriate, with the exception of international equities, total real estate, and commodities. These require further review and discussion with PERA's consultants. We believe the benchmark identified as the "short-term" benchmark for the absolute return portfolio is more appropriate than the one identified as the "long-term" benchmark. PERA already has plans to update the benchmarks in the revised IPS.

[71] The Cliffwater Absolute Return Portfolio Performance Summary uses a variety of benchmarks including Libor + 400 bps, HRFI fund-of-funds and weighted composite indexes and also specialty market indices such as Barclays High Yield Credit Bond Index.

Compensation of Managers

Research indicates that, in general, the performance of managed funds suffers dollar for dollar as a result of management fees. There is no evidence of a relationship between fees and performance. Accordingly, differentials in management fees are assumed to translate directly to differentials in net return. Consultants, investment managers, and their clients have long debated alternative compensation arrangements for investment managers. Traditionally, managers have charged clients a fee for services computed as a declining percentage of assets, or an asset-based fee. Performance fee arrangements, which are less common for public markets, call for the client to pay the manager a smaller percentage of assets as a base fee, and an additional payment contingent upon performance, i.e., a return in excess of an agreed-upon benchmark.

In tying manager compensation to superior performance, rather than solely to asset size, performance based fees better align the interests of asset manager and client. Under an asset-based fee, the manager has an incentive to increase assets under management through marketing. But larger portfolios are more difficult to trade profitably, so the growth-oriented manager runs the risk of becoming too large to outperform when trading costs are taken into account. Performance fees, on the other hand, reward the manager for performance, an inducement, in principle at least, to control growth in assets under management.

Ultimately, there is no one right approach to manager compensation. How the organization views the nature of the relationship with the manager—as a vendor or more like a partner, can be a determining factor. PERA has expressed a preference, but not an absolute requirement, for performance based fees. The Board believes performance based fees align the managers' interests more closely with the fund's long-term goals. At times, managers without an available performance-based fee schedule have been excluded from the manager search process. We believe such a practice could exclude compelling candidates that could add value to the portfolio.

The chart on the following page lists the investment manager fees paid across all assets classes by PERA for 2008. PERA utilizes a combination of active and passive management styles, and the total fees paid per asset class is a blend of those strategies. A comparison was made to similar investment style strategies and the averages across the industry. Our analysis shows that the current fees are well within industry standards and in some cases, better than industry standards.

PERA Fee Comparison by Asset Class		
Asset Class	PERA Fees[72] in bps	Pension Fund Asset Class Fee Average[73]
Domestic Equities	20.2	35.4
International Equities	31.5	42.5
Fixed Income	7.3	19.6
Real Assets	24.3	45.0[74]
Real Estate	54.8	150.0[75]
Absolute Return	130.5	100.0
Private Equity	112.3	100 - 200[76]
Total Fund	26	N/A

Alternative asset managers (real estate, real asset, absolute return, and private equity) are compensated with a management fee, an incentive-based fee or both. Typically, closed-end real estate/real asset funds will charge an annual management fee of 1.0%-2.0% on total commitments (further reduced over the life of the fund), with an incentive fee (carried interest) of 15.0%-20.0% over a preferred return (typically 8.0-9.0%).

Actively managed REIT strategies, on average, will charge 50-70 basis points per annum on net asset value. Open-end real estate funds will charge on average of 100 bps per annum based on net asset value. Absolute return funds will charge a management fee of 1-2% of net asset value plus a 20% profit sharing arrangement (carried interest). Private equity funds will typically charge an average annual management fee of 1.0%-2.5% on total commitments (further reduced over the life of the fund), with an incentive fee (carried interest) of 15.0%-25.0% over a preferred return (typically 8.0%). EnnisKnupp has reviewed each alternative asset fund's compensation arrangement and finds each within an acceptable range in light of industry standards and expectations.

[72] PERA asset class fees calculated based on fee information and asset levels provide by PERA.
[73] Greenwich Associates 2008 Fee Information except where noted. Public Funds with assets from >$5 billion. Fees for actively managed assets.
[74] Industry average based on the portfolio containing separate accounts direct mortgages.
[75] Industry average based on the portfolio containing closed end commingled value added and opportunistic funds.
[76] Information is sourced from the Dow Jones, Private Equity Analyst, Terms and Conditions Report, Fourth Edition (2008).

The following table compares PERA's total investment management fees with several benchmarks. PERA's fees compare well to these averages.

Source	Fee (in basis points)
PERA Investment Management Fees	*26*
Greenwich Average -- All Public Funds	46
Greenwich Average -- Public Funds >$5 Billion	35
Greenwich Average – Corporate DB Plans	53
Greenwich Average – Corporate DB Plans >$5 Billion	41
Greenwich Average – Endowment Funds	64
Greenwich Average – Endowment Funds >$1 Billion	61

Role and Qualifications of Placement Agents

A placement agent is any third-party intermediary that is directly or indirectly hired, used, retained, compensated, or otherwise given anything having monetary value or benefit, tangible or intangible, by an investment manager to assist the investment firm in securing an institutional investor's commitment. For example, many private equity fund managers will enlist the services of placement agents (typically affiliated with an investment bank) to assist with the marketing and relationship building aspects of raising a fund. Recent investigations revealing abuses related to the use of placement agents have resulted in significant controversy and increased scrutiny of conflicts of interest in the management of public fund assets.

In early August 2009, the SEC issued a proposed rule that would prohibit an investment manager and its employees from paying a third party, such as a placement agent, to solicit a government client on behalf of the advisor.[77] While this proposed rule has not yet been adopted, the institutional investment community has reacted by implementing placement agent policies. Some policies, developed by those who believe that placement agents serve a legitimate purpose, require significant disclosure.[78] Other policies go even further. Several pension funds, such as the New York State Common Retirement Fund[79] and those in the State of Illinois,[80] completely ban any investment in a fund that uses placement agents.

In July 2009, legislation became effective requiring PERA's fund managers to disclose the identity of placement agents and the fees paid to them. PERA is permitted to invest assets with investment managers who use placement agents as long as the manager discloses the identity and the fee paid to any third-party

[77] The Securities and Exchange Commission ("SEC") proposed rule 206(4)-5.
[78] Arizona State Retirement System; California Public Employees' Retirement System; California State Teachers' Retirement System; and Teacher Retirement System of Texas.
[79] On April 22, 2009, New York State Comptroller Thomas DiNapoli imposed a ban on the use of placement agents, paid intermediaries and registered lobbyists with respect to the state's $122 billion Common Retirement Fund, including arrangements under which any of these persons are compensated on a flat fee, contingent fee or any other basis.
[80] In Illinois, Public Act 096-0006 became effective on April 3, 2009.One of the reforms adopted in this act is a ban on contingent fee arrangements and placement fees to influence the outcome of an investment decision or the procurement of investment services by an Illinois state or local retirement system, pension fund or investment board.

marketer.[81] The ordinary practice of PERA, consistent with best practices, is to require the disclosure of placement agent, contingency, third-party marketing, and agent fees through negotiated side letter in every direct alternative investment. Disclosure of such fees is made quarterly to both the Legislative Finance Committee (LFC) and Department of Finance and Administration (DFA).

In response to the legislation, PERA staff contacted each alternative asset fund manager within the portfolio, requesting details of the placement agent's identity and corresponding fee related to each PERA investment. Of PERA's 41 alternative investment managers, 30 did not use placement agents, 9 did use a placement agent, and 2[82] chose not to respond to staff's inquiry. Many alternative asset fund managers employ placement agents, thus this level of placement agent usage is normal and expected. For 6 of the 9 fund managers using placement agents, staff was able to secure specific fee information. Since PERA had committed to these funds prior to the July 2009 legislation, the managers are not required to provide placement agent information. Appendix F lists the managers and placement agents used by PERA.

Generally, placement agent fees range from 25 bps to 150 bps of total capital raised. Based on industry standards, our experience, and the PERA information we reviewed, the fees paid to placement agents are reasonable. Furthermore, the five placement agents used by the nine investment managers are well-known and reputable, and all are registered broker-dealers. Although four investment funds have not provided placement agent or associated fee information, these funds are not required to disclose such information since these investments were made prior to the effective date of the disclosure law.

In further response to this legislation, PERA investment staff, in conjunction with Cliffwater, the alternative asset investment consultant, also sent prospective fund managers a copy of the legislation. This action will eventually save time for the Board, staff, and the investment consultant because if a fund indicates it is unable or unwilling to comply with such disclosures, the fund will be taken out of PERA's due diligence process.

The PERA staff has diligently gathered and tracked placement agent fees in light of the disclosure legislation. Although the placement agent information is well-documented and organized, in light of best practices, it is best for an independent consultant to be responsible for gathering and tracking this information. Currently, the PERA staff tracks placement agent fees that are paid by the manager to a placement agent in connection with PERA's own commitments. Additionally, PERA should also be aware of

[81] NMSA 1978, Section 10-11-133.1 Disclosure of third-party marketers; penalty. – (A) The retirement board shall not make any investments, other than investments in publicly traded equities or publicly traded fixed-income securities, unless the recipient of the investment discloses the identity of any third-party marketer who render services on behalf of the recipient in obtaining the investment and also discloses the amount of any fee, commission, or retainer paid to the third-party marketer for the services rendered. (B) Information disclosed pursuant to Subsection A of this section shall be included in the quarterly performance reports of the retirement board. (C) Any person who knowingly withhold information required by Subsection A of this section is guilty of a fourth degree felony and shall be punished by a fine of not more than twenty thousand dollars ($20,000) or by imprisonment for a definite term not to exceed eighteen months or both. (D) As used in this section, "third-party marketer" means a person who, on behalf of an investment fund manager or other person seeking an investment from the fund and under a written or implied agreement, receives a fee, commission or retainer for such services from the person seeking an investment from the fund. and the fee paid to any third-party marketer who provided services on behalf of the recipient. (This bill is effective June 19, 2009).

[82] Charterhouse and Madison Dearborn have not yet responded to PERA staff placement agent usage inquiry. Since these investments were made post July 2009, the fund managers are not required to disclose placement agent information.

all placement agent usage by a manager. Although a fund manager may not pay a placement agent to secure a PERA commitment, the fund manager may pay placement agent fees in connection with other client commitments (i.e., a fund manager may hire a placement agent exclusively for international marketing). PERA should be made aware of all placement agent fees paid by a fund manager and an independent consultant can assist in tracking this information.

Currently PERA is covered by the above mentioned statute but does not have a specific placement agent policy. Best practices are for public funds to document the method of communicating statutory requirements to the investment managers, the implementation and monitoring process, the procedure for addressing concerns, the staff responsible for these functions, and any additional disclosure or qualification requirements (such as FINRA registration) of placement agents in a written policy. The following is useful information that should be included in such a policy:

- Identity and domicile of all placement agents utilized by the fund manager, not just the ones involved in raising a particular system's commitment
- Placement agent's broker-dealer (SEC, FINRA, or comparable entity)[83] registration information
- Placement agent fee structure
- History and qualifications of the placement agent
- Placement agent's length of employment by the fund manager
- Actual fee paid to the placement agent for the public fund's commitment
- Terms of the placement agent agreement
- Previous or anticipated investigations by any federal, state, or local government agencies or regulatory bodies in the last 10 years
- Direct or indirect relationships with the decision-makers for the hiring of the investment firm, including board members and investment consultants
- Placement agent's status as a lobbyist with any state or federal government
- Placement agent's political contributions or gifts made to the decision-makers
- Placement agent employee's financial brokerage licenses (i.e. Series 7/63).

It is important to note that PERA's Code of Conduct included in the "Board Policies and Procedures"[84] provides additional protection against misconduct of placement agents. The Code includes provisions related to the prohibited transactions and acts; financial conflicts and disclosures; gifts, contributions, disclosures, and solicitations; and outside employment and other outside activity. We highlight one provision[85] that limits political contributions to Board members and other certain parties from various entities,

[83] Financial Industry Regulatory Authority ("FINRA").
[84] Adopted March 29, 2001 and revised.
[85] Contributions: No person who is a candidate in a primary or general election for a position that qualifies the person for ex-officio membership on the Board, no Member serving ex officio on the Board and no person who is a nominee for the Board by election of the membership shall accept anything of value of more than $25.00 as a contribution from a person who: a. has a current contract with the retirement board or association; b. is a potential bidder, offeror or contractor for the provision of services or personal property to the retirement board or association; c. is authorized to invest public funds pursuant to state or federal law or is an employee or agent of such a person; or d. is an organization, association or other entity having a membership that includes persons described in Paragraphs (a) through (c) of this subsection.

including agents of those authorized to invest public funds, as being aligned with public industry best practices.

Performance Reporting

Regular monitoring and reporting of investment performance are important functions in fulfilling the fiduciary duty of prudence. Fiduciaries that delegate the investment decisions of purchasing and selling securities, as the boards of public retirement systems generally do, have a responsibility not only to use care in the selection of the investment managers, but also in the oversight of the managers' performance. Failure to monitor and take action, when warranted, can produce the same degree of fiduciary risk as that resulting from imprudent due diligence in hiring managers.

Periodic performance reports provide the type of information needed by the Board and staff to make decisions regarding manager retention and termination, portfolio strategy, and structure. They also help the Board and staff assess strengths and weaknesses in the portfolio. Manager successes and deficiencies are kept in the forefront through these reports. The overall structure of the portfolio and the strategies employed are best evaluated through regular reporting that compares performance of the portfolio and individual managers to reasonable benchmarks.

Having a sound system in place to calculate the rates of return for the portfolio benefits both the board and staff. It also gives reassurance to external parties that are interested in the success of the investment program. It is a best practice for investment performance to be calculated and reported quarterly and for reports to be presented verbally at meetings where questions can be asked and answered. With today's high level of scrutiny of public retirement systems, it is very important to establish and adhere to best practices in performance reporting.

The table below lists items and elements of performance reports that we believe to be best practices. We compared those elements included in the R.V. Kuhns performance reports against best practices and noted them with a checkmark (✓) which indicates items that are typically found in the reports of other investment consultants and included in the R.V. Kuhns reports. A star symbol (★) indicates other valuable items that are not usually included in the reports of other consultants and are included in the R.V. Kuhns reports.

Best Practice Elements included in Performance Reports	Included in R.V. Kuhns Performance Reports
Capital Markets Review	✓
– Return detail of markets	★
– Hedge Fund market review	★
– Historical asset class summary	★
Asset allocation summary	✓
– Asset class over/underweight vs. policy	✓
– Change in asset allocation over the period	Not included
– Asset allocation vs. peers	✓

— Asset allocation by manager (% and dollars)	✓
Return summary versus benchmark(s)	✓
— Total fund level performance	✓
— Asset class level performance	✓
— Manager level performance	✓
— Performance shown net of fee	Not included
— Trailing period returns (including since inception)	✓
— Annual period returns	✓
— Performance versus peers	✓
Total fund and asset class attribution analysis	✓
Ratio of cumulative wealth graphs	Not included
Annualized risk/return exhibits for the total fund	✓
Annualized risk/return exhibits for each manager	✓
Manager sector allocation (versus benchmark)	✓
Manager sector performance (versus benchmark)	★
Manager characteristics (versus benchmark)	✓
Manager peer group scattergram	★
Manager up/down markets chart	★
Manager country/region allocations (versus benchmark)	✓
Manager investment philosophy/strategy	Not included
Manager performance commentary	Not included
Attestation of manager guideline compliance[86]	Not included
Appendix/Glossary	✓
— Summary of Investment Policy and Objectives	Not included
— Definitions and benchmark descriptions	✓

In addition to R.V. Kuhns, Cliffwater also provides comprehensive quarterly and annual performance reports to PERA. Both consultants strive to ensure their reports are useful for the Board. A significant portion of time at meetings is dedicated to reviewing individual and overall fund performance. These actions are inline with best practices for monitoring the fund.

One shortcoming we note is that the quarterly performance reports show most returns gross of fees (alternative investment results are reported net-of-fees). The returns are reported this way in order to make an appropriate comparison with the peer universes that show returns gross of fees, which makes sense. We believe, however, that measuring returns net-of-fees against market benchmarks is of primary importance

[86] If manager compliance is monitored and reported via a separate report, it may not be necessary to include it in a performance report.

and a best practice. There are a few other elements listed in the chart that the Kuhns reports do not include. The Board may want to discuss the value of adding such items to the report.

Having a sound performance reporting process is only part of the equation in monitoring performance. Equally important is interpreting the reports and making adjustments to the policy or manager structure when warranted. We examined the fund's performance over the past ten years, and while the shorter duration time periods have not performed well, the ten year rate of return in comparison to the policy benchmark is favorable. Over the ten-year period the returns of the PERA portfolio and its benchmark have ranked below median in a public fund universe.

In the chart below, we compare PERA's actual rate of return (ROR) against the Blended Index Benchmark, which is a passive representation of the Board's strategic allocations. The table also shows PERA's rank in a universe of other public funds. A rank of 1 is the best, and a rank of 99 is the worst.

Annualized Performance As of 6/30/2009[87]	1 Year ROR Rank	3 Years ROR Rank	5 Years ROR Rank	10 Year ROR Rank
NM PERA Total Fund w/ Alternatives	-24.1 94	-6.0 98	0.4 95	2.7 68
Total Fund Blended Index Benchmark	-16.9 38	-2.4 35	2.2 42	2.5 74

Although performing a detailed portfolio attribution analysis is not within the scope of this project, our high level observations, based upon the interpretation of information we obtained, are provided below.

The one, three, and five-year performance of the fund has been weak compared to the total fund blended benchmark, and compared to a universe of public funds. On a risk-adjusted basis, performance was also weak. The fund incurred more risk, and earned less return, than the total fund blended index. Over the five-year period, one of the largest detractors from performance was the fixed income portfolio. A material underweight to bonds during a period when stocks fell significantly, coupled with underperformance against the aggregate bond index, negatively impacted the return of the total fund. The fund's underweight to fixed income was eliminated during 2009.

Another source of underperformance over the five-year period was the domestic equity portfolio. Collectively, the active managers in the domestic equity portfolio outperformed, however, the index funds, when aggregated, produced a return below that of the Russell 3000 Index (the asset class benchmark). The individual index funds were each successful in closely tracking their respective benchmarks. When combined into one passive portfolio, however, they lagged the benchmark by over one percentage point.

[87] Returns per the R.V. Kuhns Performance Report for the quarter ended 6/30/2009. Performance is gross of fees for traditional assets and net-of-fees for alternative assets. Ranks are calculated on data provided by BNY Mellon Risk and Analytics.

Ideally, the index funds in which a fund invests will collectively mirror the construction, and thus the risk and return level, of the asset class benchmark. This serves to "anchor" the portfolio to the benchmark. When this is not the case, benchmark "misfit risk"[88] is introduced to the portfolio. It appears such a benchmark misfit was present in the portfolio and thus contributed to the total fund underperformance. It is important to note that misfit risk can have either a negative or positive impact on performance. Over the five-year period, the apparent passive overweight to large cap equities hindered performance relative to the Russell 3000 Index because small and mid cap stocks outperformed. R.V. Kuhns has discussed the construction of the index portfolio with the Board, and recommendations have been made to re-structure the portfolio to eliminate the benchmark mismatch. An overweight to U.S. equities also served to dampen performance because U.S. equities in general produced weak results compared to the other asset classes over the five-year period. More recently, the overweight to U.S. equity has been reduced.

Having a smaller impact on performance over the five-year period, although still negative, was the international equity portfolio which lagged the asset class benchmark by over one percentage point. Historically, PERA pursued an active approach in international equity, and thus the collective underperformance of the active managers detracted from results. A passive portfolio was initiated in early 2007. Over the one-year period ending 6/30/2009, the passive portfolio performed better than the active international portfolio, but still underperformed the asset class benchmark. The passive portfolio currently consists of an EAFE Index Fund and an EAFE Growth Index fund, which means there is not passive allocation to emerging markets. Having two different index funds may serve a purpose of offsetting a style overweight in the portfolio, but it also introduces complexity in the portfolio. Many institutional investors opt instead to have one index fund that includes exposure to all areas of the markets, including developed and emerging markets and growth and value stocks.

In 2007, PERA also initiated an alternatives portfolio, consisting of real estate, private equity, real assets, and absolute return strategies. Due to the short-term performance history, results of these investments are not yet meaningful. From a diversification perspective, we would expect these types of investments to enhance the fund's risk and return characteristics going forward.

While alternative investments have the potential to enhance returns, significant attention still needs to be paid to the largest asset classes in the portfolio – publicly traded equities and fixed income. The structure of the portfolios and the underperformance in these asset classes are significant concerns and must be addressed.

Conclusions

PERA follows best practices in setting its asset allocation by using asset liability studies and asset allocation modeling to analyze risk and return. The asset classes employed by PERA, including those in the alternatives portfolio, are commonly used by other public pension funds. If weighted correctly, the diversification will benefit PERA over the long run. We saw nothing in the current allocation that seemed inappropriate. Accessing the equity markets with global mandates may be beneficial.

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[88] Misfit risk is the risk that arises due to differences between the managers' specific benchmark and the asset class benchmark.

PERA's processes for rebalancing of the portfolio could be improved. The ranges around the target allocations were very wide, which allowed the asset allocation to deviate materially from the targets over the last three years, even though technically they were still within range. Discretion for tactical asset allocation, which has the potential to introduce significant risk relative to the long-term policy benchmark, was given to the CIO.

Investment goals in the IPS seem reasonable but could be expanded to include risk-adjusted performance. Also, the investment goals in the IPS and the strategic plan should be in alignment. Most, but not all of the investment goals in the strategic plan were inline with the IPS.

The "efficient frontier" exercises the Board members have gone through with the investment consultant to determine their tolerance for risk have been in conformance with the best practices and have resulted in a prudent asset allocation.

Overall, PERA's Investment Policy Statement (IPS) is thorough, well-written, and fairly typical of those of peers. One unusual aspect is the tactical asset allocation authority granted to the CIO. R.V. Kuhns has recommended eliminating this language from the IPS, and we agree.

Many other aspects of the Investment Policy Statement reflect best practices and when it is viewed in conjunction with supplementary documents, PERA has a fairly comprehensive set of policies. Some enhancements, which PERA is currently contemplating, will be improvements. The IPS needs to be formally updated to reflect the new long-term targets and define allowable ranges for the new asset allocation. These changes will be addressed by R.V. Kuhns.

PERA's assets are 100% externally managed, which is not unusual for a fund its size. Larger funds tend to use internal management for a portion of their assets. PERA's use of passive strategies has kept costs low. The number of managers PERA uses in each asset class is fairly reasonable given the approach used by PERA.

PERA's due diligence procedures for the selection of investment managers for both public markets and private markets are very thorough. The Board's approved due diligence process, however, could be more thoroughly documented in the IPS or a separate policy. Staff is actively involved in due diligence. There is significant reliance on consultants but not to an unreasonable degree. The consultants add great value and insight. The Board is more involved in preliminary details than is common; however, the process works well and is of educational value to them.

The selection of the custodian bank is not under PERA's control. It is handled by the Board of Finance. Therefore, PERA is not able to extend or terminate the custodian bank contract as it sees fit.

The PERA Board decided in 2006 to pursue alternative investments and has been funding the portfolio over the last three years. The current allocation is close to 10%, but under the long-term target of 15%. The Board recently approved accelerating the funding of the remaining allocation.

The benchmarks for the asset classes PERA uses are generally appropriate, with a few exceptions. PERA does not have a total fund benchmark in its IPS and it should. In practice, PERA measures its performance against such a policy portfolio in the quarterly performance reports. PERA also measures its performance against a broad universe of other public pension funds.

The compensation paid to managers was lower than what comparable funds pay. PERA prefers performance based fees, but has not been able to negotiate them with all managers. Despite this, PERA has achieved relatively low fees across all asset classes.

PERA is not prohibited from hiring investment managers who use placement agents; however, a new law requires disclosure of certain information about placement agents. PERA's managers in the past have used placement agents that are well-known and associated with reputable firms. PERA does not have a placement agent policy detailing the Board's views on the topic.

The performance reporting to the Board and staff comes through the two independent consultants, which is a best practice. The reports are thorough. The consultants do not merely provide data; they interpret it for the Board and staff. PERA's performance over the past 1, 3, and 5 years has been below its benchmark and below universe averages, but performance over a 10-year period has been favorable.

Recommendations on Policies, Procedures, and Practices.

Asset Allocation

25. Disallow tactical asset allocation.
26. Set a date for achieving the target allocations for all asset classes.

Asset Classes

27. Evaluate the suitability of global mandates for equities.

Reallocation of Assets

28. Update and tighten the ranges around the targets for each asset class.
29. Establish a disciplined rebalancing policy.

Investment Goals and Risk Tolerance

30. Revise the stated goals in the IPS and the strategic plan to be consistent and tied to risk adjusted returns.
31. Eliminate the investment goal in the strategic plan that focuses on selecting managers based on past performance.
32. Explore the benefits of risk budgeting with consultants.
33. Ensure the excess return target of 50 basis points, as listed in the strategic plan, is inline with the tracking and active risk levels within the portfolio.

Written Investment Policy Statement

34. Update and improve the IPS as suggested in this report with the assistance of the consultant.

Manager Structure

35. Ensure allocations to active managers are supported by either a high level of confidence in the managers' ability to add value going forward or inefficiencies in the market.
36. Evaluate the costs and benefits of managing a portion of the assets internally.
37. Continue to evaluate the portfolio structure, including the number and types of investment managers, with the investment consultant.
38. Ensure the index funds, when aggregated, represent the asset class portfolio.

Selection of Investment Managers and the Custodian

39. Evaluate whether a formal RFP process remains the most efficient and effective way to conduct manager searches.
40. Improve search reports so they include a detailed assessment of the managers' skill and the differences among the managers under consideration.
41. Place greater emphasis on skill and organizational factors, and less emphasis on past performance, when selecting investment managers.
42. Seek statutory authority to hire the custodian bank.

Alternative Investments

43. Seek a statutory change to allow discussions and materials of private market investments with proprietary investment strategies to be kept confidential.

Benchmarks

44. Include a policy portfolio as the total fund benchmark in the IPS.
45. Reconsider benchmarks for international equities, real estate, and commodities.

Compensation of Investment Managers

46. Do not disqualify investment managers from consideration based solely on the availability of performance based fee arrangements.

Role and Qualifications of Placement Agents

47. Evaluate PERA's disclosure, registration, and monitoring requirements for placement agents in light of current industry standards and document the Board's position in a policy.
48. Delegate the responsibility of tracking placement agent usage and fees to an independent consultant.

Performance Reporting

49. Report performance net-of-fees.

New Mexico Legislative Council Service
Fiduciary Review for the
Public Employees Retirement Association
Listing of All Recommendations

Below is a complete list of the recommendations that are included in the review. For ease of reference, the order in which the recommendations are made in the report and page number in which the topic is discussed is provided. We also mention the initial step required to address the recommendation, if the Board chooses to do so. The Board has the ultimate authority to prioritize, accept, modify, and reject any and all recommendations based on PERA's needs and resources.

	Recommendations	Requirement
1	Seek a statutory change requiring new Board member orientation and more hours of ongoing education, including annual fiduciary training. (see page 8)	Statutory Change
2	Provide by policy, a specific orientation and formalized ongoing education for Investment Committee members. (see page 8)	Board Policy Enhancement
3	Examine the intent of the Prudent Investor Act and its application to PERA and determine whether protections, indemnification, or immunity provided under the Public Employees Retirement Act, the Tort Claims Act, and other laws are appropriate. (see page 10)	Board Policy Enhancement
4	Amend the statute to include a definition of who is a fiduciary. (see page 10)	Statutory Change
5	Review and update the "Board Policies and Procedures" document to be more comprehensive and inline with best practices. (see page 11)	Board Policy Enhancement
6	Create a detailed position description for Board members and distribute it during the election and appointment process. (see page 13)	Position Description Development
7	Evaluate whether an ex-officio member should be allowed to designate a specific person to attend, participate, and vote at meetings. (see page 13)	Board Discussion
8	Have the Audit Committee review disclosure forms so that any conflicts of interest or policy violations can be appropriately managed. (see page 14)	Process/Procedure Enhancement
9	Modify the Standards of Conduct to require disclosure of gifts, entertainment, and meals by vendors and outside service providers on an annual basis. (see page 15)	Board Policy Enhancement
10	Require Board members and staff to annually acknowledge in writing that they have read and will comply with their respective Standards of Conduct. (see page 15)	Board Policy Enhancement
11	Conduct annual training regarding the Standards of Conduct to highlight the importance of ethics and conflicts of interest. (see page 15)	Process/Procedure Enhancement
12	Clarify who has responsibility for legal and policy compliance. (see page 16)	Board Discussion
13	Consider the value of adding outside non-voting experts to serve on the Investment Committee. (see page 17)	Committee Composition Change
14	Create an Investment Committee Charter, an Evaluation Committee Charter, and an Audit and Budget Committee Charter. (see page 13/18)	Committee Charter Development

	Recommendations	Requirement
15	Reevaluate the functions of the ad hoc Evaluation Committee in light of the "Board Policies and Procedures" which states that the Board will operate at a governance and not an operational level. (see page 18)	Board Discussion
16	Enhance the Executive Director position description to include oversight of investment activities. (see page 18)	Position Description Enhancement
17	Create a comprehensive CIO position description. (see page 19)	Position Description Enhancement
18	Discuss what value an accountability matrix may have in documenting and clarifying roles and responsibilities. (see page 19)	Board Discussion and Possible Document Creation
19	Ensure that investment goals in the strategic plan are inline with those in the investment policy. (see page 19)	Board Discussion
20	Enhance the language in the consultants' contracts to note that they are accountable to the Board. (see page 19)	Contract Modification
21	Seek autonomy in setting staff size for investments, or in the alternative, seek staffing exemptions for critical positions like the CIO. (see page 21)	Statutory Change
22	Fill the CIO position as soon as possible. (see page 21)	Hire Staff
23	Seek budget autonomy but maintain fiduciary standards, transparency, and reporting requirements. (see page 22)	Statutory Change
24	Continue to analyze PERA's budget and efficiency using CEM or another reputable source. (see page 24)	Board Discussion
25	Disallow tactical asset allocation. (see page 32)	Board Discussion and/or Policy Enhancement
26	Set a date for achieving the target allocations for all asset classes. (see page 33)	Board Discussion
27	Evaluate the suitability of global mandates for equities. (see page 35)	Statutory Change
28	Update and tighten the ranges around the targets for each asset class. (see page 37)	Board Policy Enhancement
29	Establish a disciplined rebalancing policy. (see page 37)	Board Policy Enhancement
30	Revise the stated goals in the IPS and the strategic plan to be consistent and tied to risk adjusted returns. (see page 38)	Board Strategic Plan Enhancement
31	Eliminate the investment goal in the strategic plan that focuses on selecting managers based on past performance. (see page 39)	Board Strategic Plan Enhancement
32	Explore the benefits of risk budgeting with consultants. (see page 40)	Staff/Consultant Analysis and Board Discussion

	Recommendations	Requirement
33	Ensure the excess return target of 50 basis points is inline with the tracking and active risk levels within the portfolio. (see page 40)	Board Discussion and Possible Strategic Plan Enhancement
34	Update and improve the IPS with the assistance of the consultant. (see page 41)	Board Policy Enhancement
35	Reevaluate the allocation to underperforming active fixed income and equity managers. (see page 44)	Staff/Consultant Analysis and Board Discussion
36	Evaluate the costs and benefits of managing a portion of the assets internally. (see page 45)	Staff/Consultant Analysis and Board Discussion
37	Continue to evaluate the portfolio structure, including the number and types of investment managers, with the investment consultant. (see page 45)	Staff/Consultant Analysis and Board Discussion
38	Ensure the index funds, when aggregated, represent the asset class portfolio. (see page 46)	Staff/consultant Analysis and Board Discussion
39	Evaluate whether a formal RFP process remains the most efficient and effective way to conduct manager searches. (see page 47)	Board Discussion and Possible Practice Modification
40	Improve documentation of the selection and monitoring processes used by PERA. (see page 49)	Board Policy Enhancement
41	Place greater emphasis on skill and organizational factors, and less emphasis on past performance, when selecting investment managers. (see page 49)	Due Diligence Policy Enhancement
42	Seek statutory authority to hire the custodian bank. (see page 49)	Statutory Change
43	Seek a statutory change to allow discussions and materials of private market investments with proprietary investment strategies to be kept confidential. (see page 51)	Statutory Change
44	Include a policy portfolio as the total fund benchmark in the IPS. (see page 54)	Board Policy Enhancement
45	Reconsider benchmarks for international equities, real estate, and commodities. (see page 55)	Staff/Consultant Analysis and Board Discussion
46	Do not disqualify investment managers from consideration based solely on the availability of performance based fee arrangements. (see page 57)	Board Policy Enhancement
47	Evaluate PERA’s disclosure, registration, and monitoring requirements for placement agents in light of current industry standards and document the Board’s position in a policy. (see page 59)	Evaluation of Current Practices

	Recommendations	Requirement
48	Delegate the responsibility of tracking placement agent usage and fees to an independent consultant. (see page 60)	Modification of Existing Practice
49	Report performance net-of-fees. (see page 63)	Performance Report Enhancement

Appendix A
Examples of Board Responsibilities for a Board Charter

The Board has the following responsibilities:

- Adopt a strategic plan including a mission statement and core values that set forth proper standards of behavior.
- Establish governance policies to guide the Board in an effective and efficient manner.
- Elect officers through a fair and open process.
- Set a reasonable meeting schedule.
- Establish and disband standing and special committees of the Board, as necessary.
- Articulate and adopt a statement of risk management principles.
- Adopt a comprehensive investment policy consistent with statutory requirements and current best industry practices.
- Set and periodically review the asset allocation of the portfolio.
- Hire and monitor the necessary professionals (e.g., actuaries, investment consultants, investment managers, and legal counsel) to support the investment functions.
- Adopt a funding policy with necessary contribution rates to keep the fund actuarially sound.
- Adopt reasonable actuarial assumptions and methodologies upon the advice of the actuary.
- Adopt a sufficient administrative budget and closely monitor compliance.
- Ensure that an independent audit of the fund’s financial statements takes place each year.
- Undertake an annual board self-evaluation to promote continual improvement.
- Evaluate the Executive Director annually.
- Evaluate key consultants annually and investment managers quarterly.
- Make relevant information publicly available in a timely manner.

Please note that this list is not all inclusive. It does not include responsibilities related to benefits administration. For a board charter to be comprehensive, those should be added as well.

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Appendix B
Examples of Responsibilities for Individual Board Members for a Board Member Position Description

Each Board Member is responsible for:

- Working constructively with the other Board Members to govern the organization.
- Interacting appropriately with staff, outside service providers, employers, members, retirees, beneficiaries, and others.
- Discharging his or her fiduciary duties with care, skill, diligence, and prudence, solely in the interest of all members and beneficiaries, and for their exclusive benefit, in accordance with the laws governing the organization.
- Incurring only reasonable expenses in carrying out his or her duties as a Board Member.
- Preparing for Board and Committee meetings by reading materials in the Board packet in advance of the meeting and asking questions of staff.
- Attending Board and Committee meetings and participating in discussions.
- Respecting the time commitment required for meetings by arriving prior to the start of the meeting and staying until its conclusion.
- Refraining from acting on behalf of the entire Board unless specifically delegated that authority.
- Respecting open meetings requirements by not convening meetings, including conference calls or video conferences, with fellow Board Members outside the properly noticed meetings.
- Attending statutorily required educational sessions.
- Acquiring and maintaining knowledge to effectively make decisions and evaluate those to whom duties have been delegated.
- Promptly reporting any ethical concerns to the Board Chair, Executive Director, or General Counsel.
- Avoiding conflicts of interest or even the appearance of conflicts of interest and disclosing conflicts of interest as required by statute or administrative rules.
- Refraining from any self-dealing with system assets or using the system to promote a personal business or to gain financial rewards.
- Maintaining confidentiality of member records and certain investment activity pursuant to law or system policy.
- Using reasonable care to prevent any other fiduciary of the organization from committing a breach of fiduciary duty.
- Allowing the Executive Director to oversee the operational management of the organization.

Refraining from performing any function delegated or normally assigned to staff unless prior approval is obtained from the Board.

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Appendix C
Useful Reports for an Investment Committee

The following outline sets forth the type of information investment committees (IC) of large public retirement systems might use in their oversight role. A meaningful exercise for the IC and staff is to inventory the reports currently provided to the IC and discuss their usefulness and frequency. Once the optimal types and frequency are decided upon, best practices are to document it in a policy.

In some instances the information will be in the form of a written report; in other instances the reports will be presented in person by the staff or consultants who are the authors of the reports so that the IC members may ask questions of them.

Investments

Description	Current Frequency	Changes to the Frequency
A review of the asset allocation of the trust funds presented jointly by the investment consultant and the CIO		
A review of the Investment Policy Statement along with any changes recommended by the investment consultant, the CIO, or other members of the IC		
An inventory of investments and their valuations		
An update of the activities of the managers connected with alternative investments		
A report of brokerage commissions paid to each firm and historical information regarding the trends in costs		
A report detailing the deviations from the target allocations for the portfolio		
An investment performance report for the previous quarter and the previous five years prepared by the investment consultant		
Investment manager presentations		
Review of each investment manager’s adherence to guidelines; comparison to other similar managers; portfolio risk; material changes in the organization, its philosophy or processes; and analysis of new opportunities		
Securities lending reports prepared by the custodian bank and verified by the investment office or the investment consultant		
Valuations of private equity investments prepared by the investment consultant or Staff		
A summary of proxy voting and deviations from the Proxy Policy		
Shareholder activities in addition to proxy voting such as submission of resolutions, attendance at annual meetings, correspondence with corporations, involvement with class		

actions, etc.		
An analysis of the passive/active strategy with recommended changes, if necessary		
A request to allow a deviation from the Investment Policy Statement along with the rationale for doing so		
Profiles of the top money manager candidates for a particular asset category, as recommended by Staff and the investment consultant		
Portfolio rebalancing activities		
Information about the departure of key people from Staff, current money management or consulting firms		
Placement of investment managers on the "Watch List"		
Overall status of investments		
Detailed information about real estate or private equity investments that is needed by fiduciaries		
Review and evaluation of key consultants and vendors, including investment consultant, custodian bank, and securities lending firm within the context of service level agreements		
Requests for adding or deleting permissible asset classes		

Audits

Description	Current Frequency	Changes to the Frequency
The independent financial audit of the trust funds along with the system's responses to any findings and comments in the management letter		
The operational audit report along with the system's responses		
The system's plan to address any of the findings or comments in the financial or operational audit reports		

Actuarial Reports

Description	Current Frequency	Changes to the Frequency
Asset/liability modeling study		
Actuarial valuations of the various trust funds		
Actuarial experience studies of the various trust funds		

Legal Matters

Description	Current Frequency	Changes to the Frequency
A review of claims filed in the class actions		
A report on class actions where the system is taking the role of lead plaintiff		
General litigation updates regarding progress, strategy, or proposed settlements		

Media

Description	Current Frequency	Changes to the Frequency
Negative publicity about the IC, the system, or any fiduciary connected with the trust funds		

Legislation

Description	Current Frequency	Changes to the Frequency
A summary of proposed state and federal legislation affecting the trust funds		
Detailed information about important pending legislation		
Lobbying activities relating to legislation that could affect the IC		

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Appendix D
Sample CIO Position Description

General

1. Manage investments in accordance with all relevant laws, Board policies, and goals.
2. Act as an expert advisor to the Board on all matters involving the investment or proposed investment of System assets.
3. Oversee all investment activities with overall responsibility for achieving investment performance targets.
4. Perform all supervisory functions for management of staff and resources in the investment group.

Duties and Responsibilities

The CIO will:

1. Implement the annual goals and objectives for the Investment Department as adopted by the Board; this would include annual asset allocation recommendations.
2. Oversee and monitor portfolio management by staff with respect to performance benchmarks and costs.
3. Continuously monitor all external portfolio managers, advisors, and consultants to determine if such are abiding by their respective contracts with the System and report to the Board at least every twelve (12) months with findings and recommendations.
4. Make recommendations to the Board with respect to investment related matters including, but not limited to, asset allocation decisions and the structure of the investment program with respect to external managers, advisors, consultants, and short-term and long-term investment strategy.
5. Monitor and report with regard to recommendations accepted by the Board.
6. Monitor capital markets, economic forecasts, and provide the Board with an ongoing analysis of the state of the global economic situation as it relates to the System’s investment program.
7. Demonstrate a thorough knowledge of the institutional investment industry, latest investment research, and good judgment in investment issues.
8. Advise the Board as to the impact of potential legislation on the System’s investment program.
9. Monitor Board’s proxy policies and advise as to recommended changes in such policies.
10. Develop procedures and processes to effectively implement the Investment Policy Statement as adopted and amended by the Board.
11. Constantly reevaluate policies, process, standards, measurements, and methods to incorporate best practices into the management of the investment area.
12. Establish reporting mechanisms to keep the Board and Executive Director sufficiently and appropriately informed as to the status of the System’s investment program and procedures used for implementation.
13. Recommend to the Executive Director regarding contracts or amendments for investment personnel, investment management firms, investment advisors, and consultants, including compensation structure, content of requests for proposals, and selections of competitor.
14. Make recommendations on expenditures for investment services to be paid out of the continuous appropriation or through directed commission (soft dollars).

15. Monitor the use of directed brokerage fees.
16. Advise the Executive Director as to the impact on the investment program of information released to the public, press, legislature, or other press releases and similar matters, as needed.
17. Recommend to the Board and the Executive Director appropriate investment procedures that ensure due diligence and appropriate written documentation for all actions taken to invest the funds of the System.
18. As required, on a periodic basis, advise the Executive Director and the Board as to the status and completion of each of the above duties and responsibilities.
19. Perform other duties as directed by the Board or the Executive Director that are consistent with and contemplated by the foregoing.
20. Maintain a well-functioning investment team.
21. Serve as a liaison between investment staff and Board and Executive Director.
22. Work with the Board and investment staff to enhance the decision-making process.
23. Develop and enhance the capabilities of other investment staff.
24. Address succession planning for key investment staff personnel.
25. Evaluate overall performance of senior investment staff, including their supervisory duties.
26. Attend Board and committee meetings as required.
27. Review investment-related materials to be included in the Comprehensive Annual Financial Report.

Appendix E
Sample Accountability Matrix for Key Investment Responsibilities

Responsibility	Board	Board Investment Committee	Executive Director	CIO	Other Staff	Consultants
1. Risk tolerance						
2. Monitoring risk levels						
3. Investment objectives						
4. Asset allocation targets and ranges						
5. Compliance with asset allocation						
6. Active v. passive strategy (%'s)						
7. Compliance with active/passive strategy						
8. Types of asset classes						
9. Number of external managers						
10. Selection of specific external investment management firms						
11. Investment manager contracts						
12. Performance of external investment managers						
13. Selecting custodian and sub-custodian banks						
14. Selecting investment consultant for general advice						
15. Selecting investment consultant for performance evaluation						

Responsibility	Board	Board Investment Committee	Executive Director	CIO	Other Staff	Consultants
16. Selecting specialty investment consultants						
17. "Watch list" additions/deletions						
18. Rebalancing policy						
19. Compliance with rebalancing policy						
20. Securities lending costs/benefits						
21. Valuation of real estate						
22. Purchase and sale agreements on real estate						
23. Valuation of private equity						
24. Partnership agreements on private equity						
25. Documentation of investment decisions						
26. Commission recapture/soft dollars policy						
27. Compliance with commission recapture/soft dollars policy						
28. Statutory compliance of DB investments parameters						
29. Proxy voting issues and positions						
30. Class actions – opting out						
31. Lead plaintiff role for the Association						

Appendix F
Use of Third-Party Marketers/Placement Agents by PERA

Use of Third-Party Marketers/Placement Agents by NM PERA GP (data thru 5/1/09) *NR=No Response; DR=Declined to Respond; 3PM=Third-party marketer; PA=Placement agent*						
	GP Name	Vintage Year	Asset Type	3PM/PA Used	Name of 3PM/PA	Amount Recorded by Individual/Firm for PERA's Commitment
1	Wayzata Opportunities Fund II, L.P.	2007	PE	Y	Park Hill	0.35% on $30MM Commitment = $105,000
2	Blackstone Real Estate Partners Europe III, LP	2008	RE	Y	Park Hill	1.0% on $25MM Commitment = $250,000
3	Selene Residential Mortgage Opportunity Fund LP	2008	PE	Y	Capstone Partners	1.0% on $30MM Commitment = $300,000
4	Cerberus Institutional Partners, L.P.- Series Four	2006	PE	Y	Monument Group	Declined to respond noting confidentiality
5	Lincolnshire Equity Fund IV, L.P.	2009	PE	Y	UBS	No response provided
6	The Resolute Fund II, L.P.	2007	PE	Y	Credit Suisse	0.5% on $25MM Commitment = $113,354
7	Kelso Investment Associates VIII, L.P.	2007	PE	Y	Credit Suisse	0.143% on $30MM Commitment = $43,045
8	Coller International Partners V, L.P.	2006	PE	Y	Credit Suisse	Declined to respond noting confidentiality
9	Onex Partners III, L.P.	2009	PE	Y	Credit Suisse	$325,000
10	Charterhouse Capital Partners	2009	PE	DR	DR	Declined to respond noting confidentiality

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Appendix G
List of Interviews and Documents Reviewed

INTERVIEWS

For the review, EnnisKnupp held discussions with the following parties:

Board Members
- Treasurer James Lewis, Board member
- Nancy Hewitt, Board member
- David Baca, Board member
- Susan Biernacki, Board member
- Victor Montoya, Board member
- Oscar Arevalo, Board member

PERA Staff
- Terry Slattery, Executive Director
- Julian Baca, Deputy Director of Investments for Alternative Investments
- Bob Gish, Former Director of Investment

LCS Staff
- Paula Tackett, LCS Director
- Raul Burciaga, Assistant Director for Drafting Services

Investment Consultants
- Jim Voytko, R.V. Kuhns & Associates
- Marsha Beard, R.V. Kuhns & Associates
- Jamie Feidler, Cliffwater LLC

DOCUMENTS REVIEWED

For the review, EnnisKnupp reviewed the following documents:

- Select laws and statutes:
  - New Mexico statutes and court rules
  - UPIA 45-7-601
  - Public Employees Retirement Act 10-11-1 through 142
  - Open meetings resolution 09-01
  - Resolution 09-03 regarding authorization to act on behalf of PERA to transact investment business as required
  - Organization and operation of the PERA Board – Title 2 Chapter 80 Part 800
- Financial Reports
  - PERA Annual Statement (FY2008)
- Board policies and related documents
  - Board policies and procedures (2001)
  - Board member selection process
  - Board composition, terms, and expertise
  - Committee appointments (2009)
  - Code of Ethics
  - Investment policy
  - Hedge fund policy
  - Real estate policy
  - Private equity policy
  - Procurement oversight policy
  - Proxy Voting Policy
  - Prohibition of insider trading policy
  - Securities lending policy
  - Board education policy
  - Communications policy
  - Travel policy
  - Strategic plan (FY 2010)
- Board meeting minutes and agendas (2006-2008)
- Investment committee
  - Meeting minutes and agendas (July 2007-June 2009)
- Investment policy statement (2008)
- Organizational Chart
  - Investment division
- Position descriptions
  - Executive director
  - Chief investment officer
  - Financial analyst
- RFP

  - RFP summary book
  - Investment consultant RFP
- Investment division procedural and operations manual for alternative investments
- Internal audit and controls
  - Internal audit manual (2009)
  - Internal controls and compliance protocols (2009)
- Internal auditor reports
  - Audit review memo (2008)
- Budget
  - Operating budget (FY2010)
  - Trial balance accounts
  - Budget by bureau (FY2010)
- Legislation pending (2009)
- Commission tracking report (FY2008 and FY2009)
- CEM report (2008)
- Custodian bank
  - Contract with Northern Trust (2008)
  - Contract amendment with Northern Trust (2009)
  - Safekeeping agreement (2008)
  - Information system specifications
  - Fee schedule
  - Fee payments (2009)
- Securities lending presentation (2006)
- Asset allocation
  - Asset allocation history – R.V. Kuhns
  - Presentation by R.V. Kuhns and Cliffwater on the Fund's Asset Allocation (2009)
  - Presentation by R.V. Kuhns on the Review of Domestic Equity Structure (2009)
  - Presentation by R.V. Kuhns on Fixed Income Structure Study (2009)
  - Presentation by R.V. Kuhns on Review of Current International Equity Structure (2009)
  - Presentation by R.V. Kuhns Active vs. Passive Analysis
  - R.V. Kuhns Asset Allocation Assumptions (2008)
- R.V. Kuhns contract (2006)
- R.V. Kuhns contract amendment (2008)
- R.V. Kuhns Discussion on Rebalancing (2009)
- Investment manager contracts
  - Loomis Sayles (2008)
  - Rothschild (2009)
  - Times Square Capital Management (2009)
  - BGI
- Termination letters
  - R.V. Kuhns recommendation to terminate Alliance Bernstein (2009)
  - Alliance Bernstein termination letter (2009)
  - Smith Breeden (2008)

- R.V. Kuhns performance report (2008 and 2009)
- R.V. Kuhns investment performance analysis
- Absolute return risk report (June, August, September 2009)
- Cliffwater
  - AR monthly performance report (June, August, September 2009)
  - Cover memo for IC meeting (October 13, 2009)
  - Hedge fund performance (August 2009)
  - Hedge fund market commentary (September 2009)
  - AR hedge fund commentary (August and July 2009)

Please note: Any omission of documents from the list above that we used for the findings and conclusions in this report is unintentional.