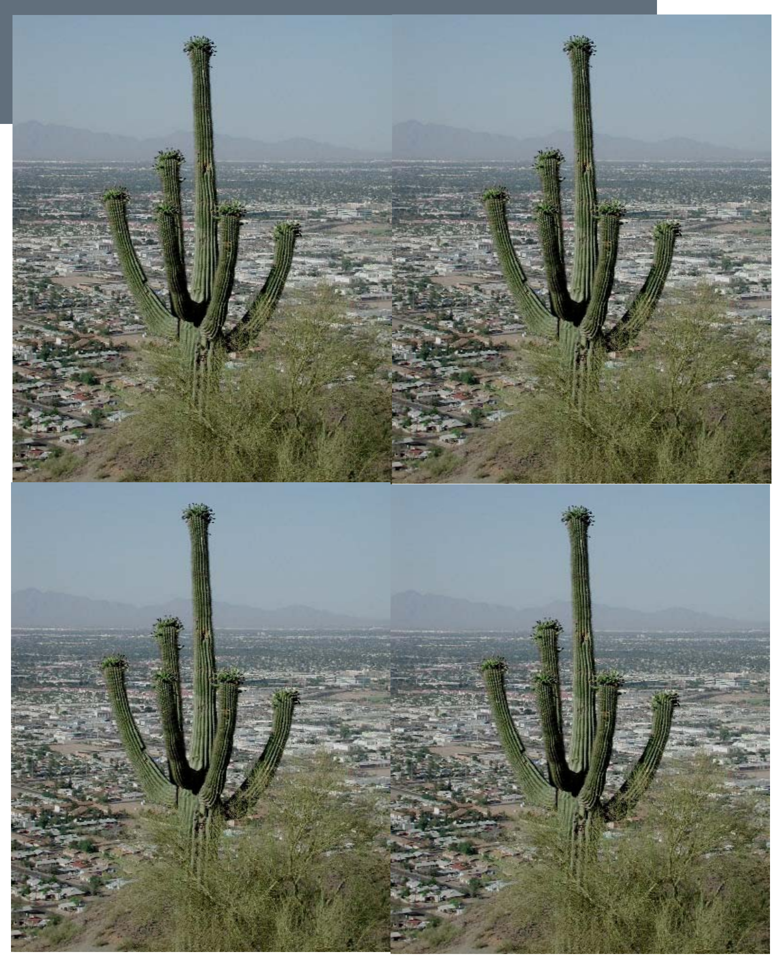
City of Phoenix Employees' Retirement System

Comprehensive Review



Conducted by:
Ennis Knupp + Associates

August 19, 2009

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INTRODUCTION

The City of Phoenix, Arizona (the City), through the City Auditor Department, retained Ennis, Knupp & Associates, Inc. (EnnisKnupp) to conduct a comprehensive review of the City of Phoenix Employees' Retirement System's (COPERS or the System) investment program and other current practices, policies, and procedures. EnnisKnupp was selected through a competitive bidding process, and is an independent investment consulting firm, located in Chicago, Illinois, that specializes in reviewing and structuring large institutional investment portfolios and governance frameworks. EnnisKnupp has extensive experience working with public retirement systems.

The investment portfolio of approximately $1.81 billion[1] is 100% externally managed. Oversight responsibility is held by the Retirement Board, which is supported by the Retirement Administrator, Investment Manager, and an investment consultant.

The high level objective of this review was to determine whether COPERS is operating in the most effective and efficient manner to achieve the best results with the least risk to the System's membership and the City. For this review, COPERS' policies and practices were compared to best practices. A "best practice" is typically viewed as the experience-tested optimum standard. What is a "best practice" for an individual organization is determined by examining how a particular function is carried out and then concluding what course of action or methodology would enhance the process. The optimum standard is then modified to suit the 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 an effective and efficient manner—the distinction is analogous to the differentiation between being good and being great.

To make this determination, EnnisKnupp relied on a combination of factors, including acknowledged industry standards (e.g. ERISA, UPIA, UMPERSA),[2] secondary research from respected, reliable industry sources (e.g. NASRA, NCTR, DOL, SEC),[3] our knowledge gained from performing similar reviews of pension fund practices, and the extensive experience of our Fiduciary Services team. The leaders of EnnisKnupp's Fiduciary Services team have first-hand knowledge of the nuances of public retirement system policies and processes from their roles in senior leadership positions at public pension funds, service as pension fund consultants, and combined experience of over 50 years.

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[1] Per 2008 Comprehensive Annual Financial Report

[2] ERISA: Employee Retirement Income Security Act; UPIA: Uniform Prudent Investor Act; UMPERSA: Uniform Management of Public Employee Retirement Systems Act

[3] NASRA: National Association of State Retirement Administrators; NCTR: National Council on Teacher Retirement; DOL: U.S. Department of Labor; SEC: U.S. Securities and Exchange Commission

SCOPE OF WORK

The Scope of Work for this review included five areas:

1. Legal Authority – including the laws that create and govern COPERS
2. Governance – including COPERS' internal governance policies and certain practices
3. Investment Strategy – including investment related policies, investment structure, and fees
4. Investment Manager Selection and Evaluation – including selection and monitoring policies and practices
5. Investment Performance Reporting Process – including the content and frequency of reports

METHODOLOGY

This review was conducted over a nine month period, from October 2008 to June 2009. The methodology we used to perform this review consisted of the following:

– Document review – We submitted a document request list to the City Auditor and COPERS' staff, and they responded promptly. The reports, policies, statutes, and other documents we reviewed are listed in Appendix II.

– Interviews – After reviewing the statutes and documents referred to above, we interviewed the Trustees, key COPERS staff, key City Auditor Department staff, and several other service providers. We interviewed some individuals numerous times. The list of interviewees is also found in Appendix II.

– Findings – The pertinent facts relevant to the System's portfolio structure, City laws, internal policies, and actual practices were checked against documents and verified with staff and outside service providers.

– Analysis – The EnnisKnupp team of consultants met internally and held discussions with the City Auditor Department's staff and System's staff to discuss all aspects of the review. We debated issues, challenged assumptions, discussed alternatives, and brought the firm's best thinking to our analysis. Peer reviewers, who were senior members of EnnisKnupp's consulting practice, were also involved in reviewing the analysis and work of the consulting team.

– Recommendations – The EnnisKnupp team and the peer reviewers discussed preliminary recommendations for each area under review to make sure recommendations were consistent and could be implemented.

– Draft Report – A draft of the report was reviewed by all members of the EnnisKnupp team and facts were once again checked with the sources – City Auditor, COPERS' staff, and others. A draft was submitted to the City Auditor and COPERS Retirement Administrator for their comments.

– Presentation of Final Report – Refinements were made to the draft and this final report will be presented to the Board and City Manager on August 19, 2009.

REPORT LAYOUT

This report presents the results of our review, and is organized into eight sections. Five sections cover the broad subject areas identified in the Scope of Work. The report also includes three appendices in addition to this executive summary. For each topic discussed in the report, background information is provided to explain the importance of the subject and its implications. Second, findings and analysis are provided to compare COPERS' practices and policies to best practices. Third, our conclusions are presented with a listing of considerations and recommendations, if applicable.

The difference between considerations and recommendations is worth noting. Recommendations state our independent advice about what changes ought to be made to current practices or policies. We encourage the Board to address the recommendations and either formally accept or reject them based upon what is in the sole interest of the System. Considerations, on the other hand, are our suggestions of alternative ways of operating. In our view, it is not necessary for the Board to address each consideration unless there is educational value in doing so.

OVERALL CONCLUSION

It is best to read the recommendations we make in the full context of the report with the findings and analysis. A matrix of all of the recommendations made throughout the report is included in the Appendix of this report.

Overall, we found COPERS' Board authority, provided by the City Charter and Code, to be in line with common practice. We offer an important recommendation related to obtaining changes in the Charter when appropriate to remove investment restrictions and replace them with contemporary fiduciary standards. We also recommend that the Board seek to clarify and/or obtain authority to hire and retain internal and outside counsel. Other recommendations relate to adopting a statement of delegation and discussing fiduciary liability protection. From our review of COPERS' governance, we found the policies to be more comprehensive than those of most systems we have reviewed. Our recommendations mainly focused on clarifying and modifying certain responsibilities of the Board and staff, offering additional training to Board members regarding fiduciary responsibility, and further developing and assessing COPERS' control environment.

COPERS' investment strategies are consistent with many best practices. Our recommendations are mainly related to further modernizing the investment policy, evaluating additional investment-related policies that may be beneficial to the organization, completing an asset liability study to confirm or change the portfolio's asset allocation, working with the investment consultant to further diversify the portfolio, and revisiting existing programs (securities lending and commission recapture) to ensure they remain appropriate for COPERS. We found the selection and evaluation processes of the investment managers to be very comprehensive and working well. Our one recommendation was related to codifying the existing practices in a Board approved policy and further defining roles and responsibilities as they relate to manager due diligence. Our review of the investment reports found them to be informative, with appropriate content. Our recommendations related to enhancing the content with net-of-fee returns and a presentation of risk-adjusted results for the Total Fund.

We are pleased to report that, in our opinion, COPERS is fundamentally sound in the areas that we reviewed. We were favorably impressed by the dedication and insight of the Board, caliber of the COPERS' and City Auditor Department's staffs, the level of sophistication in operations, and the focus on maintaining excellence in the areas covered by this review. We did not discover any material shortcomings, and the System's sound governance structure and investment program reflect positively on the COPERS Board and staff.

ACKNOWLEDGEMENTS

EnnisKnupp thanks the COPERS Board and staff, the City Auditor Department staff, and outside service providers for their time and effort in answering questions and providing materials for this review; we relied heavily upon them for information. We received prompt responses to our questions and requests. We especially want to note that the City Auditor and Retirement Administrator were very accommodating in meeting with us, participating in conference calls, verifying facts and current practices, and providing us work space at the City Auditor Office.

DISCLAIMER

The comprehensive review was limited to those topics listed in the report. This was not an all-encompassing review of the entire COPERS operation. This review provides reasonable assurance that the practices we reflected in our findings are accurate; however, this was not an investigation and should not be construed as an absolute guarantee that all practices meet fiduciary standards.

Our findings and recommendations were based upon information we received from others – COPERS' Trustees, COPERS' staff, City Auditor staff, legal counsel, investment consultant, custodian bank, etc. We did not independently verify all facts; however, we did request that sources review the facts we relied upon for our analysis.

The opinions and recommendations expressed herein reflect our independent judgment. No one associated with the City or COPERS attempted to unduly influence the scope, findings, analysis, conclusions, or recommendations expressed in this report.

INTRODUCTION

While private sector pension funds are governed by the federal Employee Retirement Income Security Act (ERISA), public retirement systems are governed by their respective state or local laws, including, in some cases, their state constitutional provisions. Generally, the laws establishing and governing these systems are statutory in nature, meaning they can be amended by legislative bodies and do not require a vote of the people. Thus, "the public pension fund is [by force of circumstances] the product of legislative enactment and often of compromise."[1]

The laws applicable to a number of public pension funds throughout the United States have not kept pace with and do not reflect modern fiduciary standards or investment practices. As a result, although fiduciaries are required to prudently manage the pension fund, they may not always have the authority to fulfill their mission effectively and efficiently because of outdated legal requirements. Modernization is often difficult. In some cases, the outdated provisions may be contained in a state constitution or city charter. The fact that constraints exist does not mean that they can or should be eliminated. What is important is that the potential effect of such constraints, when they cannot be avoided, be acknowledged and managed.

In recognition of the changing environment faced by public retirement systems, the National Conference of Commissioners on Uniform Laws (NCCUL) has developed two uniform laws. The Uniform Prudent Investor Act (UPIA) was approved and recommended to all states on August 5, 1994, and the Uniform Management of Public Employees Retirement Systems Act (UMPERSA) was approved and recommended to all states on August 1, 1997, (UPIA and UMPERSA are collectively referred to as the "Acts"). These two uniform laws effectively incorporate the major principles of modern portfolio management that have developed over the past 50 years of financial research. The concepts set forth in the uniform laws are often considered "best practice" and, therefore, are used as models by public retirement systems and investment boards to modernize their fiduciary and investment standards.

In this section of the report, we utilized UPIA and UMPERSA, as well as authoritative industry publications, independent research, and our years of experience reviewing the enabling authority and practices of numerous other pension funds to review and analyze the laws and regulations governing COPERS.

[1] Thomas P. Bleakney, *Retirement Systems for Public Employees*, Richard D. Irwin, Homewood, Illinois, 1972.

SCOPE OF REVIEW

In this section of the report we review and compare to "best practices", the City Charter, the City Code, and any applicable administrative provisions that establish and govern COPERS, with particular focus on the following subjects:

I. Board Composition
II. Board Duties and Responsibilities
   A) Fiduciary Standards
   B) Legal Provisions that Constrain the Board's Authority
   C) Council's Authority to Remove a Trustee
III. Delegation of Board Authority
IV. Fiduciary Insurance

BACKGROUND

In the City of Phoenix, City departments and agencies are governed by the City Charter (Charter). COPERS was created and is primarily governed by Chapter XXIV of the City of Phoenix Charter, the City of Phoenix Employees' Retirement Law of 1953.

The Charter is somewhat analogous to a state constitution in that changes to the Charter require a vote of the electorate of the City of Phoenix. In this regard, COPERS is unlike most statewide pension funds whose governing authority is set forth in state statutes. Statutes can be changed by the legislative branch of government through a process that is usually less arduous than that of a legislative referendum or ballot initiative. Despite the effort required, the Charter has been amended several times for matters related to COPERS. The most recent change occurred approximately five years ago in September 2003.

Chapter XXIV of the City of Phoenix Charter defines the following characteristics of the COPERS' Board:

- Composition
- Investment authority, including prohibited investments
- The standard of care for investing in "other" investment categories[2]
- Frequency of meetings
- Number required for a quorum

The policies of the Board, compiled in the Policy Manual, further define the characteristics of the Board identified above, including: Board officer election process; the respective duties of the officers; the timing of Board meetings; minutes form and minimum content; the process for election to the Board; and the imposition of a background check requirement for the elected and appointed members and the authority of the Board to disqualify individuals from Board service if unfavorable information is found. This background requirement became effective as of January 2009 and applies to new, not existing, Trustees.

[2] Whether this standard is also applicable to non-investment actions of the Board is subject to legal interpretation.

In addition to the Charter, COPERS is also subject to a number of provisions in the City of Phoenix Code (e.g., Chapter 42 of the City Code regarding representation, indemnification, self-insurance, and the circumstances under which commercial insurance may be obtained), various administrative rules, and certain provisions of the Internal Revenue Code.

We discuss each of the key characteristics of the COPERS Board on the following pages. We acknowledge that many of the considerations and recommendations provided in this section would require a Charter amendment. We are aware that the Board has discussed on several occasions both the benefits and detriments of proceeding with any changes that would necessitate a vote of the electorate. The Board reached a consensus that any such action should be undertaken only under favorable conditions and when it serves the best interest of the System. It is not within the scope of this assignment to challenge the wisdom of that decision. Based on the information received, we believe the Trustees have engaged in a deliberative process and have reached a well-reasoned conclusion, which they believe is prudent. Nevertheless, we provide considerations and recommendations for action if and when deemed appropriate.

I. Board Composition

Background

Most public retirement systems are governed by a board of trustees that has exclusive authority and control over the administration of the plan and the management of assets. In rare circumstances, however, a sole fiduciary has the authority and control.

"*The composition and functioning of the governing board are the first and main determinant of the fund's performance*."[3] While there is no model for the optimal size or make-up of public retirement boards, it is common for them to include trustees from the retirement systems' most significant stakeholders: the members, beneficiaries, and their contributing employers.

Trustees are usually selected to serve in one of three ways: (1) elected by plan members; (2) appointed by a governing body (e.g., the governor, the legislature, the mayor); or (3) as a result of holding a particular public office, as an ex officio member (e.g., treasurer, comptroller).

Constructing the most effective public retirement board involves the careful consideration of many factors. The ideal boards have members with diverse views; knowledge of institutional investment practices; an understanding of benefits administration; an appreciation of fiduciary responsibility; a commitment and ability to act prudently and solely in the interest of participants and beneficiaries; and the willingness to avoid, or at least manage, conflicting interests (actual or perceived). Trustees should also demonstrate accountability and transparency in their business transactions. Further, they should exhibit an on-going commitment to be educated and adequately informed on emerging issues facing the system and adopt well thought out decision-making processes. If these concepts and principles are not embedded in the enabling law, then the next best thing is for them to be incorporated into a board policy as a way of establishing a culture of excellence for the governing board of the retirement system. If the culture is established through law or policy, it is more likely to be sustained than it would be if it were entirely dependent upon the wisdom and good nature of the existing trustees.

Two basic issues with the composition of public retirement boards that receive the most attention today are conflicts of interest and the lack of professional expertise. In reviewing the composition of public retirement boards it is clear that elected, appointed, and ex-officio members all have the potential for conflicts of interest. Consequently, trustees today receive more training than ever on how to identify, avoid, disclose, and manage conflicts of interest. The issue of expertise is of increasing importance as the investments and operations of the public retirement systems have become more complex. 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

[3] Yermo, J. (2008), "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries", OECD Working papers on Insurance and Private Pensions, No. 15, OECD Publishing. doi:10.1787/244270553278

on Fund Governance.[4] Lack of experience and knowledge can be a concern if trustees become overly reliant on consultants and staff. While it is not necessary for all of the trustees to be experts in all areas, collectively the board should possess the necessary skills to carry out its duties and responsibilities.[5]

Using a National Association of State Retirement Administrators (NASRA) Board Composition survey, supplemented with data from several of the local retirement systems used as peers in the COPERS KPMG Organizational Study,[6] we examined the size and make-up of 92 retirement systems. Based on our research, the median board size was nine. The median board had four appointed trustees, four elected trustees, and one ex-officio trustee.

From a national perspective, at least a third of the states and the District of Columbia have a requirement that one or more members have professional experience.[7] The experience required often relates to finance, investments, or actuarial practices. For example, the Arizona State Retirement System requires that the four public members have at least 10 years of substantial experience in investments, economics, or finance. While many systems see the benefit of having trustees with relevant expertise, these systems are also cautious to ensure that the member's professional position does not create a conflict of interest.

Findings and Analysis

Board Size: The COPERS Board consists of nine members. This size is consistent with the median size for the pension funds surveyed. In our experience, boards of this size are large enough to represent diverse points of view, but not so large as to be inefficient in conducting their business.

Board Membership: The membership of the COPERS Board is comprised of five elected and four ex-officio members. With regard to the elected members, three are active participants of the Plan, one is a retired member of the Plan (elected by the three employee Trustees), and the remaining citizen member is elected by the full Board. The number of elected members on the COPERS Board is consistent with the median number of elected members for the pension funds surveyed.

The four ex-officio members of the Board serve by virtue of the public office they hold, as designated in the Charter. They include the City Manager (which has been delegated to the Deputy City Manager), the City Treasurer, the Finance Director, and the Department head selected by the City

[4] 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.)
[5] Yermo, J. (2008), "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries", OECD Working papers on Insurance and Private Pensions, No. 15, OECD Publishing. doi:10.1787/244270553278, page 12.
[6] Dated January 2002.
[7] 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.

Manager (currently the Personnel Director). The number of ex-officio members on the Board is significantly higher when compared to other statewide or local public retirement systems. From our research we found that 75% of the systems had one or more ex-officio members, but only 15% had four or more ex-officio members. Viewed another way, 44% of the total composition of the COPERS Board is ex-officio. Only seven boards of the 92 in the survey had a greater percentage of ex-officio representation – ranging from 45% to one board with 100%.

By definition, ex-officio members on a public retirement board have other interests. Those interests arising from their official capacity as state or local officials, plan sponsors, or employers can compete with their fiduciary duties as trustees. Some ex-officio members have difficulty managing their duty of undivided loyalty to the participants and beneficiaries of the plan, while at the same time managing their duty to the taxpayers and the general public as an elected or appointed official.

As written in the Charter, two of the four ex-officio members come from the Finance Department: the Finance Director and the Treasurer. Based on their City positions, the Treasurer reports to the Assistant Finance Director and, hence, has an indirect reporting relationship to the Finance Director. This indirect relationship could create the perception that one Trustee has influence over the other.

From our review of the COPERS Board operations, we believe that the members of the Board have done an exceptional job of “wearing only one hat” and acting solely in the interest of the System when conducting retirement system business. The current Trustees vocalized their awareness that a potential for conflicts exists due to their City “day-jobs.” We find that many times a lack of this type of awareness is what causes actual conflict issues.

Experience Requirements: The “citizen member” is required to “have at least 5 years of experience in a responsible position with a private or public pension fund.” The current citizen member satisfies the stated requirement and has finance and benefits experience. No other Trustee is required to have such experience. We find that boards with additional expertise, either through individual trustees or by having expert advisory committees, are becoming increasingly common.

Terms of Service: The term of service for elected Trustees is three years, which is consistent with that of most other plans. Trustees do not have term limits. The ex-officio Trustees serve on the Board based on their position in the City government; hence, they serve as long as they are employed in the position designated in the Charter. This, too, is consistent with the practice of most other public retirement plans with ex-officio members.

Conclusion

The overall size and term limits of the COPERS Board are appropriate and do not appear to pose any problems. The number of ex-officio members on the COPERS board is atypical in terms of the total number and as a percentage of aggregate membership. The level of representation from the Finance Department is also disproportionate.

Based on the information received during the interview process and our review of Board meeting minutes, we conclude that all of the current ex-officio members understand their fiduciary duty of undivided loyalty and do not appear to allow their competing interests to interfere with their fiduciary duty as Trustees. While this is currently the case, it might not be in the future if the current ex-officios are replaced with others who do not have the same level of sensitivity.

We further conclude that the retirement system employs experts on staff and has retained outside service providers consistent with the duty of prudence required of fiduciaries. With the Retirement Administrator and the Investment Manager (who has demonstrated investment experience) and with the investment consultant, the Board has an internal and external source for investment advice. This mitigates any over-reliance the Board may have on one individual source. As the investment portfolio becomes more complex, the Board will need to ensure that its level of expertise increases as well, either by having Trustees who are themselves experts or from having access to expert advice provided by the staff or the investment consultant. If some Trustees are experts in institutional investments, pensions, or other relevant areas, the resulting positive constructive tension can lead to a better decision-making process.

Consideration:

1. Consider a Charter change to add one or two private citizen investment experts on the Board, or, alternatively, create an investment advisory committee made up of investment experts through a Board policy change.

II. Board Duties and Responsibilities

A) Fiduciary Standards

Background

In the best circumstances, the laws that create the public retirement systems clearly impose the fiduciary duties of loyalty and prudence on the members of the boards of trustees. The duty of loyalty requires trustees to act solely in the interest of the retirement system's participants and beneficiaries, rather than in the interest of themselves, their constituent groups, appointing authorities, the taxpayers, or the public at large. This duty has been very strictly interpreted by the courts to mean that fiduciaries are to “wear only one hat” when acting on retirement system business.

Best practices also provide for members of the boards to be subject to the duty of prudence. Under the common law “prudent man” standard of care, a trustee was expected merely to act as a responsible person would in the handling of his or her own affairs. Therefore, certain investments had to be avoided because of the risk of loss. The common law standard is different than the “prudent investor” or the “prudent expert” standards used today by many public retirement systems. The “prudent investor” standard is the modernization of the prudent man standard and recognizes modern portfolio theory, where each investment is not evaluated in isolation for its risk and return expectations, but rather in the context of the entire portfolio. The “prudent expert” standard under ERISA, which governs private sector pension plans and is the model for many public plans, calls for trustees to either be “experts” or hire experts if they lack the relevant expertise. When it is unreasonable to expect the trustees themselves to have the expertise to perform a function, the function must be delegated to someone with the appropriate expertise.

While “prudent man,” “prudent investor,” and “prudent expert” are often used interchangeably, they do not have the same meaning under the law. The prudent man standard is outdated and not the appropriate standard for today’s institutional investors because it does not take into account modern portfolio theory. The prudent investor standard and the prudent expert standard are equivalent with regard to the expertise required in investment decision-making; however, the prudent expert standard is broader in that it requires expertise in the benefits administration area as well. In determining the prudence of a trustee action (or inaction), a court will look not only to the reasonableness of the process that the trustees followed, but also to the process that comparable (public retirement system) trustees follow in similar circumstances.

Fiduciary liability can result from a violation of the duties of loyalty or prudence. Additionally, personal liability can attach through co-fiduciary liability. If a trustee is aware of a violation by another fiduciary and does nothing about it, that trustee is breaching his/her fiduciary duty. Under ERISA, trustees have a duty to remedy the fiduciary breaches of other fiduciaries. In the public sector, many assume the courts would impose similar liability on co-fiduciaries. It is important to have a good process in place to deal with such situations.

Without stringent and clearly understood fiduciary standards, trustees may fail to carry out their fiduciary responsibilities and impair the financial integrity of the assets under their control and management.

Findings and Analysis

Neither the Charter nor the City Code states that the Trustees of the System are fiduciaries. Furthermore, the Charter and the City Code do not specifically impose the duty of loyalty or the duty of prudence on the Board. The fiduciary status of the Trustees, however, can be inferred from the fact that the System is established as a trust and would be subject to applicable trust laws.[8] Likewise, there are no legal provisions imposing co-fiduciary liability similar to what is found in ERISA.

Language (Section 34(h)) was added as an amendment to the investment restriction provisions (Section 34(a-g)) which attempted to carve out an exception to the restrictions. The language authorized “any other investment category” if the Board, acting as a prudent expert, voted to do so by a two-thirds majority and the investment was consistent with the COPERS investment policy and guidelines. Unfortunately, the language did not achieve the desired result. After seeking and attaining the additional language in Section 34(h), COPERS received legal advice regarding the flexibility the language provided to the Board in making investment decisions. Based on the advice, it was concluded that Section 34(h) does not allow the Board to ignore Section 34(a-g) restrictions and the restrictions still apply.

Conclusion

We conclude that the Charter does not clearly define the fiduciary duties which apply to the COPERS Board in carrying out its mission. Specifically, these duties include the duty of loyalty, the duty to act as a prudent expert, the duty to diversify investments, and the duty to comply with applicable plan documents.

Considerations:

1. Consider establishing in a policy that the Board is bound by fiduciary standards and specifically state that the Board has authority to delegate.
2. Consider amending appropriate enabling legislation to include personal liability for breaches of fiduciary duties and co-fiduciary responsibility.

[8] Arizona Constitution Article XXIX Section 1(B) establishes COPERS as a trust. The City Constitution states: The assets of public retirement systems, including investment earnings and contributions, are separate and independent trust funds and shall be invested, administered and distributed as determined by law solely in the interests of the members and beneficiaries of the public retirement systems. This trust status is also referenced in COPERS policy No. 179.

B) Legal Provisions that Constrain the Board's Authority

Legal Lists

Background

A "legal list" imposes limits on the types of investments in which a public fund may invest. It is backwards looking by nature because it only permits investments that are thought to be prudent based upon past performance. Such a list lacks the flexibility provided by prudent investor standards to consider asset classes and products that can provide superior returns or lower portfolio risk through diversification. For example, stocks were once considered imprudent investments for institutional investors. Now, the average public pension fund allocates over 60% of assets to stocks[9] and with certain exceptions,[10] it would probably be considered imprudent not to have an allocation to equities. The increase in equity allocations in the past twenty years has increased funding ratios of pension funds and decreased reliance on contributions from employers and employees to achieve actuarial stability. We acknowledge, however, that in 2008 the commitment to equities negatively affected returns and funding levels.

The types of investment opportunities utilized by institutional investors have greatly increased in recent years. Examples include timberland, commodities, hedge funds, infrastructure funds, venture capital, leveraged buyouts, mezzanine financing, real estate, and derivatives. Any or all of these opportunities, standing alone, could be seen as quite risky; however, when added to a diversified portfolio of stocks and bonds, they can increase returns without increasing portfolio risk to any significant degree. In fact, in many cases the inclusion of a new asset class will serve to decrease the overall portfolio's risk. The imperfect correlation between asset classes is the fundamental concept in modern portfolio theory.

Furthermore, analytical research shows that various investment constraints can negatively impact performance. In 1989, Dr. Richard Grinold, who currently heads many of Barclays Global Investors' research efforts, postulated the "Fundamental Law of Active Management,"[11] which states that risk-adjusted excess returns are a function of the manager's skill and the breadth of opportunities. This concept of breadth is important because investment constraints limit the number of opportunities, and thus limit the ability of a skilled investment manager to add value over a benchmark.

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[9] Rajnes, David. "State and Local Retirement Plans: Innovation and Renovation." EBRI Issue Brief Number 235. July 2001. http://www.ebri.org/pdf/briefspdf/0701ib.pdf.

[10] It is common practice for terminated plans to have their assets invested in bonds with a similar duration to liabilities in an attempt to immunize the portfolio from any market risk. In these situations, it would not be uncommon to see a plan hold only fixed income investments.

[11] Grinold, Richard C. 1989. "The Fundamental Law of Active Management." Journal of Portfolio Management, vol. 15, no. 3 (Spring):30-37.

Other research into the inefficiencies caused by investment constraints was performed by Roger Clarke and Harindra de Silva from Analytic Investors. They further expanded on and attempted to measure the financial impact investment constraints have on portfolio performance.[12]

The trend in the public retirement industry is away from “legal lists” and toward trustee autonomy and full discretion and control over the management of pension fund assets within fiduciary parameters. Most public retirement systems now operate pursuant to some version of the “prudent investor” or “prudent expert” standard. As indicated earlier, these standards are based on modern portfolio theory which permits boards to invest in any investment which, after following a diligent process of analysis, they find prudent within the context of the overall portfolio. This prudence standard also requires portfolio diversification, unless it would be imprudent to do so under the circumstances.

Legal lists are no longer common place; however, some funds, including the Arizona State Retirement System, still labor under some form of legal list. Constraints could cause trustees to miss valuable opportunities and impair their ability to carry out their fiduciary duties.

Findings and Analysis

We find that the COPERS Board is subject to a detailed list of investment restrictions. The investment restrictions imposed by law are outdated and not consistent with the common or best practices of institutional investors, including most public retirement systems.

Although some Trustees and staff believe that certain good opportunities have been missed due to the restrictions, most agree that COPERS is fairing better than many other public funds considering the current market environment. We also agree with this assessment; however, the recent downturn of the market is only a sliver of the overall investment experience of COPERS. For the majority of the time, the investment environment rewards investment portfolios that are diverse and not restricted by a “legal list.” The impact of “legal lists” is discussed in more detail in section 3.

Conclusion

We conclude that investment restrictions could possibly impair the ability of the COPERS Board to prudently invest and diversify the assets of the System because the opportunity set is narrowed. Well-intentioned but outdated restrictions are inconsistent with modern portfolio theory and best practices.

[12] Roger G. Clarke, Harindra de Silva, and Steven Thorley, “Portfolio Constraints and the Fundamental Law of Active Management.” Financial Analysts Journal, (September/October 2002):48–66.

Consideration:

1. Consider having the investment consultant create a hypothetical “optimal” portfolio to compare an unrestricted asset allocation to the current asset allocation in an effort to estimate the impact the restrictions have had on the portfolio.

Recommendation:

1. Seek a Charter amendment, at such time as the Board deems is in the best interest of the System, to remove the investment restrictions and replace them with contemporary fiduciary standards.

Authority to Select Legal Counsel to the Board

<u>Background</u>

Public retirement boards and staffs need to have access to legal advice from attorneys who are knowledgeable and free from conflicts of interest. Trustees and staff are entitled to feel confident in the attorneys who advise them. Anything less falls below best practices.

Attorneys who advise public retirement systems on investment matters must be knowledgeable in the interpretation and application of the governing laws and fiduciary standards; experienced in reviewing and negotiating contracts with investment managers, consultants, and other service providers; familiar with the legal issues surrounding complex investments in private equity and hedge funds; and able to oversee class action litigation.

Attorneys must be capable of advising fiduciaries who owe a duty of loyalty to the system’s members and beneficiaries. Although these attorneys are generally not considered “fiduciaries” in the same way that trustees are, the attorneys have a similar duty of loyalty derived from the professional canons of ethics which govern the legal profession. The Official Comment to Rule 1.7 of the American Bar Association’s Rules of Professional Conduct states: *Loyalty and independent judgment are essential elements in the lawyer's relationship to a client.*

The independence and loyalty of an attorney for a public retirement system can be compromised if the attorney is selected by and answerable to an entity or individual other than the board of trustees. Attorneys that work for the state or local government and not for the board may be torn between conflicting interests. For example, conflicts arise whenever a system’s right to collect contributions from the employer is at issue. Likewise, conflicts arise whenever an interpretation of a statute creates a benefit entitlement with significant funding consequences to the plan sponsor. Another example of a conflict of interest is when counsel is called upon to provide advice on the prudence of an investment decision that may be contrary to the plan sponsor’s proprietary or political interests.

A public retirement system is different from other public sector agencies in that its governing body, the board, has a specific fiduciary duty to the members of the system. A public retirement system is best served by an attorney whose duty runs exclusively to the fiduciaries on the board and staff, unimpaired by a competing duty to other public officials who do not have the same stringent fiduciary responsibility to the system's membership. It is the inherent misalignment of interests which creates the potential for conflicts of interest when the system shares its attorney with the plan sponsor, not the personal conduct of individual attorneys whose good faith and professionalism is not the issue.

Findings and Analysis

The Charter provides that the City Attorney shall be the legal advisor to COPERS. This is similar or analogous to the requirements in numerous state and local governments who have attorney generals, county counsels, and city attorneys represent the boards of public retirement systems. COPERS has never had internal legal counsel on staff.

With regard to outside legal counsel, the Charter does not specifically authorize COPERS to hire outside counsel in the event it elects not to rely upon the City Attorney. The Board's ability to select outside counsel has changed from time to time depending upon the views of different City Attorneys.

In the past, the practice was for the Board to hire outside counsel at its discretion. Currently, COPERS relies entirely on the attorneys from the Law Department except in the rare instances where the Board has requested the use of outside counsel. Those requests were made when the Law Department had clear conflicts of interest or lacked the specific legal expertise required for the assignment.

The Board is not free to hire the outside attorneys of their choice. The City Attorney determines which outside counsel will be selected and under what circumstances; however, the Board has the obligation to pay for the services of outside counsel. The City Attorney may or may not take the Board's preferences for outside counsel into consideration.

Conclusion

The best practices are for a public retirement board and staff to have the freedom to hire and consult with the attorney of their own choosing. Any attorney they rely upon ought to have knowledge, resources, and freedom from conflicts of interest.

The COPERS Board and staff should have control over the selection of legal counsel, their scope of work, and fees for the services rendered. If non-fiduciaries insert themselves into the process, it could hinder the Board from carrying out its fiduciary duties.

Recommendation:

1. Seek a Charter amendment or a memorandum of understanding, at such time as the Board deems is in the best interest of the System, to grant the Board the authority to hire internal legal counsel and retain outside counsel.

C) Council's Authority to Remove a Trustee

<u>Background</u>

Removal of trustees from public retirement boards before their terms end is a rare event. Most laws establishing the retirement systems remain silent on the circumstances under which a trustee can be removed or even sanctioned for improper behavior. In a few systems the absence of statutory language has led boards to develop internal policies about removing trustees. In these situations it is unknown if such policies would be enforceable because they arguably extend the reach of the boards beyond their authority under the law.

From a high level trust law perspective, granting trustees the authority to remove a fellow trustee for breach of fiduciary responsibility is consistent with the concept of co-fiduciary responsibility and managing the corresponding liability.

In some public retirement systems, the appointing authority specifically retains the right to remove an appointee; however, this is atypical. The concern in situations like this is that it creates the potential for undue political pressure. With regard to elected trustees, we are unaware of any public retirement systems that have a law that allows the membership or constituency who elected the trustees to recall or replace those they have elected.

Some states and local governments have laws that require trustees to resign from the board if they are absent from a set number of meetings or if they have had criminal convictions. The criminal convictions causing removal from a board are sometimes limited to felonies and other times the convictions include felonies and misdemeanors if the misdemeanors involve the misappropriation of funds or other financial related convictions.

To be consistent with best practice there should be no interference with a trustee's ability to serve their statutorily stated terms, except in the case of the trustee's voluntary resignation or removal because of a criminal conviction or a breach of fiduciary duty. The removal can be accomplished through a majority or super majority vote of the board.

<u>Findings and Analysis</u>

Section 2-51 of the City Code states that any board, commission or committee members may be removed from their office with or without cause prior to the expiration of their term upon a majority vote of the Council. It is our understanding that the City Attorney has advised that this Section covers only trustees that the Council appoints. Based on this explanation, the COPERS Board is not subject to this law; however, we believe there is a risk of a different interpretation. This risk is heightened if, in the future, a City Attorney takes office who does not share the same opinion as the current City Attorney.

Conclusion

Section 2-51 can be interpreted in two different ways. The current City Attorney has verbally expressed that this Section does not apply to the COPERS Board; however, a formal written legal opinion on this matter does not exist.

Consideration:

1. Consider obtaining a written opinion from the City Attorney stating that Section 2-51 does not give the Council the authority to remove COPERS Trustees.

III. Board Delegation of Authority

Background

Under the old common law of trusts, trustees were under a duty not to delegate to others those activities which the trustees could reasonably be required to perform.[13] UMPIA and UMPERSA advocate the modernization of the "most-criticized rule that forbade trustees to delegate investment and management functions."[14] Both of these model acts authorize trustees to "delegate functions that a prudent trustee or administrator acting in a like capacity and familiar with those matters could properly delegate under the circumstances."[15] This is particularly important given the complexity of today's environment in which institutional investors operate.

Public retirement boards can delegate but they cannot abdicate their responsibilities. They can delegate duties to qualified agents; however, if the board elects to delegate duties, it must utilize "reasonable care, skill and caution" in selecting and monitoring the agents and establishing the scope and limits of the agent's authority. This rule also parallels provisions of ERISA authorizing the division of fiduciary responsibility among multiple fiduciaries and the delegation to investment managers the authority to manage plan assets.

It is most common to see boards retain the authority over major policy decisions, but delegate the implementation of those policies to staff or outside service providers (e.g., consultants, actuaries, investment managers). Best practices are to make clear delegations in writing after undertaking a prudent process to determine if the agent is truly an expert in the type of work being delegated. Investment manager selection and portfolio monitoring are examples of duties that boards delegate to others.

Fiduciary duties can be delegated but not abdicated. Therefore, to be consistent with best practice, any delegation must be accompanied by diligent oversight, i.e., the trustees must periodically review the agent's performance and compliance with the terms of the delegation.

Findings and Analysis

We found no limitations in the law regarding the Board's ability to delegate. While we found implicit delegations of authority in the policies adopted by the Board and in Board meeting minutes, we found no specific written delegations of authority or a statement of governance which identifies what authority the Board has retained and what has been delegated to staff and service providers, beyond what was contained in contracts and position descriptions.

[13] Restatement of Trusts 2d §171
[14] See Uniform Prudent Investor Act comment to Section 9 Delegation of Investment and Management Functions.
[15] Uniform Management of Public Employee Retirement Systems Act Sec. 6.

We found that the current Board and Retirement Administrator appear to have an excellent understanding of what has been delegated to whom and who is responsible for what, but best practice calls for more formality.

Conclusion

The Board's delegation of authority is working well. Codifying the Board's authority and delegations in governance documents may improve accountability.

Consideration:

1. Consider using a decision and management responsibility matrix or similar tool that sets forth the responsibilities among the COPERS Board, the Retirement Administrator, the Investment Manager, the investment consultant, the custodian, and any other key service providers to COPERS.

Recommendation:

1. Adopt a statement of governance that clearly identifies the authority retained by the Board and the authority it has delegated and to whom.

IV. Fiduciary Insurance

Background

Some public retirement systems purchase fiduciary insurance to protect the fund from suffering losses caused by breaches of fiduciary duty by the boards or staffs.

Depending on the terms of the policies, fiduciary insurance protects the fund, the individual fiduciaries, or both. It is important to note that fiduciary insurance will not protect trustees or staff if the violation is found to be intentional.

Numerous public and private pension funds obtain fiduciary liability insurance, notwithstanding the fact that sovereign immunity may be available. This is because the application of sovereign immunity is very much subject to interpretation, with no guarantee that it will sufficiently protect the fund or individuals.

A public retirement system is generally allowed to use its own assets to purchase such insurance, but the premium for any “waiver of recourse” may not be paid from the pension fund system’s assets. A waiver of recourse provides that if the insurance carrier pays a claim on behalf of the insured, the carrier may not seek to recover that amount from the insured. The premium for the waiver of recourse may be paid by the trustee, the trustee’s employer, or another source, but not from the system’s own assets. If a trustee has paid for a waiver of recourse and the carrier pays a claim on his or her behalf, the carrier is precluded from seeking to recover from the trustee the amount paid.

Whether the protection of a fiduciary liability insurance policy is worth the cost of the insurance premiums depends on numerous factors, including but not limited to the following:

- the level of fiduciary training received to diminish the likelihood that an unintentional breach will occur
- the terms of the policy (how much protection the policy provides)
- the amount of the premiums
- the complexity of the investment program
- the degree of expertise and attention of the trustees and staff in structuring and monitoring the investment program
- the adequacy of the professional advice the trustees and staff receive
- the extent to which the trustees properly delegate and monitor delegations
- the extent to which internal controls are in place

Findings and Analysis

The law governing COPERS does not specifically authorize the board to purchase fiduciary insurance, which is not uncommon. COPERS' Trustees and staff are subject to the provision of Chapter 42 of the City Code, entitled Risk Management. The law sets forth provisions regarding the City Attorney's representation, indemnification of covered employees, the City's self-insurance provisions, and the circumstances under which commercial insurance may be obtained.

Commercial insurance has been obtained for the "citizen member" of the Board but no one else. The other members of the Board appear to trust that they are self-insured against a claim for breach of fiduciary duty and that they will be represented by the Law Department should a claim arise. Overall, we found that most members did not appear to appreciate the risk and potential expense associated with a claim for breach of fiduciary duty in the event the City Attorney declined to represent them. The Law Department determines whether or not an individual is a "covered employee" and whether the act was outside the normal course of employment. Such a determination can be made even after representation has commenced if the City Attorney determines that it is warranted based on the facts and circumstance of the case.

Fiduciary liability insurance is available through a limited number of insurance carriers. Typically, it can not be obtained in sufficient amounts to adequately protect the retirement system from all financial losses due to a breach of fiduciary duty. Often it is expensive, with high deductibles and low limits. Public retirement systems that purchase fiduciary insurance see it as a means to cover the litigation costs needed to defend the board and staff against the claim rather than a means of making the fund whole.

We find that perhaps the best protection against a potential claim is to establish a framework of good governance, good internal controls, and heightened trustee and staff training.

Conclusion

We conclude that the Board and staff are unclear about the degree to which they are protected by sovereign immunity for breaches of fiduciary duty. Further, we conclude that the representation by the Law Department, which can be withdrawn at any time, may not be sufficient protection for the Board and staff.

Recommendation:

1. Discuss the topic of fiduciary liability protection with the City Attorney at a Board meeting so that all members will be well-informed on the issues of sovereign immunity, indemnification, self-insurance, and legal representation by the Law Department.

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INTRODUCTION

In this section of the report, the governance policies of COPERS are reviewed and analyzed. There is slight overlap between this section and section 1 of the report because COPERS' governance policies are derived from the legal authority governing the System.

In a general sense, "governance" refers to the method by which an entity is directed and controlled. A governance structure defines the roles of the different parties that participate in the decision-making process. It includes the way issues are identified, options are analyzed, action is taken, and decisions are evaluated. A sound governance structure takes into account the following principles: accountability; transparency; compliance with legal requirements; effectiveness and efficiency; inclusiveness; fairness; responsiveness; and predictability. These principles of good governance are applicable to all types of entities, including public retirement systems.

For more than a decade, significant attention has been focused on the need for good governance and the value it adds. Research has demonstrated that the value of poorly performing companies improved significantly after the institution of good governance practices.[1] We believe the same is true for public retirement systems. Poor governance has been ranked as the principal barrier to excellence within an organization, followed by inadequate resources and lack of focus or a clear mission.[2] This research caused many public retirement systems to revisit the adequacy of their governance policies and practices to ensure they are keeping up with evolving standards.

In the public retirement industry, a retirement board's authority is usually defined by the enabling laws that establish the retirement system. Some boards have nearly total autonomy and function independently of the plan sponsor. Others boards have less autonomy and must function as a component unit of the state or local government. Generally, we believe that more autonomous boards have better governance structures, assuming they conduct business through open meetings, provide clear reporting of their decisions, and operate with appropriate oversight. It is important for public retirement boards to be able to make decisions and perform their duties under strict fiduciary standards. If a board's ability to carry out its duties is subject to the prior approval of or control by another entity that does not have the same fiduciary duties, then the board's ability to accomplish its stated mission, goals, and objectives is placed at risk.

When proper policies are not in place or followed, operational risk is amplified.[3] Additionally, a lack of policies and compliance can send the wrong message to the staff about the expectations of the trustees and to the membership and the general public about how the system is managed.

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[1] Wilshire study of "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 CalPERS' focus.
[2] "Excellence Shortfall in Pension Fund Management: Anatomy of a Problem" by Keith Ambachtsheer, Craig Boice, Don Ezra and John McLaughlin – October 1995.
[3] *Public Pension Systems – Statements of Key Investment Risks and Common Practices to Address Those Risks,* July 2000. Endorsed by: Association of Public Pension Fund Auditors; National Association of State Retirement Administrators; National Council on Teacher Retirement; and Government Finance Officers Association.

SCOPE OF REVIEW

In this section of the report we focus on the following areas:

I. COPERS Governance Policies
   A) Board Authority and Duties
   B) Board Officers
   C) Board Use of Committees and Committee Charters
   D) Meetings/Board Packets/Protocols
   E) Orientation/Education/Conferences Policy
   F) Retirement Administrator Evaluation
   G) Conflict of Interest/Ethics
   H) Travel/Expenses
II. Other Beneficial Policies and Practices
   A) Additional Policies
   B) Governance Manual
   C) Policy Compliance
III. Staff Roles
   A) Retirement Administrator
   B) Investment Staff
   C) Internal Auditor Function

[Note: The Investment Policy Statement, Proxy Policy, Securities Litigation Policy, and other investment related policies and guidelines are discussed in section 3 of the report.]

I. COPERS Governance Policies

A) Board Authority and Duties

Background

It is common for the statutes that establish the public retirement systems to be rather sparse in defining what the boards are actually supposed to do. Because of this, there is a growing trend among boards to better define their roles and responsibilities. Recently the emphasis has been on detailing and documenting what is expected of the board as a whole and what is expected of individual trustees. This helps trustees understand the knowledge and time commitment required to accomplish their functions and conveys to the membership, stakeholders, and the general public the extent of the board's responsibilities.

There are various ways in which individual public retirement boards exercise their authority and fulfill their duties. Some delegate many responsibilities to staff or outside service providers; others retain those same responsibilities under the board's purview. In many cases, the degree of delegation is as much a matter of custom as it is a matter of well-thought-out governance practices. We find, however, that boards that focus on their role in relation to the role of staff and others usually make meaningful improvements. The result of deliberations might either increase or decrease their delegations, but in each case the changes reflect their intention to improve the governance and operation of the retirement system.

The best governing documents that describe the roles and responsibilities are a result of boards setting aside time to discuss and reach consensus about their optimal governance role and their expectations for all who serve on the board as trustees.

Findings and Analysis

COPERS adopted Policy No. 3 in July 1999 and it was most recently reviewed by the Board in October 2008. The Policy is based primarily on the requirements of the Charter. It addresses the following subjects: the election processes for Trustees and Board Officers (the Chair and Vice Chair); the duties of the Board Officers; the Board's authority to appoint the Retirement Program Administrator (who serves as the Board's Executive Secretary); the Board's Committees; the setting of agenda items; quorum requirements; Board and special meetings; Board minutes; and the background check requirement.

In our experience, many public retirement systems do not have such a policy. We commend COPERS for adopting Policy No. 3. It establishes an excellent foundation upon which to build a more comprehensive governance framework.

Based on our interviews, it appears that the COPERS Trustees generally understand their authority and duties. They also share similar expectations about what individual Trustees are required to do to be part of a well functioning board; however, because of likely turnover in Trustees it is important for the Board to document these functions and expectations.

Conclusion

We conclude that in order to reflect best practice, the COPERS Board should set aside time to discuss expectations and reach consensus regarding an appropriate governance framework. Based on the Board's consensus view, the current provisions of Policy No. 3 could be expanded into a more detailed description of the Board's and individual Trustee's roles and responsibilities.

Consideration:

1. Consider enhancing Policy No. 3 by more accurately describing the full scope of the Board's responsibilities and by creating a position description for Trustees.

B) Board Officers

Background

The expectation of board officers and the way they operate varies significantly from system to system. Officer positions usually include a chair and vice chair, and less often a secretary. The chair at some systems may be very involved in setting the board meeting agendas, presiding over board meetings, serving as an ex-officio member on all committees, conferring with the retirement administrator between board meetings, and acting as the primary spokesperson for the organization. At other systems, the chair's role is narrower, limited to running the board meetings and appointing committee chairs. One way of operating is not necessarily better than the other; however, it is important for roles to be clearly understood and agreed upon. The vice-chair serves when the chair is not available and normally does not have distinct duties. The secretary is usually tasked with maintaining the records of the meeting (e.g., the minutes), which in practice is often assigned to staff.

The time commitment required of board officers ranges from minimally more time to substantially more time than other trustees. There are no strictly defined best practices regarding the role of the board officers and the time required. What is important is that the officers are acting consistent with fiduciary standards in the operation of the board and the oversight of the system.

Findings and Analysis

Policy No. 3 sets forth two officer positions and documents the duties of the Chair and Vice-Chair. The duties listed are consistent with the duties we would expect to see. The only omissions we noted are: serving as the primary liaison between the Board and the Retirement Administrator; ensuring proper information flow to the Board; and conducting orderly and efficient meetings. We understand that in practice the Board Chair performs all these duties.

Pursuant to existing policy, the Chair is an ex-officio member of all Board committees; however, it is not clear if the Chair is allowed to vote as an ex-officio member. In the past, COPERS Board Chairs have not often elected to participate on committees as ex-officio members. Further, since the committees do not use roll call votes, there is no record if previous Board Chairs have voted on committee matters.

COPERS, like many other public retirement systems, does not have a Trustee serve as the Secretary of the Board. That duty is fulfilled by the Retirement Administrator, which is appropriate since the persons serving in the top administrative positions are usually best able to handle these responsibilities.

Conclusion

We conclude that the roles of the Board officers set forth in Policy No. 3 are moderately representative of the actual roles; however, certain functions that the Chair currently fulfills are not documented.

Recommendations:

1. Formally determine and document whether the Chair is entitled to vote as an ex-officio member of all committees.
2. Document the duties that are expected of the Board Chair in setting meeting agendas and performing the other related functions.

C) Board Use of Committees and Committee Charters

Background

The use of committees by public retirement boards is a common practice. We estimate that some form of committee structure is used by about 75% of large public funds and used slightly less often in smaller funds if they have less than five trustees. Some boards take the position that if an issue is important enough for any board attention then all members of the board should be involved. These boards do not use committees. This, however, is a minority view.

Committees provide a systematic way to focus in-depth on important issues. Boards that use committees do so to make full use of trustees' expertise and accommodate their interests. Many public retirement trustees believe that smaller groups working in less formal settings can be more effective. Committees can save valuable time for the full board. Further, if each committee is able to focus on a particular subject, over time the committee members are likely to develop greater expertise. The most commonly used committees include investments, budget, benefits, personnel, legislative, and audit.[4] The types of committees used are somewhat dependent upon the scope of responsibility imposed upon the board.

Most committees cannot take final action on matters before them. They are only advisory in nature and make recommendations to the full board. Thus, committees usually do not supplant the responsibility of the full board.

A public retirement system's committees are sometimes set in statute, but usually the establishment of committees is left to the discretion of the board or board chair. The board chair usually appoints the members of the committees, taking into account the need for expertise, diverse views, and time commitments. The chairmanship of the committees is sometimes determined by a vote of the committee members, but most often it is determined through appointment by the board chair.

Trustees usually have a general understanding of what work has been assigned to the various committees. On occasion, however, we find controversy with regard to the way committees operate. Frequently boards do not live by the committee delegations they have made and they rehash committee issues at board meetings. Sometimes boards find fault when committees have shirked their responsibilities. Other times boards believe the committees have been overreaching and acting outside of the mandate they were given. Still other times, the activities of two committees overlap. Because of these problems we believe that comprehensive committee charters and annual committee work plans can improve governance practices at public retirement systems.

The best written committee charters detail the following:

- Purpose of the committee
- Responsibilities
- Authority
- Composition, including appointment process
- Terms of service
- Chairmanship
- Attendance
- Voting
- Meeting schedule and agenda setting
- Staffing
- Reporting requirements

Findings and Analysis

Currently, COPERS has four committees. The Disability Assessment Committee was established by the Charter, and the other three committees were instituted by the Board–-the Investment Committee, the Charter Amendments/Policies & Procedures Committee, and the Legal Review

[4] National Council on Teacher Retirement and National Association of State Retirement Administrators *Survey on the Frequency of Public Retirement Systems' Board Meetings*, January 2003.

Committee. The three committees instituted by the Board do not take final action on matters, but rather make recommendations to the full Board for its final actions.

Based on the information obtained during the interview process, it is our understanding that the Committees' roles and responsibilities are clearly understood by the Trustees. COPERS' Policy No. 3 includes documentation of some committee functions and establishes the Board Chair's role with respect to committee appointments and participation. The Policy also establishes the scope of authority, the minimum number of members, and the frequency of meetings for the Investment Committee and the Charter Amendments/Policies & Procedures Committee, but not for the Legal Review Committee. COPERS is in the process of drafting a Legal Review Committee Charter.

Each Committee is addressed below, along with a discussion of an audit committee, which COPERS currently does not have.

Investment Committee

Authority: While we believe that the eight responsibilities listed in Policy No. 3 are fairly comprehensive, a more detailed or expanded listing of responsibilities may be beneficial. For example, it is not unusual for an investment committee to be responsible for establishing an overall investment philosophy of the fund, determining orientation and education requirements for its members, assessing fund performance quarterly and annually, recommending changes to the fund's investment policy to the board, or identifying legislation related to investments that the system may want to address.

Committee composition: Some public retirement systems have investment committees that are "committees of the whole" board. Others have a subset of the board act as an investment committee. Investment committees range in size, but six to eight members is typical in large statewide retirement systems according to a NASRA and NCTR survey.[5] Anecdotally we note that committee size for local government systems is somewhat smaller.

Policy No. 3 specifies that the Committee shall consist of at least three members. In practice, COPERS has five Trustees serving on the Investment Committee. Five seems to be workable and prudent. A number less than five might result in limited perspectives to fully vet the issues.

Committee meetings: Policy No. 3 indicates that the Investment Committee shall meet "as often as necessary." COPERS' Investment Committee meetings are held nine to ten times annually. It appears that the typical duration of the meetings is 15 to 30 minutes. The meetings are held on the same days as Board meetings.

[5] *Investment committee meeting frequency survey*, 2003. Conducted by the National Association of State Retirement Administrators and National Council on Teacher Retirement.

Data collected from 24 public retirement systems in a 2003 survey remains remarkably similar to what we see today.

NCTR/NASRA Survey[6]

Frequency of Investment Committee Meetings/Year	4X	5X	6X	8X	12X	As Needed
Number of Funds	10	1	1	1	8	3

In a recent survey of EnnisKnupp clients we found that investment committees of public retirement systems (regardless of size) meet more frequently than investment committees of endowments, foundations, and corporate pension funds, which tend to have quarterly meetings. Public funds continue to meet between four to 12 times per year. The length of the meetings generally ranges from two to six hours, primarily because the topics covered in the meetings are usually more than "information only" items. They are complex issues that require analysis and discussion before any recommendations can be made to the full board. Typically, meeting frequency and length are directly related to the complexity of the investment portfolio and the degree of delegation the board has made.

Even when frequency is taken into account, we found that COPERS' Investment Committee meetings appear to be much shorter in duration than is common. During the interviews, no Investment Committee member voiced concern about meeting lengths being too short to accomplish agendized work. This may be because investment issues of major importance are discussed at Board meetings following the Investment Committee meetings and also at special quarterly meetings when performance reports are presented. Additionally, COPERS holds an annual roundtable where investment managers provide presentations. In light of these additional meetings, we believe the length of the Investment Committee meetings is not a problem.

We reviewed the Investment Committee packets from October 2008 to February 2009 that were provided to the Committee and found them to be comprehensive and useful. We noted that the Investment Committee does not have an annual work plan; however, the calendar in the Board packet contains an activity plan that helps the Board, as well as the Investment Committee, schedule its activities.

Charter Amendments/Policies & Procedures Committee (CAPP)

Authority: Policy No. 3 lists the functions of the CAPP Committee as reviewing procedures, charter changes, rules of the Board, annual budget for submission to the Board, and any operating problems

[6] *Responses to survey on frequency of public retirement system' board meetings,* January 2003. Conducted by the National Association of State Retirement Administrators and the National Council on Teacher Retirement.

of the Retirement Administrator. The CAPP Committee's authority to take final action is not clearly stated in the Policy.

The CAPP Committee addresses supplemental budget requests and COPERS staff puts together decision packets, and the full Board receives the budget materials as information items. We believe that it is good governance to tightly manage the time spent on the details of the operations budget. In our experience with other systems too much board time is often spent on operating budgets to the detriment of other issues that have far greater financial impact, (e.g., actuarial funding levels, collections of contributions, and the management of investments).

Committee composition: The Policy requires the CAPP Committee to have at least three members. In practice it actually has five members and given the purpose of the Committee we find this number to be reasonable.

Committee meetings: Pursuant to the Policy, the CAPP Committee is to meet as necessary. On average, it meets four times a year. We believe this to be reasonable given the Committee's scope of responsibility.

We also reviewed a number of the CAPP Committee packets provided to the members and found them to be comprehensive and useful. A work plan does not exist for the CAPP Committee; however, the absence of a work plan is not significant since its work is contingent on the number and types of appeals and Charter changes.

Legal Review Committee

Authority: The Legal Review Committee is established in Policy No. 3, but its functions and authority are not stated in the Policy or any other document that we reviewed; however, we understand its purpose is to review legal changes and issues.

Committee composition: The Policy does not state the number of members who serve on this Committee. The Committee currently has five members and we find this number to be reasonable.

Committee meetings: The Policy does not set the number or frequency of meetings. Its last meeting was held in May 2008. On average, the Legal Review Committee meets once a year.

We also reviewed a number of the Committee packets provided to the members and we find them appropriate. A work plan does not exist for the Committee due to its ad hoc nature.

Audit Committee

It is the responsibility of the board to identify the risks of its organization and then establish controls to manage them.[7] In many organizations, this responsibility is delegated to an audit committee. Currently, COPERS does not have an audit committee that is a subset of the Board. Instead it relies on the City's Audit Committee. That Committee has much broader responsibility to the City government than merely addressing issues of the retirement system. The question of whether COPERS needs its own audit committee was discussed during the course of this review. The Trustees and staff did not express strong opinions either way.

There is a strong, growing trend among public retirement systems to have an audit committee, even in the case of city retirement systems that may be a component of the plan sponsor.[8] We believe that establishing an audit committee as a subset of a public retirement board is consistent with best practices for two reasons. First, trustees have fiduciary responsibility for the system whereas others in City government may not. It is important for fiduciaries to be able to influence the focus of any audits and understand the audit results so that they can improve governance and business practices. Second, because of the unique nature of a pension fund and the evolving fiduciary standards of prudence in paying benefits and making investments, those having a deep understanding of the business functions are in the best position to determine the value and effectiveness of the audits.

The Association of Public Pension Fund Auditors (APPFA) lists the following as areas of oversight which ideally would fall under the purview of a board's audit committee:

- Financial Reporting Process
- System of Risk Management
- System of Internal Controls
- Internal Audit Process
- External Audit of the Financial Statements
- Engagement of External Audit Firms
- Organization's Processes for Monitoring Compliance with Laws, Regulations, Ethics Policies, Codes of Conduct and Fraud Policies
- Special Investigations and Whistleblower Mechanisms

The American Institute of Certified Public Accountants (AICPA) also provides guidance to audit committees. A summary of its advice is provided in Exhibit A at the end of this section.

Conclusion

COPERS does not have separate committee charters for its three board committees. Some information that would ordinarily be contained in a committee charter can be found in Policy No. 3. We commend COPERS for addressing the functions, procedures, meeting frequency, and composition of the Investment Committee and the Charter Amendments/Policies & Procedures Committee in that Policy. This governance document has established a good governance foundation

[7] Key risks include market risk, operational risk, and political risks. See Bank of New York White Paper entitled "*New Frontiers of Risk - the 360 Risk Manager for Pensions and Non-Profits*," October 2005.
[8] Examples of such funds include the City of Ann Arbor, City of San Diego, City of Milwaukee, City of El Paso, and Houston Firefighters.

for these two Committees. We believe that more details, such as those set forth in the background section of this portion of the report, would be worth adding.

The Legal Review Committee is not sufficiently described in any governance document, but COPERS is in the process of drafting a Legal Review Committee charter.

We also conclude that the Board, due to it being the ultimate fiduciary for the System, has oversight responsibility for the financial reporting process, the system of internal controls over financial reporting, the audit process, and the process for monitoring compliance with the law and applicable plan documents. An audit committee, composed of members with the same fiduciary responsibilities to the trust, would assist the Board in fulfilling its oversight function.

Considerations:
1. Consider lifting excerpts related to committees' functions from Policy No. 3 and expanding details to create comprehensive charters for each committee.
2. Consider establishing an Audit Committee of the Board to handle the types of matters recommended by APPFA and the AICPA.

D) Meetings/Board Packets/ Protocols

Background

Meetings: The purpose of a board meeting is to provide a public forum for trustees to come together in order to deliberate, make decisions, and establish the long-term direction and major policies of the organization. Meeting frequency, meeting materials, agenda items and other protocols are factors that affect a board's ability to operate in an optimal way. If a board is not given the information it requires in a timely manner, if agendas do not cover the important issues, or if board meetings do not occur at the right frequency, the board's abilities are constrained and the success of the system is impeded.

Due to the nature of the business involved, it is a commonly accepted that public retirement boards should meet no less than four times per year. We find that best practice is for the number of meetings to be decided by the board itself based on its volume of work and its goals. Below are the results of a 2003 survey.

NASRA/NCTR Survey[9]

Board Meetings/Year	1-3	4-7	8-10	11-12	> 12
Number of Systems	1	20	11	17	1

[9] The survey was conducted by the National Association of State Retirement Administrators and the National Council on Teacher Retirement regarding the frequency of board meetings.

In a recent survey of EnnisKnupp clients we found that public retirement boards generally meet between four to 12 times per year. The number and length of the meetings varies among the retirement systems because of the scope of responsibility, the issues to be addressed, the degree of delegation to the staff, the use of committees, and the efficiency of the meetings. A benefit of frequent meetings is that trustees can form a more cohesive group if they spend more time together. Likewise, frequent meetings between the board and staff can be beneficial for the same reason. The downside to more frequent meetings can be a lack of time to sufficiently prepare for meetings by both the board and the staff and an increased focus on operational or managerial issues instead of true policy-level issues.

To encourage efficiency, some boards have established a maximum meeting length, which can be waived if the majority of the members present believe it is warranted. And a few systems find it beneficial to list the timing for each agenda item as a way of signaling to the trustees what important items will need significant attention.

Board Packets: The decisions that trustees must make are complex and have monumental consequences. To be prudent fiduciaries, trustees must carefully review the issues before them. Therefore, it is imperative that the written material provided to the trustees in their board packets be comprehensible and pertinent to the topics on the board meeting agenda. Best practice is for the material to be distributed at least a week or five business days in advance so the trustees have sufficient time to review it. Some public retirement boards that have fewer meetings with longer agendas require more time for advance preparation.

Determining the right type and amount of information to provide to a board can be difficult. Giving too little information can expose the board to fiduciary risk if a critical issue is not addressed. On the other hand, giving too much information that is not explained well can also expose the board to similar risk. Some boards have rather formal procedures including annual work plans with timelines that specify what topics will be discussed at what meetings and what reports will be distributed. This works well for the routine matters but when it comes to issues that are not routine, it falls to the judgment of the retirement administrator (or executive director) to make the call. Sometimes the board chair is also involved in deciding what information should be given to the board.

Protocols: First and foremost, a public retirement system's protocols ought to be in conformance with open meetings and open records laws of the state in order to maintain public trust through accountability and transparency. Second, official business should not be transacted unless a quorum of the board is present. A quorum is generally at least half of the total trusteeship. In the absence of by-laws or a specific legal requirement, Roberts Rules of Order often define a quorum. Third, board meeting agendas should be established by the board chair and the retirement administrator, acting collaboratively, and taking into account any requests made by other trustees. Fourth, meeting agendas and minutes are commonly posted on the retirement system's website for public viewing. Fifth, boards often use a roll call when voting if issues are controversial, if votes are close, or if trustees want to maintain a record of how each trustee voted. Sixth, board actions are usually memorialized in the form of motions or resolutions in the meeting minutes.

Generally it is best practice to disseminate board meeting materials according to each trustee's preference. Some trustees still prefer that hard copies be sent through the mail; however, more and more trustees prefer information be provided via intranet or email for portability and security reasons. Some public retirement systems have established secure board websites for meeting materials, board polices and other pertinent information. Many outside service providers (consultants, actuaries, investment managers, etc.) already provide softcopies of reports to their clients, which reduces the need to scan each report. Although converting to this delivery method is initially time consuming, we find that it is more efficient and timely in the long run than making copies and coordinating the mailing of materials.

Findings and Analysis

The City Charter sets forth some Board meeting requirements. Additional details regarding quorums, agenda setting, recording and posting of minutes, and meeting frequency are further clarified in Board Policy No. 3.

As a public entity, COPERS adheres to open meetings and public records laws. Per policy and the Charter, a quorum of the Board is five Trustees with at least two being non-ex-officio members. The mandate regarding non-ex-officio members is unusual, but given the high percentage of ex-officio members on the Board, this feature may have been implemented to balance the ex-officio representation.

Per policy, Trustees forward any agenda items they may have to the Retirement Administrator. Board meeting agendas are set by the Chair with the support of the Retirement Administrator.

COPERS' Board meeting agendas are posted at least a week in advance in City Hall, on the City Clerk's website, and on the COPERS website. Board actions and meeting minutes are posted on both websites within 24 hours of the meeting. This process, which we believe to be sound, is not detailed in any written policy.

The Charter requires at least quarterly meetings. Policy No. 3 provides for monthly meetings on a designated day, at a designated time - the fourth Wednesday, at 9:30 a.m. In practice, the Board holds 15 to 16 Board meetings annually, including monthly meetings and special quarterly Board meetings to discuss investment performance reports. Recently, the CAPP Committee considered updating the Policy to authorize the Board Chair to reschedule meetings if necessary.

Trustees and staff believe the frequency and length of meetings are appropriate and we agree, although 15 to 16 meetings per year is on the high end of the range. Meeting times range from 30 minutes to three hours; however, the Board meets for as long as required to conduct COPERS business.

Based on our interviews and review of Board meeting minutes, we found that most Board decisions are based on a unanimous vote. For votes that are not unanimous, the names of the Trustees voting in the minority are recorded.

Board actions are documented in the meeting minutes as motions. While some Trustees and staff generally recall when certain motions were voted upon, the motions are not compiled in any easy to use document or matrix for the Board's reference to maintain oversight.

Board meeting materials are usually provided to the Trustees approximately a week in advance via regular mail. This is consistent with the practices of many boards and typically provides the trustees adequate time to review the material prior to the meeting. Based on Board interviews and our review of the Board packets, the material provided is relevant, comprehensive, and well organized.

Conclusion

We conclude that the frequency and length of Board meetings are appropriate for the agenda items covered. The meeting schedule appears to work well for the Trustees. The agendas are well developed even though the detailed practices for setting the agendas are not contained in policy.

Based on our review, we conclude that the Board meeting material is comprehensive, valuable to the Trustees, and provided in a timely manner.

Using electronic transmittal (email) or a secure website as the delivery method for the Board meeting material might be more efficient than the current mailing process.

Considerations:

1. Consider documenting details of governance practices relating to meetings, materials, and protocols that are working well so that these practices become institutionalized within COPERS.
2. Consider evaluating the delivery method for Board meeting material and other information provided to the Trustees.
3. Consider maintaining a compilation, separate from the minutes, of all motions and resolutions approved by the Board to assist the Board in its oversight function.

E) Orientation/Education/Conferences Policy

Background

Orientation: Trustees of public retirement systems assume full fiduciary status as soon as they are elected, appointed, or hold a designated ex-officio public position. The common law governing trusts and trustees does not recognize a "sliding scale" of fiduciary responsibility. Consequently, new trustees are instantly held to the applicable fiduciary standards to the same degree as more experienced trustees. For this reason, best practices among public retirement systems now include much more intensive new trustee orientations than ever before. These orientations should be comprehensive and held at the new trustees' convenience sometime before they assume their board seats.

Orientations are best if they are customized for the particular retirement system. Our position is that the orientations should include, at a minimum, the following topics:

1. History and purpose of the organization
2. Fiduciary responsibility, ethics, and liability
3. Board governance and good trusteeship
4. Benefits and services the system provides
5. Actuarial concepts
6. Asset class characteristics
7. Asset/liability modeling, asset allocation, and rebalancing
8. Investment policies, procedures, benchmarks, and compliance
9. Custodian bank responsibilities
10. Role of consultants, actuaries, attorneys, and others
11. Auditing (internal and external)
12. Legal and legislative issues (open meetings and open records)
13. Reporting responsibilities under statute
14. Administration and staffing of the organization
15. Backgrounds of staff and key service providers
16. Strategic initiatives and the strategic planning process
17. Operating budget and compliance
18. Evaluation process for the board and retirement administrator
19. Current hot topics in the industry
20. Review of a typical board packet

Education: To keep abreast of current issues and industry changes, best practices are to provide thorough and on-going training for trustees and staff. Some boards have adopted education policies, which we see as a prudent practice. Education policies set forth recommendations for certain educational sessions, a schedule of in-house training programs on a variety of topics, an evaluation process for board input on training, and materials for self-study.

We believe that annual training on fiduciary responsibility greatly benefits most public retirement boards and prevents inadvertent breaches. Training sessions can range from one hour to a full day in length.

The fiduciary training we recommend often covers the following:
- Understanding who is a fiduciary
- The common law of trusts and the standards
- The duties of prudence and loyalty
- The duty to follow plan documents (statutes)

- Identifying and managing conflicts of interest
- Delegation of duties and due diligence required
- Monitoring and oversight of delegated duties

Understanding fiduciary responsibility is of utmost importance to anyone who is a trustee of a public retirement system. The fiduciary standard is the highest standard imposed by law and is not easily understood.

Fiduciary training can be provided to boards by their staffs, legal counsel, or outside service providers (consultants or attorneys). No one party is necessarily better than another. The most important point is that the board is comfortable with the education provider's expertise and has confidence in their judgment.

Conferences: Best practices are to evaluate the costs and benefits of educational opportunities to ensure that trust funds are used wisely and trustees receive maximum value for the time and money spent. Many retirement systems provide the board with a list of "approved" or "recommended" conferences for trustees to attend. At some retirement systems, trustees are required to make periodic reports on educational conferences so that individual efforts and expenses can be tracked by the board or its audit committee. This practice enhances accountability and transparency.

Findings and Analysis

COPERS has a formal Board Training policy (Policy 181) which was adopted in January 2008. According to the Policy, the new Trustee orientation curriculum addresses the following:

- COPERS history
- Investment review
- Actuarial review
- Board and committee structure
- Review of administrative structure
- Review of plan benefit provisions
- Open meetings law training
- Ethics training
- Fiduciary duty

The new Trustee orientations are scheduled at times that are convenient for the oncoming Trustees. COPERS attempts to provide such training before they attend their first Board meeting. The orientations take place over two days in an effort to enhance the orientation experience and avoid "information overload." The orientation is delivered by the Retirement Administrator, a City Attorney representative, the incumbent investment consultant, the Board actuary, and other COPERS staff.

We found the documents provided at the most recent orientation to be comprehensive and valuable reference material. COPERS' orientation practice far exceeds what other boards receive and is an excellent governance practice.

The COPERS Board Training policy also addresses ongoing education for Trustees. It encourages Trustees to attend educational sessions regarding the following:

- Investment issues and trends
- Pension benefits designs
- Fiduciary responsibilities
- Actuarial issues and trends
- Other subjects related to the administration, management, and operation of the Retirement Plan

The Retirement Administrator periodically provides the Board information on relevant conferences and seminars. Additionally, the investment consultant provides periodic training related to investment issues. Trustees find these educational sessions to be quite valuable. This practice is in line with those of other well run retirement systems.

It is our understanding that COPERS Trustees are not required to attend an annual fiduciary update as a "refresher" of important case developments involving fiduciary breaches within in the public retirement industry. We find such updates to be a valuable way for the Trustees to be reminded of basic fiduciary concepts, examine changes in the law, and learn from mistakes of others.

Policy 181 is an excellent education policy. Pursuant to it, Trustees are to evaluate their own educational needs. It also requires the Board to approve Trustee attendance at any training where the cost is incurred by the System. Additionally, it requires the Retirement Administrator to provide periodic reports to the Board regarding the training activities of individual Trustees. We believe this to be a good policy that keeps the Board informed and ensures transparency.

Attending conferences can be a good source of education and an opportunity to build a network with peer systems; however, recent scrutiny of public retirement systems and the cost of attending such events have heightened sensitively to this issue. Some systems are reducing the budgets for conferences. Others are prohibiting the payment of conference expenses by outside parties. Both practices are designed to maintain public confidence. COPERS' Board and staff alike are aware of such issues. Neither Board nor staff attends many out-of-state conferences or ones that are directly sponsored by investment managers. COPERS has taken advantage of some local conferences that have been offered at a discounted price or free of charge. Attendance at local educational events is encouraged to keep travel costs low. We commend COPERS for its efforts in this regard.

Conclusion

We conclude that COPERS is adhering to best practices related to Board education by having a policy that the Board follows regarding new Trustee orientation and ongoing education. The only notable omission from this policy is a requirement for annual fiduciary training.

Additionally, we conclude that the Board should evaluate the direct and indirect sponsors of conferences that Trustees attend and from which COPERS accepts discounted registration fees. Although this practice has not caused any issues yet, it is considered best practice to be aware of the organizers/sponsors of conferences and who is paying for the expenses in order to manage conflicts of interest issues.

Consideration:

1. Consider apprising the Board of direct and indirect sponsors of conferences that Trustees might attend.

Recommendation:

1. Hold annual fiduciary trainings for the Board that highlight important issues involving breaches of fiduciary duties.

F) Retirement Administrator Evaluation

Background

The most important delegation a public retirement board makes is to the individual primarily responsible for the implementation of its policies and the day-to-day administration of the system.

Therefore, it is valuable for boards to set forth in policy the process and criteria they will use to evaluate the administrator's performance. Best practices are to review the performance of the retirement administrator on an annual basis and for all trustees to provide input. A good evaluation process also involves the administrator submitting a written self-evaluation prior to the board's evaluation.

In our experience, evaluation criteria include many of the following:

- Leadership
- Management of the organization
- Progress toward strategic goals
- Staff development
- Policy recommendations
- Communications
- Investment performance
- Customer service
- Legislative success

Sometimes boards use outside facilitators when they review the administrators. In those instances, the facilitators do not influence the performance ratings but rather assist the board in staying focused on performance within the specified evaluation period, candidly discussing differing opinions of performance, and "speaking in one voice" in order to send a clear message to the administrator.

Findings and Analysis

As a City employee, the Retirement Administrator is annually evaluated by the City Personnel Director, who is an ex-officio member on the COPERS Board, with input from other COPERS Trustees, the Police and Fire Pension Board Chair, the Disability Assessment Committee members, and various City departments. The City Performance Achievement (PA) Program is used in the evaluation process. The PA process utilizes three forms: management form, executive form, and retirement program administrator form. The retirement program administrator form includes three major criteria: support to Boards and Committees, management responsibilities, and citywide responsibilities.

The Personnel Director is responsible for aggregating all the feedback and communicating an overall performance rating to the Retirement Administrator. Although the individual Trustees provide feedback to the Personnel Director via surveys in the beginning phase of the evaluation, no direct, formal feedback is given to the Retirement Administrator by the COPERS Board and the COPERS Board is not informed of the final evaluation results. Despite this process, we understand that the current Retirement Administrator routinely solicits feedback from Trustees individually.

During interviews with Trustees, no one mentioned any issues with the Retirement Administrator's evaluation process and to them it appears to be working well. This may be due to the current Retirement Administrator's initiative to seek direct feedback from Trustees and the Board's overall high satisfaction with the current Retirement Administrator's performance.

We believe a slightly modified evaluation process would be beneficial. First, it is important for the Board and the Retirement Administrator to agree upon the most appropriate criteria to be used in the evaluations of performance at the beginning of an evaluation period. Second, it is important that the Board reach consensus as a board about what the Retirement Administrator is doing well and where there may be room for improvement. Third, in order to have candid discussions and comfortable dialogue, the performance evaluations should be discussed in closed executive sessions, if possible.

Conclusion

Currently, COPERS has no formal process for the Board to provide a consensus view of performance to the Retirement Administrator directly. Furthermore, the Board is not informed of the final performance evaluation given to the Retirement Administrator. The current Retirement Administrator seeks feedback from individual Trustees, which is good; however, best practice is for the Board to discuss the Retirement Administrator's performance, reach consensus, and deliver the evaluation results by speaking in one voice.

Best practice also includes documenting the evaluation criteria and process that is to be followed annually.

Recommendations:

1. Document the Retirement Administrator evaluation process and criteria.
2. Modify the Retirement Administrator evaluation process so that Trustees reach consensus as a board about performance and provide evaluation results to the Retirement Administrator directly.

G) Conflict of Interest/Ethics

<u>Background</u>

The purpose of conflict of interest and ethics policies is to define guidelines the board and staff 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 and recuse themselves from discussing or voting on matters where conflicts exist. They are to manage conflicts to the best of their ability.

Written policies clearly stating ethical expectations are better than letting everyone's consciences be their guide. In our experience, many policies adopted by public retirement systems tend to be stricter than the policies of other industries due to the public scrutiny and fiduciary nature of 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. Some policies permit attendance at meals, but require trustees and staff attendees to pay for their own expenses. Some policies go even further, prohibiting even attendance at any meals or entertainment in order to avoid even the appearance of undue influence.

It is best practice to insulate those who serve as fiduciaries during a request for proposal (RFP) or search process when vendors may attempt to influence them. Many systems have detailed and strict policies in this regard which set up "black-out periods" to prohibit all contact from competing vendors unless they are channeled through a specific person at the system.

Another 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. In some codes of ethics, outside service providers (investment managers and others who serve the system) are required to affirm they have complied with the system's ethics policy. They may be asked to specifically list and value all gifts, entertainment, and meals they have provided to the board and staff members over the course of a year. While this is not a widespread practice, we consider it a best practice and one that service providers have become accustomed to.

<u>Findings and Analysis</u>

The COPERS Board and employees are covered under and adhere to the City of Phoenix Ethics Handbook, which was last revised in June 2003. It references relevant Charter and Code provisions covering conflict of interests, gifts, favors, compensation, entertainment, confidentiality, and political activity, as well as information on seeking advice, declaring a possible conflict, and reporting improper behavior. It also provides instructions on completing a declaration of gifts form.

Trustees are provided training on the City's ethics and conflicts of interest policies during new Trustee orientation and are shown a video that supplements the training. Trustees are required to sign an acknowledgement after receipt of training.

According to the Handbook, no gifts, services, or favors that are meant to influence or create an appearance of favoritism are allowed; however, this does not mean that the COPERS' Board and staff cannot accept gifts. If gifts or offers of entertainment are accepted, the COPERS Board and staff are required to disclose them within two working days.

The Handbook also requires the disclosure of conflicts of interest and prohibits participating in decisions/actions where conflicts exist. The disclosure is to be made in meeting minutes and then brought to the attention of the City Clerk's Office when the minutes are submitted. The person with the conflict is not required to leave the meeting during discussions and voting.

The penalties and consequences for the Board and staff in the event of violations are also outlined. For staff, the consequences are derived from personnel rules, regulations, and laws. For the Board, the consequences are removal from office. Personal liability and criminal and civil penalties typically associated with breaches of fiduciary responsibilities are not mentioned.

For outside service providers doing business with the System, there is no requirement that they make disclosures about gifts, meals, or entertainment given to the Board or staff.

<u>Conclusion</u>

We conclude that the City Ethics Handbook is comprehensive and better than most we have reviewed. It covers most of the major areas we usually recommend be addressed in ethics policies; however, we believe it would beneficial to address the fiduciary nature of COPERS with ethical standards that are more on point.

Consideration:

1. Consider creating an ethics policy to supplement the City's rules that specifically addresses common ethical issues that public retirement boards face.

H) Travel/Expenses

<u>Background</u>

The purpose of a travel/expenses policy is to promote accountability and transparency and establish guidelines for when and how expenses are to be paid. A clearly defined and well-reasoned policy serves as a protection for the trustees and staff, as well as the system. It defines required travel, describes the board's approval process and reimbursement procedures, and outlines any travel summary or disclosure requirements.

It is common practice for public retirement systems to address travel and expenses in a written policy. While such policies have long existed in the public retirement arena, recent news articles regarding board and staff travel and expenses have caused many to revisit their existing policies. To avoid negative public perception, many have adopted stricter policies. These policies address travel for legitimate business purposes and protect the system from potential for abuse. Like COPERS, many systems are required to adhere to applicable state or local rules; however, often times such rules are not tailored to the high standards expected of trustees who are fiduciaries. For this reason, some boards create system-specific policies that include state and local requirements, but also include stricter standards in some areas, in order to reflect best practices.

Findings and Analysis

The COPERS Board and staff are covered under and adhere to the City of Phoenix 3.41 revised administrative regulation, dated September 2006, related to business, conferences, and training travel and related expenses.

This City regulation was designed to address a wide range of circumstances involving general City employees and take into account the best interest of the community. It was not specifically created to address the System's or the Trustees' needs as fiduciaries. According to the regulation, the department heads approve travel expenses. Expenses that exceed a certain amount or are unbudgeted require approval of the City Manager or his/her designee.

In practice, the Board approves Trustees' travel, the Board Chair approves the Retirement Administrator's travel, and the Retirement Administrator approves all other travel of staff. Approvals are based upon the costs for educational and other business-related opportunities being reasonable and beneficial to the System, Trustees, and staff. To date, Trustees and staff have not been unduly restricted from traveling to educational conferences or for business of the System.

The current process related to travel and expenses appears to be without problems because of the sensitivity the Board and staff have toward travel expenditures and because of a good working relationship between the System and City departments. The process has not caused the Board or staff any concerns of a fiduciary nature.

Unfortunately, many other public retirement systems have experienced not only consternation, but also negative publicity over their travel and expenses. Certainly, there have been some abuses where poor judgment has led to excessive travel expenses. On the other hand, there are situations where retirement systems have had their travel so significantly restricted by policies outside of their control that trustees and staff believe they have been prevented from conducting business in a prudent manner. Their primary concerns arise when they are prohibited from taking due diligence trips and attending educational conferences.

Conclusion

We conclude that while the travel and expense regulation was not designed by COPERS for its own business purposes, the regulation is appropriate and has not caused problems. Going forward there is a potential for issues to arise if City officials change, Trustees and staff turn over, or relations among City departments become less collegial, and problems could occur.

Consideration:

1. Consider creating a supplemental travel and expense policy that incorporates the City's requirements and addresses specific issues unique to the Board.

II. Other Beneficial Policies and Procedures

A) Additional Policies

<u>Background</u>

In addition to the previously discussed policies, set forth below is a list of additional policies we believe enhance the governance of public retirement systems.

- Audit
- Legislative
- Funding
- Communication
- Customer service
- Board self-evaluation
- Strategic planning

We acknowledge that these policies may be beyond the scope of this Review but we provide a brief description of the purpose and content of each policy for whatever benefit they may have for COPERS.

Audit

Regardless of whether or not a public retirement system has an audit committee of the board, an audit policy can be beneficial. The purpose of an audit policy is to document the board's approach to risk management and to see that essential audit functions are clearly defined and assigned to internal staff, external auditors or a combination of both. It helps ensure that assessments are performed on a reasonable, planned frequency to protect the system from risks. Ideally, the audit policy should set forth procedures and processes that are in place to manage and control the relevant risks.[10]

Some audit policies address:

- Board/staff financial disclosures, expense reimbursements, conflicts of interest, and ethics compliance
- Compliance with state and federal statutes, local ordinances, city charters, and governing codes
- Fees and expenses of investment managers and other outside service providers
- Contract compliance with all service providers
- Benefits overpayments and underpayments, and eligibility for survivor or disability benefits
- Employer and employee contributions, including purchases of service credit

[10] Public Pension Systems – Statements of Key Risks and Common Practices to Address Those Risks. July 2000. This report is endorsed by the Association of Public Pension Fund Auditors, National Association of State Retirement Administrators, and National Council on Teacher Retirement, and Government Finance Officers Association, and serves as a manual for public funds seeking to adopt audit policy best practice.

- Data supplied from the employers on salary, work schedule, and eligible compensation
- Data supplied by the retirement system to the actuary for valuations and experience studies
- Investment performance calculations and reports for the Board and staff
- Contents of the Comprehensive Annual Financial Report (CAFR)
- Efficiency and cost of staff functions

While it is still common to find public retirement systems that do not have audit policies, the practice is changing. Greater scrutiny of public retirement systems nationally, widely publicized failures in internal controls, increased complexity in operations, new standards and business processes, and more appreciation for risk management are driving the changes.

Legislative

The purpose of a legislative policy is to outline how and when the board will determine its legislative agenda and the circumstances under which it will and will not take positions on federal legislation, state statutes, or city code and ordinance changes. The policy addresses when it is appropriate for the system to sponsor or support legislation or regulation, when it should adopt a neutral position or no position, and when it should oppose legislation or regulation. It may also establish a legislative committee, if the board desires, and define the information required by the board to implement a consistent framework for evaluating legislative proposals.

Funding

The purpose of a funding policy is to identify the adequate funding level of the retirement system, thereby reducing unnecessary volatility in the employer contribution rate and minimizing confusion about the board's liability management process. A funding policy identifies the target funding ratio of the system and defines an acceptable range of funding (i.e., 78% to 110%). It also requires the board to evaluate the situation and determine if action is needed when the funding ratio is outside the predetermined range set forth in the policy.

Communication

The purpose of a communication policy is to promote and address the process for effective dialogue (verbal or written) between the boards and the systems' memberships, staffs, elected officials, external stakeholders, and the general public. The goal of a communication policy is to ensure that communications are efficient, timely, consistent, and accurately reflect the actions of the board and system. Communications policies may also state who the official spokesperson for the system is. Some detailed policies set forth how and in what format regular communications are to be made.

Customer Service

Aside from setting forth eligibility requirements and the benefit formulas, statutes rarely mandate the level of customer service a system is to offer. For example, the timing of first benefit payments, refunds, and annual statements of benefits are usually not addressed in the law. Furthermore, the availability and content of individual counseling sessions are usually not contained in law. When applicable laws or regulations are silent or minimal, or when boards are committed to adhering to high levels of customer service, some retirement boards have adopted a customer service policy. The purpose of this policy is to establish and maintain a superior level of customer service to the members, retirees, and other beneficiaries.

Board Self-Evaluation

Consistent with good governance, in recent years many boards of public retirement systems, corporations, and non-profit organizations have adopted various ways to evaluate their performance. While a board self-evaluation can be difficult to do if a board is not functioning as it should, the benefits can be well worth the time and effort.

In the public arena there are always questions about whether open meetings and open records requirements will hinder any attempt at a candid self-evaluation. Even with such laws in place, more and more public boards are finding that annual self-evaluations are a wise and valuable undertaking, especially when held in conjunction with the retirement administrator’s evaluation.

Strategic Planning Policy

Many boards and staffs recognize that the best way to be efficient and orderly in fulfilling the mission of the organization is through strategic planning. The purpose of a strategic planning policy is to encourage long range thinking and planning that will guide the shorter term (annual) business plans of the organization. In adopting such a policy, the board states its intention to engage with staff in a regular, systematic process to assess the strengths and weaknesses of the system, define outside opportunities and threats, evaluate new ways to fulfill the mission of the organization, focus resources on high value activities, and establish the general parameters within which decisions will be made.

<u>Findings and Analysis</u>

It is our understanding that currently COPERS does not have the policies described above. We acknowledge, however, that some of the activities referred to in the descriptions of the policies are taking place at COPERS, even with the current constraints on resources. We find value in having key activities set forth in written polices and formally incorporating them into the System’s business practices so that they are sustained despite turnover in the Board and staff.

Although COPERS does not have an audit policy, we find that the roles and authority of the City of Phoenix Auditor, the Audit Department, and the Audit Committee are described in the Charter and Code as they generally relate to the City; however, they are not specifically tailored to the functions of COPERS.

The major audit functions of the City Auditor are listed as: conduct financial, internal control, contract compliance, process improvement, information systems, and performance management audits. The current City Auditor performs these functions for COPERS on a scheduled basis and the Board appears to be satisfied with this arrangement.

Pursuant to the Code, the City Auditor is to report findings and recommendations to the Retirement Administrator, City Manager, and Council, and is to report annually to the City's Audit Committee. The City Auditor is not required to report findings and recommendations to the Board, but in practice the current City Auditor does that.

While the Charter and Code define the high-level duties of the Audit Department, they do not provide any detailed information on the risk assessment and audits for COPERS.

<u>Conclusion</u>

We conclude that COPERS has many good informal policies in place and follows sound business practices. We attribute this to the wisdom and leadership of the Board and Retirement Administrator and to the culture they have established within the organization. As we have seen in too many situations, informal policies and practices, no matter how laudable they are, do not always endure over time. COPERS may benefit, as other public retirement systems have, from a discussion of the above listed policies.

Consideration:

1. Consider discussing and adopting additional governance policies to guide the System over the long term.

B) Governance Manual

<u>Background</u>

In general, the purpose of a governance manual is to set forth the expectations a board has for itself. It codifies the way things work and provides continuity when trustees change. It documents the structure, manner, and process by which a board exercises its authority and control. It helps boards meet their fiduciary responsibilities.

It also serves as an orientation document as well as an ongoing reference for the trustees. A governance manual, thoughtfully developed by a public retirement board, can also serve to protect individual trustees in the event of legal or reputational challenges.

The best governance manuals assist a board in maintaining an appropriate policy-level viewpoint of the system by defining roles and responsibilities of the board, board officers, staff, and consultants. The governance manuals document delegations the boards have made to staff and others.

Many systems assemble their board policies and relevant statutes, regulations, and other documents into a governance manual in order to create one centralized place where pertinent information can be found.

An emerging trend among public retirement systems is to make major policies or governance manuals readily available to the public by posting them on their websites. We believe this to be a best practice and support it.

Findings and Analysis

In 2008, COPERS staff conducted a review of its 94 policies. At that time COPERS was in the process of obtaining an IRS qualification letter. The IRS project provided COPERS with an excellent opportunity to update and align its policies. The staff presented their findings to the CAPP Committee for its consideration in October 2008. Based on the Committee's decision, 30 policy changes were made to reduce redundancies and update policies. COPERS may implement this policy review as an ongoing practice, where each policy is reviewed every other year.

Currently, COPERS has compiled its numerous policies into a Policy Manual. We find the policies are well organized and the Manual compares well to governance and procedures manuals of others. The COPERS' Policy Manual currently includes all internal policies applicable to both the Board and staff. In our experience, boards find it valuable to have a board governance manual that includes only the policies that are applicable to them.

While the Manual is fairly comprehensive, it does not include pertinent Charter or Code sections, regulations relating to ethics, travel and expenses, or other informal governance practices currently in place at COPERS.

Conclusion

We conclude that COPERS has a number of the policies we typically recommend and has them compiled into a useful Manual. The Manual may be enhanced by adding references to the relevant Charter and Code sections. It would also be beneficial for COPERS to have a formal policy and schedule to periodically review each policy. Policies need not be reviewed at the same time; the policy review can be staggered.

We further conclude that combining board level governance polices with operational policies in the same manual might make it more difficult for Trustees to use.

Considerations:

1. Consider making policies and other related documents available on the website.
2. Consider creating a Board Governance Manual, which only includes policies and laws relevant to the Board.

C) Policy Compliance

Background

Having appropriate policies in place provides protection to the system only if they are followed. For this reason policy compliance is also important. Non-compliance may expose the system and its fiduciaries not only to criticism but also to liability for breach of fiduciary responsibility. Furthermore, policy breaches may distract a board and staff from the system's core business.

To ensure compliance, three things are important. First, it is best if "mechanisms" are established that are practical to use. Second, it is helpful if both board and staff understand the compliance mechanisms. Third, it is important that a committee, board officer, or a staff member be assigned responsibility for ongoing monitoring and policy compliance.

Below we list questions that we advise boards to discuss when they review the general topic of policy compliance.

- ✓ Do all trustees, staff, and service providers understand the policies they are to comply with?
- ✓ Do inconsistent practices exist in following the policies?
- ✓ Are compliance procedures articulated in the policies?
- ✓ Is there a clear and generally understood monitoring process?
- ✓ Who is to check policy compliance for each policy, and how are breaches to be reported?
- ✓ Do those who monitor compliance have access to timely and accurate information?
- ✓ Have there been any violations or exceptions to the policies in the last 12 months?
- ✓ Were those violations handled appropriately?
- ✓ Have decisions been made about how to avoid violations in the future?

Findings and Analysis

Based on information obtained during the interview process, we understand that the Investment Manager and the investment consultant oversee compliance for the investment related policies; however, in the investment consultant's contract, only proxy compliance is mentioned, not the overall compliance with the investment policy statement.

The Retirement Administrator, along with other staff, creates mechanisms for monitoring compliance for non-investment policies. Per the job description, the Retirement Administrator is to evaluate the adequacy of the current procedures, programs, and controls and implements changes, where necessary.

Conclusion

COPERS, like many public retirement systems, has not documented its policy compliance mechanisms or the Board's role in policy compliance. It is understandable that policy compliance is not a top priority when a system is operating as well as COPERS does. Unfortunately, from experience we know that when serious transgressions occur, limits are exceed, or rules are violated, it is usually too late to engage in a meaningful dialogue about who has the responsibility for monitoring compliance.

We believe that COPERS would benefit from "rounding out" its governance polices to include guidance about policy compliance responsibilities. Such guidance could prove very beneficial if problems arise in the future.

Consideration:

1. Consider documenting policy compliance mechanisms and assign responsibility to specific committees, board officers, staff, and outside service providers, as appropriate.

III. Staff Roles

A) Retirement Administrator

Background

The retirement administrator position (typically referred to at most public retirement systems as the “executive director” or “CEO”) is the most important position at a retirement system since it bridges the board’s governance role and the staff’s day-to-day management of the system. Public retirement boards usually have the authority to establish qualifications, hire, evaluate, terminate, and in many cases set the compensation for this position.

Boards generally delegate significant authority to this position to manage all the essential functions and activities of the system. Such delegation allows the board to concentrate on policy level decisions rather than on the management of the system. Delegations and a board’s expectations are often documented in written position descriptions.

Findings and Analysis

The City of Phoenix Code gives sole authority and responsibility for the administration and management of the System to the Board and allows it to hire a Retirement Administrator to fulfill many of the functions of the retirement system. The compensation of the Retirement Administrator is set within the City’s compensation structure since all COPERS staff members are covered by civil service rules.

Due to the nature and importance of the position, COPERS has created a position description for the Retirement Administrator that sets forth the roles, responsibilities, and qualifications of the position. It clearly states that the Retirement Administrator is responsible for “planning, organizing, directing, controlling, and staffing activities under the direction from three retirement boards.” Due to the relationship of the COPERS’ Retirement Administrator with the Fire Pension Board and Police Pension Board, in addition to the COPERS Board, three Boards are referenced in the Retirement Administrator’s job description.

Responsibilities of the Retirement Administrator include:
- Office management and budgeting
- Plan administration
- Design and interpretation
- Plan communications and counseling
- Financial reporting
- Governmental reporting and disclosure
- Actuarial analysis
- Development of administrative policies and procedures
- Negotiation of contracts through RFP process for professional services

- Management of and participation in legal, fiscal, and procedural monitoring activities
- Preparation material for the Board and attendance at Board meetings
- Evaluation of consultant investment program and recommendations

It is our understanding from our observations and interviews that the Trustees rely heavily on the Retirement Administrator to provide them with relevant information and to fulfill the functions that have been delegated through the position description or made through directives at Board meetings. The Retirement Administrator acts as the Board's primary advisor, which is appropriate. The relationship appears to be very solid and working well. There seems to be no disagreement about who is responsible for what between the Board and the Retirement Administrator. The Board sets policy and the Retirement Administrator sees that policy is implemented.

The current position description appropriately defines many responsibilities that should be assigned to the Retirement Administrator. We note, however, that some responsibilities we expected to see are not mentioned, such as succession planning, developing strategic direction, monitoring the funding level, and providing communications to outside entities. Arguably, some are covered within a number of the broad categories listed. Duties that may not be currently performed (i.e., related to strategic planning) appear to be the result of having limited resources as opposed to lack of awareness or willingness.

For some of the responsibilities in the position description we note that the Retirement Administrator may in fact delegate the actual work to another party. For example, the Retirement Administrator may not personally prepare all the Board's meeting materials. Delegation such as this is appropriate. The Retirement Administrator is ultimately responsible for the quality and content of all work completed.

<u>Conclusion</u>

The duties and responsibilities the COPERS' Board has prescribed for the Retirement Administrator are reasonable and comparable to those of top administrators of other similarly sized public retirement systems. The current position description is generally accurate, but does not capture all of the duties the Retirement Administrator is actually performing.

Consideration:

1. Consider revising the Retirement Administrator position description to make actual responsibilities more explicit.

B) Investment Staff

Background

Different systems have different staffing needs for their organizations based on their mission and unique circumstances. The number of staff dedicated to the investment activity of the plan is dependent on the type of plans, number of plans, asset size, asset classes used, portion of investments managed in-house, active or passive strategies used, number of managers, roles and responsibilities of outside consultants, other resources available, etc. Funds with internally managed assets or very complex investment programs generally have more staff than those with only externally managed assets and relatively simple investment programs.

While it is difficult to make meaningful comparisons with other systems, the 2007 Greenwich Survey Market Data is somewhat enlightening.

Greenwich Associates
Number of full time equivalents within sponsor organization

	Select and Supervise External Investment Managers			Manage Investments Internally		
	2005	2006	2007	2005	2006	2007
Public Funds	2.1	2.8	2.4	3.7	4.1	9.2
State	3.2	3.5	3.7	5.0	5.7	12.4
Municipal	1.3	2.2	1.7	1.9	1.8	2.1
Over $5 billion	4.0	4.9	4.5	5.3	5.7	11.5
$1-5 billion	1.5	1.6	1.5	2.0	1.0	1.7
$501 million-$1 billion	1.1	1.2	1.1	1.1	1.4	
$500 million and under	1.2	1.3	0.8	1.0	1.3	

Note: Means exclude "None."

The survey indicates that in 2007 public funds with assets between $1 and $5 billion that were 100% externally managed had an average staff investment size of 1.5.[11]

The chief investment officer is typically the primary internal investment expert for a public retirement system and performs services that are associated with overseeing the management of

[11] It is important to note that the Greenwich Survey covered approximately 200 to 300 public funds, with approximately 70 funds with assets between $1 and $5 billion. We do not, however, have information about the overall size and nature of these funds. Likewise, the survey did not provide details about why the average number of full time employees dedicated to the investment activity changed from year to year.

the assets and implementing the investment policies adopted by the board. The function of the CIO varies from system to system depending on the factors we mentioned above. The title also varies depending on the functions.

In a minority of systems the CIO and Chief Executive Officer (CEO) positions are combined and one person fulfills both functions. In the systems[12] where this is the case, we believe it works well. As with other governance and management features, all systems have unique needs and circumstances that cause them to be structured differently.

Findings and Analysis

Due to the increased complexity of the COPERS investment portfolio, the Board decided to create a new position, titled Investment Manager, by reclassifying a vacancy within the information technology area. The Board sought an individual who had the level of investment experience necessary to monitor the investment managers and their compliance with the investment policy and guidelines, and would be fully dedicated to COPERS internal investment functions.

Since 2004, in addition to the increased complexity of the investment program, the number of managers has increased from 7 to 16. It is anticipated that the number of managers will increase to 20 by the end 2009. Therefore, we find that it was prudent for the Board to have a dedicated position to oversee the investment program on a day-to-day basis.

The person in the newly created position started in June 2007 and has over 20 years experience in the investment industry. His education and background meet the requirements set by the Board and as indicated on the job description. He is the only staff that is fully dedicated to investment issues; however, the Retirement Administrator is also involved in COPERS' investment functions.

The primary function of the Investment Manager position as stated in the City's position description is "to design, implement, and manage City or retirement fund investments including investment policies, guidelines, and processes that will prudently achieve market rate of return on invested funds of the City or retirement fund."

In the position description, the responsibilities of the Investment Manager include:

- Provide support to Board and DCP
- Provide assistance to the Finance Director and Treasurer in cash management administration
- Provide assistance to the Retirement Administrator
- Monitor, analyze, and interpret investment portfolio performance evaluation reports to make recommendations to management or Board on investment policy
- Monitor compliance of securities traded with investment guidelines

[12] Texas Municipal Retirement System, San Antonio Fire and Police Pension Fund, and Alabama Retirement Systems are examples of systems where the CIO and CEO positions are combined and one person fulfills both functions.

- Monitor compliance of investment managers, custodian banks, and investment consultants with contracts
- Prepare reports and analyses
- Report to the Finance Director, Treasurer, or Retirement Administrator

This position description is a generic one for the two City Investment Manager positions. Overall, it is comprehensive in monitoring and oversight duties. The position description does not; however, call for the Investment Manager to take a proactive role in helping the Board and Investment Committee be forward looking and strategic with regard to the investment portfolio. In practice, we believe the Investment Manager does this.

Below we list some additional responsibilities that are often given to the person in the lead investment position at pubic retirement systems.

- Advise and work with the Board to enhance the decision-making process
- Make recommendations to the board on asset allocation
- Make recommendations on the structure of the investment program with respect to internal and external managers, advisors, consultants, and short-term and long-term investment strategy
- Implement the asset allocation directives and help the board set annual goals and objectives
- Monitor capital markets, economic forecasts, and provide the board with an on-going analysis of the state of the global economic situation as it relates to the system’s investment program
- Advise the board as to the impact of potential legislation on the system’s investment program
- Monitor the board’s proxy policies and advise as to recommended changes in such policies
- Advise the retirement administrator as to the impact on the investment program of information released to the membership, the general public, the media, government officials, and others
- Make recommendations about the appropriate due diligence and documentation for all investment actions

It is our understanding that the Investment Manager monitors the managers and investments on a daily basis; considers rebalancing in light of the asset allocation; monitors contract compliance and negotiation; checks mandates if there are any concerns; creates management reports; coordinates work between RV Kuhns and COPERS; contributes toward Board education by providing information on current investment issues; and attends all Board and Investment Committee meetings. Additionally, the Investment Manager compiles quarterly rebalancing reports (which have been temporarily suspended due to new asset allocations and the transition toward new targets); securities lending reports; and proxy reports for the Board.

The Investment Manager has access to investment related periodicals, such as *Pensions and Investments*; however, he does not have any investment software and relies on RV Kuhns for investment manager research and information. We find that some public retirement systems with uncomplicated portfolios and limited resources use this approach; however, more commonly, public retirement systems have tools available to staff to allow them to independently research and verify the information provided to them by external parties.

Additionally, we note that the position title of the Investment Manager may cause some confusion. In the investment industry, "investment manager" is the term used to refer to those who buy and sell securities. COPERS' internal Investment Manager does not do that. To prevent confusion, a different title, such as "investment officer," might be advisable.

Conclusion

We conclude that the Investment Manager is fulfilling many important oversight and monitoring activities for the fund. The support provided to the Board by the Investment Manager (and the Retirement Administrator) meets the Board's need at this time.

As COPERS' investment portfolio continues to grow and becomes increasing complex, the Board may find value in expanding the position description of the Investment Manager to include additional responsibilities that are beyond monitoring and compliance activities. In other funds of similar size the boards look to the lead investment person to develop investment strategy, report on investment trends, and provide insight on investment managers, custodians, and other service providers.

Recommendation:

1. Evaluate the Investment Manager's functions in light of the future direction of COPERS' investments.

C) Internal Auditor Function

Background

The role of an organization's internal auditor is to independently examine and provide assurance to management, and ultimately to the board, that appropriate internal controls and risk management processes are in place. Thus, the internal audit function is an important management tool and an essential component of an organization's governance. The internal auditor's role may also, in some cases, extend to providing consulting services to enhance the organization's controls, risk management, and governance. In either role, it is essential that the internal auditor's independence and objectivity are maintained and that the auditor's interests are directly aligned with those of the board. The Government Auditing Standard 3.29 provides that "auditors need to be sufficiently removed from political pressures to ensure that they can conduct their audits objectively and report their findings, opinions, and conclusions objectively without fear of political repercussions."

Regardless of size, it is best practice for public retirement systems to have some type of internal audit coverage. Large statewide public retirement systems are more likely to have an internal auditor on staff, but as local and municipal retirement systems become larger and more complex, they too are evaluating the needs for such a position. Whether a retirement system totally outsources its internal audit function, handles it through a dedicated internal position, or uses an arrangement with shared services, is not simply dependent on the availability of resources, but also dependent on the size and complexity of its programs (investments and benefits) and the level of risks associated with such programs. A greater level of risk requires a greater level of controls; this also increases the need for an internal audit function that can provide ongoing, specialized, and in-depth evaluations regarding the effectiveness of internal controls, risk management, and governance processes.

It is common practice for a city retirement system to rely upon the city auditor or the city's external audit firm to examine its internal controls. In some localities, boards have questioned whether the interests of these auditors are more aligned with the interests of the sponsoring entity (i.e., the city) than with the interests of the retirement systems. Sometimes boards also question the auditors' expertise in reviewing internal controls, and their time commitment to working with the board and staff. Understandably, these factors are important for boards since they are the ultimate fiduciaries for the retirement systems.

Below is a list of typical duties and responsibilities related to an internal audit function within public retirement systems. We acknowledge that some of the duties are outside the investment scope of this Review but we provide them for whatever benefit they may have to the entire COPERS organization.

1. Review employer payroll to verify accurate employer reporting of retirement related information
2. Review the integrity of information used for initial member applications, retirement applications, benefit payments, and internal processing
3. Review investment operations to ensure they are in compliance with federal, state, and local laws and regulations
4. Review activities to ensure they are in compliance with Board policies and directives
5. Review implementation of all investment policies and guidelines
6. Perform compliance tests to determine implementation of policies and execution of directives
7. Review data processing procedures for information security and processing improvements
8. Evaluate effectiveness of internal controls and risk management efforts
9. Evaluate cost effectiveness and efficiency of key business processes and operating plans
10. Evaluate the utilization of resources
11. Interpret accounting standards, theories and fiscal rules and policies
12. Verify whether accounting records are kept in accordance with governmental reporting requirements
13. Verify contract compliance by outside service providers
14. Conduct various specialized audits at the request of management or the board
15. Coordinate activities related to the annual independent financial audit
16. Follow up on management letter recommendations to determine that action to implement

change has occurred

17. Assist with the compilation of the Comprehensive Annual Financial Report (CAFR)
18. Periodically, and upon request, provide the Retirement Administrator and the Board with informational reports on trends and issues
19. Train staff on issues related to internal control and ethical standards
20. Perform other duties as assigned, related to financial reporting, internal controls, compliance, and risk management

Findings and Analysis

Per the position descriptions, the Retirement Administrator and the Investment Manager are formally charged with developing and implementing internal controls. The former's position description includes the responsibility to "evaluate adequacy of current procedures, programs, and controls and implement changes." The latter's position description includes the responsibility to monitor compliance of investment guidelines and contracts. It is our understanding that staff of other City entities such as the Finance Department, and the investment consultant, also provide their support in developing and implementing internal controls.

For COPERS, the City Auditor is charged with conducting internal controls audits. In fulfilling its function, the City Auditor identifies risks and verifies that internal controls have been developed, implemented, and are adequate to mitigate those risks. To do this, the City Auditor Department keeps abreast of organizational policies, procedures, and processes to achieve organizational objectives while minimizing risk. It also evaluates organizational policies, procedures, and processes and provides recommendations for improvement.

Previously, the City Auditor Department mainly concentrated on testing administrative controls and benefit transactions (i.e., calculation verification). As COPERS has grown in terms of asset size and complexity of its investment program, the City Auditor now also focuses on investment and actuarial functions. The shift to encompass all retirement system risk and control areas is consistent with what we see at other public pension funds across the country. The City Auditor Department has made significant efforts to research best and common practices among public retirement systems. The Department participates as a member of the Association of Public Pension Fund Auditors (APPFA), which is the only organization that is solely dedicated to the study of issues and the establishment of best practices for auditors of public pension funds.

Currently, there are three auditors under the supervision of the City Auditor that spend approximately 500 hours per year (cumulatively) on internal auditing functions for COPERS. Utilizing the City Auditor has worked very well in the past. Having the authority, however, to hire an internal auditor or an independent external firm, would be beneficial should the Board ever determine that doing so would be in the best interest of the System. We acknowledge that either course of action may result in some increased fees, but the benefit (additional services, expertise, independence, etc.) may outweigh any additional costs.

Based on the APPFA philosophy and other research, the City Auditor Department has recently developed a five year COPERS' Audit Plan with 15 audits listed below with varying audit cycles. The audit plan is related to contributions, distributions, investments, and other miscellaneous issues. The audits that are conducted annually are identified with an asterisk (*).

1. Retirement system testing*
2. Continuous auditing of retirement system*
3. 13th check*
4. Pension equalization program*
5. Retirement system financial statement*
6. Actuarial assessment review of proposed benefit increases
7. Investment and actuarial consultants
8. Transaction/Process review of investment managers
9. Investment portfolio/management review
10. Actuarial review
11. Retirement system's board review
12. Annual audit review and documentation*
13. Annual performance analysis*
14. Replacement of professional consultant review
15. Protection and contingency plan for member files

To date, 11 of the 15 audits have been completed. It is the intent of the Audit Department to complete all 15 by 2012. Some of the audits require the use of external consultants with specialized expertise and others do not. While the internal audit plan appears reasonable and comprehensive, we understand that it was not developed through any type of risk assessment or with specific input from the Board.

Conclusion

We conclude that, consistent with common practice for city retirement systems, COPERS has in effect outsourced its internal audit function to the City Auditor. The City Auditor Department has made significant efforts to research the auditing needs of COPERS and to follow the best established practices for audits of public retirement systems.

The multi-year audit plan is comprehensive; however, COPERS' governance would be enhanced by further developing its internal control environment through a comprehensive enterprise-wide risk assessment aimed at areas of weakness and preventable internal risk. While this will not eliminate risk it would help to mitigate it and demonstrate that COPERS has actively considered and developed a structured, prudent process.

Considerations:

1. Consider reviewing and documenting the roles among the City Auditor, COPERS Board, and staff with regard to COPERS' framework of internal controls and risk management functions.

2. Consider periodically reviewing the resources committed to COPERS' internal audit functions to determine if it would be beneficial to have an internal auditor on-staff at COPERS.

Recommendations:

1. Further develop and document COPERS' control environment, particularly in the investment area, based upon the results of an enterprise risk assessment.
2. Involve the Board in decisions about more frequent, in-depth assessments of COPERS' system of internal controls and risk management.

Exhibit A
Functions of an Audit Committee of the Board

A growing trend among public retirement systems is for the board to have an audit committee. The American Institute of Certified Public Accountants (AICPA) provides guidance to audit committees. In summary, our understanding of its advice as applied to a public retirement system is the following:

1. Ensure that each member of the audit committee is appointed by the board.
2. Have at least one member of the audit committee with financial experience.
3. Review the audit committee's charter annually and reassess it for adequacy.
4. Meet at least four times per year and additional times when necessary.
5. Have the option to discuss matters privately with any of the following: the independent auditors, executive director, chief financial officer, internal auditor, general counsel, outside counsel, director of financial reporting, controller, and anyone else as desired by the committee. (Please note: open meetings laws come into play in the public sector.)
6. Have the authority to hire professional consultants if necessary.
7. Review, evaluate, and concur on the appointment, replacement, reassignment, or dismissal of the internal auditor.
8. Oversee the appointment of the independent outside financial auditors to be engaged for the audited financial statements and establish the related audit fees. Review and evaluate the performance of the independent auditors and inform the full board of any problems with the independent auditors.
9. Establish a regular schedule for periodically re-bidding the audit contract with an outside CPA firm.
10. Review with management the policies and procedures with respect to expense accounts and the personal use of public property.
11. Ask the executive director, internal auditor, and the independent auditors about significant risks or exposures facing the system; assess the steps management has taken or proposes to take to minimize such risks and periodically review compliance with such steps.
12. Review audit scope and plan of both the internal auditor and the independent auditor. Address the coordination of audit efforts to assure the completeness of coverage, reduction of redundant efforts, and the effective use of audit resources.
13. Review significant findings on internal audits during the year and management's responses.
14. Ask the executive director and CFO about the budget and expenditures.
15. Review with the independent auditors and the internal auditor the adequacy of internal controls including computerized information system controls and security.
16. Review with management and the independent auditor the effect of any regulatory and accounting industry changes.
17. Review with the independent auditor that performs the financial statement audit all critical accounting policies and practices used by the government organization as well as alternative treatments of financial information within generally accepted accounting principles.
18. Review all significant written communications between the independent auditors and management, such as management letters.

19. Review with management and the independent auditors the financial reports and the audit reports and ask for their independent judgment about the quality, not just the acceptability, of the system's accounting principles. Also ask about any significant changes required in the independent auditors' audit plan and any serious difficulties or disputes with management encountered during the audit.
20. Review with the general counsel and the internal auditor legal and regulatory matters that, in the opinion of management, may have a material impact on the financial statements and compliance with federal, state, and local laws and regulations.
21. Periodically review the system's code of conduct to ensure that it is adequate and up to date and review how compliance is monitored.
22. Review the procedures for the receipt, retention, and resolution of complaints regarding accounting, internal accounting controls, auditing matters, or suspected fraud that may be submitted by any party internal or external to the system.
23. Review procedures for the confidential, anonymous submission by the system's employees of concerns regarding questionable accounting or auditing matters, or suspected fraud.
24. Review and approve the annual audit plan submitted by the internal auditor for the upcoming year.
25. Review the audit committee's own effectiveness

INTRODUCTION

Institutional investors (pension funds, endowments, foundations, and other trusts) are best served if they have a carefully conceived investment strategy based on sound investment theory, i.e., a plan that is designed to achieve clearly defined goals and objectives. Actuarial valuations and experience studies serve as a foundation to setting appropriate investment goals and objectives.

The written investment policy statement is what investors typically use to document their investment strategy. Strategy stems from asset allocation, a decision that involves the types and degree to which investments (asset classes) that will be used. Asset allocation is the most important decision impacting the portfolio since it is the primary determinant of a portfolio's performance.

The adoption of the investment policy and asset allocation generally falls under the purview of a board of trustees that has the fiduciary responsibility to prudently administer the trust. Fiduciaries, rarely, if ever, delegate responsibility for adoption of the investment policy and asset allocation. A board's ability to define the parameters of the investment policy and select investments consistent with its investment strategy is at times controlled by governing laws or legal interpretations.

Boards typically set the 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, such as every five to seven years or when major modifications are made to the benefits offered by the plan. A shift in the asset allocation is typically made to either increase returns or lower risk, or in some cases both.

Once an asset allocation has been adopted, a suitable portfolio "structure" must be put in place. Structure in this context refers to the use of passive index funds versus active managers, internal versus external management, the number and types of managers a fund uses, and the level of diversification. A portfolio's structure will also include custody arrangements and other activities such as commission recapture and securities lending. Discussions and decisions regarding the structure of an institutional investment program require careful thought and unbiased advice from experts on staff and qualified consultants.

The investment portfolio structure directly affects investment management expenses and related fees incurred by the fund. Dollar for dollar, fees and expenses take away from the assets available to meet liabilities. Ensuring fees are reasonable is an important fiduciary duty.

SCOPE OF REVIEW

In this section of the report we analyze the following:

I. Actuarial Valuations
II. Investment Policies
   A) Investment Policy Statement
   B) Proxy Policy
   C) Securities Lending Policy
   D) Securities Litigation Policy and Claims Management Process
   E) Brokerage Policy
III. Investment Portfolio Structure
   A) Overall Portfolio Risk/Return Characteristics
   B) Diversification
   C) Custody Arrangements
   D) Commission Recapture Program
   E) Securities Lending Program
IV. Costs and Fees

I. Actuarial Valuations

Background

Actuarial valuations determine the financial condition and funded status of a pension plan. In the public sector they are typically performed every year by outside actuarial firms. The results of an actuarial valuation determine the required contribution levels. The funding of promised benefits in a pension plan is impacted by only two factors—investments and contributions. Therefore, contributions are a significant part of the equation for a well-funded plan and setting appropriate contribution rates is of great importance.

Performing actuarial valuations is a complex task, requiring professional expertise and sound judgment. A limited number of actuarial firms perform this type of work for the public sector. A few public pension funds have faced significant unfunded liabilities or contribution shortfalls when errors or inaccurate calculations have been made in their actuarial valuations.[1] To mitigate the risk of such errors, actuarial experience studies and actuarial audits are prudent ways for boards to be assured of the accuracy of the valuations.

An actuarial experience study compares the actual experience of the pension fund to the assumptions made regarding the plan's demographics (including rates of retirement, disability, mortality, and terminations) and economic assumptions (including rates of return, inflation, and salary changes). Results from the experience study may lead to modifications in assumptions or methodologies going forward in order to better reflect the true circumstances of the pension plan. Actuarial experience studies are often performed every five years or when significant changes in the plan design occur.

Actuarial audits are used to "check" the methodology and calculations of the retained actuary. The Public Pension Coordinating Council,[2] a non-profit organization that works to promote excellence in pension fund management, recommends that actuarial audits take place once every ten years and many public retirement boards have adopted this practice. Recently, however, some public pension funds have requested audits more frequently due to their low funded levels and high public scrutiny.

Findings and Analysis

COPERS is required by law[3] to complete actuarial valuations and by doing so, COPERS follows industry practices by having valuations performed annually.

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[1] For example, Los Angeles County Employees Retirement Association, Public School and Education Employee Retirement Systems of Missouri, and Alaska Department of Administration Retirement and Benefits.
[2] The Council is composed of executive directors from the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement System, and the National Council on Teacher Retirement.
[3] Section 11 of the City Charter.

We reviewed the 2007 actuarial valuation completed by COPERS' actuary, Rodwan Consulting Company (Rodwan) and found that it was performed in accordance with accepted actuarial standards. A valuation was also completed in 2008 for the period ending June 30.

COPERS' last experience study was completed for the period of July 1, 1999 through June 30, 2004. As a result of that study, Rodwan made several recommendations for changes in assumptions.

Assumption	Modifications	Impact on Liabilities
Withdrawals	Higher rates	Lower liabilities
Retirement	Higher rates	Higher liabilities
Disability	Lower rates	Lower liabilities
Mortality	Higher rates – males Lower rates - females	Higher liabilities Lower liabilities

The assumption changes recommended from the experience study were adopted. The next experience study will be completed for the five year period ending June 30, 2009.

We also reviewed the actuarial audit report completed in 2008 by Milliman, which contained a detailed analysis of the valuation performed by Rodwan. As the audit states, the valuation seems reasonable in its assumptions and completeness. Milliman did, however, raise several issues which may have an impact on the value of liabilities. These are subjective in nature and could be argued for or against by different actuaries.

Milliman stated that the investment return assumption of 8% is too aggressive. Some believe an 8.0% assumed rate of return is too high given the tempered outlook for investment returns, but we note that many plans in the public sector have similar return assumptions. Data reported by NCTR and NASRA indicates that an 8.0% return assumption is most commonly used by public pension funds. In this survey of 125 public pension plans, 41% of funds had an 8.0% return assumption and 64% used a return assumption of 7.5% or 8.0%. Gabriel Roeder Smith & Company, a prominent actuary for public pension funds, has, however, noted that assumed rates of returns have decreased in recent periods. They noted that in 2005 48% of funds in the public fund survey had a return assumption of 8.0% or below, but in 2007 73% of funds had a return assumption of 8.0% or below.[4]

Milliman also noted that Rodwan is assuming cash flow and decrements to occur during the middle of the year, which is a widely used assumption. Changing it to end of year or taking into account half a year in the year of decrement could certainly change the liability values but perhaps not significantly. Milliman states that changing these assumptions could increase the contribution rate by as much as 2%. Finally, Milliman states that future improvements in mortality should be

[4] Gabriel Roeder Smith & Company, Report of the Review of Actuarial Assumptions, May 2009.

reflected in the valuation. Many public plans incorporate updated mortality tables in their valuation assumptions and by doing so likely increase their liabilities.

The Board reviewed the report with Milliman and Staff created a document to track the implementation of the recommendations and considerations. Additional issues will be addressed at the September 2009 Board meeting. Overall, the audit is a complete review of the valuation and gives it a passing grade with several minor caveats.

Conclusion

We conclude that COPERS is conducting actuarial valuations and experience studies in accordance with industry standards. We also commend COPERS for engaging an actuarial audit. We believe this to be a good practice.

Recommendation:
None

II. Investment Policies

A) Investment Policy Statement

Background

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

In most jurisdictions, the law does not specifically require pension funds to have a written IPS; however, having such a well-crafted document is a best practice. ERISA, for example, does not require it of private sector pension funds; however, the Department of Labor strongly encourages trustees to adopt written investment policies. In the states and municipalities that require pension fund boards to adopt an investment policy there is no uniform standard for the content or an absolute model to follow. Public retirement industry organizations, however, have provided guidance.[5] This has led to some commonalities in investment policy statements that are considered reflective of best practice.

Based on our experience, an investment policy statement should ideally address the following fundamental subjects:

- Reference to the system's enabling law and the authority of the board of trustees
- The applicable standard of care
- The system's mission and purpose
- Investment philosophy, including its risk tolerance and use of diversification
- Investment goals and objectives of the fund, as well as any constraints
- The liquidity needs of the system
- The roles and responsibilities of key parties in the investment process (e.g., the board, any relevant committees, internal staff, the investment consultants, investment managers, and the custodian), including delegations of authority
- The long-term strategic asset allocation, including specific targets and ranges
- Investment guidelines for each asset class, including prohibited and permissible investments, and diversification mandates
- Rebalancing requirements

[5] 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 performance standards and measures, including benchmarks for each asset class and the fund as a whole
- The investment manager search and selection process
- Monitoring and reporting requirements, including who is responsible for what and when
- Miscellaneous policies regarding plan assets and investment practices, including:
  a. Proxy voting
  b. Securities lending
  c. Securities litigation and claims management process
  d. Brokerage

It is common for public funds to have an investment policy statement that is less comprehensive than what is outlined above. Many do not address all of the subjects we have identified. Some public funds have extensive investment manager guidelines or detailed contract provisions to supplement policies, or they 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.

Findings and Analysis

We compared COPERS' written investment policy (Policy No. 154) to the checklist of fundamental provisions that should be included to reflect best practice. Overall, we found COPERS' investment policy to compare favorably; it includes most of the essential provisions.

The policy references COPERS' investment authority granted by Chapter 24, Article II, Section 34; however, it does not indicate the applicable standard of care or set forth the exclusive purpose. As indicated in section 1 of this Report, neither the Charter nor the City Code address fiduciary standards applicable to the Board or its service providers.

The policy does not set forth the mission or purpose of the system, nor does it identify the intended beneficiaries of the trust. This may seem to be self-evident but having these provisions in the IPS makes it more complete as a stand-alone document.

The policy identifies the Board's investment objectives and philosophy, including a clearly stated risk tolerance. It does not appear that these fundamentals have been updated since 1990. Much has occurred over the last 19 years. As a result, aspects of the investment objectives and philosophy adopted by the Board at that time, while admirable, may no longer be viable.

COPERS' asset allocation policy and investment guidelines are set forth primarily in the section of the IPS entitled "Diversification." We note the following:

- Permissible investments are clearly identified, including targets and ranges for each asset class and sub-class.

- A description of the frequency and methodology of asset liability modeling and resetting the allocation is not included.
- The policy does not address diversification relative to a single issuer or diversification relative to the System's assets as a whole; however, individual manager guidelines do specify limits on investments with a specific issuer. Some boards also limit exposure to a single issuer across all accounts. Such limitations are best determined through consultation with the investment consultant.
- A historical progression of asset allocation adjustments is provided from the creation of the policy in 1990 through May 2008. Although this type of information is not typically found in an IPS it is valuable information and provides an added level of transparency.
- The IPS specifies that credit risk will be avoided; however, credit risk is not clearly defined.
- Each separate account manager has individual guidelines set forth in their respective investment management agreements.[6]

The IPS stipulates that investments that are not expressly stated in the Diversification section or specifically authorized by the Board are prohibited.

The IPS includes a rebalancing policy, added in November 2007. The inclusion of a rebalancing policy is consistent with best practice as it enhances the likelihood that actual allocations will be reasonably in alignment with the Board's articulated policy. Many pension funds neglect to address rebalancing in their policies or fail to assign responsibility for the function. COPERS is to be commended for being progressive in this area. Rebalancing is assessed quarterly by COPERS' staff.

Liquidity (in this case the absence of liquidity needs) is specifically addressed, which is important. Given the recent market conditions, the Board may want to consider if its position on liquidity is still valid.

With respect to investment performance standards and measures, the importance of risk-adjusted performance as a primary consideration in the Board's evaluation process is specifically acknowledged, which is in alignment with best practice.

Consistent with best practice, the IPS contains a detailed section that clearly defines the performance review process, including the frequency of reviews.

The IPS provides for a quarterly review of adherence to policy. A statement by each manager attesting to policy compliance for the applicable period is, however, not required.

A policy portfolio benchmark is not articulated in the IPS; instead, peer groups are identified as the primary performance measurement. While peer groups offer interesting information, they are

[6] Investments in commingled pools are controlled by the governing documents of the particular pool.

not always relevant as a primary measure of performance. We understand that, in practice, COPERS does compare performance to a policy portfolio.

The use of transition managers, from a pre-approved pool, is addressed. We believe this is an effective way to mitigate risk and an emerging best practice which COPERS has adopted.

The IPS addresses the distinction of responsibilities between the Board (to control risk) and the investment managers (to purchase and sell securities and make pricing decisions). The roles and responsibilities as among the Board, internal staff, the investment consultant are interspersed in various sections of the policy and are not contained in a distinct section within the IPS. The references to staff responsibility appear limited to rebalancing and managing transitions. The IPS does not cross reference other documents that might further define staff responsibilities.

An alternative investment policy is included in the IPS. The policy defines the asset class and requires the investment managers to provide and review with the Board their respective policies and procedures for periodic valuation. The policy does not identify the factors that the Board considered in making the decision to include the alternatives asset class. COPERS' alternative investments portfolio currently includes real estate and real return investments, but not private equity.

With regard to trading practices, "best execution" is not addressed nor is commission recapture. We note, however, that individual manager contracts and guidelines stipulate "best execution" is required.

The investment manager search and selection process is not addressed.

The IPS states that the Policy will be reviewed periodically, rather than annually as is best practice.

Proxy voting is addressed in a separate policy (Policy No.157). There are also distinct policies for collateralization of investments (Policy No. 60), call options (Policy No. 94), and securities inventory practice (Policy No. 136); however, there is no cross-reference to these policies in the IPS.

Conclusion

COPERS' investment policy reflects best practice in a number of areas; however, it could be enhanced by including a number of additional provisions, consolidating or cross-referencing the other separate investment-related policies, and generally updating its content and format. Specifically, the issues for the Board to address are the following:

- Reconsider if the stated investment objectives and philosophy remain appropriate

- Adopt the ERISA fiduciary standards of care for purposes of investment-related decision-making
- Describe the frequency and methodology of asset liability modeling and the process for resetting the allocation
- Limit non-systematic risk by imposing diversification requirements relative to a single issuer and relative to the System's assets as a whole
- Clearly define "credit risk"
- Describe the policy portfolio benchmark
- Address investment duties of the Board, the Investment Committee, internal staff, the investment consultant, the investment managers, and the custodian
- Impose a best execution standard on the purchase and sale of securities
- Cross-reference other policies relating to proxies, securities lending, securities litigation and claims management, and brokerage or include them in an appendix
- Address the investment manager search and selection process, or in the alternative adopt a distinct policy

The work plan proposed by the consultant, beginning in late 2005, called for a review of the investment policy following the completion of the asset allocation study. The plan provided that the investment consultant would propose changes to the IPS, manager holdings, and performance guidelines. A number of changes to the IPS were adopted by the Board during 2006 and 2007; however, the changes focused primarily on the asset allocation policy.

Consideration:

1. Consider changing the review period for the IPS from periodic to annual.

Recommendations:

1. Work with the investment consultant to further enhance and modernize the current IPS.
2. Require a quarterly statement from each manager attesting to policy and guideline compliance for the applicable period.
3. Adopt or document a securities lending policy, securities litigation and claims management process, and a brokerage policy.

   [The substance of the additional investment-related policies recommended above is specifically discussed in the later portions of this section.]

B) Proxy Policy

<u>Background</u>

Proxies are considered plan assets and as such they are to be managed prudently. Fiduciaries may not ignore a proxy solicitation or vote automatically with management. Votes must be cast so as to maximize the economic value of the plan holdings. Therefore, fiduciaries must carefully analyze the impact of their vote on the economic value of the plan's investment. The Department of Labor (DOL) has also indicated that ERISA funds should develop written policies or guidelines for the voting of proxies.[7] The Employee Benefits Security Administration[8] (EBSA) has pointed out that a proxy voting policy is an important part of a comprehensive investment policy.

As noted earlier, ERISA does not govern public pension funds; however, courts have typically referred to DOL pronouncements for guidance in interpreting issues of fiduciary duty. In light of this, many public pension plans have adopted ERISA-like standards regarding their proxy voting practices. The duty of loyalty requires that proxy votes be exercised solely in the interests of the participants and beneficiaries and for the exclusive purpose of providing benefits and defraying administrative expenses. The duty of prudence requires that the proxy votes be exercised with the care, skill, prudence and diligence that a prudent person, knowledgeable in such matters and similarly situated, would exercise.

Proxy voting affords shareholders the opportunity to influence companies in ways that can improve performance and in turn increase the share price and add value. The direct impact that proxy voting has on the value of stock is not easily measurable. That value should be weighed against the cost of administering the proxy voting process. For example, with respect to foreign securities, the DOL has recognized that the costs to the plan of voting a proxy may exceed the economic value, given the difficulties in ascertaining and following complex foreign laws, regulations and corporate practices. The DOL has indicated that fiduciaries may take such factors into account in determining whether to vote foreign stock proxies.

Fiduciaries are to consider “only those factors that relate to the economic value of the plan’s investment” in voting proxies. If the cost of voting (including the cost of research, if necessary, to determine how to vote or costs related to developing proxy resolutions, proxy voting services, and the analysis of the likely net effect of a particular issue on the value of the plan’s investment) is likely to exceed the economic benefit of voting, the fiduciary has an obligation to refrain from voting.[9]

Proxy voting is a significant component of corporate governance. It is among best practices for fiduciaries of systems to be committed to corporate governance issues, including expressing the board’s collective view when voting of the shares owned by the plan. Proxy policies are designed to set boundaries for the management of proxies and other corporate actions. These policies take into consideration applicable laws, statutes, regulations, program objectives, and business plans. They also define the authority and delegation with respect to managing, casting, and reporting proxy votes.

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[7] Avon letter (issued February 1988) and DOL IB 94-2 (29 CFR 2509.94-2) as superseded by DOL IB 08-2, effective October 17, 2008.
[8] The Employee Benefits Security Administration is a division of the Department of Labor. It is responsible for administering and enforcing the fiduciary, reporting and disclosure provisions of Title I of ERISA.
[9] See Advisory Opinion No. 2007-07A (December 21, 2007).

Based on our experience reviewing public funds, many have adopted the views of the U.S. Department of Labor on fiduciary duties related to proxy voting and have delegated voting authority to their investment managers, either subject to the managers' discretion or pursuant to a specific set of voting guidelines. We are also aware of public pension funds that take an active role and vote proxies themselves; others use a proxy voting service. A limited number of large public funds actively engage companies on issues of concern, in some cases sponsoring shareholder resolutions, in an effort to increase share value.

Findings and Analysis

COPERS has a general proxy policy and voting guidelines (Policy No. 157). The Policy was last revised in February 2007. In the Policy, COPERS recognizes and agrees to adhere to the DOL standard even though COPERS, as a public retirement system, is not subject to the DOL's jurisdiction. The Policy states that the Board reserves the right to vote every proxy directly or through a designee under the direction of the Investment Committee. It then designates equity managers to vote the proxies consistent with COPERS' voting guidelines. The policy has not been updated to reflect the inclusion of international equity managers; however, international managers have been directed to vote proxies in accordance with the policy.

The guidelines are advisory and provide that each proxy is to be voted in the best interest of the Plan members and reviewed on a case by case basis. COPERS' proxy policy divides proxies into four categories: (1) routine issues; (2) social, environmental, and political issues; (3) shareholders rights and returns related issues; and (4) non-routine issues. The voting guidelines specify COPERS' position for each category, but the managers are allowed to deviate from the guidelines if they can demonstrate that it would be detrimental to the plan to follow the stated position.

Given its current level of resources, we believe that the approach COPERS has taken is reasonable and in line with many other public funds. We did not, however, find any language in Policy No. 157 that suggests the Board has considered the cost effectiveness of the selected approach. Such an acknowledgement would demonstrate that the Board has considered the economic value of the approach it has taken.

Based on the policy, COPERS maintains a record of each proxy vote and provides quarterly reports to the Board. In practice, the Investment Manager (COPERS staff) receives these reports from each outside manager, verifies each manager's compliance to the Board policy, and compiles the reports for the Investment Committee's review. The Committee provides these reports to the full Board usually as an informational item.

It is our understanding that these automated reports contain detailed transactional information. We find that these types of reports are usually of minimal value to boards and not well understood by all trustees (or most trustees do not know which information is of importance and should be addressed in board meetings). We also find that boards prefer receiving a narrative summary verifying that proxy votes were within the policy guidelines and, if appropriate, providing details about votes that were outside the policy or may be of particular interest.

Pursuant to contract, RV Kuhns is to assist the Board in updating and developing new policies concerning investments and voting of proxies. This is a reasonable and prudent role for the consultant to play. We also note that the contract states that "upon the request of the Trustees, [RV Kuhns will] review the proxies voted by each Investment Manager in connection with accounts and provide the Trustees with a written report reflecting whether such actions conform to the Applicable Standards." The Board has not requested such a report from RV Kuhns.

Conclusion

We conclude that the COPERS' proxy voting policy is sound and positions each vote to be in the best interest of COPERS. Although not specified in writing, the policy applies to global and domestic voting.

Quarterly reporting on proxy voting is standard for investment managers but it might be more frequent information than the Board needs. We believe that an annual report which highlights any significant or unusual activity is often most useful to boards.

Considerations:

1. Consider acknowledging in the proxy policy that the Board has considered the cost effectiveness of the approach utilized.

Recommendations:

1. Review frequency and format of proxy reports provided to the Board.
2. Document that the proxy policy applies to global proxy voting.

C) Securities Lending Policy

Background

Lending securities held in a long term portfolio is a common practice among institutional funds to generate incremental income. Brokers and investors need securities to facilitate trading, to undertake short sales, and for various other purposes. Initially, this practice was thought to involve close to zero risk. Recent events have proven that this is not the case. Having a policy in place that establishes a board's risk tolerances for securities lending, and requirements for monitoring and reporting on the program will reduce fiduciary risk, enhance transparency, and increase accountability.

Findings and Analysis

We found that although COPERS has a securities lending program, it has not documented a policy establishing guidance regarding its structure, parameters, collateral, or the process for monitoring and reporting.

We review and assess the particulars of COPERS' Securities Lending Program in section 2.F of this report.

Conclusion

While the Board carefully structures and monitors its securities lending program, a formal policy does not exist. Without a documented policy, the Board runs the risk of allowing participation in sub-optimal securities lending or not adequately structuring or monitoring whatever they currently do in practice. Inadequate structure or monitoring in turn may produce undue risk or sacrifice available returns. The recent issues related to collateral risk, make adoption of a policy even more critical.

Recommendation:
None [See page 3.10 for a recommendation related to a securities lending policy.]

D) Securities Litigation Policy and Claims Management Process

Background

Securities class action litigation affects investment returns. It affords the opportunity to recover losses resulting from the wrongful actions of a company in which pension fund assets are or were invested. The DOL views securities class action claims as plan assets. Since the claims are plan assets, the DOL has advised ERISA funds that trustees have an affirmative duty to determine whether it would be in the best interest of plan participants to become actively involved in securities litigation, and a duty to take reasonable steps to recover on claims.[10]

Like proxies, it is probable that courts will take ERISA principles into account when construing whether public pension fund trustees have an affirmative duty regarding securities class action claims. Consequently, it is advisable for public pension fund trustees to address how they are going to meet their fiduciary responsibility in this area.

To address its fiduciary responsibility, and to take reasonable steps to identify and recover securities class action claims, some boards of trustees adopt formal securities litigation policies. The policies acknowledge that securities class action claims are plan assets and therefore the trustees have a fiduciary duty to take reasonable and cost-effective steps to identify, analyze,

[10] Bragdon v. Telson Corp (Northern District of Ohio).

pursue, and collect securities class action claims. They identify the objectives of the board in pursuing securities litigation and set forth the evaluation and monitoring process that will be used, as well as the minimum loss threshold. The policies also define the roles and authority of the key parties in the process. Many funds have determined that the cost of taking an active role as the lead plaintiff in a class action exceeds the anticipated benefit. When such determinations have been made it is wise to adopt a policy that the pension fund will maintain a passive role unless there are exceptional circumstances warranting an active role.

Even if boards decide not to take an active role in securities litigation, they should file a claim on behalf of the pension fund for every case in which the pension fund is a member of the class, unless the board determines, based on expert advice that it is in the interest of the plan not to do so. Therefore, ideally, the securities litigation policy should include a section that documents the claims management process required by the board.

The documentation should identify the entity with responsibility for carrying out the claims management function. Typically, this function is performed by the custody bank, but a small number of funds now utilize other third parties. The responsible party should acknowledge, in writing, its fiduciary responsibility for filing proofs of claim for all settlements in which the pension fund is an eligible class member.

An effective claims management process addresses how to handle claims that are over the threshold amount for which a decision must be made about whether to object, comment, or opt out of the litigation. The process covers who is responsible for evaluating claims. A sound process ensures that claim payments are accurate; provides guidelines to the custodian for investing and accounting for proceeds of claims; provides for a claims reconciliation process and an internal audit process to check accuracy of claim filing activity; and requires the custodian to provide monthly reports and an annual cumulative report for each settlement.

In best practices, the staff communicates significant events or exceptions to the Board in a report that contains:

- Name of security and date notice of settlement is received
- Class period for each notice
- Due date for claim filing
- Date claim filed
- Identification of accounts to which proceeds will be credited
- Date payment received and amount of payment
- Distribution of proceeds for investment

Findings and Analysis

COPERS does not have a process in place that guides decision-making as to what claims should be actively pursued, how to pursue them, or the cost/benefit assessment. COPERS considered the issue of securities litigation in May 2007 and decided to maintain a passive role and delegate responsibility for claims management and reporting to the custody bank. We find this to be a reasonable approach.

State Street, the custodian bank, provides quarterly class action information to COPERS Staff. Once State Street transitions the way they capture litigation information, COPERS will be able to view relevant information on-line.

Conclusion

Best practices would be for the COPERS Board to demonstrate that it is acting affirmatively, in a manner that is consistent with its fiduciary responsibility, in the management of securities class action claims since they are commonly considered a plan asset. The COPERS Board can accomplish this by adopting a written policy. To reflect best practice, the policy should acknowledge that class action claims are considered plan assets and that the Board's fiduciary duty is to take reasonable, cost-effective steps to identify, analyze, pursue, and collect securities class action claims. The policy should also set forth the evaluation and monitoring process that will be used and describe the decision-making framework and criteria for determining the nature and level of the pension fund's efforts to recover losses. Finally, the policy should define the roles and authority of the key parties in the process. While this type of policy is consistent with best practice, it is common for pension funds not to have a formal securities litigation policy.

Given COPERS' limited resources we suggest that the policy provides the Board will maintain a passive role unless there are exceptional circumstances that warrant an active role, and includes a claims management and reporting process with the custody bank designated as the entity responsible for the function. The policy should be developed with the assistance of legal counsel.

Recommendation:
None [See page 3.10 for a recommendation related to adopting a securities litigation policy.]

E) Brokerage Policy

Background

Brokerage commissions are a plan expense and, therefore, the Board is responsible for monitoring them. If brokerage costs are rebated through a commission recapture program, those dollars are once again plan assets. Investment managers should be required to seek "best execution" (i.e., best trade based on share price, commission, available research, etc.) on all trades. If soft-dollar, directed brokerage and/or commission recapture arrangements are utilized then the IPS, or a distinct policy referenced in the IPS, should acknowledge that they are also plan assets and establish a process to monitor and report on the investment managers' brokerage commission activity and practices. [11]

Findings and Analysis

COPERS does not have a brokerage policy nor does it explicitly require "best execution" in the IPS on the part of its investment managers when effecting trades. The individual manager guidelines and contracts do, however, contain references to brokerage costs and best execution. For example, some of the managers' contracts state that the manager must maintain "proper control" of transaction costs. Others specify that COPERS does not require the manager to give up best execution in order to direct brokerage.[12] Elkins McSherry provides COPERS reports on best execution on a quarterly basis. Having this type of independent review is a best practice. Elkins McSherry is a well-known provider in this area and has the requisite expertise to provide analysis on trading execution.

COPERS also has a commission recapture program, but has not adopted a policy or guidelines with respect to this program. In the absence of a written policy there is no transparency regarding the objectives of the program or the desired rebate rate. A good policy for COPERS would, at a minimum, contain the following:

- an acknowledgment that brokerage commissions are a plan asset and, as such, the Board is responsible for prudently monitoring them;
- a requirement that investment managers are obligated to seek best execution on all trades;
- COPERS' objectives and guidelines regarding the commission recapture;
- a clearly defined process for monitoring the investment manager brokerage commission activity and practices.

Conclusion

Brokerage costs are a plan expense and thus need to be monitored. A policy that addresses brokerage and commission recapture would be a benefit to COPERS.

Recommendation:
None [In section 3.II.A we recommended that a brokerage policy be adopted.]

[11] "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
[12] Examples from Investment Services Agreement with Cadence Capital. Dated February 1, 2009.

III. Investment Portfolio Structure

A) Overall Portfolio Risk/Return Characteristics

Background

Asset allocation is one of the most important decisions a public retirement board is called upon to make. It, more than anything else, determines the long-term rate of return and risk level for a portfolio. 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 analysis that determines target allocations based on the risk/return characteristics of various asset classes, their correlation, and the risk tolerances of a board. It is an asset return optimization exercise focused on attaining an assumed asset return target. Typically asset allocation reviews will evaluate several model portfolios in terms of an efficient frontier. The model portfolios that have either the highest level of expected return for a given level of risk or the lowest level of expected risk for a given expected return are “efficient.” There are different efficient frontiers for portfolios that include different asset classes. For example, the efficient frontier for a stock and bond portfolio will be different from the efficient frontier for a portfolio that includes not only stocks and bonds, but also real estate, private equity, or other asset classes.

While asset allocation reviews are good tools for 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. By recognizing that a fund’s liabilities have certain characteristics and potentially change over time, a pension fund’s investment consultant, often in consultation with the staff, can recommend an asset allocation strategy, or set of strategies, that is 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. In particular, the following impact asset allocation recommendations:

- Funding policy: If the calculation of cash contributions into the plan is based on longer amortization periods for asset and liability gains or losses, more allocation to equity-like investments may be reasonable.
- Characteristics of plan participants: A growing population of active participants supports more risk taking while a mature population with significant retirees might need a more conservative policy.
- Funded status: A less funded plan can utilize additional returns from equity-like investments to help close the funding gap.
- Nature of plan benefits: A pension with sensitivity to wage inflation growth can benefit from equities in the long-term; an increased need for liquidity due to significant benefit payments in the near future can have a more conservative policy.

Periodically, boards may consider additional asset classes to be included in the portfolio. Reviewing all the possible expected return and standard deviation combinations available from the construction of portfolios from a given set of assets,[13] in the context of the board's risk and return goals and liabilities, is an important part of the overall asset allocation process. Having a methodical approach to evaluating investment ideas is central to meeting fiduciary standards of prudence.

As noted earlier, a rebalancing process ensures that the decided upon 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. Rebalancing is an important control because it keeps the portfolio in line with the board's risk and return expectations.

Findings and Analysis

Process Used to Set Asset Allocation

The COPERS Board has worked with staff and the investment consultant to identify a suitable combination of long-term return potential and risk control. The most recent asset allocation review, titled "Asset Allocation Study," was completed in May 2008 by the investment consultant, RV Kuhns. We found that the 2008 asset allocation review was thorough and an important exercise for the COPERS Board.

An asset liability study, however, has not been completed within the last five years. As a result, COPERS has not compared various portfolios in terms of their impact on surplus (assets minus liabilities) or shortfalls (negative surplus). As COPERS pays out benefits throughout each year, the ideal asset allocation should take potential surplus and shortfalls into account. A shortfall could trigger higher contributions from the City of Phoenix, which is not a desirable outcome particularly in a depressed market. The asset allocation that COPERS has selected, based on the 2008 asset allocation review, may do a good job of targeting a specific return, but may or may not succeed in minimizing surplus volatility. Conducting an asset liability study would facilitate COPERS' ability to confirm whether the asset allocation it has adopted is optimal when surpluses and shortfalls are taken into account.

Conducting an asset-liability study approximately every five years, or more often if there are major changes in the fund's circumstances, is a best practice.

[13] Commonly referred to as the "opportunity set."

Asset Allocation Compared to Peers

We compare COPERS' target and actual allocations 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 an interesting exercise.

COPERS' Target and Actual Allocation as of 9/30/2008[14] versus Greenwich Average					
Asset Class	2008 Greenwich Average	COPERS Target Allocation	Difference from Greenwich	COPERS Actual Allocation	Difference from Greenwich
U.S. Equity	36.5%	38%	1.5%	37%	0.5%
Non-U.S. Equity	19.7%	23%	3.3%	19%	-0.7%
Total Equity	56.2%	61%	4.8%	56%	-0.2%
Fixed Income	27.2%	20%	-7.2%	22%	-5.2%
Cash/Other	2.0%	0	-2.0%	1%	-1.0%
Total Fixed Income	29.2%	20%	-9.2%	23%	-6.2%
Private Equity	6.6%	0	-6.6%	0	-6.6%
Hedge Funds/Tactical Asset Alloc[15]	1.7%	9%	7.3%	10%	8.3%
Real Estate	7.3%	10%	2.7%	12%	4.7%
Total Fund	100%	100.0%	--	100.0%	--

It is important to note that the Greenwich information represents actual allocations as opposed to policy targets. COPERS' overall target asset allocation differs somewhat from the Greenwich average with the most notable differences being a lower allocation to fixed income, a zero allocation to private equity, and a significantly higher allocation to hedge funds and real estate.

The comparison in the chart above highlights that COPERS has not invested in private equity, which is not an approved asset class for COPERS. Public pension funds have been investing in private equity for many years. There are special risks associated with private equity, but for those investors that understand the risks and can tolerate illiquidity for a portion of the portfolio, it serves as an appropriate part of a diversified portfolio and can provide a boost to overall portfolio returns.

[14] Target and actual allocations per RV Kuhns 9/30/2008 Performance Report. Long-term targets have been approved that will be different than the current targets. Please see page 3.20 for the long-term targets.
[15] The Greenwich survey does not include a separate category for tactical asset allocation strategies, thus for the purposes of this comparison we included COPERS' real return strategy in this category. We view the TAA approach and strategy utilized by Research Affiliates to be "hedge-fund like."

Allowable Ranges and Rebalancing

The following table shows the allowable ranges set around the target asset allocation. Limits set by statute or other restrictions are also shown. For reference, the long-term targets, which are expected to be achieved over the next several years, are also shown. Once new targets are reached, the corresponding allowable ranges will also be modified.

Allowable Allocation Ranges

Asset Class	Charter Restrictions	COPERS Target	Allowable Ranges	COPERS Long-Term Target
U.S. Equity ▪ Large Cap ▪ Small/Mid	60% limit on common stock	38% 25% 13%	-- 23% – 27% 12% – 14%	25% 16% 9%
Non-U.S. Equity ▪ Large Cap ▪ Small/Mid Cap	Must be prudent and approved by 2/3rd majority of the Board	23% 18% 5%	-- 16 %– 20% 4% – 6%	21% 17% 4%
Total Equity		61%	55% – 67%	46%
U.S. Fixed Income	Must be investment-grade and issued by a solvent company	20%	18% – 22%	19%
Cash	No restrictions	0	--	0%
Total Fixed Income		20%	18%- 22%	19%
Real Return	All other restrictions apply; must by prudent and approved by 2/3rds majority of the Board	9%	8% – 10%	10%
Real Estate	May not be acquired from the State of Arizona[16]	10%	--	15%
Long-Biased Long/Short Equity	All other restrictions apply; must be prudent and approved by 2/3rds majority of the Board	--	--	10%
Total Fund		100%		100%

COPERS' rebalancing policy allows for the actual allocation among asset classes to float within acceptable ranges before any rebalancing is required. Many institutional investors follow this approach as it limits the need for constant rebalancing and, therefore, avoids unnecessary transaction costs. Rebalancing ranges are typically set to represent a reasonable trade-off

[16] Real estate must not be acquired, directly or indirectly form the State of Arizona, its political subdivisions, or any incorporated cities or towns.

between risk control and costs. If there were no trading costs to rebalance a portfolio, the optimal strategy would be one of continual rebalancing.

We found the ranges around each approved asset class to be reasonable. Asset classes with larger allocations have slightly wider ranges than asset classes with smaller allocations, which we also think is reasonable.

Historically, COPERS has successfully implemented its rebalancing policy, keeping the actual asset allocations within allowable ranges. Recently, based on a recommendation from the investment consultant, the COPERS Board approved the suspension of rebalancing because of liquidity issues within the fixed income markets. Many other public funds have also suspended or slowed rebalancing activity as the market conditions have made transacting in the fixed income market potentially harmful to the portfolio. COPERS is in the process of re-allocating assets to managers and strategies; given that, the suspension of rebalancing will avoid unnecessary transaction costs.

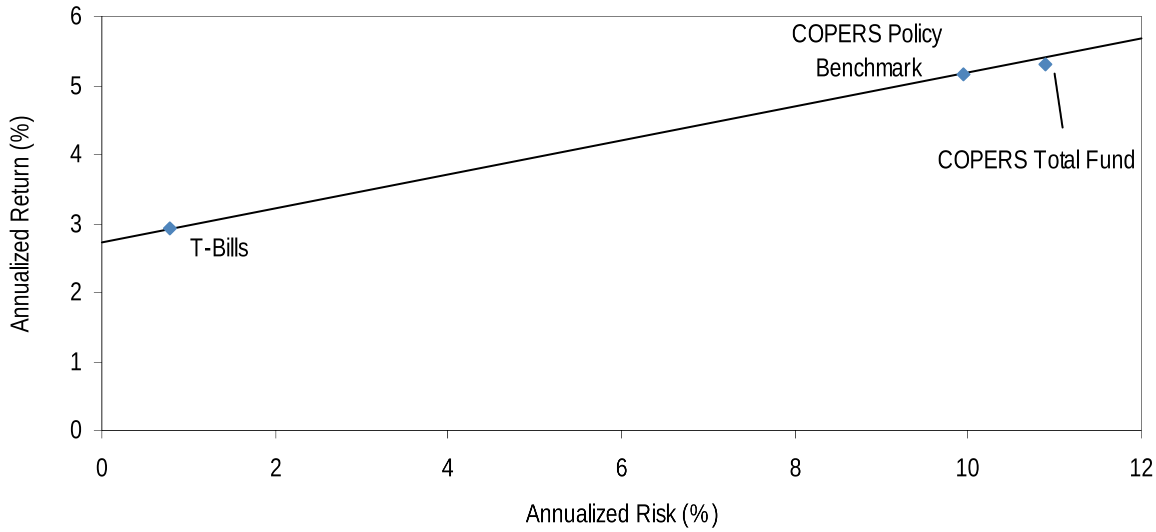
We found the decision to suspend rebalancing activity, and the process by which it was approved, to be prudent. It is our understanding that the investment consultant and staff continue to monitor the situation and keep the Board apprised. We were informed that the suspension of the rebalancing policy will be reconsidered every three months, and if necessary re-approved. We believe the reconsideration process is appropriate.

Expected Return and Risk

Over the past ten-years, the COPERS' portfolio has earned an annualized return of 5.2%, compared to the target benchmark return of 5.3%.[17] Since inception (12/1987) the fund has earned an annualized return of 8.4% compared to the target benchmark return of 9.5%. The graph on the following page shows the trailing period risk return characteristics of the fund are similar compared to those of the target benchmark.

[17] As of 9/30/2008, per RV Kuhns performance report.

Risk-Return
10 Years Ending 9/30/2008



Measuring past performance is important; however, it is also important to understand the expected risk and return characteristics of the fund going forward. EnnisKnupp's January 2009 capital market assumptions calculate an expected long-term return and risk level for COPERS as shown below.

Expected Return and Risk Per Ennis Knupp Current Capital Markets Assumptions[18]			
Asset Class	COPERS Target Allocation	Expected Compounded Return	Expected Risk[19]
U.S. Equity	38%	7.70%	16.83%
Non-U.S. Equity	23	7.46%	19.10%
U.S. Fixed Income	20	4.73%	6.61%
Cash	0	4.51%	0.00%
Private Equity	0	10.37%	30.31%
Real Return[20]	9	7.24%	10.10%
Real Estate	10	6.36%	11.63%
Total Fund	100%	7.31%	11.68%
RV Kuhns Asset Allocation Study		6.97%	10.85%

[18] EnnisKnupp Assumptions as of January 2009; June 2009 assumptions were released after the completion of this report.
[19] One year holding period.
[20] We used a hedge-fund like return and risk assumption for the real return strategy, which we believe to be appropriate.

COPERS' investment consultant also has markets assumptions. While their assumptions are somewhat different from ours, they result in a similar expected compounded return and expected risk level. The investment consultant calculated a compounded return for the target allocations of 6.97% and a risk level of 10.85%.[21]

We note that in May 2008, the COPERS board adopted long-term allocation targets that will impact the expected return and expected risk calculations. Based on these new policy targets, if achieved, the investment consultant has calculated an expected compounded return of 7.85% and an expected risk level of 10.06%. Like the investment consultant's calculations, our expected return and risk would also improve once these new allocations are reached. For reference, the long-term approved targets are shown below.

Long Term Allocation Targets	
Asset Class	COPERS' "Long-Term" Allocation Targets
U.S. Equity	25%
Non-U.S. Equity	21%
U.S. Fixed Income	19%
Cash	0%
Private Equity	0%
Real Return	10%
Real Estate	15%
Long/Short Equity	10%
Total Fund	100%

COPERS' actuarial assumed rate of return is 8.0%. This assumption is determined by the actuary as an estimate of what should be expected from the fund based on the asset allocation set by the Board. The fund's past performance since inception has exceeded this assumed rate of return. COPERS' assumed rate of return is similar to that of other public pension funds.

EnnisKnupp's recent survey of Public Fund Actuarial Return Assumptions reflects that on average the assumed rate was also 8.0%; ranging from a low of 7.25% to a high of 9.00%. The results of the 42 fund survey are shown in the chart on the following page. Although the funds are statewide funds, we note that many cover municipalities. We render no general opinion on the appropriateness of the assumptions found in the survey; it is important to note, however, that many funds are considering downward adjustments due to a more tempered outlook for

[21] RV Kuhns Asset Allocation Study, May 2008. We note that RV Kuhns' expected return and risk for the portfolio was calculated in 2008, while our calculation was based on 2009 expectations. Typically, return and risk assumptions are adjusted periodically; however, any changes are usually small. Therefore, the difference in time periods used has an insignificant impact on results.

investments. It is our understanding that COPERS is not currently considering lowering its assumed rate of return.

EnnisKnupp Survey of Public Fund Actuarial Return Assumptions[22]			
Fund	Actuarial Return Assumption	Fund	Actuarial Return Assumption
Alabama RS	8.00%	Minnesota PERA	8.50%
Alaska Division of Retirement	8.25%	Mississippi PERS	8.00%
Arizona PSPRS	8.50%	Missouri SERS	8.50%
Arizona SRS	8.00%	Montana TRS	8.00%
Arkansas PERS	8.00%	Nebraska Investment Council	8.00%
Arkansas TRS	8.00%	New Hampshire RS	9.00%
CalPERS	8.25%	New Jersey PERS	8.75%
CalSTRS	8.00%	New York Common	8.00%
Colorado PERA	8.50%	Ohio PERS	8.00%
Delaware	8.50%	Ohio TRS	8.25%
Florida RS	8.00%	Oklahoma PERS	7.50%
Georgia TRS	7.25%	Oklahoma TRS	8.00%
Hawaii ERS	8.00%	Oregon PERS	8.00%
Illinois SURS	8.50%	Pennsylvania SERS	8.50%
Illinois TRS	8.50%	Rhode Island ERS	8.25%
Indiana PERF	7.25%	South Carolina RS	7.25%
Iowa PERS	7.50%	South Dakota RS	8.00%
Kentucky TRS	7.50%	Texas TRS	8.00%
Kentucky RS	7.75%	Tucson SRS	7.75%
Maine SRS	8.00%	Virginia RS	8.00%
Michigan SERS	8.00%	Washington PERS	8.00%

Using the EnnisKnupp Capital Markets Assumptions, we estimate COPERS' long-term return going forward to be 7.31%, lower than the 8.0% actuarial return assumption. We define "long-term" as over the next 15 years. Our return expectation assumes an inflation factor of 2.3%. The 7.31% expected return can improve if there is outperformance by active managers, or if asset classes with higher return expectation are used to a greater degree.

In COPERS' most recent asset allocation study, additional asset classes were considered for the portfolio, including value-added real estate, opportunistic real estate, and long/short equity

[22] Assumed rates of return reported as of 2007. Information for Arizona PSPRS and Tucson SRS as of FY 2008.

strategies. COPERS' investment consultant and EnnisKnupp both have return expectations for these investment vehicles that are higher than those of the core asset classes currently included in COPERS' portfolio. Adjusting the current asset allocation to include value-added real estate, opportunistic real estate, and long/short equity strategies will serve to increase the expected return. We note, however, that even after including higher-returning asset classes in the portfolio, neither COPERS' investment consultant nor EnnisKnupp forecast a return of 8.0% or greater. When using EnnisKnupp's expected returns, the only asset allocation that would result in a return of 8.0% would require a substantial allocation to private equity, an action few investors would regard as prudent.

While we estimate that the COPERS portfolio will earn a roughly 7.31% return, the uncertainty surrounding this expectation, based on historical volatility of asset classes, is quite large. In fact, the table below illustrates the range of potential returns over the next 15 years, and the probability of achieving such returns. We estimate that there is a 42% chance that the COPERS' portfolio will earn the 8.0% actuarial assumed rate of return.

Percent Probability	Expected Return
5%	12.40%
25%	9.40%
50%	7.31%
75%	5.37%
95%	2.56%

Conclusion

We conclude that COPERS' process for determining its asset allocation, and the risk and return characteristics of the fund, has been reasonable. Conducting an asset liability study at this time, however, would be consistent with best practice.

We find COPERS' target asset allocations to be reasonable relative to other public funds. While our capital market expectations suggest that it may be difficult for COPERS to earn its assumed actuarial rate of return going forward, we do not advocate the adoption of an overly aggressive asset allocation. The planned addition of value-added real estate, opportunistic real estate, and long/short equity strategies will serve to increase the expected return. Investing in private equity could also increase the expected long-term return of the fund. Using private equity, however, is impacted by Charter restrictions applicable to COPERS' investments and dependent upon the outcomes of any asset liability study.

Recommendations:

1. Complete an asset liability study to confirm the current asset allocation is best and consistent with the fund's liabilities and liquidity needs.

2. Have staff and the investment consultant evaluate and report to the Board on the merits of investing in private equity.

B) Diversification

Background

Diversifying fund assets is a key fiduciary responsibility and essential to managing risk. Public retirement boards diversify by asset type (stocks, bonds, real estate, etc.) and also within an asset class by criteria such as sector, credit quality, and property type. In order to appropriately diversify, there must be an adequate process in place to evaluate new investment opportunities.

In today's institutional investment arena, Modern Portfolio Theory[23] (MPT) is used as the overall framework for evaluating investments. It is a portfolio management strategy and quantitative method used by institutional investors 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, and the proper way to judge investment performance is to evaluate the overall performance of the entire portfolio. No investment is considered, *per se*, imprudent. An investment can be risky in isolation and still be prudent. What matters is how a particular investment fits within the overall investment portfolio.

One of the fundamental tenets of MPT is that the positive or negative correlation of different asset classes is an important factor in determining the riskiness of the total portfolio. If, for example, one type of investment tends to increase in value while another one declines, then the overall portfolio is strengthened by including both asset classes. Thus, an investment that may seem too risky on a stand alone basis could, nevertheless, qualify as a prudent addition to a diversified portfolio.

Findings and Analysis

Process of Indentifying New Investment Opportunities

We found the process COPERS uses for evaluating new investment opportunities for inclusion in the portfolio to be thorough and prudent. A comprehensive written analysis, conducted by the investment staff and/or the investment consultant, is used as the foundation for all major decision-making by the Board regarding new investment opportunities. These materials are assembled in advance of meetings and sent to the Board to allow adequate time for review and analysis. Based on our review of Board packets, the materials are thorough and incorporate a balanced discussion of the pertinent issues at hand. We believe the written documentation on significant issues is consistent with best practices. Although not always a common practice

[23] 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.

among funds and their consultants, it is a best practice to have advice in writing and delivered prior to meetings. Consequently, by requiring written advice in advance of making a decision, COPERS has adopted an effective process that is more vigilant than the practices employed by many other funds.

We were informed that Trustees do not feel rushed and they only make a decision after thorough analysis and discussion. While we did not observe the decision-making process for a new investment opportunity, we did observe the Trustees asking interesting and relevant questions during its meetings. They appeared well prepared and appropriately engaged. The process seems to be working as it should.

The following is a description of the process recently used to approve the adoption of real return strategies. It is provided to illustrate the process COPERS used. First, the investment consultant identified a need in the portfolio for inflation sensitive assets and additional diversification. Second, the staff and the investment consultant collectively decided that a real return strategy would satisfy this need. Then, as a prerequisite to moving the recommendation forward, a legal determination was requested regarding whether or not a real return strategy was permissible. After obtaining the legal opinion, the next step was to educate the Board on the merits of the strategy, as well as the risks involved. To accomplish this, the investment consultant made an educational presentation to the Board. Once the Board was comfortable with the strategy and approved it, the investment consultant identified a suitable pool of managers to implement the strategy. Managers who were semi-finalists presented to the Board. This provided the Board with the opportunity to understand each manager's approach, strengths, and weaknesses. Summary information about the candidates was provided to the Board in advance of the interviews.

In our opinion, the illustration confirms that the process was prudent and works well. As noted in discussion regarding the investment policy statement, while the Board used a prudent process, it has not documented the process in a way to require its continued use in the future.

Specific Strategic Allocations

In our review of the portfolio, we observed three strategic allocations in the portfolio.

- Overweight to mid/small cap stocks
- Home country bias
- Limited use of index funds

We do not render an opinion regarding appropriateness of these strategic allocations, as that is the role of the investment consultant and beyond the scope of this report. We do, however, comment on the process by which these strategic allocations were determined and approved.

The policy allocation to small and mid cap stocks compared to the allocations in the U.S. market is set forth in the following table. As shown, COPERS has adopted by policy an overweight to mid and small cap stocks.

U.S. Equity	Market (Index) Allocation[24]	Policy Allocation
Large	75%	65%
Mid/Small/Micro	25%	34%

The current policy allocation was set by Board action in 2007. The target allocations were last reviewed during the asset allocation review completed by the investment consultant in May 2008. As a result of that review[25] the long-term target allocation to mid/small cap stocks will be increased, further overweighting that segment of the market. This decision was based on the expected risk/return characteristics for mid and small cap stocks. The analysis and discussion that supported this strategic allocation is well documented and thorough.

COPERS currently has a greater-than-market weight to U.S. equity, i.e., a home country bias.[26] Many public funds exhibit a home-country basis, although some have taken steps to reduce or eliminate it. COPERS' policy allocations compared to those in the market are shown in the table below.

Equity	Market (Index) Allocation[27]	COPERS Policy Allocation
U.S.	45%	62%
Non U.S.	55%	38%

The allocations to U.S. equity and non-U.S. equity were also discussed in the last asset allocation review. As a result of the future expected risk and return levels for U.S. equity and non-U.S. equity, the home country bias in the COPERS portfolio will be slowly reduced, but not completely eliminated.

The COPERS portfolio is predominately invested by using active management. The policy provides for a 5% allocation to a U.S. core index fund. This is notably different from the amount other public pension funds typically invest in index funds. According to the 2008 Greenwich Associates survey of 328 public funds, the average allocation to passive U.S. equity investments was 20%. In the RV Kuhns Public Fund Universe of 89 large pension funds, across all asset classes the average fund allocated 16% to passive management. Of these 89 funds, approximately 17% had a zero or close to zero allocation to passive management. We find that larger funds (greater than $5 billion) use passive management to a greater degree. We do not believe peer averages should drive policy decisions; nevertheless, it is important that fiduciaries be aware of what their peers are doing and have a sound rationale for any major differences.

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[24] Dow Jones U.S. Total Market breakdown
[25] The study was a mean-variance analysis employing the investment consultant's forward-looking market assumptions.
[26] A home country bias refers to the practice of favoring one's home country
[27] MSCI U.S. IMI Index breakdown

Whether or not a fiduciary is acting in a prudent manner is determined, in part, by what comparable investors are doing under similar circumstances.

COPERS' lower-than-average allocation to passive management was a conscious decision by the Board. The issue was formally addressed in 2005. At that time, COPERS' investment consultant prepared a report on the merits of active and passive management. Based on that analysis, the Board affirmed a predominantly active approach for the investments of the fund. The policy allocations, including the use of index funds, are reviewed and affirmed annually.

We found the processes by which these three strategic allocations were established, and are periodically reviewed, to be appropriate.

Number and Types of Managers Used

The table below lists the number of external managers used within COPERS' investment program across the different asset classes.

	As of September 30, 2008[28]
Asset Class	Number of Managers
Domestic Equities	6
International Equities	3
Fixed Income	2
Real Estate	2
Real Return	1
Cash Management	1

There is no right number of managers to use in a portfolio; fewer managers result in larger allocations, on the whole, while more managers result in smaller allocations. Most of COPERS' managers are allocated between 5 – 10% of the total portfolio's assets; however, fixed income managers are allocated more than 10% of the fund's assets. By having a smaller number of managers with larger allocations, COPERS has avoided a portfolio structure that results in "closet indexing."[29] Closet indexing is an expensive way to gain market-like exposure, and thus is something we recommend against.

Having a smaller number of managers where each is allocated upward of 5% of the total fund's assets is not unusual. Most often this would be a result of indexing a large portion of the asset base (which COPERS has not done). Having more than 10% of the fund's assets invested with a single active manager is somewhat unusual, but not necessarily imprudent. Having the entire

[28] Per the RV Kuhns September 30, 2008 performance report.
[29] "Closet indexing" is a term that refers to having so many active managers that when they are all aggregated into one portfolio they essentially offset each other's active bets (over or underweights to stocks or sectors).

fixed income allocation divided between only two managers makes the COPERS portfolio somewhat concentrated in terms of exposure to a single manager's business risk, investment style, and performance. Investment style and performance are related to active risk.[30]

It is very important to be cognizant of the level of active risk that each manager is bringing into the portfolio. Risk budgeting, which is a developing trend in managing large, multi-manager portfolios in the public sector, would allow COPERS to monitor manager, asset class, and total fund levels of active risk. By using a risk-budgeting approach, COPERS would establish active risk targets or ranges for each asset class and the total fund, and quantify the active risk of each manager. A risk budget may help the COPERS board and staff monitor the level of risk each manager brings and evaluate whether that level of risk is reasonable. Such an analysis could be an effective approach to determine whether more managers are needed.

Another factor that comes into consideration when deciding on the appropriate number of managers to use in a portfolio is the level of fees. Larger portfolios typically result in more favorable fees when employing standard asset-based fee arrangements. COPERS has been successful in obtaining competitive fees from most of its investment managers (fees are discussed in greater detail in the costs and fees portion of this report). Economies of scale, however, must be balanced with the business and investment risk inherent in investing a large portion of assets with a single manager.

The table on the following page illustrates some of the key characteristics of COPERS' managers and speaks to the level of diversification in the portfolio. As shown, the portfolio is fairly well-diversified. As noted earlier, within the fixed income asset class, the fund has a heavy reliance on the two current managers. Both of COPERS' fixed income managers have a high allocation to mortgage backed securities (MBS). Further diversification in this area may be advisable. We were informed that the issue of further diversification in the fixed income asset class is currently being evaluated by COPERS' investment consultant.

[30] Active risk is a statistical measure of risk that an active manager assumes relative to the benchmark it seeks to outperform. 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.

Manager	Allocation (% of Total Fund)[31]	Asset Class	Style / Cap	Number of Holdings	Top Three Sector Exposures
Dimensional Fund Advisors	9.6%	U.S. Equity	Large Cap Value	155	Financials, Industrials, Oil & Gas
Cadence Capital	8.8%	U.S. Equity	Large Cap Growth	76	Industrials, Technology, Oil & Gas
Northern Trust	5.1%	U.S. Equity	Large Cap Index	502	Oil & Gas, Technology, Financials
Cramer Rosenthal McGlynn	5.6%	U.S. Equity	Small Cap Value	49	Financials, Industrials, Consumer Goods,
Eagle Asset Management	5.2%	U.S. Equity	Small Cap Growth	72	Industrials, Technology Consumer Services
The Boston Company	2.4%	U.S. Equity	Mid Cap Core	70	Oil & Gas, Utilities, Financials,
Grantham, May, Van Otterloo	7.6%	International Equity	Large Cap Core	358	Oil & Gas, Financials, Consumer Goods
Fidelity (Pyramis)	7.6%	International Equity	Large Cap Core	413	Financials, industrials, Consumer Goods
AXA Rosenberg	3.9%	International Equity	Small Cap Core	1,146	Industrials, Basic Materials, Oil & Gas
Wells Capital	11.1%	Fixed Income	Core	422	MBS, Credit, CMBS
Western Asset	10.1%	Fixed Income	Core Plus (excluding HY)	525	MBS, Credit, Cash
Research Affiliates	9.6%	Real Return	Tactical Asset Allocation	20	TIPs, Core F/I (ETF's), Emerging Mkt Debt (ETF's)
Morgan Stanley	6.4%	Real Estate	Core	227	Office, Apartment, Retail
JP Morgan Real Estate	5.7%	Real Estate	Core	147	Office, Retail, Residential

[31] As of 9/30/2008

Conclusion

We conclude that the process by which new investment opportunities are identified and evaluated is thorough and prudent. It has worked well for the Board, and both the staff and the investment consultant have taken active roles in facilitating effective decision-making. Nevertheless, it would be best for the process to be documented.

We note that COPERS' decision to minimally use passive management in the portfolio is unusual; however, the process by which the decision was made and subsequently reconsidered appears to be appropriate. The same is true for the decision regarding the strategic allocations to U.S. stocks and mid/small cap stocks. Both decisions were made thoughtfully and based on thorough analyses.

The number and types of equity managers COPERS employs is reasonable and overall the portfolio is fairly well diversified. The one area that may benefit from further diversification is the fixed income asset class.

Consideration:
1. Consider using a risk budgeting tool to monitor active risk.

Recommendations:
1. Document the process by which new opportunities will be evaluated for inclusion in the portfolio.
2. Periodically review strategic allocations (underweight to non-U.S. equity, overweight to small/mid cap, and minimal use of index funds) to ensure they remain appropriate for the fund.
3. Work with the investment consultant to evaluate the merits of additional diversification in the fixed income asset class.

C) Custody Arrangements

Background

Custodian banks safeguard pension fund assets and are responsible for arranging settlement of any securities purchased or sold, managing cash transactions, 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, organizations 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.

Findings and Analysis

As custodian for COPERS, State Street Bank and Trust Company (State Street) provides basic custody services plus some ancillary services. Per the Master Custody Agreement, these services include the safekeeping of assets, trade processing, accounting, class action processing, and basic reporting. The Master Custody Agreement is current with an effective date of May 1, 2009.

State Street is one of the industry's largest custodians with nearly $15 trillion in assets under custody and roughly 1,140 U.S.-based custody clients. State Street derives 84% of its total bank revenue from its custody business. This amount is significant and indicates a greater level of stability due to the bank's overall reliance on this business for its total revenues. COPERS is well served from utilizing a custodian that benefits from such economies of scale.

State Street has $1.6 trillion total public fund assets, which represents 47.5% of total U.S. custody assets, and 191 U.S. based public fund clients. As evidenced by these statistics, State Street has sufficient experience with other public pension funds, which makes it an appropriate custodian for COPERS.

The single most important factor in determining the level of client satisfaction is the quality of the people assigned to the custody relationship. At State Street each Relationship Manager has between four to six clients, with the average Relationship Manager having 10 years of custody experience. Securities processing is also an important aspect of a custody relationship and State Street has sufficient processes in place to ensure timely receipt of information relating to corporate actions, such as tender offers, exchange offers, etc. Another crucial part of a custody relationship is the systems and data processing capabilities. State Street's internally built Global Horizon system is dedicated solely to the custody business and employs an adequate technology staff to maintain the system. Accounting and reporting functions are also vital to the success of the custody relationship. State Street offers online reporting and has internal accounting controls that are subject to independent audits. In this regard, we believe State Street is well positioned to offer COPERS a high level of customer service. COPERS has reported to us that they have been generally satisfied with the customer service from State Street. The level of satisfaction was informally assessed prior to the contract renewal, which we believe to be a good practice.

In late June, State Street Global Advisors (SSGA), the investment arm of State Street Bank and a subsidiary of State Street Corporation, received a Wells Notice from the SEC. A Wells Notice is communication from a regulator that the recipient has been the subject of an investigation and, based upon the findings, the regulator intends to take up enforcement proceedings. The Notice will generally explain the basis on which an enforcement proceeding may be initiated. The recipient is allowed an opportunity to respond directly to the regulator (in this case the SEC) with information and their perspective on the findings prior to the final decision on whether or not enforcement action will be taken.

SSGA's Wells Notice relates to certain disclosures and the firm's management of select active fixed-income strategies in 2007 and earlier periods. The investigation is not related to State Street's custodial services. Further, the management of the cash collateral pools for securities lending, in which COPERS participates, is handled by a separate team, the cash management team. This announcement does not affect the cash management team, or the cash collateral pools.

COPERS pays State Street a flat fee, annually, for custody services. The base fees (before credits) for 2006/2007, 2007/2008, and 2008/2009 were $110,000, $117,500, and $125,000, respectively. The custody fee represents approximately 0.75 basis points (bps) of total plan assets. For an investment plan of the size and structure of COPERS receiving basic services plus additional ancillary services (such as transition management and securities lending), these fees are reasonable compared to other such plans.

State Street also offers custody credits should COPERS decide to invest in either the SSgA S&P 500 Index strategy or the SSgA Intermediate Gov/Credit Index strategy. Credits to be applied in 2006/2007 were 0.2 bps for the S&P 500 Index and 0.4 bps for the Intermediate Gov/Credit Index. These same credits were 0.1 bps for the S&P 500 index and 0.2 bps for the Intermediate Gov/Credit Index in 2007/2008. No credit schedule was provided for 2008/2009. COPERS does not invest these index funds so the credits were not used.

Additional credits were also offered through the investment of revenue in the Quality D collateral pool via securities lending. The credit was a flat dollar amount (prorated per month of inception) of $15,000 in 2006/2007 and $7,500 in 2007/2008. No credit schedule was provided for 2008/2009. COPERS received a partial month credit in December of 2006 and has been receiving a full month's credit of $1,250 each month since January 2007.

The types of credits mentioned above are typical offerings from custodians that are willing to reduce custody fees if the bank is used for other services, such as investment management.

Conclusion

State Street is one of the largest custodians in the industry today, with significant industry experience. They have a large number of U.S.-based clients and assets, including a considerable number of public funds. State Street provides standard and additional ancillary services to the City of Phoenix Employees' Retirement System, which we believe to be appropriate based on the size and scope of services required by COPERS. We have a high regard for State Street's capabilities and believe that the fee charged is reasonable when compared to similar investment programs. While the proceedings regarding the Wells Notice issued to SSGA should be monitored, we do not believe they affect State Street's custodial capabilities.

Recommendation:
None

D) Commission Recapture Program

<u>Background</u>

Brokerage is broadly defined as the process of transacting purchases and sales of securities and is a key factor in the investment rate of return of a fund. The brokerage commission is the fee paid to the broker for purchasing or selling a security in the market. The process of effecting trades that on average achieve favorable price results, under the relevant circumstances, is called "best execution."

Sometimes brokerage commissions are over and above the cost of pure execution in exchange for research or other services from brokers. The part of the commission in excess of the cost of execution can be viewed as an indirect fee beyond the negotiated management fee that investors pay their investment managers. This fee is not visible and is absorbed in the performance of the portfolio. As investment managers incur no direct cost for these services, they have little incentive to hold costs down. Arrangements like this may cause investment managers to trade more through brokers that provide additional services against execution-only brokers, which may not necessarily be in the best interest of the investor.

In a commission recapture program, an investor recovers a portion of the commissions that investment managers pay to execute trades. The mere presence of a commission recapture program suggests that commission dollars are being used inefficiently, which strengthens the case for differentiating research and execution costs. When these costs are combined, a commission recapture program allows the investor an opportunity to "recapture" some of the inefficiencies. Plan sponsors must be careful in setting up such programs, as the recaptured commissions in a poorly structured program can be easily offset by invisible costs related to market impact and delayed executions.

In an ideal world, unbundling research and execution costs will add transparency to the investment management process, and result in a more efficient use of resources. Although unbundling might cause an explicit management fee to rise, it should also have no effect on the net wealth of investors; instead of being reflected indirectly in the form of poorer performance, research expenses will be included in a higher management fee. As investment managers pay for all research out of their management fee, they should focus more on bringing costs down, which over time could reduce total costs for investors. Until the industry demands that research and execution costs are unbundled, however, commission recapture programs can assist investors in recouping some of these fees.

Findings and Analysis

COPERS participates in a commission recapture program operated by State Street Global Markets (SSGM). In the current arrangement, COPERS is rebated 80% of the net commissions (after brokers' executing-only rates) of those trades directed through their network of U.S. and non-U.S. brokers and 100% of the net commissions for those trades executed through SSGM.

State Street continues to manage a robust network of 26 brokers within their commission recapture program. In August 2006, in response to the withdrawal of many brokers from commission recapture programs and the significant decrease in commissions, SSGM moved from a gross commission rebate structure to a net commission structure where the client's rebate rate is calculated net of the broker's executing-only rate. With the overall decrease in commissions and the new rebate rate structure, the revenue generated by COPERS through commission recapture has significantly decreased over the last five years from approximately $310,000 in 2004 to $52,000 in 2008. The projected revenue for 2009 is $33,000.

The significant contraction in broker participation in commission recapture programs and the evolution of the brokerage industry over the past few years has resulted in a steady decline in commission rates. Because of this many have reconsidered their commission recapture arrangements. COPERS has not evaluated the continued suitability of the commission recapture program in recent years to determine if the program should be continued.

Continuation in the program needs to be viewed in the broader context of the benefits received vis-à-vis the cost of operations (staff time in monitoring and other administrative time). In light of declining income from the program, staff time may be better spent on initiatives that benefit the COPERS investment plan in more meaningful ways. Further, we expect commission recapture revenues to continue to decline over time.

Conclusion

Commission recapture programs are a complex way of giving money back to investors that should not have gone out of their portfolios in the first place. The arrangement indicates an inefficient use of commission dollars, which strengthens the argument for eliminating soft dollar arrangements. We believe that it makes sense to continue to participate in the commission recapture program as long as inefficiencies in the commission marketplace continue to exist, thereby allowing for recapture, and more importantly, that COPERS' investment managers continue to seek best execution. Due care must be taken to ensure that every dollar in "recaptured" commissions does not cost more in terms of performance.

Recommendation:

1. Periodically revisit the commission recapture program and analyze the costs and time associated with monitoring the program.

E) Securities Lending Program

Background

Many institutional investors engage in securities lending programs with the objective of generating additional revenue by taking on very low levels of risk. There is a securities lending market for both equity and fixed income securities. The securities lending industry continues to develop as new participants are attracted and new technology serves to facilitate this growth.

A security loan involves three primary parties: the investor who owns the portfolio from which the securities are loaned acting as lender, the broker or investment manager who borrows the securities on behalf of itself or its customers as borrower, and an intermediary institution matching borrower and lender and negotiating and enforcing terms, as agent for the lender.

Investors participate in securities lending programs either directly for their separate account portfolios (portfolios that hold individual securities in the name of the investor), or indirectly through commingled or mutual funds (where the investor owns units of the fund, not the individual securities, which are owned by the fund). In the latter case, the investor has no control over the securities lending program, as the lending guidelines are determined by the fund companies.

Securities lending income is not guaranteed. This fact has been highlighted over the last 18 months. The greatest risk in a securities lending program comes from collateral investments. Even aggressive collateral investment guidelines are unlikely to add more than a few basis points annually to the return of the overall fund, while the downside, if it occurs, can be meaningful.

Collateral investments typically take on duration risk and credit risk to enhance the securities lending revenues. Security loans can be considered as overnight transactions that are rolled over daily. Collateral is typically invested in instruments with longer maturities to try to capitalize on higher yields (assuming an upward-sloping yield curve), creating an asset/liability mismatch. Collateral losses can result if interest rates rise (interest rates and the value of fixed-income securities are inversely related – a rise in rates causes the market value of a bond to decline, and vice versa). Returns are also enhanced by taking on some credit risk. Losses can occur if spreads widen, the issuer of the fixed-income paper is downgraded, or the issuer defaults. Securities lending can be viewed in a sense as fixed-income leverage.

Borrower risk is the risk that the borrower does not return the borrowed securities. Borrower risk can be controlled by approving only high quality borrowers, setting individual borrower limits, and regularly monitoring the borrowers. Further protection is available to the lenders in the form of the collateral deposited by the borrowers (102% to 105%) which is marked-to-market on a daily basis. Indemnification against borrower default is typically offered by the lending agent or can be negotiated in a securities lending program. In a principal securities lending program, the entire counterparty risk is with a single borrower, unless the portfolio has been split into various pools and distributed among various principal borrowers to achieve diversification.

It is common industry practice for the lending agent to earn a portion of the securities lending revenues but not share in the losses on collateral investments. This asymmetric reward structure could motivate the lending agent to take undue risks. Recently, some securities lending programs have incurred losses due to issuer defaults in the collateral investments.

Collateral investment risk can be reduced by investing in duration-matched government securities/repurchase agreements, but such an approach can significantly hamper (if not eliminate altogether) the revenue-generating potential, which might make a securities lending program unviable for many institutional investors.

Findings and Analysis

COPERS currently lends both equities and fixed income through their custodian, State Street Bank. As of December 31, 2008, COPERS had approximately $600 million in lendable assets with about 30% of that on loan (approximately $200 million). The majority of the securities that were on loan were U.S. equity and Treasury securities. Cash collateral received against the loans of the securities is invested in State Street's Quality D Fund. State Street retains 30% of the income associated with lending COPERS' securities and passes along 70% of the income to COPERS. Based on our experience, this is a reasonable and competitive fee split. In addition, COPERS pays 1.75 bps on the management of the cash collateral. This is a reasonable fee for managing the cash collateral. In 2008, COPERS' lending program generated $2.7 million in net revenue. COPERS is indemnified against borrower default by State Street.

The structure of COPERS' lending program is appropriate given the size and type of securities that are available to lend. State Street has full discretion to lend from their lendable base of securities, which allows the lender to maximize intrinsic value to the best of their ability. In addition, managing risk in the reinvestment portfolio is of utmost importance when structuring a securities lending program. The majority of plan sponsors invest in a conservative reinvestment portfolio that allows investment in diversified securities with a weighted average maturity level that cannot exceed 60-90 days.

COPERS' current collateral pool, Quality D, is an appropriate investment vehicle for a securities lending program. While very few short duration managers escaped the depressed pricing or illiquidity facing the short duration fixed income markets in the most recent months, State Street did avoid exposure to defaulted securities and, therefore, clients did not experience any realized losses. State Street took the appropriate measures to bring in risk significantly during the volatile markets and only invested in overnight repurchase agreements with some small investments in securities maturing within 90 days. Given the unfortunate events of late 2008 that negatively impacted cash collateral pools and therefore, securities lending revenue, State Street, as many of their competitors are doing, has decided to change the investment guidelines of the Fund to closely mirror those of a money market fund.[32] We view this as a favorable change given the importance that should be placed on reinvestment risk within a securities lending program.

As risk is brought in on the reinvestment side, most likely resulting in lower yields, the types of securities that will be lent may change. With respect to the loan of securities, revenue is generated by negotiating favorable rebate rates on the loan relative to the Federal Funds Rate, which is referred to as the intrinsic spread. The intrinsic spread or risk-free spread can be thought of as the premium which broker/dealers are willing to pay the owners of the securities for the ability to borrow securities to facilitate short sales. Hard to borrow securities or specials offer favorable intrinsic spreads since they generally have lower levels of liquidity and significant borrower demand.

On the other hand, securities that have sufficient liquidity and where there is no imbalance between borrower demand and supply are referred to as general collateral securities or general collateral. These securities trade at low intrinsic spreads. For general collateral, when there is not as much of an opportunity to generate revenue from negotiating a favorable intrinsic spread (general collateral is typically lent at or near the Federal Funds Rate), additional revenue can be made by investing the cash in the reinvestment portfolio at a higher yield. As the yields on reinvestment portfolios go down, which we view as favorable, the revenue generated on a general collateral loan will also decrease.

COPERS staff currently receives monthly statements from State Street that are available on their website. In addition, staff has access to daily reports that can also be downloaded from the internet that lists information on the program including counterparty exposure, collateralization, amount on loan, and other key aspects of the securities lending program. Staff provides the Board with summary level information on a regular basis.

COPERS' general consultant performs a comprehensive review of the securities lending program on an annual basis that is subsequently presented to the Board. This review includes an educational review of the mechanics of securities lending and addresses key aspects of a lending program including the risks involved, the reasons for engaging in securities lending (both from the borrower and lender perspectives), and in general how securities lending works and revenue is generated. In addition, the consultant reviews State Street's securities lending

[32] Rule 2a-7 of the Investment Company Act of 1940 sets certain requirements for credit quality, maturity, and diversification for money market funds.

capabilities and conducts a complete analysis of the current program including amount of assets on loan, historical revenue generated, collateralization, borrower exposure, and cash collateral guidelines.

The securities lending contract has been revisited on a periodic basis and although the original was signed in 2002. There are two amendments that have been made over the past six years to the original document. We are comfortable that the current contract is up-to-date and reviewed at appropriate intervals.

Staff monitors and reviews the securities lending program on a regular basis and maintains a current version of the securities lending contract. In addition, the review that is conducted on an annual basis by the general consultant is thorough and covers all aspects of the securities lending program in a way that allows the Board to understand the risks and exposures that are inherent in a lending program. This is extremely favorable and is a good practice for the Board to continue.

Conclusion

The COPERS securities lending program is appropriately structured and monitored. We acknowledge, however, that the marketplace is changing. Given the changes that are occurring within the securities lending industry, it is prudent to periodically conduct reviews with State Street on the potential impact a more conservative investment portfolio could have on the amount of securities lent and revenue that can be generated going forward. The Board may want to decide at that point whether it makes sense to continue with securities lending given the risk/reward expectations.

Recommendations:

1. Conduct a review of the securities lending program to determine how a more conservatively managed collateral reinvestment portfolio will affect the amount of securities on loan and the revenue that can be earned for COPERS going forward.
2. Periodically review with the Board the risks inherent in a securities lending program and, as the market environment continues to change, decide if the risks and rewards support a continuation of the securities lending program.

IV. Costs and Fees

Background

The number and type of managers hired directly affects the investment management expenses incurred by a fund. Generally speaking, passive management is less expensive than active management and internal management is less expensive than external management. Additionally, larger allocations of assets to a single manager will usually reduce expenses if certain thresholds are met. Expenses alone should not drive all decisions related to the portfolio; other factors such as risk management, diversification, and confidence in a manager's ability to outperform net-of-fees should also be considered.

Findings and Analysis

COPERS exclusively uses external investment management, which is a very common approach for public funds, particularly for those of comparable size. The information in this table represents COPERS' fees for each of the asset classes for the year ended March 31, 2008 and the total assets in each asset class as of that date.[33]

COPERS' fees for each of the asset classes for the year ended March 31, 2008			
Asset Class	Assets ($ in Millions)	Fees ($ in Millions)	Fees in bps
Domestic Equities	$669.1	$2.9	42.6
International Equities	395.1	2.1	54.2
Fixed Income	383.8	0.8	22.0
Private Real Estate	201.6	1.9	94.0
Real Return	175.4	1.1	65.0
Total	$1,825.0	$8.9	48.6

The investment management fees associated with COPERS' investment program amount to approximately $8.9 million per year or roughly 48.6 basis points (bps) on COPERS' total asset base (excluding cash) of approximately $1.8 billion. COPERS' fees are a result of the size, complexity, and structure of the investment program. COPERS' investment management fees are somewhat higher than would be expected for a fund of comparable size and investment mandates. Even though somewhat higher, we do not find the fees to be unreasonable when generally compared to other public and corporate pension plans. COPERS' investment management fees are similar to those paid by corporate plans and lower than those paid by endowments.

[33] Assets and fees based upon March 31, 2008 RV Kuhns Investment Manager Fee Schedule Review. Total assets excludes cash.

Fee Comparison	
Source: Greenwich 2008 Fee Report	Fee (in basis points)
COPERS Investment Management Fees	*48.6*
Greenwich Average -- All Public Funds	44.5
Greenwich Average -- Public Funds $1-5 Billion	44.6
Greenwich Average – Corporate DB Plans	50.2
Greenwich Average – Corporate DB Plans $1-5 Billion	48.0
Greenwich Average – Endowment Funds	83.0
Greenwich Average – Endowment Funds >$1 Billion	81.7

COPERS' limited use of indexation partially explains the difference in fees. The very low cost nature of index funds provides investors a cost advantage relative to peer public funds. COPERS also has larger-than-average allocations to real estate and real return strategies, which on average have higher fees than most other asset classes. Together, COPERS' current actual allocation to these asset classes is approximately 22%, compared to the average fund's allocation of 9%.[34] The average fund also has an allocation to private equity (another high fee asset class), which COPERS does not. Even so, when the average fund's allocation to real estate, hedge funds, and private equity is combined it equal 15.6%, still lower than COPERS' 22% allocation. COPERS' higher-than-average allocation to higher-fee asset classes has contributed to its slightly higher-than-average fee.

In addition to looking at the total cost structure of the COPERS investment program, we compared fees for the public markets asset classes to two peer comparisons. Fees are computed in basis points and are based on total assets in each asset class.

COPERS Fee Comparison by Asset Class			
Asset Class	COPERS Fees in bps	CEM Median Fee for All U.S. Public Funds[35]	Greenwich Associates Asset Class Fee Average[36]
Domestic Equities	42.6	37.6	48.0
International Equities	54.2	44.0	55.7
Fixed Income	22.0	19.8	26.8

[34] Greenwich Associates 2008 Market Dynamics report.
[35] CEM Benchmarking, Inc.'s 2007 report, which includes information for 133 U.S. public pension funds with aggregate assets of nearly $2.3 trillion and average assets of $17.6 billion.
[36] Greenwich Associates 2008 Fee Information. Public Funds with assets from $1-5 billion. Fees for actively managed assets.

COPERS' fees across the publicly traded asset classes are higher relative to peer funds in the CEM universe. The fees that are included in the CEM universe are for both passive and active management; therefore, it is not surprising that COPERS' fees are above average. The Greenwich Associates asset class averages are only inclusive of active management. In this comparison, COPERS is below average.

Whether total fund and asset class fees are high or low depends upon individual manager fees. In the table below, we show each manager's fee and compare it to an appropriate universe. We have highlighted the only two managers that have higher than average fees. COPERS has spent considerable time reviewing and negotiating fees and was comfortable with the fee schedules for these two managers in light of the universe of managers that was available at the time of hire. Fees are addressed at every contract renewal.

COPERS Manager Fee Comparison			
	COPERS Fee[37]	Average Fee[38]	Rank
Dimensional Fund Advisors Large Cap Value	22.3	53.5	1
Northern Trust S&P 500 Index	5.0	10.1	18
Cadence Capital Management Large Cap Growth	34.5	53.0	6
The Boston Company Mid Cap Opportunistic Value	74.0	72.4	55
Cramer Rosenthal McGlynn Small Cap Value	100.0	82.8	80
Eagle Asset Management Small Cap Growth	54.3	83.8	4
GMO International Intrinsic Value III	63.0	98.0	11
Fidelity (Pyramis) International Growth Equity	39.7	72.9	2
AXA Rosenberg International Small Cap	64.4	99.3	1
Wells Capital Mgmt Montgomery U.S. Core Fixed Income	21.0	24.3	28
Western Asset Management Core Fixed Income	23.0	24.3	44[39]

Note: A rank of 1 is best (meaning the manager has the lowest fee in the peer group).

COPERS' manager fees are competitive. The majority of COPERS' individual managers have fees that are significantly lower than the average fee for comparable managers. All but two managers rank above median in terms of competitive fees (meaning they have lower than average fees). Several of COPERS' managers rank in the top quartile of their respective fee universes (meaning their fees are very low compared to fees charged by other managers for a similar mandate).

[37] Investment Management fees per RV Kuhns fee analysis as of 3/31/2008.
[38] Average Fee per an eVestment database universe, based on each manager's mandate size and strategy.
[39] The fixed income fee universe is very "tight"; meaning a small difference in fees can result in a large different in ranking. This is why Western and Wells rank so differently in the fixed income universe.

COPERS' aggregate costs in managing the investment program, including costs associated with consultants, legal counsel, etc. are shown in the table below.

Investment Related Fees and Expenses[40]	
Fee Category	Amount ($ in 000s)
Total Investment Management Costs	$8,871
Consultant	176
Custodian	107
Legal Counsel	36
Actuary	19
Foreign Taxes	6
Investment Office Expenses[41]	114
Total Fees and Expenses ($ in '000s)	$9,329
Total Fees and Expenses	51 bps

The total cost of the COPERS investment program is reasonable compared to the peer averages. In the CEM[42] 2007 benchmarking survey of 185 U.S. pension funds, the average total cost for managing an investment portfolio was 50.0 basis points (inclusive of investment management fees, overlay management costs, and other costs including oversight, custodial, consulting, performance management, and audit).

Conclusion

We conclude that COPERS' fees are fairly reasonable given the structure and size of the asset base. While asset class fees and total investment management fees are slightly higher than peers, this is a result of the decision to pursue a predominately active management approach, a higher-than-average allocation to real estate and real return, and relatively high fees from two specific investment managers. The active managers' fees, on the whole, are very competitive.

Consideration:

1. Consider re-evaluating if a higher allocation to index funds is appropriate for the fund given their low cost structure.

Recommendation:

1. Continue to negotiate lower fees with the managers that have fees above the peer median.

[40] Investment Management fees per RV Kuhns fee analysis as of 3/31/2008. All other expenses per the COPERS Schedule of Investment Expenses for the Fiscal Year Ended June 30, 2008

[41] Includes salary and employee benefits, calculated at the mid-point of the salary range for one full time employee dedicated to investments.

[42] CEM Benchmarking Inc. provides benchmarking information to pension funds on performance and cost.

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INTRODUCTION

Many factors influence the results of an investment portfolio. Asset allocation will by far have the largest impact on the investment returns of a portfolio,[1] while manager and security selection will have a much smaller effect by comparison. This is not to say, however, that manager selection and oversight is not an important fiduciary duty. Fiduciaries are called upon to make decisions manager hiring decisions and whether to make any changes to the roster of selected managers. When making these decisions, the fiduciaries have the duty to act prudently. They are judged by the prudence of their process, not by the outcome.[2] Prudence is not the same as “perfection,” but it does require the Board and staff to use the same care, skill, and diligence that other sophisticated institutional investors use in the selection and monitoring of comparable investment managers.

Prudence, as used here in the fiduciary sense, is often referred to as “due diligence.” It involves more than a cursory glance at the strengths and weaknesses of a firm. It requires a thorough, scrupulous process. Due diligence has two phases; the initial selection of managers and the on-going monitoring of those managers.

The selection process essentially begins with the entire universe of managers under consideration. This is a very large universe; for example, when considering active management, approximately 12,000[3] investment managers currently exist just in the United States. Of these, less than 50 may be suitable for a public fund to seriously consider due to the size and structure of the investment portfolio. Therefore, the selection process must effectively parse the opportunity set to identify the managers that are uniquely skilled for the mandate being sought.

After managers have been selected, due diligence must continue to ensure the selected managers remain appropriate for the fund. An effective process will trigger action when changes are needed. Due diligence includes a review of the investment’s performance against agreed upon benchmarks and an assessment of whether any of the factors that were considered in the selection of the manager have adversely changed. In addition, due diligence also includes a review of compliance with stated guidelines and monitoring of risk in the portfolio.

Due diligence procedures can be exemplary, but if they are not documented and codified in a policy, they fall short of best practices. Public funds are best served if selection and monitoring processes are articulated in policies. This will help to ensure that the board’s expectations for due diligence are broadly understood and followed.

[1] Brinson, Gary and et al. “Determinants of Portfolio Performance II: An Update” Financial Analysts Journal; May/Jun 1991.
[2] See case law Donovan v. Cunnigham, 716 F.2d 1455, 1457 (5th Circuit 1987)
[3] Source: eVestment Alliance

SCOPE OF REVIEW

In this section of the report we analyze the following:

I. Selection Process
II. Manager Monitoring Policies and Practices

I. Selection Process

Background

Historically, in the public pension fund arena, investment managers have been selected through a Request for Proposal (RFP) process. Many continue to use such a formal process; it often parallels the protocol other governmental entities use for purchasing goods and services. From a public policy perspective, this 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. In the selection of investment managers, the RFP process, in theory, opens up the opportunity for business to a large number of managers. We believe, however, that a suitably large number of managers can be considered by using an "open search", an alternative and equally fair process.

About 65% of EnnisKnupp's public fund clients have moved to an open search which can be accomplished in as quickly as six to eight weeks. Using this 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 often 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 are capable and should be considered.

Many public funds find this process 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. A few public funds do not have the ability to use the open search process because they are subject to laws or legal interpretations requiring them to comply with state or municipal procurement rules. Such requirements are often extremely cumbersome and add months to the selection process.

Findings and Analysis

Over the past three years, COPERS has completed seven manager searches which resulted in the hiring of ten investment managers. The search process is initiated when RV Kuhns, COPERS' investment consultant, determines that a manager is needed either for an existing asset class or a new asset class and the Board approves the commencement of a search. COPERS has approached manager searches using either a traditional RFP or an open search. Going forward, we understand that COPERS expects it will predominately use an open search for manager selection.

The open search eliminates the need for COPERS to post a formal RFP. Rather, the staff and the investment consultant work together to establish a short list of managers from screening manager databases and previous research. A scoring methodology is then developed and used, which further narrows the list of candidates. This process has worked well for COPERS.

The consultant prepares a report that summarizes the qualifications of the managers on the short list and reviews the information with the Board, who then chooses three to five semi-finalists. We reviewed two recent search reports that were completed by the investment consultant and presented to the Board. Each report included the following:

- Executive Summary
- Market Conditions
- Risk/Return Mix and Nature of the Investment
- Evaluation Strategy
- Candidate Summaries (including advantages and disadvantages)
- Fund Comparisons

The search reports were thorough and provided the Board pertinent information upon which to make an informed decision.

We understand that the Board and staff rely upon the consultant to perform most of the due diligence associated with the initial screening of investment managers. The consultant meets with managers, analyzes performance, strategy, and investment style as part of their routine manager research activities. COPERS has access to RV Kuhns' analysis upon request. Although COPERS staff does not subscribe to a manager universe database, we find this understandable given the way in which COPERS works with its investment consultant.

The semi-finalist firms meet with the consultant and ultimately make a presentation to the Board who selects the manager(s) it wants to hire. Having an investment committee or board involved in interviewing and selecting investment managers is a common practice. This task can successfully be delegated to the staff if a board approved, thorough, complete, and documented due diligence process is in place. While this is not a common practice, some public funds with larger investment staffs have adopted this model.[4]

COPERS' manager search process includes many of the factors that we believe should be evaluated when employing best practices in selecting new managers. Below we note whether these factors were included in the search reports we reviewed.

1. Perceived Skill (included)
2. Trading Efficiency (not applicable in the search reports reviewed)
3. Management Fees (included)
4. Consistency of Past Performance (included)
5. Product Fit (included)
6. Product Importance (included)
7. Ownership (partially included)
8. Organization (partially included)
9. Other Relevant Factors (included)

[4] For example, Los Angeles County Employees Retirement Association, Missouri State Employees' Retirement System, and Teacher Retirement System of Texas.

1. Perceived Skill (included in COPERS' search reports)

Perceived skill, which we define as the ability to identify and exploit security mispricings, is the essential ingredient of successful active management. Recognizing that skill *is* the essential ingredient, the following subfactors should be evaluated:

- Cogent investment thesis
- Information advantage
- Unusual insight
- Talent
- Sound investment process

2. Trading Efficiency (not applicable in the search reports we reviewed)

Trading efficiency consists of several aspects, most notably portfolio size and trading practices. Financial theory and evidence indicates that smaller portfolios should perform better than large ones, all else being the same, due to lower trading costs associated with market impact. Here, the size of the manager's portfolio is compared relative to the "opportunity set." The smaller the economic size of the portfolio, the greater the trading efficiency. This analysis should also explicitly consider portfolio turnover, concentration, and trading techniques.

Trading practices enter into the assessment of trading efficiency in two ways. For equity managers, if the manager trades with an affiliated broker for *any* clients this should be viewed negatively. We believe that trading with an affiliate is a clear conflict of interest. Soft-dollar trading practices and other forms of "paying up" should be examined.

3. Management Fees (included in COPERS' search reports)

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.

4. Consistency of Past Performance (included in COPERS' search reports)

It is known that an investment manager's past performance is a poor predictor of future performance. Research has shown that, with the exception of "momentum" managers in certain periods and certain groups of poor-performing managers, past performance has no reliable predictive content. To reflect the fact that performance is difficult to ignore, it should be taken into consideration.

5. Product Fit (included in COPERS' search reports)

It is important to determine how well a particular active investment product or strategy meets the needs of the investor. Within an asset category, product fit is determined primarily by three factors: congruence (scope of the investment), aggressiveness, and management style. A review of correlation and/or overlap with other investments already in the portfolio is part of this analysis.

6. Product Importance (included in COPERS' search reports)

An investment firm has finite capital and human resources. Consequently, it faces a critical resource allocation decision: to invest in an established product or to attempt to create (or acquire) and market new ones. In general, product investment, rather than product proliferation, better serves the interests of the public fund.

7. Ownership (partially included in COPERS' search reports)

Stability of the investment management firm, its professional staff in particular, is highly desirable. Common sources of organizational instability are concerns on the part of key professionals related to control of the firm and compensation. Both are clearly linked to ownership of the firm. When majority ownership lies with employees, organizational instability is lessened. Accordingly, the extent and breadth of employee ownership at the firm should be the focus of the assessment in this area.

The consultant does not focus on percentage of employee ownership in the firms, but does evaluate ownership changes.

8. Organization (partially included in COPERS' search reports)

Investment management being the sole or the dominant business of the firm, including the activities of any and all affiliates, is a positive feature. Similarly, it reflects positively if the principal emphasis in the firm's culture is on investment management rather than on product development and distribution. The reputation the firm enjoys in the institutional investment community can be considered, especially the firm's reputation for integrity in all its dealings. The quality and depth of management is important in any organization. The quality of service provided to clients (apart from any performance statistics) is a determinant of client satisfaction.

Information arising from the regulatory investigations over the past few years has increased the focus on the importance of agency issues in investment firms. In particular, it is important that investment firms are carefully assessed for the extent to which they treat client interests as their highest priority. The stability of personnel and process, agency issues/alignment of issues, management quality and depth, client service, and reputation for integrity can be evaluated in this category.

The consultant does not explicitly focus on whether the firms are solely in the business of investment management, but does evaluate the reputation and ability of personnel.

9. Other Relevant Factors (included in COPERS' search reports)

Other relevant factors can also be taken into account that may influence the assessment of the manager.

<u>Conclusion</u>

Although not documented in a written policy, we conclude that in practice COPERS' manager search and selection process is thorough and prudent. COPERS' investment consultant, RV Kuhns, has indicated that it will continue to use an open search process for new manager searches. This manager selection approach, when permissible by applicable procurement law, is more effective and efficient for a public pension fund to use and considered a best practice.

Recommendation:
None [See recommendation in section 3 regarding the development and adoption of a written investment manager search and selection policy.]

II. Manager Monitoring Policies and Practices

Background

Best practices require that the staff and investment consultants of public funds provide their boards with valuable insights and updates on the investment managers' performance and organizational stability. We advise that staff, in conjunction with the investment consultant, perform ongoing due diligence on the managers that includes a review of any changes in the factors that were used in the selection process. For example, special attention should be given to the manager's ownership, organization, key personnel, and investment philosophy.

While not all staff at public funds conduct on-site visits as part of on-going monitoring, we believe the practice is valuable because it allows them to gain critical insight from seeing a manager's operations and meeting with essential portfolio managers and support staff. Best practice is for an on-site meeting to be conducted, either by staff or the fund's investment consultant, every one to two years or when material changes have occurred.

It is also best practice for assessments of managers to be in writing and provided to the boards or investment committees periodically (either quarterly or annually). These assessments help boards identify issues that could negatively impact performance or increase risk. They state whether or not staff or the investment consultants have any concerns. Such documentation is valuable in evidencing what due diligence has been performed and demonstrating that boards are meeting their fiduciary duty of prudent oversight.

Findings and Analysis

The COPERS Investment Policy Statement (IPS) calls for individual manager performance to be reviewed quarterly; and this is adhered to in practice. The IPS also requires manager compliance with the policy to be reviewed quarterly. COPERS investment staff has reported that policy compliance is monitored on both a monthly and quarterly basis. Staff also uses reports from RV Kuhns and State Street to monitor manager compliance with guidelines and investment policy.

Per the IPS, manager reviews are to focus on adherence to policy, progress toward achievement of objectives, and performance relative to opportunities. It is a prudent practice to have monitoring requirements outlined in the IPS. Furthermore, each manager is expected to perform in the top one-third of managers with a similar style over a market cycle. While peer comparisons can be interesting, we believe the most relevant performance comparison is to the agreed upon benchmark. The quarterly performance reports measure performance versus peers and versus the manager's benchmark. We address this issue in more detail in the performance reporting section of this report.

Most of the manager monitoring in terms of performance, organizational, and personnel issues is performed by the investment consultant. We believe this is an appropriate division of responsibilities between the staff and the consultant. From our review of materials, it appears that staff and the investment consultant have carried out their manager monitoring duties in adherence with the IPS.

After a manager is hired to invest a portion of COPERS' assets, the investment consultant periodically performs on-site due diligence visits. The investment consultant reported to us that they meet with all of the managers either in their offices or on-site at the managers' offices annually. Also, through COPERS' "round table" all the investment managers meet with staff and the Board at least once a year. We believe this to be a sound and valuable practice.

When staff and the investment consultant have identified concerns with respect to an asset class or manager, they prepare a written analysis of the issues. The most recent analysis was completed in November 2008. We reviewed the memorandum and found it to be complete, concise, and informative.

COPERS does not utilize a "watch list," which is a way for some funds to formally monitor investment managers and document issues of concern. The use of a watch list is a fairly common practice among many public funds; however, we do not believe the watch list is a necessary tool for funds that have an efficient, disciplined monitoring process in place (as does COPERS). In fact, there are a number of drawbacks to maintaining a formal watch list because it is difficult to establish one that incorporates all types of concerns. Further, having a watch list could create unnecessary pressure on trustees and staff to terminate a manager or encourage managers to take more risk to "fix" performance. If a COPERS manager has experienced performance challenges or potentially adverse organizational developments, the manager is asked to come before the Board and make a presentation addressing the issues(s).

Conclusion

We conclude that COPERS' manager monitoring process is thorough and prudent. The monitoring process is in compliance with best practices, but should be documented in a monitoring policy.

Recommendation:

1. Develop and adopt a monitoring policy that specifies the Board's philosophy for monitoring managers, the factors covered in the periodic review, and who is responsible for monitoring what topics or processes (i.e., the current division of labor between the staff and the investment consultant).

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INTRODUCTION

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 pension funds 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 investment managers.

Written performance reports protect fiduciaries by documenting that ongoing monitoring has taken place. The best reports are detailed enough to convey whether the investment managers are abiding by the mandates given to them (usually contained in their contracts) and meeting or exceeding their assigned benchmarks. Benchmarks are the measurements against which each manager, asset class, and the total portfolio are measured in order to determine the success of an investment program. Benchmarks must be carefully set. If they are unrealistic by being too high or too low, the fiduciaries who govern the fund will not be able to ascertain whether the implementation of the investment policy has been effective.

It is a best practice for investment performance to be calculated by an independent party and reported quarterly and for reports to be presented verbally at meetings where questions can be asked and answered.

In this part of the review, we evaluate the content and frequency of the performance reports, the independence of the preparer of the report, the use of the reports by the Board and staff, and the adequacy of the benchmarks.

SCOPE OF REVIEW

In this section of the report we analyze the following:

I. Performance Reporting Practices
II. Adequacy of Benchmarks

I. Performance Reporting Practices

Background

Having a sound system in place to calculate the rates of return for the portfolio benefits both the boards and the staff of public funds. It also gives reassurance to external parties that are interested in the success of the investment program. With today's high level of scrutiny of public retirement systems, it is very important to establish and adhere to best practices regarding performance reporting.

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 make overall assessments of 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.

Findings and Analysis

We reviewed COPERS' quarterly performance reports for quarters ending June 30, 2008; September 30, 2008; and December 31, 2008. All three reports were produced by R.V. Kuhns & Associates (Kuhns or the consultant). Kuhns is a well respected investment consulting firm with a long history of providing similar services to public pension funds. It is an independent firm that does not provide any services to the investment managers and, therefore, has no conflicts of interest in calculating and reporting COPERS' performance.

Kuhns calculates returns independently from staff using data supplied directly to them by the custodian bank, State Street. This is a typical process used by investment consultants. The consultant calculates COPERS' performance for each manager, asset class, and the total fund.

The consultant receives hardcopy statements from State Street, as well as an electronic feed of State Street's data from a third party vendor. The consultant then verifies the accuracy of the electronic feed with the hardcopy statements. This type of double-check is a prudent practice.

Kuhns uses a time-weighted (modified Dietz) method to calculate returns. The time-weighted rate measures the investment performance of a pool of assets, removing the impact of cash flows, and is an appropriate measure of investment performance.

Consistent with common practice, the consultant reconciles calculated rates of return with those reported by the investment managers. Investment managers electronically provide the consultant with return and portfolio data (market values and cash flows). This allows the consultant easy access to information for reconciliation purposes.

When the consultant's calculated returns differ by more than the allowable amount (5 basis points per month or 10 basis points per quarter) the consultant compares the beginning and monthly asset values and cash flows provided by the custodian with those reported by the investment managers. It is not uncommon that month-to-month, or even quarter-to-quarter, returns calculated by the consultant and those reported by individual managers diverge. This can be a result of different pricing sources or settlement dates for transactions. Kuhns reported to us that typically any differences cancel out over time. Three- and five-year returns are also monitored to verify that differences have indeed canceled out. If discrepancies persist, the consultant takes further reconciliation steps with the investment managers and State Street. This is a reasonable process and one followed by many investment consultants.

The performance reports are typically mailed to the COPERS' Board and staff a week prior to the meetings at which they are discussed. Providing meeting materials at least five business days in advance of meetings is a best practice. At the meetings the consultants spend approximately 30 minutes presenting and explaining the reports and COPERS Trustees and staff have an opportunity to discuss issues as a group and ask any questions they might have for the benefit of themselves or others. When there are questions or concerns, or significant market events, more time is spent on investment results. For the time period we reviewed (meeting minutes from August 2005 to April 2008) nearly all Trustees were present at the meetings when investment performance was discussed.

The entire COPERS Board reviews performance reports quarterly, which is a common practice and generally the best practice in the public retirement industry. More frequent reporting is uncommon and usually unnecessary. It increases expense and takes time away from other issues. Unless there are concerns about investment managers or major shifts in the financial markets have occurred, quarterly reporting is acceptable for the Board. As is the case with most well-run public pension funds, the staff and the investment consultant monitor performance on a monthly basis. Over the last year when the financial markets were in distress, staff and the Board leadership have benefited from the monthly reports that Kuhns provides.

The contents of the quarterly reports prepared by Kuhns compare well to what we consider to be best practices. A summary of our findings in the chart on the following page lists items which we believe provide valuable information and are useful to include in performance reports. A check symbol (✓) indicates items that are typically found in the reports of other investment consultants and included in the 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 Kuhns reports. Where the item is not marked, that item is not included in the Kuhns performance report.

No.	Best Practice Elements included in Performance Reports	Included in RV Kuhns Performance Reports
1	Capital Markets Review	✓
	— Return detail of markets	★
	— Hedge Fund market review	★
	— Historical asset class summary	★
2	Asset allocation summary	✓
	— Asset class over/underweight vs. policy	✓
	— Change in asset allocation over the period	✓
	— Asset allocation vs. peers	✓
	— Asset allocation by manager (% and dollars)	✓
3	Return summary versus benchmark(s)	✓
	— Total fund level performance	✓
	— Asset class level performance	
	— Manager level performance	✓
	— Performance shown net of fee	
	— Trailing period returns (including since inception)	✓
	— Annual period returns	
	— Performance versus peers	✓
4	Total fund and asset class attribution analysis	
5	Ratio of cumulative wealth graphs	
6	Annualized risk/return exhibits for the total fund	
7	Annualized risk/return exhibits for each manager	✓
8	Manager sector allocation (versus benchmark)	✓
9	Manager sector performance (versus benchmark)	★
10	Manager characteristics (versus benchmark)	✓
11	Manager peer group scattergram	★
12	Manager up/down markets chart	★
13	Manager country/region allocations (versus benchmark)	✓
14	Manager investment philosophy/strategy	
15	Manager performance commentary	
16	Attestation of manager guideline compliance[1]	
17	Appendix/Glossary	✓
	— Summary of Investment Policy and Objectives	
	— Definitions and benchmark descriptions	✓

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

The performance reports provided to COPERS contain useful information and many of the elements we consider best practices. The consultant's reports have a number of valuable features that enable the Board and staff to have a good understanding of the COPERS fund. During our interviews, the COPERS Board and staff stated that they found the reports to be comprehensive and clear.

One shortcoming we note is that the quarterly performance reports only show returns gross 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 and a best practice. Kuhns does calculate net-of-fee returns, which are provided to Board leadership and staff on a monthly basis, however, the entire Board does not necessarily see these calculations.

There are a few other elements listed in the chart that the Kuhns reports do not include (asset class results, attribution, calendar year returns, etc.). COPERS staff and RV Kuhns have indicated that all of these items are available, but for space considerations and readability of the report they are not all included. The Board may want to discuss the value of adding such items to the report. The one item that we feel most strongly about is annualized risk/return exhibits for the total fund. While the performance reports do include risk-return exhibits for each manager, the reports do not show risk-adjusted returns for the total fund. It is prudent that risk-return characteristics for each manager are reviewed, especially in light of the COPERS Investment Policy Statement, which states that "particular attention will be directed to reviewing performance relative to the risk." Including exhibits that compare the risk and return characteristics of the total fund and managers versus the market benchmarks is a best practice and will help the Board adhere to its Investment Policy Statement.

<u>Conclusion</u>

We conclude that COPERS is receiving the investment performance reports it needs to comply with the fiduciary duty to monitor the performance of investment managers. The reports are timely, comprehensive, and useful. Including net-of-fee results and risk/return exhibits for the total fund would further improve the performance reports.

The investment consultant makes quarterly presentations about performance, and provides monthly return reports which the Board leadership and staff find meaningful.

Consideration:

1. Consider reviewing the chart on page 5.4 to evaluate whether the Board would like any additional elements added to the performance reports.

Recommendations:

1. Include net-of-fee returns in the quarterly performance reports or provide the net-of-fee monthly reports to the entire Board.
2. Include risk/return exhibits for the total fund in the performance report.

II. Adequacy of Benchmarks

Background

Boards set benchmarks and measure actual portfolio performance against them to measure the success of implementing 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 under a particular manager's mandate. When measuring actual performance against benchmarks, the staffs at large public pension funds track performance monthly and generally report results to the boards of trustees quarterly.

The risk of a portfolio compared to its benchmark is also important. A manager or the total fund may be outperforming its benchmark, but at a much greater level of risk. Reviewing performance on a risk-adjusted basis helps boards monitor whether the returns are commensurate with the risk taken.

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 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 the manager's strategy.

Findings and Analysis

The Investment Policy Statement indicates that the COPERS total fund performance will be compared to other pension funds of similar size and is expected to be in the top half of similar plans. COPERS' Investment Policy Statement further indicates that individual managers will be measured relative to opportunities and against peer universes. It is expected that managers will perform in the top one-third of the appropriate peer universe.

The investment consultant includes peer comparisons in the performance report which allows the staff and Board to monitor performance against the measures stated in the Investment Policy Statement. Kuhns' peer universes are well regarded in the industry because they are extensive and carefully prepared. We do not believe that peer results should be the primary measure of a fund or manager's success; rather, benchmarks based on market returns are the most appropriate primary benchmark.

COPERS' market benchmarks are set based on recommendations from the staff and investment consultant and approved by the Board. It is a best practice for a consultant to opine on the benchmarks, independent from the staff, and for the benchmarks to be approved by the Board.

The COPERS total fund has two benchmarks, a Target Custom Benchmark and an Actual Allocation Custom Benchmark. The Target Benchmark is based upon the policy allocations set by the Board, while the Actual Allocation Benchmark is based on beginning-month weights. Both benchmarks are constructed using a weighted average approach, combining the underlying asset class benchmarks at the given weight in the portfolio (either target weight or actual weight).

Having a target custom benchmark is a best practice. COPERS' target benchmark measures the impact individual managers have on total fund performance, and takes into account the impact deviations from policy targets have on performance. The allocation benchmark provides COPERS interesting information that focuses on how the performance of the managers has impacted total fund results. The allocation benchmark removes the effect of policy deviations from relative performance.

COPERS does not review performance at the asset class level (although the investment consultant does calculate asset class composites) and thus does not have asset class benchmarks. The table below shows the benchmark assigned to each manager and our assessment of whether they are appropriate.

Manager	Mandate	Benchmark	Assessment
Dimensional Fund Advisors	Large Cap Value U.S. Equity	Russell 1000 Value Index	Appropriate
Northern Trust	Large Cap Core U.S. Equity	S&P 500 Index	Appropriate
Cadence Capital	Large Cap Growth U.S. Equity	Russell 1000 Growth Index	Appropriate
The Boston Company	Mid Cap U.S. Equity	Russell Mid Cap Index	Appropriate
Cramer Rosenthal McGlynn	Small Cap Value U.S. Equity	Russell 2000 Value Index	Appropriate
Eagle Asset Management	Small Cap Growth U.S. Equity	Russell 2000 Growth Index	Appropriate
Grantham, Mayo Van Otterloo	Developed Markets International Equity	MSCI EAFE Index	Appropriate
Fidelity (Pyramis) Mgt	Developed Markets International Equity	MSCI EAFE Index	Appropriate
AXA Rosenberg	Small Cap International Equity	S&P/Citi World Extended Market Ex U.S. Index	Appropriate

Manager	Mandate	Benchmark	Assessment
Wells Capital	Core Fixed Income	Barclays Capital Aggregate Bond Index	Appropriate
Western Asset	Core Plus Fixed Income (excluding high yield)	Barclays Capital Aggregate Bond Index	Appropriate
Research Affiliates	Real Return	CPI + 4%	Appropriate
Morgan Stanley	Core Real Estate	ODCE Index	Appropriate
JP Morgan	Core Real Estate	ODEC Index	Appropriate

Conclusion

We conclude that the market benchmarks established by the Board for the total fund and the individual managers are appropriate. These market benchmarks are the best primary measurements for the Board to use in evaluating whether the total fund and individual managers are meeting their return objectives. Risk adjusted performance compared to benchmarks is also an important metric to consider.

The performance reports given to the Board appear to place equal emphasis on universe comparisons as on performance vis-à-vis market benchmarks. We acknowledge that comparisons to peer universes are a common practice and that the universe data prepared by Kuhns is robust. In our experience, however, we believe that any universe comparisons should be considered a “secondary” tool for measuring performance.

If the Board decides to monitor performance at the asset class level, as we mentioned in an earlier section of the report, then the Board would need to establish appropriate benchmarks. The best asset class benchmarks represent the full opportunity set of the underlying managers.

Recommendation:
None

City of Phoenix Employees' Retirement System
Comprehensive Review
Listing of All Recommendations with Priorities

Below is a complete list of the recommendations that are included in the review. Considerations have not been included in this list since they do not rise to the same importance as the recommendations. For ease of reference, the section in which the recommendation is located is provided along with the page number. We have also listed the initial step required to address the recommendation, if the Board chooses to do so.

For the Board's consideration, we have identified those recommendations which we believe are the highest priority based on our analysis; however, the Board has the ultimate authority to prioritize, accept, modify, and reject any and all recommendations based on COPERS' needs and resources. The six recommendations that we believe are of the highest priority are marked with an asterisk (*).

Reference Section	Recommendations	Requirement
*1.II.B	Seek a Charter amendment, at such time as the Board deems is in the best interest of the System, to remove the investment restrictions and replace them with contemporary fiduciary standards. (see page 1.12)	City Charter Change
*1.II.B	Seek a Charter amendment or a memorandum of understanding, at such time as the Board deems is in the best interest of the System, to grant the Board the authority to hire internal legal counsel and retain outside counsel. (see page 1.14)	City Charter Change or Issuance of Memorandum of Understanding (MOU)
1.III	Adopt a statement of governance that clearly identifies the authority retained by the Board and the authority it has delegated and to whom. (see page 1.17)	Board Policy Enhancement
1.IV	Discuss the topic of fiduciary liability protection with the City Attorney at a Board meeting so that all members will be well-informed on the issues of sovereign immunity, indemnification, self-insurance, and legal representation by the Law Department. (see page 1.19)	Board Discussion
2.I.B	Formally determine and document whether the Chair is entitled to vote as an ex-officio member of all committees. (see page 2.5)	Board Policy Enhancement
2.I.B	Document the duties that are expected of the Board Chair in setting meeting agendas and performing the other related functions. (see page 2.5)	Board Policy Enhancement
2.I.E	Hold annual fiduciary trainings for the Board that highlight important issues involving breaches of fiduciary duties. (see page 2.18)	Annual Board Training

Reference Section	Recommendations	Requirement
2.I.F	Document the Retirement Administrator evaluation process and criteria. (see page 2.20)	Documentation via a Board Policy
2.I.F	Modify the Retirement Administrator evaluation process so that Trustees reach consensus as a board about performance and provide evaluation results to the Retirement Administrator directly. (see page 2.20)	Modification of Existing Practices
2.II.B	Evaluate the Investment Manager's functions in light of the future direction of COPERS' investments. (see page 2.36)	Evaluation of Current Practices
*2.III.C	Further develop and document COPERS' control environment, particularly in the investment area, based upon the results of an enterprise risk assessment. (see page 2.40)	Documentation and Analysis
2.III.C	Involve the Board in decisions about more frequent, in-depth assessments of COPERS' system of internal controls and risk management. (see page 2.40)	Modification of Existing Practices
3.II.A	Work with the investment consultant to further enhance and modernize the current IPS. (see page 3.10)	IPS Enhancement
3.II.A	Require a quarterly statement from each manager attesting to policy and guideline compliance for the applicable period. (see page 3.10)	Policy and Practice Modification
3.II.A	Adopt or document a securities lending policy, securities litigation and claims management process, and a brokerage policy. (see page 3.10)	Board Policy Development
3.II.B	Review frequency and format of proxy reports provided to the Board. (see page 3.13)	Discussion between Board and Staff
3.II.B	Document that the proxy policy applies to global proxy voting. (see page 3.13)	Board Discussion and Possible Policy Change
*3.III.A	Complete an asset liability study to confirm the current asset allocation is best and consistent with the fund's liabilities and liquidity needs. (see page 3.26)	Asset Liability Study
3.III.A	Have staff and the investment consultant evaluate and report to the Board on the merits of investing in private equity. (see page 3.27)	Analysis and Discussion

Reference Section	Recommendations	Requirement
3.III.B	Document the process by which new opportunities will be evaluated for inclusion in the portfolio. (see page 3.33)	Documentation via Board Policy
3.III.B	Periodically review strategic allocations (underweight to non-U.S. equity, overweight to small/mid cap, and minimal use of index funds) to ensure they remain appropriate for the fund. (see page 3.33)	Analysis and Discussion
*3.III.B	Work with the investment consultant to evaluate the merits of additional diversification in the fixed income asset class. (see page 3.33)	Analysis and Discussion
3.III.D	Periodically revisit the commission recapture program and analyze the costs and time associated with monitoring the program. (see page 3.38)	Analysis and Discussion
*3.III.E	Conduct a review of the securities lending program to determine how a more conservatively managed collateral reinvestment portfolio will affect the amount of securities on loan and the revenue that can be earned for COPERS going forward. (see page 3.41)	Evaluation of Current Practice
3.III.E	Periodically review with the Board the risks inherent in a securities lending program and, as the market environment continues to change, decide if the risks and rewards support a continuation of the securities lending program. (see page 3.41)	Analysis and Discussion
3.IV	Continue to negotiate lower fees with the managers that have fees above the peer median. (see page 3.45)	Discussions with Managers
4.II	Develop and adopt a monitoring policy that specifies the Board's philosophy for monitoring managers, the factors covered in the periodic review, and who is responsible for monitoring what topics or processes (i.e., the current division of labor between the staff and the investment consultant). (see page 4.9)	Board Policy Development
5.I	Include net-of-fee returns in the quarterly performance reports or provide the net-of-fee monthly reports to the entire Board. (see page 5.5)	Documentation
5.I	Include risk/return exhibits for the total fund in the performance report. (see page 5.5)	Documentation

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City of Phoenix Employees' Retirement System
Comprehensive Review
Listing of All Considerations

Below is a complete list of the considerations that are included in the review. For ease of reference, the section in which the consideration is located is provided along with the page number.

Reference Section	Considerations
1.I	Consider a Charter change to add one or two private citizen investment experts on the Board, or, alternatively, create an investment advisory committee made up of investment experts through a Board policy change. (see page 1.7)
1.II.A	Consider establishing in a policy that the Board is bound by fiduciary standards and specifically state that the Board has authority to delegate. (see page 1.9)
1.II.A	Consider amending appropriate enabling legislation to include personal liability for breaches of fiduciary duties and co-fiduciary responsibility. (see page 1.9)
1.II.B	Consider having the investment consultant create a hypothetical "optimal" portfolio to compare an unrestricted asset allocation to the current asset allocation in an effort to estimate the impact the restrictions have had on the portfolio. (see page 1.12)
1.II.C	Consider obtaining a written opinion from the City Attorney stating that Section 2-51 does not give the Council the authority to remove COPERS Trustees. (see page 1.15)
1.III	Consider using a decision and management responsibility matrix or similar tool that sets forth the responsibilities among the COPERS Board, the Retirement Administrator, the Investment Manager, the investment consultant, the custodian, and any other key service providers to COPERS. (see page 1.17)
2.I.A	Consider enhancing Policy No. 3 by more accurately describing the full scope of the Board's responsibilities and by creating a position description for Trustees. (see page 2.4)
2.I.C	Consider lifting excerpts related to committees' functions from Policy No. 3 and expanding details to create comprehensive charters for each committee. (see page 2.11)
2.I.C	Consider establishing an Audit Committee of the Board to handle the types of matters recommended by APPFA and the AICPA. (see page 2.11)
2.I.D	Consider documenting details of governance practices relating to meetings, materials, and protocols that are working well so that these practices become institutionalized within COPERS. (see page 2.14)

Reference Section	Considerations
2.I.D	Consider evaluating the delivery method for Board meeting material and other information provided to the Trustees. (see page 2.14)
2.I.D	Consider maintaining a compilation, separate from the minutes, of all motions and resolutions approved by the Board to assist the Board in its oversight function. (see page 2.14)
2.1.E	Consider apprising the Board of direct and indirect sponsors of conferences that Trustees might attend. (see page 2.18)
2.1.G	Consider creating an ethics policy to supplement the City's rules that specifically addresses common ethical issues that public retirement boards face. (see page 2.21)
2.I.H	Consider creating a supplemental travel and expense policy that incorporates the City's requirements and addresses specific issues unique to the Board. (see page 2.23)
2.II.A	Consider discussing and adopting additional governance policies to guide the System over the long term. (see page 2.27)
2.II.B	Consider making policies and other related documents available on the website. (see page 2.29)
2.II.B	Consider creating a Board Governance Manual, which only includes policies and laws relevant to the Board. (see page 2.29)
2.II.C	Consider documenting policy compliance mechanisms and assign responsibility to specific committees, board officers, staff, and outside service providers, as appropriate. (see page 2.30)
2.III.A	Consider revising the Retirement Administrator position description to make actual responsibilities more explicit. (see page 2.32)
2.III.C	Consider reviewing and documenting the roles among the City Auditor, COPERS Board, and staff with regard to COPERS' framework of internal controls and risk management functions. (see page 2.39)
2.III.C	Consider periodically reviewing the resources committed to COPERS' internal audit functions to determine if it would be beneficial to have an internal auditor on-staff at COPERS. (see page 2.40)

Reference Section	Considerations
3.II.A	Consider changing the review period for the IPS from periodic to annual. (see page 3.10)
3.II.B	Consider acknowledging in the proxy policy that the Board has considered the cost effectiveness of the approach utilized. (see page 3.13)
3.III.B	Consider using a risk budgeting tool to monitor active risk. (see page 3.33)
3.IV	Consider re-evaluating if a higher allocation to index funds is appropriate for the fund given their low cost structure. (see page 3.45)
5.I	Consider reviewing the chart on page 5.4 to evaluate whether the Board would like any additional elements added to the performance reports. (see page 5.5)

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INTERVIEWS

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

Board Members

- Elizabeth Bissa, Chairperson, Retirement Board
- Linda Reidenbach, Vice Chairperson, Retirement Board
- Barbara Lang, Trustee
- Bob Wingenroth, Trustee
- Cathleen Gleason, Trustee
- David Hensley, Trustee
- Janet Smith, Trustee
- Kerry Wangberg, Trustee
- Rick Naimark, Trustee
- Frank Barriga, Former Trustee
- Jim Flanagan, Former Trustee

Staff

- Donna Buelow, Retirement Program Administrator
- Greg Fitchet, Investment Manager
- Anna Martinez, Management Assistant II
- Jackie Temple, Accountant IV

City Departments

- Randy Spenla, City Auditor
- Barbara Coppage, Deputy City Auditor
- Mary Chang, City Law Department
- Sonia Blain, City Law Department

Service Providers

- Yolanda Diaz, State Street Bank and Trust Company
- David Beach, State Street Bank and Trust Company
- Ryan Harvey, R.V. Kuhns & Associates
- Eric Tanaka, R.V. Kuhns & Associates
- Nick Woodward, R.V. Kuhns & Associates

DOCUMENTS REVIEWED

For the review, EnnisKnupp reviewed the following documents:

- Select laws and statutes:
  - Chapter XXIV of the City Charter
  - Phoenix City Code
- Comprehensive Annual Financial Reports (CAFR)
  - City CAFR (2007)
  - COPERS CAFR (2007 and 2008)
- Board policies and related documents
  - Policy #181 regarding Board training
  - Policy #3 including: election of officers, duties of officers, committees, agendas, meetings, and minutes
  - Section 2.52 City of Phoenix Ethics policy
  - Conflicts of interest policy from the City of Phoenix Ethics Handbook
  - Policy #157 regarding proxy voting
  - Policy #154 regarding investment and asset allocation
  - City audit policy in Chapter VII of the Phoenix City Charter
  - A.R. 3.41 Revised Board travel policy
  - Ordinance No. S-35230 regarding compensation policy
  - Policy #183 regarding auto reimbursement
- Board orientation packet
- KPMG peer group used to initiate a budget change policy
- Board meeting agendas and minutes (2005-2008)
- Investment Committee meeting agendas and minutes (2005-2008)
- City Auditor Department reports on COPERS (FY 2004-2005, FY 2005-2006, FY 2006-2007, FY 2007-2008)
- Various Risk Metrics for COPERS
- External auditor scope of responsibility
  - Actuarial audit RFP (2008)
  - Clifton Gunderson Risk Identification and Significant Controls (RISC) Part II
    i. Responses (FY 2008)
    ii. Contributions received and receivable
    iii. Financial close and reporting EBP
    iv. Investments, insurance, and investment contracts

v. Participant data

- Actuarial audit report
  - Milliman actuarial audit final report (2008)
  - Milliman actuarial audit presentation (2008)
- Internal audit documents
  - City of Phoenix Audit Department five year audit plan for COPERS (FY 2007-2012)
  - Completed audit plan for past 2 years (FY 2007-2012)
  - Association of Public Pension Fund Auditors (APPFA) survey of audits for other retirement funds (2005-2006)
- COPERS organization chart for Administrative staff
- Position descriptions
  - Retirement program administrator
  - Investment manager
- Performance Achievement Program for the Retirement Program Administrator (2008-2009)
- RV Kuhns asset allocation studies (July 2005, January 2006, June 2006, May 2008)
- Actuarial valuations and experience studies
  - Experience study (1999-2004) completed by Rodwan Consulting
  - Annual actuarial valuation (2007) completed by Rodwan Consulting
- RV Kuhns contract (2008)
- Initial work plan for RV Kuhns from Donna Buelow
- Reports related to asset allocation, benchmarks, and management structure from RV Kuhns
  - Target allocation vs. Asset allocation (2007 and 2008)
  - Real estate benchmarking memo (2008)
  - International equity benchmarking memo (2008)
  - Peer group recommendations (2006)
  - Research Affiliates TIPS benchmark (2008)
  - Cost of under diversification (2006)
  - Small/mid cap restructure and benchmark (2007)
  - Fixed income portfolio structure review (2008)
- Reports evaluating new asset classes or investment strategies for the portfolio
  - Long-short education strategies (2008)
  - Real Estate education presentation (2008)
- Performance reports and asset allocation from RV Kuhns
  - Investment performance analysis (2Q 2007, 3Q 2007, 4Q 2007, 1Q 2008, 2Q 2008, 3Q 2008)

  - Target asset allocation summary (January 2008 – August 2008)
- COPERS asset allocation reports
  - Target asset allocation post Q1 rebalance (May 2008)
- Explanation of selection and evaluation criteria of investment managers from RV Kuhns
  - Long/short equity fund of funds manager search (2008)
  - Value added real estate manager search (2008)
  - Opportunistic real estate manager search (2008)
- Custodian contract
  - Contract with State Street (2006)
  - Contract amendment with State Street (2007)
  - Select invoices (2006, 2007, 2008)
- RV Kuhns evaluation of State Street (2006)
- Securities lending agreement with State Street (2002 and 2007)
- Securities lending reports to the Board
  - COPERS securities lending annual report from RV Kuhns (2008)
  - Update to 2007 annual COPERS securities lending review from RV Kuhns (2008)
  - Securities lending earnings from State Street (2007 and 2008)
  - Securities lending report from State Street (2008)
- Meeting Packets
  - Board meeting packets (November 2008 – January 2009)
  - Investment Committee meeting packets (November 2008 – February 2009)
  - Legal Review meeting packets (June 2007 – May 2008)
  - CAPP Committee meeting packets (June 2007 – December 2008)
- Commission recapture statement from State Street (February 2009)
- Trade execution report from State Street (4Q 2008)
- Schedule of investment expenses (FY 2008)
- Actuary contract with Rodwan Consulting Company (2007)
- Contracts with all investment managers
  - AXA Rosenburg (2007)
  - Boston Co. (2008)
  - Cadence (2009)
  - Eagle Asset (2009)
  - GMO (2005)
  - GMO amendment (2008)
  - JP Morgan (2006)
  - Morgan Stanley (2006)

- Northern Trust (2007)
- Pacific Alt Asset (2008)
- Pyramis (2006)
- Pyramis renewal agreement (2008)
- Research Affiliates (2007)
- Research Affiliates amendment (2008)
- Western Asset (2008)
- Wrightwood (2008)
- Cramer, Rosenthal, McGlynn (2007)
- Dimensional Fund (2007)

▪ Investment manager fee schedules

▪ Quarterly performance history (1998-2008)

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