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March 9, 2009

Honorable Members of the Los Angeles City Council
Water and Power Employees Retirement Plan Board of Administration
Board of Water and Power Commissioners

As required under City Charter Section 1112, the Los Angeles City Controller, the Office of the Mayor, and the Los Angeles City Council jointly cause, once every five years, a management audit to be conducted of the pension and retirement systems by an independent qualified management auditing firm. The audit examines whether the pension or retirement system is operating in the most efficient and economical manner and evaluates the asset allocation of the system.

The attached "Final Report on the Management Audit of the Water and Power Employees' Retirement Plan" (WPERP, or Retirement Plan), examines whether the Retirement Plan has been managed in an effective, efficient and economical manner. The audit included an evaluation of the Retirement Plan's governance, organizational structure and resources, benefit administration functions, processes to minimize City contributions (through its investment program) and administrative processes and costs. This report represents the third and final audit of the City's three pension and retirement systems for the five-year cycle. Audit reports on the Los Angeles City Employees' Retirement System (LACERS) and the Fire and Police Pension System (FPPS) were issued on November 21, 2007.

Due to the leadership and efforts of the Retirement Plan's Board and staff, the audit found that the Plan was generally operating efficiently and within common and best industry practices; providing reasonable investment returns overall; utilizing acceptable actuarial assumptions and methods; and already funding a portion of its Other Post-Employment Benefits (which puts it ahead of most similar public plan sponsors). As noted by the report recommendations, the Retirement Plan has room for enhancements and improvements in several areas.

One distinct difference noted with the Retirement Plan compared to the City's other retirement systems, is the governance structure of the Retirement Plan and its relation to the Department of Water and Power. LACERS and FPPS are entities independent of any City department and their respective Boards are independent governing bodies. In contrast, the Water and Power Employees' Retirement Plan divides responsibility among three separate entities: the Department of Water and Power as the employer of the Retirement Plan personnel; the Water

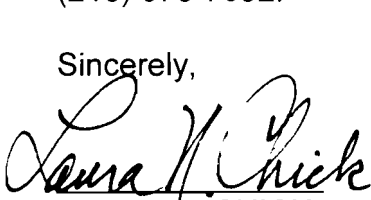
Honorable Members of the Los Angeles City Council
Water and Power Employees' Retirement Plan Board of Administration
Board of Water and Power Commissioners
March 9, 2009
Page 2

and Power Board of Commissioners; and the Board of Administration as the Retirement Plan fiduciaries. The Retirement Plan is essentially a "division" within the Department of Water and Power and, as such, the Retirement Plan cannot be managed in a way that is completely devoid of City and Department of Water and Power influence and control. This makes adherence to best practice standards challenging. A formal governance statement clearly defining the roles and responsibilities of the Department of Water and Power, the Water and Power Board of Commissioners and the Board of Administration would help clarify and support governance of WPERP.

As previously noted in the audits completed on LACERS and FPPS, the City has an opportunity to substantially improve operational efficiencies and economies of scale through consolidation of the three separate retirement systems. Based on this audit of the third retirement system, consolidation of the investment programs of all three retirement systems could save the City in excess of \$500 million over a period of 30 years (typical time horizon of a public pension fund). Consolidation would not reduce benefits and the various member/employee groups that currently have Board representation could still be represented on any consolidated governing Board. It is recommended that the City consider, through appropriate legislative processes, consolidation of all three City retirement systems. Even greater economies could be achieved through consolidation of the benefits administration programs of the three plans.

Independent Fiduciary Services, Inc. conducted the management audit on behalf of the City. If you have any questions about the report, please contact Farid Saffar, Director of Auditing, at (213) 978-7392.

Sincerely,



LAURA N. CHICK
Controller



ANTONIO R. VILLARAIGOSA
Mayor



ERIC GARCETTI
City Council President
13th Council District

Attachment

cc: Honorable Rockard J. Delgadillo, City Attorney
Robin Kramer, Chief of Staff, Office of the Mayor
Ben Ceja, Director, Office of the Mayor
H. David Nahai, Chief Executive Officer and General Manager
Sangeeta Bhatia, Retirement Plan Manager
Raymond P. Ciranna, Interim City Administrative Officer
Karen E. Kalfayan, Interim City Clerk
Gerry F. Miller, Chief Legislative Analyst
Independent City Auditors



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February 6, 2009

The Honorable Antonio Villaraigosa
The Honorable Laura N. Chick
The Honorable Members of the City Council
c/o The City Controller
City of Los Angeles
200 N. Main Street, Suite 460
Los Angeles, CA 90012

Re: Management Audit of the Los Angeles Water and Power
Employees' Retirement Plan

Dear Joint Administrators:

Enclosed with this letter please find Independent Fiduciary Services (IFS) Final Report on the Management Audit of the Los Angeles Water and Power Employees' Retirement Plan (WPERP). In accordance with your request, we are providing three bound copies. We have also provided by e-mail a .pdf file of the Report for ease of printing and distribution.

IFS greatly appreciates the opportunity to be of service to the City of Los Angeles and we hope that this Report will be a useful tool and provide significant benefit to WPERP and to the City.

Very truly yours,

Steven M. Harding
Senior Vice President and Managing Director

Independent Fiduciary Services®

Final Report

On the Management Audit of the

**Department of Water and Power
Employees' Retirement Plans
(WPERP)**

February 6, 2009

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Independent Fiduciary Services®

Final Report

On the Management Audit of the

Department of Water and Power Employees' Retirement Plans (WPERP)

Introduction

This Final Report is presented in four sections: Section I - *Executive Summary*; Section II - *Background, Review Methodology, and Limitations on the Report*; Section III - *Detailed Discussion and Analysis*; and Section IV - *Exhibits*.

Section I, *Executive Summary*, offers a high level overview of the major themes in the report. The *Executive Summary* should be used in the context of the full Report.

Section II, *Background, Review Methodology and Limitations on the Report*, describes IFS and the methodology we followed in performing this assignment. It then explains the overall format of the Report, and concludes with caveats and observations about the substantive sections of the Report.

Section III, *Discussion and Analysis*, constitutes the body of the Report. This section is divided into Task Areas 1 through 5 based on the scope of work. The *Discussion and Analysis* sets forth the topic, guiding principles, risks (that are typical for the topic but not necessarily

risks applicable to WPERP), detailed observed conditions, and recommendations of IFS based on our audit.

Since the scope of work contains task areas that sometimes overlap (for example, the Governance task area affects other task areas), some sections have been combined for ease of reading.

Section IV, *Exhibits*, contains supporting material, tables and charts that are referenced within the body of the report. A summary of report recommendations is included as Exhibit A.

Section I.

Executive Summary

In accordance with the City Charter, the City of Los Angeles ("the City") is required to perform a periodic management audit of each of the pension and retirement systems by an independent qualified management auditing firm. In that regard, the Management Audit Joint Administrators ("the Administrators"), on behalf of the Mayor, the City Council and the City Controller, hired Independent Fiduciary Services, Inc. ("IFS") to perform an independent, thorough and impartial review – a management audit – of the Los Angeles Department of Water and Power (the "Department") Water & Power Employees' Retirement Plans ("WPERP").

The high-level objectives of the management audit, as set forth in the City Charter, are to (1) examine whether the pension or retirement systems are operating in the most efficient and economical manner and (2) evaluate the asset allocation of the systems.

This *Executive Summary* is provided to summarize some of the more notable sections of our report. It is not intended to take the place of the full report.

Governance Structure

The current governance structure of the Water and Power Employees Retirement Plan divides responsibility among three separate entities: the Department of Water and Power; the Water and Power Board of Commissioners; and the Board of Administration. The Board of Administration has not adopted a Governance Statement (or comparable document) that clearly defines the roles and responsibilities of each of the above parties with respect to the retirement Plan. This is a key area of board governance that should be clarified and documented. Please see Sections 1a and 2a5 of our Report.

The Board of Administration operates under a very complicated governance structure due primarily to its status as a “division” within the Department of Water and Power, making adherence by the retirement system to “best practice” standards challenging. Under this construct, the retirement system cannot be managed in a way that is wholly devoid of City and Department of Water and Power influence and control.

Fiduciary Standard of Care

Although public pension funds are not subject to the federal Employee Retirement Income Security Act of 1974 (“ERISA”) the ERISA prudence standard serves as a best practice model. The Board’s adherence to the more rigorous ERISA “prudent expert” standard of care is consistent with best practices. Please see our discussion on pages 6-9 of this Report.

Budgetary Authority

Incorporating the retirement Plan’s budget into the Department of Water and Power’s budget for final approval may be consistent with the statutory framework under which the retirement Plan operates if we accept that the retirement Plan is a “division of DWP for budget and employment purposes,” as it is characterized by staff. However, under this construct, ultimate approval of the Board of Administration’s budget appears to rest with the Water and Power Board of Commissioners, not the Board of Administration. Lack of autonomy in establishing the Plan’s budget is not consistent with best practices.

Personnel Authority

The Retirement Plan Manager serves as the equivalent of a chief administrative officer of WPERP. We understand from Board members and staff that the General Manager of the

Department of Water and Power, who is a member of the WPERP Board of Administration, appoints the Retirement Plan Manager. IFS was further advised by Board members and staff that the WPERP Board as a whole has no role in the appointment of the Retirement Plan Manager and it is unclear (and not prescribed in statute) whether the Board would have the ability to challenge the appointment or removal of the Retirement Plan Manager.

Selection and oversight of the Retirement Plan Administrator (or comparable administrative head of the retirement system) by someone other than the Board is a common public sector constraint that is inconsistent with the Board's responsibility to prudently manage the retirement system.

Board Meeting Attendance

Based on our review of Board minutes from the last two years, we found several instances in which the Board of Administration operated with less than a full complement of board members. Board members conceded that there is sporadic absenteeism, but in their view, the absenteeism has not compromised their ability to manage the pension fund.

It is understandable that the ex officio members may at times have other obligations that may prevent them from attending board meetings. However, under no circumstances are ex officio members relieved of their fiduciary obligation to the Board of Administration, which includes the obligation to obtain the knowledge and skills necessary to perform their fiduciary role. Attendance at board meetings is an essential part of this obligation.

Use of Legal Counsel

The City Attorney, who serves as the statutory attorney for the City of Los Angeles, is empowered by law to serve as legal counsel to WPERP, even though the City Attorney's

interests at times may conflict with those of the retirement system. Granting the Board exclusive authority to contract for legal services is consistent with best practices. Our report discusses this issue in detail. In addition to relying on the City Attorney for legal advice, we recommend that the Board seek legislative authority to select, hire and retain its own legal counsel and to hire outside counsel when specialized legal advice is required.

Strategic Planning

The Board has not developed a Strategic Plan. Ideally, a Strategic Plan should be developed for the next one year, three year and five year periods, at a minimum, and should include, among other things, a mission statement, the Board's set of core values, the Board's goals and objectives and timelines for completion of its goals and objectives. In addition, annual strategic plans should be developed for each asset class.

Opportunity for Joint Efficiency/Economy of Scale through Consolidation with LACERS

As discussed in greater detail in Section 2j, we recommend that the City consider, through appropriate legislative and democratic processes, consolidation of WPERP with LACERS, and ultimately, serious consideration should be given to combining all three City pension departments. The various member/employee groups that currently have Board representation should still be represented on any consolidated governing Board. Consolidation would not reduce benefits. In fact, because of the potential for increased economies of scale, the ability to pay benefits should be enhanced. We estimate that by projecting the savings out over the time horizon of a public pension fund, typically 30 years, the City would save in excess of \$500 million. We think this is a reasonable and conservative estimate of the savings to be gained by combining the investment programs of the three LA pension departments.

While we do not offer a legal opinion, since the State Constitution requires public fund fiduciaries to minimize employer contributions, we suggest that they would be obligated to review our recommendation for consolidation given the significant cost savings that ultimately translate into significantly reduced employer contributions over time.

Additionally, our estimate does not take into consideration increased revenues from securities lending or other investment opportunities due to greater negotiating leverage and scale from consolidation. We expect these additional savings would be substantial. Further along these lines, substantial additional savings can be gained from combining the benefits administration functions of the three pension departments.

Investment Policy Statement (IPS) and Guidelines

While the WPERP IPS is reasonable and complete in many essential respects, we identify several elements in our Report that we believe the Board should consider adding and/or revising. In addition, we found the organization of the IPS to be less clear than optimal and believe that the document could be rearranged for ease of understanding – see our discussion in Sections 3e.

Asset Allocation and Rebalancing

WPERP has made significant changes to its asset allocation in recent years, increasing the amount invested in alternative asset classes. IFS and M^{Cube} reviewed the historic and recently adopted long-term policy asset allocation and we found the new long-term policy to be reasonable. Given the new focus on alternatives, it is important for the Board (and staff) to receive sufficient training on investment issues and the accompanying risks and to provide sufficient resources to monitoring alternatives. We also evaluated various rebalancing alternatives and recommend that the staff consider a SMART rebalancing program in the future.

Investment Manager Guidelines

It is best practices for individual investment managers to have custom investment guidelines for their portfolios. WPERP should develop specific investment manager guidelines for all of their separate account managers. Additionally, the WPERP should have a written policy for monitoring compliance with investment manager guidelines, including identifying responsible parties and detailing a method to document the monitoring activity.

Other Post-Employment Benefits (OPEB) – Retire Health Insurance

WPERP has received partial funding of its OPEB liabilities. In that very important respect it is ahead of most public plan sponsors that have post-employment healthcare liabilities. We commend WPERP and the Department for having the foresight to plan ahead to begin to fund these obligations. Our review of the OPEB assumptions and reports prepared by WPERP's actuary was performed by our sub-contracted actuarial consulting firm. Please see Section 4.d of this report for several important observations and recommendations.

Administrative Expense

WPERP' overall administrative expense is well below the mean of a group of comparable sized funds. However, all administrative expenses are reimbursed by the Department which has the effect of passing all retirement costs ultimately to the city's rate payers. Please see our more detailed discussion in Section 5.

* * * *

Please note that the above summary only highlights a few of the observations and recommendations contained in the Report. IFS has performed numerous operational reviews of

public pension funds over the past twenty years. The results of this review demonstrate that WPERP is doing well with room for improvement in the areas specified in our recommendations.

We wish to thank Ms. Sangeeta Bhatia, the WPERP Retirement Plan Administrator, and Ms. Monette Carranceja and Mr. Manoj Desai, our liaisons with WPERP, and the WPERP Board members and staff for their support, co-operation and participation during this extensive review. We also wish to thank Ms. Cynthia Varela, our primary contact from the Controller's Office and liaison with the Joint Administrators.

Section II.

Background, Review Methodology, and Limitations on the Report

IFS specializes in evaluating the organization, administration, and investment programs of pension systems using combined expertise in investment practices, fund operations and fiduciary responsibility. In operation for almost 20 years, we have performed similar evaluations for numerous other public and private pension funds.

In most sections of the Report, we set forth a 'standard' that we used as criteria for the area being evaluated. In some cases the standard or criteria comes from some authoritative industry publication; in other cases the standard may be what we have deemed an industry or 'best' practice based on our experience performing similar reviews.

The analysis leading up to this Report progressed through the following stages:

Document Collection

The first stage in our process was collection – with the staff's cooperation – of information regarding the Board's operations, and investment program and practices. This included amassing extensive data and documents, such as the Board's enabling and related statutes, written operating policies and procedures governing the organization, written investment policies and guidelines, service provider contracts, and other materials. This phase was conducted from February through March, 2007.

Analysis & Interviews

The next stage of our process, which continued throughout the project, was analysis. In undertaking this review, IFS employed a team approach, assigning certain of its personnel to concentrate on particular subject areas. Throughout the process, we coordinated and integrated our efforts and maintained communication with representatives of the Board. The main interview phase was conducted March 12 through March 23, 2008. Subsequent interviews were conducted by telephone.

We also held discussions with people directly associated with WPERP. These included face-to-face and/or telephone interviews with Board Members, the Retirement Plan Manager, staff members, Legal Counsel and the investment consultant. These discussions occurred from March through April.

Research

IFS performed research directed at 'peer' pension funds. The results of the research are incorporated in the Discussion and Analysis section of the Report.

Draft, Preliminary, and Final Report

The written report also progressed through several stages. We submitted a first draft report to the Retirement Plan Manager and the Joint Administrators on August 4, 2008. The purpose of the first draft was to obtain comments from the Department. Comments on the draft were received on September 22, 2008. Based on comments and additional information received, a second draft report, the Preliminary Review Report, was issued to the Joint Administrators on October 22, 2008. On November 19, 2008, we reviewed the Preliminary Review Report with the Joint Administrators and received their comments. We met with representatives of WPERP for an audit Exit Conference on January 16, 2009 to discuss the draft. That process lead to this Final Report.

Report Caveats

This Report should be read and evaluated with several caveats in mind.

First, many of the subjects addressed in this Report are inherently judgmental and not susceptible to absolute or definitive conclusions. When we express a judgment or make a recommendation, we also set forth the observed conditions and rationale that led us to that viewpoint. Many of our conclusions are less in the nature of definitive recommendations than they are alternatives for the Board and staff to consider in light of WPERP' evolving investment program.

Second, in conducting this review, we necessarily relied on oral and written representations of the people we interviewed and on the contents of the documentary information we obtained. We sought to cross-verify certain information among different interviewees and documents, but the process of cross-verification was limited. We were not hired to detect or investigate fraud, concealment or misrepresentations and did not attempt to do so. We were not hired to, and did not attempt to conduct a formal or legal investigation or otherwise to use judicial processes or evidentiary safeguards in conducting our review. Our findings and conclusions are based upon our extensive review of documents, the interviews we conducted with the Board, staff, and others associated with WPERP, independent analysis, and our experience and expertise.

Third, this Report does not and is not intended to provide legal advice.

Fourth, our observations are necessarily based only on the information we considered as of and during the period we performed our review. Our Report cannot and does not attempt either to assess the manner in which any of our recommendations may be implemented or observed in the future, or predict whether WPERP' practices, as represented to us, will be observed in the future. Nor does our Report supplant or reduce the ongoing independent

fiduciary duty of the Board and staff to structure and evaluate their investment program or policies and procedures.

Fifth, although this Report sets forth observations and recommendations regarding limited aspects of WPERP' internal controls, we did not conduct – or attempt to conduct – a full or formal examination of WPERP' internal control system. This Report is not intended as a substitute for such an examination, if one is deemed to be appropriate. The scope of our work was limited by our contract with the Board.

Sixth, our approach to various organizational issues in this Report is in terms of public pension policy, from the perspective of participants and beneficiaries. We have not attempted to assess such issues from all practical and political perspectives running across all aspects of California state government.

Finally, although we discussed our findings with, and submitted prior draft versions of our Report to the Joint Administrators and to Department's Retirement Plan Manager, its final form and content reflect the independent judgment of IFS. In accordance with the City Charter, the extent to which our report and recommendations are adopted or implemented is the Board's decision.

Section III – Discussion and Analysis

Task Area 1 – Governance

(For purposes of this report, we have combined some elements of Task Area 1 and Task Area 2 because of the interrelationship between “governance” issues and “organizational structure” and “board policies, practices, procedures” issues.)

1a. Governance Standards

Principles

Unlike private retirement systems that are governed principally by the federal Employee Retirement Income Security Act (ERISA), the investment and operation of public pension funds are governed by their respective state and local laws. Many of these public fund laws have not kept pace with and do not reflect modern investment practices. As a result, although the supervising fiduciaries are legally required to prudently invest the assets of the pension fund, and have been vested with exclusive authority and control over such assets, they may be unable to (a) optimize returns at an appropriate level of risk and (b) effectively and efficiently manage their investment organizations because of outdated statutory requirements.

In recognition of the changing environment faced by public retirement systems, the National Conference of Commissioners on Uniform Laws has developed two uniform laws.¹ 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 Acts effectively incorporate the major principles of portfolio management theory developed over the past 50 years. Most states have adopted UPIA², but not UMPERSA.³ Nevertheless, the governance and investment

¹ “Uniform” designation indicates that there is a substantial reason to anticipate enactment in a large number of jurisdictions and standardization is the principal purpose. By contrast, a “model” designation means uniformity is not the principal objective and a significant number of jurisdictions are not expected to adopt the Act in its entirety, since its purposes can be achieved by adoption of its principles.

² UPIA has been adopted by approximately 40 states. California adopted a version of the UPIA in 1995, which applied to investment decisions and actions taken after January 1, 1996.

³ Only Maryland and Wyoming have adopted UMPERSA, in modified form. *See, 2004-2005 Annual Report of the National Conference of Commissioners on Uniform State Laws*. A number of public pension fund organizations participated in the development of the law (e.g., the National Council of Public Employees Retirement Systems (NCPERS) the National Council on Teacher Retirement (NCTR), and various members of the National Association

concepts set forth in these uniform laws are viewed as “best practices” and are often used as models by public pension funds and investment boards to modernize their standards.⁴ They include (but are not limited to):

- Granting fund board members exclusive authority to manage fund assets, which are maintained as a trust; and
- Granting autonomy, with accountability, as discussed further below, to fund board members by empowering the board to:
 - Make budget, personnel and procurement decisions (including salary levels for personnel and obtaining professional services and resources) solely in the interest of pension fund participants and beneficiaries, not in response to a more wide-ranging set of interests and not subject to the jurisdiction’s general civil service, procurement or personnel laws; and
 - Contract for necessary services, including actuarial, legal and audit services, rather than relying on other agencies of government to provide those services.

Best practices advocate autonomy for Board trustees. The notes to UMPERSA provide the rationale for granting autonomy to the Board, indicating that *“the pension fund and its trustees should be endowed with more independence than other agents of the state or other state employees, because in exercising that independence the trustees are subject to a more extensive and stringent set of fiduciary obligations than other agents of the state or other state employees.”* This principle is equally applicable with respect to locally created (or City Charter-based) pension funds. The pension fund is a “trust.” The board members, as fiduciaries of the trust, are obligated to see that it is managed in the exclusive interest of the participants and beneficiaries. As stated by a recognized public pension fund executive director, *“in order to carry out [its] mission and pursue excellence in service delivery and risk management, it is critical that fiduciaries who have ultimate legal responsibility for the trust also have ultimate authority for and programmatic control over all system activities.”*⁵

The grant of autonomy to pension fund trustees should not be made in a vacuum. Rather, it must be balanced with accountability in the form of stringent fiduciary standards and duties, liability for failure to comply, and regular and significant reporting and disclosure requirements.

of Public Pension Attorneys (NAPPA). However, because UMPERSA did not address portability, pension board representation, full funding, service credit purchase, disclosure and reporting proxy voting, contractual rights to benefits, and domestic relations orders, it was not endorsed by the public pension fund organizations that participated in its development.

⁴ See, National Association of State Retirement Administrators, “Model Practices for Trust Independence and Board Governance Identified in UMPERSA and UPIA,” at <http://nasra.org/resources/modelgovernancepractices.htm>.

⁵ *Glass Houses – It’s Never to Late to Change*, by Gary Findlay, Plan Sponsor Magazine, September 8, 2003.

Public oversight, combined with adherence to rigorous standards of fiduciary responsibility, provide appropriate controls over a public pension fund.

Risks

A statutory design which imposes external constraints, rather than granting autonomy with oversight, can impair the trustees' ability to effectively and efficiently administer the retirement system and its investments in the interest of the system's participants and beneficiaries.

When autonomy is compromised, trustees may be forced to decide between fulfilling their fiduciary obligations to retirement system's participants and beneficiaries or complying with the directives of the executive or legislative branches of government, who have no fiduciary responsibility to the trust, and who often must respond to different and possibly conflicting interests, such as budget balancing dilemmas, enhancing the tax base through local investing or pressures to enhance benefits in an unfunded liability environment.

Observed Conditions

The current governance structure of the Water and Power Employees Retirement Plan divides responsibility among three separate entities: the Department of Water and Power; the Water and Power Board of Commissioners; and the Board of Administration. The Board of Administration has not adopted a Governance Statement (or comparable document) that clearly defines the roles and responsibilities of each of the above parties with respect to the retirement Plan. This is a key area of board governance that should be clarified and documented. We discuss this issue further in Section 2a. Board Governance – Policies, Practices & Procedures.

The Department of Water and Power (the "Department" or "DWP") is the largest municipally-owned utility in the United States. As a governance model, the Department is a proprietary department of the City of Los Angeles, with a five-member independent Board of Commissioners, a model commonly used by large municipal utilities. The Commissioners are appointed to five-year terms by the Mayor, subject to confirmation by the City Council, but they may be removed by the Mayor without City Council approval⁶. Thus, as a practical matter, the Commissioners serve at the pleasure of the Mayor and it is conceivable that an entirely new set of Commissioners could be appointed to the Board of Commissioners each time a new mayor is elected.

The City Administrative Code requires the Mayor to seek diversity in his appointments. Specifically, the Code reads: *"Unless otherwise provided in the Charter, the Mayor, Council or other appointing authority shall strive to make his or her overall appointments to appointed*

⁶ See Charter Section 502 (a) and (d).

boards, commissions or advisory bodies established by the Charter or ordinance reflect the diversity of the City, including, but not limited to, communities of interest, neighborhoods, ethnicity, race, gender, age and sexual orientation.”⁷

The Board of Commissioners appoints the General Manager of the Department, subject to confirmation by the Mayor and the City Council and the Board of Commissioners may remove the General Manager, subject to confirmation by the Mayor.⁸

The Water and Power Employees Retirement Plan (“WPERP” or the “pension fund” or the “retirement Plan”) was established within the Department of Water and Power pursuant to Section 1102 of the City Charter under a governmental structure that is conceptually more akin to the corporate pension fund model. The retirement system operates as a single-employer benefit plan which provides pension benefits to eligible DWP employees. As an internal control measure, the retirement system is administered by an independent Board of Administration. Assets of the pension fund are segregated from the assets of the Department and are held in trust by the Board of Administration, which has “*sole and exclusive*” fiduciary responsibility over the pension fund assets. Assets of the fund are held for the exclusive purposes of providing benefits to participants and beneficiaries in the retirement system and for defraying reasonable expenses of administering the system.⁹

The Board of Administration consists of the following members:

- Three ex officio members: the General Manager of the Department of Water and Power, the Chief Accounting Employee of the Department of Water and Power and one Board of Water and Power Commissioner;
- Three elected members, who are active employee members of the retirement system and elected by the active employee members; and
- One retired member of the retirement system, who is appointed by the Board of Water and Power Commissioners.

The appointed retired member and the three elected members serve for a three-year term. The three ex officio members, who serve on the Board by virtue of their offices, continue to serve as members of the Board of Administration for so long as they hold those positions.

Under the Retirement Plan Document, the Board is authorized to elect from among its members, a president, a vice-president and other officers, as required.

⁷ See Section 501 of the Administrative Code.

⁸ See Charter Section 604.

⁹ See Article XVI, Section 17 (a) of the California Constitution.

The Board has “*sole and exclusive*” authority to administer the retirement system for the following purposes:

- *To provide benefits to the [retirement] system participants and their beneficiaries and to assure prompt delivery of those benefits and related services;*
- *To minimize City contributions; and*
- *To defray the reasonable expenses of administering the [retirement] system.*¹⁰

The Board of Administration exercises its authority in accordance with a constitutional grant of “*plenary authority and fiduciary responsibility for the investment of moneys and administration of the system,*” as discussed more fully below.

Consistent with the need for autonomy, it is our understanding that the intent of the California Pension Protection Act, an amendment to the California constitution enacted in 1992 as Proposition 162 (“Proposition 162”), was to insulate the administration of retirement systems from oversight and control by legislative and executive authorities and to grant retirement systems sole and complete authority over investments and administration of their systems, free of direction from state and local legislative and executive prerogatives.¹¹

1. Fiduciary Standard of Care

Principles

It is well established that pension fund board members are subject to a rigorous standard of fiduciary conduct when managing the pension fund’s assets. One element of the fiduciary standard requires board members to act solely in the interest of the pension system’s participants and beneficiaries, rather than in their own self-interest or the interests of their constituent group(s) or appointing authority, the public or taxpayers at large. This duty is commonly referred to as the “duty of loyalty.”

A second critical element of the fiduciary standard of care imposes on pension fund trustees a “duty of care.” Under the traditional law of trusts, a trustee is expected to act merely as a prudent person would act when handling his/her own affairs. This common law standard is less demanding and has evolved over time to the higher standard which ERISA imposes on the board members of private sector pension funds. Under the ERISA prudent person standard (commonly referred to as the “prudent expert” standard), a fiduciary must operate with the “care,

¹⁰ See City Charter Section 1106 (a).

¹¹ See, Singh v. Board of Retirement, 41 Cal.App. 4th 1180, 1192 (1996).

skill, prudence and diligence under the circumstances then prevailing that a prudent [person] *acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims*" (emphasis supplied). Trustees are not required to be "experts" (unless the trustee has represented that he/she has greater skill than that of a man of ordinary prudence).¹² However, if fiduciaries are not "familiar with such matters" they are allowed to retain experts and to delegate fiduciary authority.

While public pension funds are not subject to ERISA, and each state can and does formulate the fiduciary standards for the trustees of its public pension funds, the ERISA "prudent expert" standard has become the best practice model. General acceptance of the concepts embodied in the ERISA standard is further reinforced by UMPERSA's use of a virtually identical standard of care formulation.¹³

UMPERSA also authorizes public fund 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."¹⁴ A trustee who elects to delegate functions must use "reasonable care, skill and caution" in selecting and monitoring the agent, and establishing the scope and limits of the agent's authority. Again, the UMPERSA standards parallel provisions of ERISA authorizing the division of fiduciary responsibility among multiple fiduciaries, and the delegation to "investment managers" of a trustee's authority to manage plan assets.

Risks

In the absence of rigorous fiduciary standards and without having the ability to delegate, and obtain expert advice, Trustees will not carry out their fiduciary responsibilities in a prudent manner. This could result in mismanagement and impair the financial integrity of the plan assets under their control, which could then lead to lower benefits and/or higher contribution levels.

Observed Conditions

In 1992, the voters of California adopted the California Pension Protection Act of 1992 ("Proposition 162" or the "Act"). As explicitly stated in Section 3(e) of the Act, one of the legislative "purposes and intents" of the new legislation was "*to give the sole and exclusive power over the management and investment of public pension funds to the retirement boards elected or appointed for that purpose, to strictly limit the Legislature's power over such funds, and to prohibit the Governor or any executive or legislative body of any political subdivision of this state from tampering with public pension funds.*"

¹² See Annot., Standard of Care Required of Trustee Representing Itself to Have Expert Knowledge or Skill, 91 A.L.R. 3d 904 (1979) & 1992 Supp. At 48-49.

¹³ UMPERSA Sec. 7.

¹⁴ UMPERSA Sec. 6.

Consistent with best practices, assets of the Water and Power Employees Retirement Plan are held in trust. The Act defines the assets of the retirement system as “*trust funds, held for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system*” (California Pension Protection Act, Section 17 (a)). While the retirement system is not subject to ERISA, defining the assets of the pension fund as “trust funds” is consistent with the ERISA requirement that plan assets be held in trust to prevent the commingling of plan assets with non-plan assets or property and to ensure that the Board of Administration administers the retirement system for “the exclusive benefit of system participants and their beneficiaries.”¹⁵ The City Charter also acknowledges that the assets of retirement system are a trust fund “*separate and apart from the other money of the City.*”¹⁶ Establishing pension fund assets as “trust funds” by statute is particularly significant in the context of the Water and Power Employees Retirement Plan to ensure that retirement system assets cannot be commingled with Department of Water and Power funds or with City general funds.

The fiduciary obligations imposed on members of the Board of Administration are also consistent with best practices. Specifically, section 17 of Proposition 162 provides members of the retirement board with “*plenary authority and fiduciary responsibility for investment of moneys and administration of the system,*” subject to (1) a “*prudent person*” standard of care; (2) a duty of loyalty “*to discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system;*” and (3) a duty to “*diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.*”¹⁷

Although framed in terms of “*plenary authority,*” it has been determined that the Board’s authority is not without limitation.¹⁸ The provisions of Proposition 162 and the City Charter, which govern the retirement system, must be harmonized unless they clearly conflict. Consequently, the legal and practical limitations of Proposition 162 are somewhat ambiguous, differing among the various retirement systems based on the deference afforded by the other executive and/or legislative entities with control over the retirement system. For example, one explicit Proposition 162 limitation is found in Section 17(f), which states as follows:

¹⁵ See Section 1106.

¹⁶ Article XI, §1152(f)

¹⁷ Article XVI, Section 17 and Section 17 (a) (b) (c) and (d).

¹⁸ Westly v. California Public Employees’ Retirement System Board of Administration (2003) 105 Cal.App.4th 1095.

“The Legislature may by statute continue to prohibit certain investments by a retirement board where it is in the public interest to do so, and provided that the prohibition satisfies the standards of fiduciary care and loyalty required of a retirement board pursuant to this section.”¹⁹

This is a very broad carve-out by the Legislature and an incursion into a Board’s “*plenary authority*” to prudently manage and invest the assets of the fund. Although the Legislature’s power in this regard is limited to situations in which the prohibition “*satisfies the standards of fiduciary care and loyalty required of a retirement board pursuant to this section,*” the law is silent on the question of *who* will determine whether the proposed prohibition satisfies the fiduciary requirements and *how* that determination will be made. Additional constraints on the Board of Administration’s “*plenary*” authority to administer the retirement system are discussed below under Section 1a.2. Common Public Sector Constraints.

While the Board’s duty of loyalty extends to “minimizing employer contributions”, the City Charter explicitly states that this obligation is secondary to the Board’s “duty to its participants and their beneficiaries.”²⁰

The Board’s adherence to the more rigorous ERISA “prudent expert” standard of care is consistent with best practices. The language of the standard of care set forth in Proposition 162 is virtually identical to the prudence standard found in ERISA and UMPERSA (which, as discussed above, is commonly referred to as the “prudent expert” standard) and, as further noted above, is a higher standard than the common law prudent person standard. This standard of care is also set forth in Article XI §1106 (c) of the City Charter. This formulation acknowledges that the Board members are subject to a higher standard than the common law “prudent person” standard.

Consistent with best practices, the Board is empowered to adopt any rules, regulations or forms it deems necessary to carry out its administration of the pension system or assets under its control²¹ (Section 1106 (f) of the Charter).

2. Common Public Sector Constraints

Principles

As noted earlier, public sector retirement systems often operate within a statutory framework that constrains to some degree their ability to manage their investment programs.

¹⁹ Article XVI, Section 17 (f).

²⁰ See, Article XVI, Section 17(b) and Section 1106(a) of the LA City Charter.

²¹ Charter Section 1106(f).

Examples of common restrictions which do not apply to other participants in the financial markets include:

- “Legal lists” requiring that system assets be invested only in designated asset classes, with percentage limitations applicable to each;
- Requiring the retirement system to rely on other branches of government for essential services, such as legal counsel and procurement of external services;
- Limiting the retirement system’s ability to employ, attract and retain qualified staff by limiting the system’s fiduciaries’ authority to set salaries and define the staffs’ job classifications;
- Directives requiring or compelling investments in local business enterprises, or engaging local service providers;
- Directives requiring or compelling the engagement of woman-owned or minority-owned service providers; and
- Open Meeting and Freedom of Information laws which require that virtually all of the Board’s deliberative processes, including discussions of investment strategies, be open to the public.

Simply acknowledging that public sector constraints exist does not mean that they can or should be eliminated. What is paramount is that the potential effect of such constraints, when they cannot be avoided, are acknowledged and managed.

Risks

Investment decisions can have negative consequences for a fund if considerations other than the risk and return characteristics and other financial and portfolio construction aspects of particular investment options are taken into account by investment decision-makers.

The effectiveness and efficiency of an investment program can be compromised if the resources required to manage that program are insufficient and/or unavailable due to considerations external to the retirement system.

Observed Condition

The Board of Administration operates under a very complicated governance structure due primarily to its status as a “division” within the Department of Water and Power, making

adherence by the retirement system to “best practice” standards challenging. Under this construct, the retirement system cannot be managed in a way that is wholly devoid of City and DWP policy considerations and/or constraints.

The State Constitution and the Charter give the WPERP Board sole and exclusive fiduciary responsibility over the assets of the Plans as well as sole and exclusive responsibility to administer the Plan in a manner that will assure prompt delivery of benefits and related services to Plan participants and their beneficiaries. Consequently, the retirement Plan may contract with independent contractors when it determines *“that such work can be performed more economically or feasibly by independent contractors than by City employees.”*²²

In accordance with this broad authority and consistent with best practice, the retirement Plan is empowered to:

- Hire, fire and supervise a master trustee or custodian;²³
- Hire, fire and supervise investment managers and investment consultants;
- Set investment policy; and
- Hire an actuary and, at least once every five years, obtain an actuarial survey and report of the Plan.²⁴

However, this authorization has not been deemed to extend to the hiring of independent legal counsel.

- The Board of Administration has been deemed unauthorized to hire its own legal counsel unless it first receives approval from the City Attorney. Charter Section 275, which governs the employment of legal counsel by the pension fund, states in relevant part: *“Upon recommendation of a board enumerated in Section 272 (c), (which includes the Board of Administration) and the written consent of the City Attorney, the City may contract with attorneys outside of the City Attorney’s Office...”*.

Other retirement systems within California, including the California Public Employees’ Retirement System (“CALPERS”) and the California State Teachers’ Retirement System (“CALSTRS”), are authorized to independently select their own legal counsel. The Los Angeles County Employees Retirement Association (“LACERA”) is authorized to “secure legal

²² Chapter 1, Article 1 of the Administrative Code, Section 10.23.

²³ See Section 1108 (c).

²⁴ See Section 1190.

*representation, on such matters as the board of retirement or the board of investment may specify, from other than the county counsel.”*²⁵ Moreover, retirement systems in any of the twenty counties that are subject to the County Employees Retirement Law of 1937 (commonly referred to as the “37 Act Counties”), such as the San Bernardino, Orange, Kern, San Joaquin and Santa Barbara retirement systems, among others, have explicit authority to “*contract with the county counsel or with attorneys in private practice or employ staff attorneys for legal services.*”²⁶ Notwithstanding that the Board of Administration is a “division” within the DWP, the Board should have authority to select its own independent legal counsel that is separate and independent from the legal counsel to the Department of Water and Power, in accordance with best practices. We discuss this issue further in Section 2g. - Use of Legal Counsel.

Consistent with best practices, California law does not impose a “legal list” requirement on the Board of Administration with respect to its investment decisions.

As discussed above, the City Charter grants the retirement system broad general powers to administer the Plan. Specifically, the Board of Administration alone “*has plenary authority and fiduciary responsibility for investment of moneys and administration of the system*”, subject to certain enumerated exceptions. This power is further constrained by virtue of the retirement board governance structure.

A number of Charter-imposed requirements generally applicable to City Departments apply to the Department of Water and Power and, under the current structure, have been determined to apply to the WPERP. These requirements serve as constraints on the Board’s “*plenary authority*” to administer the Plan. They include the following:

- Staff salaries are set by the City Council, unless otherwise set by, among other things, collective bargaining agreements, which must also be approved by the Council;²⁷
- The WPERP is required to follow the City’s procurement rules and regulations with respect to contracts for goods and services, provided they are consistent with Article XVI of the California Constitution;
- Contracts entered into by the WPERP for a term longer than three years must be approved by the City Council;²⁸ and

²⁵ California Government Code Section 31529.1.

²⁶ California Government Code Section 31529.9.

²⁷ City Charter, Section 219.

²⁸ Chapter 1, Article 1 of the Administrative Code, Section 10.5

- Each contract awarded by the WPERP must be approved as to form by the City Attorney.²⁹

a. Budgetary Authority

Because WPERP is a “division” of the Department of Water and Power for budget and employment purposes, its budget is incorporated into and made a part of the Department of Water and Power budget. The budget process does not appear to be prescribed in statute. However, staff described the budget process to IFS as follows:

- The Board of Administration prepares a proposed budget;
- The Board of Administration approves the budget; and
- The Board of Administration submits the “approved” budget to the Department of Water and Power for, according to staff, “information purposes”.

It is unclear what role, if any – formal or informal -- the Department of Water and Power plays in the budget process. It is also unclear whether the Department of Water and Power has any influence in the development of the WPERP budget (i.e., whether the WPERP budget is reviewed and discussed with the DWP prior to finalization). The term “information purposes” is subject to differing interpretations and the actual meaning of the term is not defined in statute or written policy. Thus, it is unclear whether submitting the budget to the Department of Water and Power for “information purposes” means that the Department of Water and Power accepts the Board of Administration’s Budget as submitted, without change, or whether the Department of Water and Power is authorized to make changes or otherwise “approve” the Board of Administration’s budget. There were divergent views on this point from the Board and staff.

It is noteworthy that the Board of Administration’s budget is a component part of DWP’s budget, which must be approved by the Board of Commissioners of the Department of Water and Power. Incorporating the WPERP’s budget into the Department of Water and Power’s budget may be consistent with the statutory framework under which the WPERP operates. However, under this construct, ultimate approval of the Board of Administration’s budget arguably rests with the Water and Power Board of Commissioners, not the Board of Administration.

Staff asserts that the Board of Administration has final approval of its budget; however, there is no statutory framework to support this assertion. Board control and approval of the retirement system budget is a best practice. To avoid any confusion in this regard, we believe the Board should seek clarity on this point, through legislation.

²⁹ Chapter 1, Article 1 of the Administrative Code, Section 10.2.

Granting WPERP independent and exclusive authority to establish the fund's administrative budget *solely in the interest of pension fund participants and beneficiaries* is viewed as a "best practice" and is consistent with the Board's *plenary authority* to administer the Plan. (We express no opinion on the legal question of whether the Board of Water and Power Commissioners' role, if any, in the Board of Administration's budget process is a function that imposes a fiduciary responsibility on the Board of Water and Power Commissioners to the WPERP's participants and beneficiaries.)

Task Area 1a Recommendation 1

So as not to conflict with the Board's plenary authority, WPERP, supported by the Department of Water and Power, should seek, through legislation, an amendment to Section 1106 of the City Charter to add the establishment and final approval of the budget as one of the specific powers and duties of the WPERP Board. In the interim, we recommend that the Board of Administration seek clarification and document that the Department of Administration's budget is submitted to DWP solely for "information" purposes and may not be modified.

b. Personnel Authority

Proposition 162, §17(a) provides that the board shall have *sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and beneficiaries.*

The provisions of Article X of the Charter (Civil Service Employment Provisions) apply to all employees of the City of Los Angeles, except for those employees that are specifically excluded from its requirements. All WPERP employees are Department of Water and Power employees and they hold non-exempt civil service positions, according to staff. We were informed that the Board of Administration has not requested or sought exemptions for any of the retirement Plan's employees. It is our understanding from the Board and staff that such a request would be made to the Department of Water and Power as part of the budget process.

All staffing and investment-related resources are requested as part of the budget process and, according to the Board and staff, are submitted to the Water and Power Board of Commissioners "for information purposes," as discussed above. (Authority to grant exemptions and approve requests for resources appears to be indicia that the DWP has "control" over the Board of Administration's budget.)

Thus, while the Board is charged with "*sole and exclusive responsibility to administer the system*", its ability to attract, hire and retain the staff necessary to carry out that responsibility is constrained.

The Retirement Plan Manager serves as the equivalent of a chief administrative officer of the retirement system. There was certainty among Board members and staff that the General Manager of the Department of Water and Power, who is a member of the retirement board, appoints the head of the WPERP. We requested written documentation in support of the General Manager's appointment authority and the selection process, but it was not provided. IFS was further advised by Board members and staff that the Board of Administration as a whole has no role in the appointment of the Retirement Plan Manager

To the contrary; however, the Retirement Plan Document states the following:

"The Board shall appoint a chief executive officer and other necessary employees and shall designate a secretary and a Chief Accounting Employee who shall be an employee other than the chief executive officer." (See Section III (A) (5) – Board of Administration.)

The appointing authority for the Retirement Plan Manager should be clarified. Selection and oversight of the Retirement Plan Administrator (or comparable administrative head of the retirement system) is a common public sector constraint that is inconsistent with the Board's responsibility to prudently manage the retirement plan. As discussed above, we were not provided with any documentation prescribing the selection and oversight of the Retirement Plan Administrator and we are not aware of any statutory requirement to evaluate the Retirement Plan Administrator's performance.

A number of California funds (not including LACERS and FPPS) are allowed to directly appoint their CEOs (or head of the retirement system), including but not limited to, CALPERS, CALSTRS and LACERA.³⁰ Actually, even before the passage of Proposition 162, both the CALPERS and CALSTRS Boards had authority to directly appoint their Executive Directors.³¹ Following the passage of Proposition 162, their authority was expanded to include the ability to also select the Chief Investment Officer ("CIO")³² as well as to establish the compensation levels for both positions. Nevertheless, initially all compensation requests still had to be submitted to the Department of Personnel Administration (DPA). Subsequently, a number of key management positions were exempted from Civil Service, and in 2002, DPA delegated authority to establish compensation to CALPERS and CALSTRS. Examples of positions in addition to the CEO and

³⁰ CALPERS, CALSTRS and LACERA are respectively the acronyms for the California Public Employees Retirement System, the California State Teachers Retirement System and the Los Angeles County Employees Retirement Association.

³¹ The position was exempt from Civil Service. Section 22204, Chapter 893. Statutes of 1993.

³² The CIO position is also exempt from civil service.

CIO which have been designated as managerial positions include the Deputy CEO, Chief Counsel, System Actuary, the Investment Officers, and the portfolio managers.

Other examples of public pension fund boards that have sole authority to select their Executive Director/Administrator include San Diego City, San Bernardino and Contra Costa County.³³

In response to our draft report, staff also informed IFS that the Retirement Plan Manager's salary is set through the "Meet and Confer" process, but provided no documentation regarding this process.

Task Area 1a Recommendations 2-3

The Retirement Plan, supported by the Department of Water and Power, should seek through appropriate legislative processes, an amendment to the City Charter to, at a minimum, authorize the pension board to have ultimate decision-making authority (1) to appoint the Retirement Plan Manager and Retirement Plan staff; (2) to terminate the Retirement Plan Administrator; and (3) to set the Retirement Plan Manager's compensation at the level it deems appropriate, and set the pay schedule for the retirement Plan's staff.

We recommend that the Retirement Plan seek authorization to obtain one or more exempt positions, at a minimum for the Retirement Plan Manager and the CIO positions, to afford the Plan more flexibility in attracting and retaining qualified investment professionals.

c. Open Meetings Law

The statute governing public access to meetings of non-State governmental bodies in California is commonly known as the Brown Act (Government Code Sections 54950-54962). The Brown Act is the "local agency" analog, as defined in the statute, to the State's Bagley-Keene Act,³⁴ which governs state boards and commissions. While the intent of both Acts is virtually the same, it is the opinion of some that the Brown Act provides more public access than the Bagley-Keene Act. The City Attorney has determined that the Brown Act applies to the WPERP.

While there are a few categorical exceptions to the requirement that meetings be open to the public (each as further qualified within each category), such as personnel matters, pending

³³ California Government Code Section 31522.2

³⁴ California Government Code Section 11126. Although passed approximately 14 years after the Brown Act, the Bagley-Keene Act was intended to be virtually identical to the Brown Act.

litigation, labor negotiations, property negotiations and for such “other” purposes specified in the Act, as a general rule, meetings of the Board of Administration are open to the public. We note also that the City Attorney informed IFS that they take the position that the Board may hold closed sessions for the limited purposes of considering specific investments, noting that this exception to the Brown Act does not extend generally to all investment matters.³⁵

Open meetings laws by definition impose restrictions on the manner in which business is conducted by the pension plan; however, IFS generally views “Sunshine Laws” as a positive requirement in that they foster transparency in the Board’s operations.

Notwithstanding the above general comment, the mere breadth of the Brown Act provides very little opportunity for closed door sessions. It also impedes the ability of the board members to exchange ideas openly among themselves fearing that any such gathering of more than four members would constitute a “public meeting.” In this context, the Brown Act serves to inhibit unfettered discussion and deliberation by the Board which is often needed, particularly in connection with complex investment issues.

Task Area 1a Recommendation 4

The Department of Water and Power, supported by the Retirement Plan, should seek through appropriate legislative processes, an amendment to the Brown Act to explicitly exclude from its coverage, individual or specific investments (e.g., information related to private equity investments, information that could result in front running, etc.) so that this legal interpretation will be embedded permanently in law.

³⁵ The Bagley-Keene Act allows the following matters to be conducted in closed session: (a) the appointment, employment, or dismissal of a public employee; (b) matters pertaining to the recruitment, appointment, employment, or removal of the Chief Executive Officer or pertaining to the recruitment or removal of the Chief Investment Officer; (c) to confer with, or receive advice from, legal counsel regarding pending litigation when discussion in open session concerning those matters would prejudice the position of the Board in the litigation; and (d) to consider investment decisions, although with regard to investment decisions, the Board shall attempt to consider most investment matters in open session unless such consideration would jeopardize execution of the investment or cause harm to the economic value of the investment. Investment decisions, which are made in the closed session, must be made by roll call. The roll call vote shall be entered into the closed session minutes of the meeting. The Board shall endeavor to release the roll call vote to the public once the transaction is closed, or sooner if it is determined the investment will not be harmed by such release.

1b. Fiduciary Liability Insurance

Principles

A fundamental principle underlying the investment of pension and other benefit funds is that of fiduciary responsibility as fully described in the preceding section of this Report.

An inherent component of fiduciary responsibility is personal responsibility. Under federal and state pension and trust laws fiduciaries may be held personally responsible for their actions.

Mitigating this risk, fiduciary standards generally are process rather than results focused. If fiduciaries make decisions in good faith within the scope of their authority they are judged on whether the process was prudent, not whether the result achieved the objectives. In addition, under certain circumstances the employer or sponsoring organization is permitted to indemnify fiduciaries against the cost of defending themselves against allegations of fiduciary breach.

The ultimate fiduciary is the sponsoring and contributing entity. In many situations that entity spreads the fiduciary risk through delegation of authority and responsibility to other fiduciaries. Some of those fiduciaries are compensated adequately for taking that risk; others are not. Uncompensated fiduciaries typically need and demand protection against personal fiduciary risks.

The typical and most appropriate standard for indemnifying fiduciaries is to limit the protection to actions taken or not taken by fiduciaries within the scope of their position that did not involve fraud, self-dealing, or other criminal acts. In plain terms, indemnification is intended to protect fiduciaries for doing what they are supposed to do in the way they are supposed to do it, but not for doing what they are not supposed to do.

Indemnification is not a risk. It is a mechanism for transferring risk from one party to another. Typically a risk is transferred down to a sub-fiduciary through delegation and then in part transferred back up through indemnification.

Such risks may be able to be transferred through purchase of insurance to a non-fiduciary party in part or in full.

Fiduciary liability insurance covers only part of the risk. The balance is by definition self-insured.

Risks

Risk of loss, whether investment, fiduciary, or otherwise, is borne by the benefit plan initially and ultimately by the sponsoring and contributing entity such as the employer.

Through delegation, portions of that risk may be passed down to sub-fiduciaries, such as boards, professional staff, investment managers, consultants, and custodians. Some of these fiduciaries are compensated through fees for taking this risk. Others – particularly board members and staff – are not. Fiduciaries bear fiduciary risk, and that risk is personal. This is fundamental.

The risk is not only that of a fiduciary breach having occurred. Any allegation of such a breach needs to be defended. The cost of defense is as much a part of the risk as the cost of the penalty on finding that a breach occurred.

Absent transference of risk many qualified people would be unwilling to take uncompensated fiduciary responsibility under any circumstances. Even without any breach occurring, the cost of defending against an accusation of breach is likely to be beyond most qualified person's ability and willingness to bear personal risk. Under such circumstances appointing qualified Trustees and hiring qualified senior staff could prove cost prohibitive or even impossible.

Such transference of risk may be in the form of an indemnity, an insurance policy, or both.

Indemnities not only need to be in place, they need to be effective. They need to provide:

- Qualified independent representation to each fiduciary subject to the allegation, recognizing that any such allegation may be made against multiple fiduciaries whose interests and defenses may not be aligned.
- Protection not only covering defense against an alleged breach, but protection against any penalty imposed for an actual breach that does not involve criminal activity on the fiduciary's part.
- A mechanism to continue to provide and cover the defense cost until criminal activity is established, and then to recover that cost.

Carrying or not carrying insurance against certain risks is a financial risk, not a fiduciary risk. Any insurance decision is fundamentally based on an analysis of cost and benefit.

Observed Conditions

WPERP requires its investment managers and other service providers to carry insurance. Such insurance protects WPERP indirectly by providing assurance that there will be funds available to WPERP in the event the manager is negligent. The Department also carries its own insurance to protect itself, its Boards, and its staff in the event such negligence or breach of fiduciary duty is alleged against the system. These comments apply to the latter situation – the Department’s own insurance and related indemnifications of its board members and staff.

WPERP differs somewhat from the other Los Angeles city pension funds, in that the sponsoring entity of the pension fund is a municipal corporation and revenue producer under California law. Therefore it looks to itself and its revenues to fund its pension and other liabilities, rather than directly to the city and its tax base.

Fiduciary risk, or at least the risk of having to defend against an allegation of fiduciary breach, likely rises above the level of the Board of Administration to the general management and Board of Water & Power Commissioners itself.

The Department initially chose to carry fiduciary liability insurance in 1996 as a single policy with AIG. (Due to the possible risk of a potential plaintiff using the availability of insurance as the basis for instituting legal action and setting a claimed level of damages, we are not disclosing the amount of coverage in this report.) In 2003, the policy was replaced by a combination of a primary policy with Zurich and an excess policy with St. Paul. A year later the total program limit was increased as a primary with Zurich, an excess policy with Axis, and a secondary excess with Federal. All three are highly rated companies. The increase was taken on largely because market conditions at the time allowed higher coverage at approximately the same premium as in previous years.

The process for obtaining and maintaining the policies begins with setting a budget amount for the fiduciary policy coverage with the overall WPERP broker to shop the policies among the set of available underwriters. This process is to assure the coverage terms and premiums are competitive. The annual combined premium has been essentially flat over the past five years.

Policy forms are largely standard corporate fiduciary liability forms with typical endorsements and exclusions. While some of the corporate and particularly the ERISA references in these forms are not fully applicable, this is the closest approved form available in the industry to the needs of public funds and public corporations. The Department indicated that the applicability of the ERISA references is limited to the WPERP applying ERISA’s party-in-interest concepts only.

The two excess policies specifically exclude coverage for one matter for which notice was given to the insurers on March 25, 2004. The two excess policies were written as of April 1, 2004, replacing the prior excess policy. The primary policy and insurer, Zurich, was in place on the date of the notice and has not claimed that coverage is not available. The Department's insurance staff expressed the belief that the full coverage is in place notwithstanding the exclusion. If that matter leads to costs in excess of the primary coverage, however, we expect that securing higher amounts will not come without argument. Since the matter is in litigation we were not able to obtain information on expected exposure.

The policy definition of Insured Persons is very broad, including among others "fiduciary", without limitation. However, the policy further provides that the policy is secondary to any other valid policies. The Department's insurance staff explained that the broad definition is intentional due to the secondary liability faced by the Department's and WPERP for breaches by other fiduciaries under California's joint and several liability laws. The Department protects itself by strictly requiring its external fiduciaries such as investment managers and consultants to carry their own insurance. The degree such contractor protections adequately insulate the Department and its insurance from claims depends on the specific conditions and amounts. Through a February 15, 2006 resolution the Board of Administration established a 2.50% of assets under management standard for its investment managers (\$2.5 million of coverage per \$100 million of Assets Under Management (AUM)). The resolution does not address the level of insurance required of other service providers for whom AUM is not applicable, such as actuaries and consultants, other than the \$1 million minimum.

We reviewed the contract with the primary general consultant with regard to the extent protections for the Department are built in. Generally we found this to be the case. The contract:

- Specifies the consultant to be a fiduciary and defines its standard of care, being that of a "prudent expert acting in a like capacity and familiar with such matters ... in like situations;"
- Requires the consultant to indemnify and hold harmless the entire hierarchy from the City of Los Angeles through all levels of the organization and its subcontractors for death, bodily injury or personal injury, or damage or destruction of property "arising by reason of the negligent acts, errors, omissions or willful misconduct incident to the performance of this contract ... except for the active negligence or willful misconduct of [DWP];"
- Requires the consultant to carry specified amounts of commercial automobile liability, commercial general liability, and property damage insurance;

- Requires the consultant to carry workers' compensation and employer's liability insurance; and
- Requires the consultant to carry a specified level of professional liability insurance.

Based on our reading of the contract we are uncertain and recommend further investigation into two questions:

- 1) Does the indemnification provision include indemnification with respect to breaches of fiduciary responsibility by the consultant for which the Department, the Board of Administration, or its employees might be charged?
- 2) Is the \$1 million insurance limit imposed on the consultant sufficient protection, taking into consideration the effect on consulting fees that might result from requiring a higher limit?

Task Area 1b Recommendations 1-2

The City Attorney directly or through an appropriate expert should evaluate and opine on the extent the indemnity clause applies to protect the Board of Administration and staff in situations of fiduciary breach and other situations applicable to matters covered by the professional liability policies.

The Department's insurance staff should confer with WPERP investment staff and the City Attorney to evaluate the desired level of both indemnified and insured protection to be afforded by the various external non-manager fiduciaries, the cost of added protection in terms of fees or other factors, and decide in each case whether to amend existing requirements by specifying levels or methods to determine levels.

In discussing with various members of the Board of Administration we became aware that typically they had only a vague awareness that they were protected from personal liability. Only some were aware this included an insurance policy and overall there was no awareness of any indemnification from the City or others.

We understand the benefit of keeping insurance availability information confidential, since such knowledge may lead to greater temptation to institute proceedings in the hope of a quick settlement to avoid defense costs. However, we believe that the Board has a compelling interest in fully understanding its own fiduciary protection and the terms and circumstances under which it applies – or does not apply.

A May 2000 memorandum written by an assistant city attorney very ably describes for the Board of Administration “What it means to be a Trustee.” The document describes the responsibility and liability associated with being a trustee, but does not mention any mitigation or protection afforded the trustees.

We understand that WPERP’s investment consultant, PCA, conducted a briefing for Board members to explain the extent they are protected – and not protected – by the combination of indemnifications and insurance in the event of allegations of their breach of fiduciary duty. Based on the responses from Board members, several of them are not fully clear on the details.

Task Area 1b Recommendation 3

The Department’s insurance staff, city attorney, and possibly the insurance broker and/or others should hold a closed training session for Board members to educate them on the totality of protections and exposures applicable to their service to WPERP, including clear descriptions when and how protection is limited.

1c. Board Policies, Practices, and Procedures

(The principles, risk, observations and recommendations related to the board's various policies, practices, and procedures were consolidated with the discussions related to the retirement system's Governance (in Section 1), Organizational Structure and Resources (in Section 2a entitled "Board Governance – Policies, Practices and Procedures) and Investment Program (in Section 3)).

Task Area 2 - Organizational Structure and Resources

2a. Board Governance – Policies, Practices & Procedures

The organizational and management structures and processes utilized by an organization for decision-making, implementing its decisions, and for monitoring and assessing performance define its governance. An organization with good governance has structures and processes which enhance the organization's efficiency and effectiveness while minimizing both the potential and the impact of mismanagement. A good governance structure is generally composed of the following principal elements:

- adherence to law and rules;
- accountability;
- predictability;
- participation;
- consensus;
- transparency;
- responsiveness;
- inclusiveness;
- equity; and
- effectiveness and efficiency.

These principal elements are necessary to the governance of all types of organizations, including public pension plans and remain the same irrespective of the type or size of a pension plan.

Principles

It is well-documented that the value of poorly performing companies improved significantly following the institution of good governance practices.¹ We believe the same is true for public pension funds. The need for good public pension fund governance arises from the same types of issues that give rise to the need for good corporate governance.

A statement of governance articulating the allocation of authority to recommend, to monitor and to decide among the various key participants enables each segment of leadership to

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 appeared to improve as a result of CalPERS' focus.

focus on performing its tasks, confident that all key governance tasks are covered. The absence of such a statement can result in both duplication of effort and gaps in carrying out those functions.

Risks

Poor governance is an internal threat that can unnecessarily expose a pension fund to the possibility those policies and procedures may not be implemented properly and that the assets under the authority and control of the Board will not perform to expectations.² Poor governance is typically ranked as the principal barrier to excellence within an organization, followed by inadequate resources and lack of focus or a clear mission.³

In an organization with numerous interrelated parties responsible for various interrelated functions, a clear delineation of their various roles, lines of authority and reporting responsibilities could assist the organization in effectively and efficiently achieving their objectives.

Set forth below are some of the essential documents that define a pension fund's organizational and management structures and processes:

- **A Mission Statement.**
- **A Strategic Plan** – a document that summarizes the fund's short and long-term goals and objectives. It defines where an organization is going, how it is going to get there, and how it will know if it got there or not.
- **Bylaws.**
- **Resolutions (Actions on Motions)** - documenting the decisions of the Board.
- **Minutes** – recording the proceedings at the Board's formal meetings.
- **A Governance Statement** – a document that clearly defines the appropriate roles, responsibilities and permissible conduct of the "key players." It should describe who has authority over whom and who is responsible for what and when.

² Public Pension Systems Statements of Key Risks and Common Practices to Address Those Risks, July 2000. Endorsed by the Association of Public Pension Fund Auditors (APPFA), the National Association of State Retirement Administrators (NASRA), and the National Council of Teachers Retirement (NCTR).

³ Source: "Excellence Shortfall in Pension Fund Management: Anatomy of a Problem" by Keith Ambachtsheer, Craig Boice, Don Ezra and John McLaughlin – October 1995.

- **A committee structure** with “charters” defining their roles and responsibilities.
- **An Investment Policy Statement and Investment Guidelines** – documents that define and clarify the Board’s investment objectives, tolerance for risk, liquidity needs and permissible (impermissible) investment strategies, asset classes, and instruments. (See Section 3e–Investment Policy Statement.)
- **A Standard Operating Procedures Manual** – a compilation of the organization’s policies, procedures, and practices, as well as functional position descriptions of the organization’s staff.
- **An educational policy** – a policy setting forth processes for trustees and key staff to obtain access to programs providing information about developments related to investment of pension fund assets.
- **A well-defined ethics policy.**
- **A Board and staff travel policy.**

Our examination of WPERP’s organizational and management structures – governance – focused on the appropriateness of the governance documentation, identifying ways in which the roles and procedures of the various parties work effectively or pose problems, the sufficiency of the nature and functions of the various committees utilized by the retirement system, and comparing the stated duties and procedures of each Committee against the actual performance. As part of our examination, we also interviewed Board members and staff and reviewed sample board agendas, minutes and other documentation from prior meetings.

1. Board Governance Structure

Observed Conditions

a. The Board

As discussed above in Task Area 1, the Board of Administration consists of seven members:

- Three ex-officio members, consisting of the General Manager of the Department of Water and Power, the Chief Accounting Employee of the Department of Water and Power and one Department of Water and Power Commissioner;

- Three elected members, who are active employee members of the retirement system and elected by the active employee members; and
- One retired member of the retirement system, who is appointed by the Board of Water and Power Commissioners.

The law sets forth a three-year term for the appointed retired member and the three elected members of the Board of Administration. The three ex officio members, who serve on the Board of Administration by virtue of their offices, continue to serve as members for so long as they hold those positions.

The Board elects the officers of the Board of Administration, including the President and Vice President, from among its members.⁴

Board members were predisposed to maintaining the current board composition for two primary reasons: (1) under the current structure, the Board functions well and the size of the board is conducive to managing the fund efficiently; and (2) the absence of political pressure (there are no direct political appointees on the Board) enables the board to operate more cohesively as a single body and ensures that they act solely in the interests of members and participants. There was also general consensus among the board members that they respect each other's contribution to the Board meetings.

The Board includes stakeholders in the pension system: active participants and retirees. Participants and beneficiaries of the retirement system are often supportive of including stakeholders on the board because they believe stakeholders have a greater incentive to vigilantly protect the assets of the retirement system.

The table of Board composition of 66 public retirement systems appearing on the website of the National Association of State Retirement Administrators (the "NASRA Table") shows that 37 of 66 public retirement systems are governed by a seven, eight, or nine person board. The average and median Board size for the retirement systems in the NASRA Table was nine. Although the Board of Administration's membership level falls just below the average, board members believe they have a sufficient number of members to effectively conduct the business of the retirement system.

California law does not impose a requirement that members of the Board of Administration have particular investment, finance or accounting experience. While IFS believes that requiring some members to have investment, finance or accounting expertise is beneficial to the Board and more states are beginning to require such experience, the absence of a statutory

⁴ See Section III A (4) of the Plan Document.

requirement that members of the Board of Administration have investment, finance or accounting experience is not unusual or distinctive.

Furthermore, we acknowledge that there may be some downside to statutorily imposing a requirement that certain board members have investment expertise. One concern is that members with investment expertise will be inclined to concentrate on investment issues to the exclusion of other important business of the Board. In addition, compliance with the conflict of interest and ethics rules applicable to the Board members may make it difficult to find active investment professionals who are eligible to serve. On balance, however, there is significant value in having individuals with financial, accounting or investment expertise on the Board and this requirement should be embedded in statute.⁵ Such a requirement for one or more⁶ members of the Board would enhance the Board's ability to set and to revise investment policy and to monitor its execution,⁷ all of which will inure to the benefit of the fund's participants and beneficiaries.

Based on our review of Board minutes from the last two years, we found several instances in which the Board of Administration operated with less than a full complement of board members. Board members conceded that there is sporadic absenteeism. In this regard, we were told that ex officio members are sometimes not available for board meetings due to other job-related commitments. There was general consensus among the Board members that absenteeism has not compromised their ability to manage the pension fund.

Notwithstanding this assertion, among the principle duties a trustee owes to the retirement system is the duty to attend and participate in board meetings. Repeated absences by board members – in particular, repeated consecutive absences -- diminish the effectiveness of the entire board and prevent the board from making decisions that reflect the opinions of the entire board. In addition, it is very difficult to stay abreast of new and developing board issues when a member routinely misses consecutive board meetings.

It is understandable that members may occasionally miss meetings due to illness or other types of "excused" absences (such as jury duty). However, regardless of the category of membership, all members are expected to attend board meetings. Recognizing that ex officio members of a public fund board may not be able to attend all board meetings, some jurisdictions

⁵ See, The Stanford Institutional Investors' Forum: Committee on Fund Governance, Best Practice Principles (May 31, 2007). *"If a state constitution, statute or local ordinance prescribes trustee membership selection in a manner that could be inconsistent with the appropriate exercise of fiduciary responsibility on behalf of fund beneficiaries, then the trustees should seek legislative amendments as necessary to provide an appropriate governance and fiduciary structure .(page 8)*

⁶ There is no magic formula for establishing how many Board members should have investment expertise.

⁷ We acknowledge a concern exists that having a Board member with investment expertise could create conflicts, depending upon the member's affiliations in the financial industry. IFS believes that certain types of investment professionals would be less prone to conflict, e.g., a finance professor or retired professional, and that appropriate recusal procedures would mitigate or eliminate potential problems.

authorize ex officio members to designate a representative to serve as their proxy on the board. Designation of a “permanent” representative (as opposed to selecting a different representative for each meeting) ensures continuity in representation and enables the alternate to stay abreast of Board matters. We encourage the Board to explore this possibility. Consistent with best practices, any representative of an ex officio member should take appropriate steps to obtain the necessary education and skills necessary to serve in a fiduciary capacity.⁸

We discuss Board education and training below in Section 2a.7. Travel and Education.

Task Area 2a Recommendations 1-2

We recommend that the Board of Administration support legislation requiring that one or more of the Board members be a person with investment, finance or accounting expertise.

We recommend that the Board consider the advisability of seeking legislative authority to allow ex officio members to designate a representative to attend board meetings in their stead, if and when necessary.

The Board does not conduct an annual review of the Retirement Plan Manager or an annual self-evaluation. Although the Board is not statutorily required to review annually the performance of the Retirement Plan Manager, we believe that the Board and the Retirement Plan Manager can benefit from such a review. The Board should adopt a formal policy and develop written procedures setting forth a process, guidelines and criteria that will be employed by the Board in conducting its review of the Retirement Plan Manager.

Task Area 2a Recommendation 3

The Board should evaluate the Retirement Plan Manager annually and adopt a formal evaluation process that sets forth the process, guidelines and criteria that will be used by the Board in its annual review and evaluation of the Retirement Plan Manager.

We also suggest that the board formally incorporate a board self-evaluation process into its overall governance structure and conduct the self-assessment annually. Periodic self-

⁸ See, The Stanford Institutional Investors' Forum, Committee on Fund Governance, Best Practice Principles, May 31, 2007: “The committee recognizes that in many instances, trustees will serve ex officio and may not have qualifications that are otherwise expected of a fund fiduciary. In such instances, the ex officio trustee should recognize that his or her fiduciary duties to the fund beneficiaries are preeminent when deciding on fund issues. Additionally, ex officio trustees should seek to develop the skills and training outlined in [these principles]. If an ex officio trustee relies on another individual to represent the ex officio trustee or provide counsel, then it is a best practice that the representative possesses the appropriate skill and training required of a fiduciary [as outlined in these principles].”

evaluation of a board's effectiveness is critical to improving the overall performance of the board. In addition to providing the Board with valuable insight into its management of the fund, the self-evaluation process assists the Board in improving the quality of its decision-making processes.

Procedurally, we believe the Board should conduct its annual self-evaluation immediately prior to conducting its evaluation of the Retirement Plan Manager. This approach will provide the Board with a contextual framework in which to evaluate the Retirement Plan Manager's performance. Moreover, the Board will be able to assess the impact, if any, that its actions have had on the Retirement Plan Manager's ability to fulfill her goals and objectives, valuable information that has a direct bearing on the Retirement Plan Manager's performance.

Task Area 2a Recommendation 4

The Board of Administration should institutionalize a board self-evaluation process and commit to performing a board self-evaluation annually. We encourage full board participation in the self-evaluation process. The Board of Administration should conduct the board self-evaluation immediately prior to conducting its annual review of the Retirement Plan Manager.

b. Board Meetings

As a charter-created board, it appears the Water and Power Board of Administration is required to hold regular meetings at least twice a month, pursuant to City Charter Section 503 (b). However, the Retirement Plan Documents state that the Water and Power Board of Administration is required to hold regular meetings at least once a month.⁹ We recommend that the Board of Administration update the Retirement Plan Documents to conform to the statutory requirement that the Board is required to meet at least twice a month. It appears from the 2008 Schedule of Regular Board Meetings that the Board typically meets twice per month.

Based on the Board and Committee Meeting Schedules, it seems that committee meetings are often held on the same day as regular board meetings. The one exception is the Audit Committee, which we were told convenes meetings only when necessary. The practice of holding regular meetings and committee meetings on the same day facilitates the likelihood of member attendance at meetings.

A representative from the City Attorney's Office who has been assigned to the retirement system attends all Board and committee meetings and is available to address any legal questions that may arise. We believe this is a good practice.

⁹ Section III A (8) of Plan Document.

The Board of Administration does not hold annual off-site board meetings. Off-site meetings are convened by some public funds so that the board can have focused discussions on more long-range issues and on issues that require more lengthy discussion and analysis. Many funds reserve time at the annual meeting to discuss strategic planning. The annual off-site meeting also provides the Board with an excellent opportunity to have detailed, in-depth discussions on the Board's planning initiatives, goals and objectives and, as discussed above, provides another venue for educational training. Finally, in addition to the goals of the pension system, the Board can also set goals and objectives for the Retirement Plan Manager at the annual meeting, which can then be incorporated into an overall Strategic Plan which we discuss further below.

Board members indicated that they typically receive their board packages four to six days prior to each Board meeting. The members we interviewed were very satisfied with the quality of the materials and indicated that they had sufficient time to adequately review the board materials and prepare for the meetings.

The Board members were enthusiastic and seemed to welcome the challenges of serving on the retirement board. The Board is supportive of staff and several members commented that staff reports to the Board have improved over the last year. We should add that the investment staff may have been somewhat handicapped due to the CIO vacancy. (However, staff informed IFS that a new CIO was appointed by the Board of Administration on September 1, 2008.) We were told that board members typically rely on information provided to them by the consultants and use staff as a cross-check. Board members indicated that meetings are open and members are respectful of the opinions of their colleagues.

IFS also attended a board meeting and we found that the meeting was organized, informative and run efficiently. Board members were engaged and the chair allowed ample time for questions and explanations from the various presenters.

Task Area 2a Recommendation 5

The WPERP Board should consider holding an annual off-site board meeting(s) to discuss long-range issues that affect and have an impact on the pension fund, to discuss strategic planning initiatives and to review and discuss any other issues that the Board deems appropriate. In addition, the Board should include educational training sessions at the annual off-site meeting(s).

2. Board Committees

The Board may delegate authority to one or more committees.¹⁰ By resolution, the Board has formed three committees: the Audit Committee, the Governance Committee and the Benefits Committee. We observed the resolution for the audit committee but did not observe resolutions for the two remaining committees. These committees serve in an advisory capacity and they are required to report their actions to the Board. According to the Plan Documents, their actions are reported to the Board monthly.¹¹ It is unclear from the minutes whether the committees comply with this requirement. Board members believe their current committee structure is efficient and adds value to the Board's decision-making process.

We recommend that the Board of Administration create charters describing the roles and responsibilities of each of these committees so that the Board's expectations are documented and clearly understood by committee members and so delegated authority to the committee is described and documented.

Due to the small size of the Board, many of the Board members sit on more than one committee. Together with their committee assignments, this is a significant commitment of time by Board members. Similar to responses we have received from other pension fund boards in California who are subject to a statutory "two meetings per month" requirement, members of the Board of Administration uniformly stated that they are not overwhelmed by or concerned about the amount of time they are required to devote to the Board meetings.

Task Area 2a Recommendation 6

We recommend that the Board of Administration create charters describing the roles and responsibilities for each of its three committees and any committees established in the future so that the Board's expectations are documented and clearly understood by committee members. We also recommend the committees report to the Board monthly as required by the plan documents.

3. Board Delegations

Although there is no formal written delegation of authority, the Board of Administration appears to have delegated authority to the Retirement Plan Manager for the day-to-day management and administration of the system.

¹⁰ We note that explicit provisions exist in the Plan Document for the establishment of certain committees and that a formal delegation of authority from the Board may be required in these instances. See Section III A (7) (a) of the Plan Document.

¹¹ See Section III A (7) (b) of the Plan Document.

As discussed above, the Board has established and delegated authority to three committees. As is typical among public pension funds, the Board's committees are purely advisory and do not have decision-making authority. Each committee reviews, reports to the Board and makes recommendations to the Board with respect to the subjects within its jurisdiction, and the Board then acts on the recommendation. The practice of establishing advisory committees, followed by written recommendations and action by the full board, is commonplace among public funds. The practice assures that final decision-making authority on all matters requiring Board action rests with the entire Board.

Staff informed IFS that "most" committee recommendations are presented to the Board in writing. We recommend that all committees report their recommendations to the Board in writing. We also recommend that the Board include a requirement to this effect in each committee charter.

Task Area 2a Recommendations 7-8

The Board should create one or more formal delegations of authority to the Retirement Plan Manager. The delegation should include, at a minimum, responsibility for: (1) managing the day-to-day administration of the pension fund; (2) employing, supervising, monitoring, and evaluating senior managers and staff, as delegated, (3) providing services to beneficiaries; (4) budgeting; (5) governmental affairs/media relations; and (6) employee training and development.

We recommend that all committee recommendations be reported to the Board in the form of a formal motion or resolution. We further recommend that each committee charter contain a requirement that all committee recommendations to the Board be done through formal motion or resolution.

4. Board Minutes

Principles

Trustees are judged in light of their decision-making process. The minutes of an organization document this deliberative process.

A public pension fund board should maintain minutes that memorialize its decision-making process. The minutes should establish the lines of reasoning the Board explored, the rationale used, and the decisions the Board ultimately reaches. Well-maintained minutes create the permanent historical record of those decisions, which is necessary both for reference purposes and for transparency of the Board's decisions. Thus, minutes are an excellent tool that can be used to disclose the facts on which board members deliberated and acted.

As a management tool, the minutes should serve as a reference point to assist staff in understanding the Board's objectives and in implementing the directives of the Board. Minutes can also serve as a benchmark for the Board and staff to measure subsequent progress (or lack of progress) relative to Board's actions, objectives and directives.

Risks

Without documentation of the deliberative process, the ability of a fiduciary to substantiate that a particular decision was prudently derived is more difficult and thus the likelihood of successfully defending a challenge of the outcome is jeopardized.

Observed Conditions

The Board records and transcribes the minutes of each meeting. Therefore, the minutes are very detailed, clear and complete. Board members believe they reflect the substance of the Board's discussions and actions. Meeting minutes frequently refer to documents or reports that are attached to the minutes.

In our experience we have found that some pension funds use summary minutes to reflect their deliberative process. We questioned whether members felt the minutes were perhaps overly detailed and too lengthy, but members indicated that they prefer to be overly-inclusive and are satisfied with the level of detail found in the minutes.

Staff uses a standardized format for both the minutes and for Board resolutions. This is a good approach. It facilitates consistency and increases the likelihood that required procedural matters are followed in each meeting. It further enables the Board to conduct its business in an orderly manner.

5. Governance Documentation

Observed Conditions

Members of the Board of Administration and staff informed IFS that the Board is currently focused primarily on structuring and diversifying the investment portfolio, although they recognize the importance of developing a sound governance framework. Diversification of the assets of the fund is a constitutionally-mandated obligation and we commend the Board for devoting serious attention to this responsibility.

The Board has adopted a Mission Statement that defines the retirement system's overall purpose. The Mission Statement is found in the Summary Plan Description, which, among other things, provides an overview of the Plan and the methods of funding the Plan.

IFS was informed that the Board hired Cortex Applied Research Inc. to develop governance policies and procedures tailored to the administration of the retirement system, but the governance project was abandoned.

In addition to formal delegations of authority and committee charters, which we discuss above, a number of essential governance documents do not exist. For example, there is no formal "Governance Statement" that identifies the roles and responsibilities of key participants involved in the management and administration of fund's investment program. A comprehensive Governance Statement takes on a heightened level of importance when the pension fund is a "unit" within a City department.

In addition to the Board and the Retirement Plan Manager, significant participants whose roles should be defined in a Governance Statement would include:

- Key staff, including the Chief Investment Officer and the pension fund's Investment Officers;
- The Department of Water and Power and the Water and Power Board of Commissioners, due to their roles with respect to the budget, which we discuss in Task Area 1 of the Report; and
- The pension fund's service providers (including the general investment consultant, specialty consultants and legal counsel).

The Governance Statement should clearly define the specific authority, roles and responsibilities of and among the key participants and describe who has authority over whom, who is responsible for what and when that authority may be exercised. The Governance Statement should include any written delegations and limitations of authority from the Board to the Retirement Plan Manager and other key participants.

One key employee whose functions, span of authority and reporting lines of authority need to be documented is the Retirement Plan Manager. It is unclear what the Retirement Plan Administrator's day-to-day job functions are and what functions have been delegated from the Board to the Retirement Plan Administrator. It is also unclear who the Retirement Plan Manager reports to; consequently, as discussed above, it is unclear whether anyone has assumed responsibility for reviewing the Retirement Plan Administrator's job performance. We understand from staff that there is an evaluation process for all new DWP employees during the initial probationary period. However, the incumbent Retirement Plan Manager is not within the

probationary period. (We note that it is also unclear whether the incumbent manager was evaluated (and by whom) during her probationary period.) Ambiguities such as these should be clarified and documented in a Governance Statement and in a functional job description, which we discuss further below.

The Governance Statement (or a separate delegation or charter) should also document the goals and objectives for the Retirement Plan Manager, which will help to clarify this role and the relationships among the Retirement Plan Manager, the Board, the staff and the Department of Water and Power.

The Board has documented some procedures. For example, there is a document entitled "Selection Process of Investment Managers" and a document entitled "Ongoing Monitoring Activities" regarding oversight the fund's investment managers. These documents are discussed in more detail below in Section 2a.9. Selection and Termination of Investment Managers. It is unclear whether these procedures were adopted by the Board.

Staff informed IFS that all of the Board's policies and procedures are centrally located in the investment section and approved by management. We recommend that staff collect all existing investment-related policies and procedures and incorporate them into a Standard Operating Procedures Manual. A single compilation of the Board's policies and procedures will then be available for easy reference by Board members and staff. A Standard Operating Procedures Manual will be particularly useful to new Board members and investment staff. The Board should work with the City Attorney and/or fiduciary counsel to determine which policies need to be updated or revised and work out a schedule for making those changes. New policies should be included in the Standard Operations Manual once developed and approved by the Board.

The retirement system has a number of civil service "duties" statements for various job titles and staff indicated that they are used for hiring purposes. Also, a position description for the CIO, a key position that is currently vacant, has been developed on a civil service form document. The CIO's duties and percentages of time to be devoted by the CIO to the enumerated tasks are included in the position description. Staff informed IFS that they used the CIO position description in the CIO search process. The "duties statements" serve a necessary purpose but they do not supplant the need for functional position descriptions.

There are no functional, day-to-day job descriptions that outline the precise duties of the pension fund staff and which impose specific requirements regarding applicable asset classes and the overall investment program. To enhance efficiency and staff accountability, functional position descriptions should be developed for each member of the retirement system's staff. The position descriptions should be specific, broken down into daily, monthly, quarterly and annual job responsibilities. Once finalized, the position descriptions should be incorporated into the

Standard Operating Procedures Manual. The civil service "duties statements" could be used as a starting point for development of the functional position descriptions.

Task Area 2a Recommendations 9-14

We recommend that the Board revisit the work done by Cortex (assuming it is documented) and, to the extent appropriate, use those materials as a starting point for developing written documentation to form a comprehensive governance framework.

We recommend that the Board of Administration, with the assistance of staff and the consultants, if necessary, develop a Governance Statement for the Plan. The Governance Statement should be a detailed document that clearly defines the specific authority, roles and responsibilities of and among the Board of Administration, the Water and Power Board of Commissioners, and the General Manager of the Department of Water and Power and describe who has authority over whom and who is responsible for what and when. The Governance Statement should identify the roles and responsibilities of key staff (including the Chief Investment Officer and the pension fund's portfolio managers) and the pension fund's service providers (including the general investment consultant and legal counsel).

The Governance Statement should also incorporate goals and objectives for the Retirement Plan Manager, which will add clarity to the role of the Retirement Plan Manager among the Board, the staff and the Department of Water and Power. Finally, the Governance Statement should include written delegations and limitations of authority, which we discuss in more detail in Section 2a.3. Board Delegations.

Once the Governance Document is completed, we recommend that the Board hold a general educational training session on its governance policies, procedures and practices.

We recommend that the Board, in conjunction with the City Attorney and/or fiduciary counsel, (1) collect and review all of the Board of Administration's investment-related governance policies and procedures; (2) adopt a Standard Operating Procedures Manual that consolidates in a single location, the fund's internal investment-related policies, procedures, determine what revisions need to be made and revise the documents accordingly; (3) determine where new policies are required, and (4) develop appropriate new policies and procedures.

To facilitate monitoring and oversight of the Board's investment-related policies and procedures, the Board's Governance Policies should include the dates of adoption, provisions for review of each policy or procedure, with frequency of review dates (e.g., this policy shall be reviewed no less than every three years) and include the dates of any subsequent amendments of the Policies.

Task Area 2a Recommendations 9-14

We recommend that the CIO (or designee) develop day-do-day functional position descriptions for each investment position. Functional position descriptions that describe in detail the daily, weekly, monthly and annual duties and responsibilities of each member of the retirement system staff will increase job efficiency and accountability. The current civil service "duties" statements can be used as a starting point for this process.

6. The Strategic Plan

A strategic plan is a document that summarizes the short and long-term goals and objectives of an organization. It establishes the organization's overall direction, i.e., where are we today, where do we want to be and how will we get there, sets the organization's strategic priorities and provides an "action plan" for achieving the organization's goals and objectives, all in accordance with established implementation benchmarks.

The principle elements of a strategic plan include:

- a vision statement;
- a mission statement;
- critical success factors;
- goals, strategies and actions needed to achieve the stated objectives; and
- a prioritized implementation schedule.

A strategic plan serves as an excellent management tool for purposes of establishing the framework and direction of the organization, focusing the management of an organization, communicating the priorities of the organization, measuring success and progress in meeting goals and objectives, and fiscal planning. It should not be viewed as a static document; rather it should be referenced and reviewed regularly.

Observed Conditions

The Board has not developed a Strategic Plan. Strategic Planning is consistent with best practices. Ideally, a Strategic Plan should be developed for the next one year, three year and five year periods, at a minimum, and should include, among other things, a mission statement, the Board's set of core values, the Board's goals and objectives and timelines for completion of its goals and objectives. In addition, annual strategic plans should be developed for each asset class.

Task Area 2a Recommendation 15

The Board of Administration should develop and adopt a Strategic Plan that covers the fund's goals and objectives for the one year, three year and five year periods, at a minimum. Also, among other things, the Strategic Plan should include a mission statement, the Board's set of core values, the Board's goals and objectives and timelines for completion of its goals and objectives. In addition, annual strategic plans should be developed for each asset class. In response to our draft report, staff indicated that short and medium term goals have been developed.

7. Travel and Education

Principles

To enhance the likelihood that the organization will operate effectively and efficiently, it is critical that board members and staff have the appropriate skill set, experience, and training to perform their assigned job functions. If they do not, it exposes the organization to governance and operational risk. Board members and staff cannot rely blindly on the advice of external service providers. It is essential that Board members and staff are knowledgeable about any particular subject matter under consideration to ensure they make informed decisions. If they do not understand something then they should not make a decision regarding it. It is particularly important that new trustees and staff participate in a formal orientation program as soon as possible upon joining the organization.

Training can take many forms, including required job-specific, leadership development. It can be provided in-house (e.g., using staff or pension fund service provider), or through the use of external providers (e.g., academic institutions or industry conferences).

Ongoing education and development should be an integral part of every organization and critical to its success. Since education and training cannot be obtained solely internally, travel is necessary. Although, the locations of educational and training courses offered are typically not within the control of the board and staff, nevertheless public fund organizations are still subject to significant public scrutiny regarding travel. In light of this, it is imperative that public fund organizations have a written travel and education policy. The policy document should facilitate transparency and accountability and include, at a minimum, the fund's philosophy regarding travel and education, the requisite approval process (including an advance requirement and any permissible exceptions), recommended circumstances that may require travel, suggested educational courses and conferences, and a reporting and disclosure process. The amount authorized for travel and education in the aggregate, and per board member and per key staff member and/or fund department should be subject to the organization's annual budget process.

Risk

Inadequately trained board members and staff place an organization at risk.

Observed Conditions

a. Board Education

Education and training was a common area of concern for the members. Training was described generally as ad hoc or non-existent. Training consists primarily of presentations made to the Board from time to time, principally by the consultants. Members are also free to attend educational conferences and seminars. Board members uniformly expressed a need for a more structured education and training program – one that includes new member orientation and on-going training. We agree.

During our interviews, various Board members informed IFS that there is no formal educational training program for new Board members, although they indicated they would like to have a formal training program. Similarly we were told that there is no formal on-going educational program for Board members. Instead, based on our interviews, most Board members obtain continuing education and training in Board meetings, through presentations by staff and the general investment consultant, and through attendance at industry conferences and educational seminars.

The Board has not adopted an Education and Travel Policy for Board members and retirement system staff. Most public pension funds do not have a written travel policy. However, we recommend that the retirement system document its education and travel policy and guidelines in a written document, which is consistent with best practices. The policy should include provisions for pre-approval of conferences (and costs associated with each conference) by the Board either through use of pre-authorized conference lists or pre-approval on a conference-by-conference basis. Board members should also be required to present a report to the full Board regarding the subject matter of the conference following attendance.

The Board maintains a written list of internal and external educational conferences, seminars and presentations attended by Board of Administration members in a document entitled "Management Audit – Board Members' Attendance to Investment Seminars and Conferences and Educational Presentations – September 2006 to March 2008." We reviewed the list for the two-year period from September 2006 to March 2008. The list reflects the name of the attendee, the title of the conference, dates of attendance, the sponsor, and in some instances, the speakers. We commend the Board for tracking this type of information and have made recommendations for broadening the Management Audit Report in Recommendations 17-25 below.

Based on the information provided regarding the conference subject matter, they all appeared to have material educational value. However, whether or not an educational conference provides value to a particular member is dependent on the knowledge level of that member. The list does not reveal the educational level of the conference.

There is also a good "Plain English" memorandum from the City Attorney entitled "What it means to be a trustee: a brief introduction into the world of fiduciary duty." This memorandum is somewhat dated (May 10, 2000); however, if it were updated, it would be a useful reference tool for new and existing trustees.

Task Area 2a Recommendation 16

The Board should ask the City Attorney to update the May 10, 2000 memorandum and distribute it to the Board members.

b. Board Travel

The retirement system appears to rely exclusively on City or Department of Water and Power rules, policies and procedures relating to travel. For example, the retirement system adheres to the City's travel expense and reimbursement procedures (see Chapter 5 of the Los Angeles Administrative Code: Reimbursement for Certain Expenses Incurred by City Employees); and the Department of Water and Power's Travel Rules, Mileage Reimbursement Policy and Meal Allowance Policy.

Again, we believe the Board should adopt a separate Travel and Education Policy for the Board. The Policy should set forth the applicable travel guidelines and inform the Board members of their obligations under these laws. Such guidance is particularly important given the fiduciary obligation of the Board members to comply with the law and the weight afforded to a determination by the Board regarding the administration of the fund.

There also do not appear to be limitations on the number or type of conferences and seminars that a Board member may attend nor is there a cap on the number of trips that may be taken by an individual trustee per year. As noted earlier, all Board members' travel and travel-related costs (including fees and expenses relating to attending and participating in conferences and seminars) should be pre-approved and documented by the Board of Administration.

Finally, we believe the City Attorney should provide clarity on the issue of when and under what circumstances a Board of Administration member or retirement system staff may accept reimbursement of travel and related expenses from a third party. Following resolution of this issue, reimbursement provisions should be incorporated into the Education and Travel Policy that we have recommended. The Board should make the establishment of a policy addressing the

permissibility and specific criteria associated with third party payment (or reimbursement) of Board member and staff travel a priority. It is our understanding that this issue is currently under review by the City Attorney.

Task Area 2a Recommendations 17-25

We recommend that staff work with the City Attorney (and outside counsel, if appropriate) to develop a "new member" orientation handbook. At a minimum, the handbook should include relevant laws, rules and regulations relating to the pension fund; relevant board policies and procedures, including the proposed Ethics Policy; Board Charters and Delegations; the budget and the Annual Report. Key staff and the City Attorney should also set aside time to meet with new board members and address any questions they may have regarding membership on the board.

The Board should periodically hold compulsory educational sessions (for current and new trustees) for the purpose of becoming more knowledgeable about the governing documents applicable to the administration of the pension fund and the investment of pension fund assets, including but not limited to the provisions of Proposition 162, the City Charter, as amended, the Brown Act, the Board's Investment Policy Statement, and any reporting and disclosure requirement applicable to the Board. In response to our draft report, staff indicates that some training is provided by the consultant and the retirement plan manager and that fiduciary training is provided.

We recommend that staff work with the City Attorney and fiduciary counsel to develop a formal new member and a formal continuing education program for board members. The program should include a fiduciary training component. In response to our draft report, staff indicates that Board members have a training schedule and budget.

The Board should direct staff to develop, in conjunction with the Board's general investment consultant, more educational seminars on investment strategies and products and risk management, as directed by the Board. In response to our draft report, staff indicates that educational seminars on investment strategies and products and risk management are provided to the Board; however, as noted above, the Board is not satisfied with the current level of training and we recommend that the educational program be enhanced.

We recommend that the Board of Administration adopt a Travel and Education Policy that includes written travel guidelines and approval requirements, which is consistent with best practices. The policy also should include provisions for conference pre-approval and Board of Administration members should be required to present a report regarding the subject matter of the conference

Task Area 2a Recommendations 17-25

following attendance. To facilitate the ability to monitor the Board's and staff compliance with the rules regarding travel, and the members' ability to select appropriate conferences for their knowledge level, the Board of Administration should prepare a list of "pre-approved" conferences and identify the educational level of the conference (e.g., fundamental, intermediate, advanced).

We recommend that the Board require that staff prepare an annual Travel and Education Report for the Board of Administration's review that summarizes Board member travel for the year. The Travel and Education Report should include: the number of board member(s) and staff that attended, the names of the attendees, and the total amount of expenses incurred in connection with participation at each conference. We recommend that the Board also consider limiting the number of conferences an individual trustee can attend in a given year and allowing members to attend more than the maximum number of conferences only with the approval of the Board. The current report entitled "Management Audit: Board Members' Attendance to Investment Seminars and Conferences and Educational Presentations – September 2006–March 2008 is a good starting point and should be broadened to include the costs (including fees and expenses) associated with each conference. As mentioned earlier, all costs relating to attendance and participation in conferences and seminars should be pre-approved by the Board. (Costs and fees could also be recorded in a separate document, such as a board resolution.) We also recommend that the staff prepare an annual report of Board and staff attendance at educational seminars, conferences and internal/external presentations for the Board's review.

We recommend that the City Attorney provide clarity on the issue of when and under what circumstances a Board of Administration member may accept reimbursement of travel and related expenses from a third party. Following resolution of this issue, reimbursement provisions should be incorporated into the Travel Policy. The Board should make the establishment of a policy addressing the permissibility and specific criteria associated with third party payment (or reimbursement) of Board member and staff travel a priority. It is our understanding that this issue is under review by the City Attorney.

The Education and Travel Policy should require investment professionals to participate in both internal and external continuing education and training relevant to their particular area or an area in which they may be crossed trained. We also encourage retirement system staff to maximize internal training and sharing of information through, for example, brown bag lunch sessions and attendance at approved conferences or programs.

The Education and Training Policy should clarify what educational opportunities are available to retirement system staff and the reimbursement policy.

c. Staff Education and Travel

Principles

To enhance the likelihood that the organization will operate effectively and efficiently, it is vital that staff have the appropriate skill sets, experience, and training to perform their assigned job functions. Training affords staff the opportunity to gain knowledge and needed educational tools that will enhance their ability to perform their job functions.

Ongoing training and development should be an integral part of every professional organization.

Placing a strong emphasis on staff education, training, and development is consistent with best practices and thus, should be a high priority for the professional organization. Continuing education in the pension fund industry should include staying abreast of new developments and being knowledgeable and well-informed about current investment issues. Moreover, ongoing educational training will strengthen the internal investment “bench” and enhance the likelihood that investment consultants will provide objective advice.

Training can take many forms. It can be provided in-house (e.g., using staff or pension fund service providers) or through the use of external providers, such as academic institutions or industry conferences.

Risks

Lack of appropriate skill sets and failure to provide adequate training for staff in their assigned job functions exposes the organization to operational risk.

Observed Conditions

Based on our knowledge of public funds, it is common among public funds to use internal training as well as external training that is available through educational courses, seminars and conferences. The Education and Training Policy we propose above should include a requirement that retirement system staff receive both internal and external training on relevant and appropriate investment topics.

The Education and Training Policy should clarify what educational opportunities are available to retirement system staff, include a list of approved conferences and seminars, and

include provisions relating to reimbursement of costs associated with attendance at educational sessions.

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The Board of Administration should review the Staff Education and Travel Policy in light of Recommendations 17-25 above.

8. Ethics

Principles

A conflict of interest arises when a person, such as a public sector employee, is influenced by personal considerations when doing his or her job. Consequently, decisions are made for the wrong reasons. Perceived conflicts of interests, even when the right decisions are being made, can be just as damaging to the reputation of an organization and erode public trust as an actual conflict of interest.

Conflicts of interest are inherent in the financial services industry. The potential for conflicts are numerous. Therefore, it is important that those who provide these services have processes in place to properly manage these conflicts, by, for example, eliminating them when possible, disclosing them and/or putting in place an acceptable ethics wall. Best practice is to avoid actual and perceived conflicts of interest when possible.

It is essential that a pension fund have the confidence of its members, the taxpayers, and the plan sponsor in the integrity of the pension fund's operations, particularly with regard to decisions which could have an impact on the financial stability of the fund. Public confidence can be undermined if the fund does not have policies and procedures in place designed to prevent improper conduct.

Ethical leadership begins at the highest level of an organization.¹²

To hold personnel accountable pursuant to vague or ambiguous principles and standards is contrary to fundamental rules of fairness.

Risks

Failure to establish, monitor and maintain effective conflict of interest and ethical standards is inconsistent with good governance, exposes the fund to headline risk and thus could

¹² Asset Manager Code of Professional Conduct, CFA Centre for Financial Market Integrity.

erode trust and confidence of its members and the taxpayers in the integrity of a fund's operations.

Observed Conditions

The Board of Administration relies on the City's Ethics Rules and Regulations to guide the Board and staff on ethics and conflict of interest matters; the Board does not have its own Ethics Policy. Board members and staff informed IFS that the City's Ethics Commission provides on-line mandated ethics training for all City employees. An annually mandated ethics training program is consistent with best practices

Although the Board has not adopted an Ethics Policy, there are some provisions in the Retirement Plan that address ethical matters. For example, Section III B (5) of the Retirement Plan, which is cited below, contains a prohibition against self-dealing with respect to pension assets.

(5) Except as herein provided, no member of the Board of Administration, and no employee thereof, shall have any interest, direct or indirect, in the making of any investment of moneys in the Retirement Fund, the Disability Fund or the Death Benefit Fund, or in the gains or profits accruing therefrom, or in any action of the Board in selling, assigning, conveying, exchanging, or other-wise transferring title to any bonds, securities or property of any nature whatever acquired with moneys coming into said funds. No member of said Board or employee thereof, directly or indirectly, for himself or as agent or partner of others, shall borrow any of the moneys coming into any one of said Funds, or in any manner use the same except to make such current and necessary payments as are authorized by said Board; nor shall any member of said Board or employee thereof become an endorser or surety, or become in any manner an obligor for moneys invested by the Board.

We recommend that the Board adopt its own Ethics Policy that is tailored to the unique ethical and conflict of interest matters that confront pension fund fiduciaries, which is considered to be a best practice.¹³ The Policy should clarify the legal and regulatory framework in which the Board is operating with respect to conflicts of interest, starting with the Political Reform Act of 1974 and the Government Code and related regulations. In addition to describing Board member and staff relationships and/or actions that may give rise to actual or perceived conflicts of interest, the Policy should include procedures for disclosing and reporting conflicts. Finally, the

¹³ See *The Stanford Institutional Investors' Forum, Committee on Fund governance, Best Practice Principles*, May 31, 2007.

Ethics Policy should include a compliance protocol to enable the Board to monitor Board member and staff adherence to the Policy.

Similarly, the Board does not have a comprehensive conflict of interest and disclosure policy for service providers (e.g., investment managers and investment consultants). We recommend the Board work with the City Attorney to develop an appropriate policy that will enable the Board to monitor third-party conflicts. In response to staff's comments, we did not find a requirement for an annual conflict of interest statement in the general consultant contract or in the contracts for investment managers.

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We recommend that the Board adopt a formal, tailored Ethics Policy and ensure that both board members and staff receive Ethics training relating to the new Policy. (This training should be in addition to any training that is done in connection with the City's Ethics Code.) The Ethics Policy should describe Board member and staff relationships and/or actions that may give rise to actual or perceived conflicts of interest. The Policy should also clarify the legal and regulatory framework in which the Board is operating with respect to conflicts of interest, starting with the Political Reform Act of 1974 and the Government Code and related regulations; define and clarify terms used in the Policy, clearly delineate prohibited activities; include annual reporting and disclosure requirements; and include an oversight and monitoring protocol.

The Board of Administration should, with the assistance of the City Attorney, develop a comprehensive conflict of interest and disclosure policy for its service providers and incorporate an annual certification requirement into the policy.¹⁴ The Board of Administration may also wish to clarify in the policy whether the City's lobbying laws apply to service providers.

With respect to the conflict of interest and disclosure policy for service providers, we recommend that the Pension Board require that consultants disclose, at a minimum, any personal or business relationships with members of the Board or administrative staff of the retirement system; and personal or business relationships (monetary or otherwise) with the fund's managers or consultants. The Policy should also require that consultants disclose in the RFP or other solicitation any payments for placement services to any person, firm or entity with respect to the contracting opportunity. These requirements are a very good starting point for a more comprehensive policy.

¹⁴ Sample conflict of interest protocols for third-party consultants, sample guidelines for internal review of conflicts, sample guidelines relating to provisions (for inclusion in contracts and requests for proposals) and sample disclosure forms for third-party investment consultants and managers are provided at Exhibit B.

9. Securities Litigation

Principles

Trustees have a fiduciary duty to recover investment losses incurred by the fund as a result of corporate fraud or mismanagement. The Department of Labor (DOL) views securities class action claims as plan assets. Since the claims are plan assets, 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 realize on claims.¹⁵

Although public pension funds are not subject to ERISA, most are governed by fiduciary standards that are similar, if not identical, to ERISA principles. It is probable that courts will be guided by ERISA principles when construing whether public pension fund trustees have an affirmative duty to pursue securities class action claims. While we are not aware of any precedent that establishes a requirement that public funds actively participate in securities litigation class actions as lead plaintiff (or otherwise), there are actions relating to securities litigation matters that a board must undertake to meet their fiduciary responsibility in this area. For example, consistent with the theory that securities litigation claims are plan assets, the Board should take reasonable steps to identify, evaluate, monitor and recover securities litigation claims. Adoption of a formal securities litigation policy will assist the Board in fulfilling its fiduciary responsibility in this regard.

Risks

Absence of an effective securities litigation policy may result in a failure to timely file proofs of claim, resulting in an inability to recover substantial litigation settlement proceeds to which the fund may be entitled.

Observed Conditions

The board has not adopted a securities litigation policy; however, under the supervision of the City Attorney, the Board has retained three outside law firms for the following primary purposes:

- to identify pending securities class action filings;
- to determine whether the fund has sustained a loss;
- assist the pension fund to file a claim, upon request; and

¹⁵ DOL *amicus* brief submitted in *Bragdon v. Telxon Corp.*, 98 Civ. 2876 (N.D. Ohio April 28, 1999).

- monitor the fund's equity portfolio for purposes of identifying potential litigation opportunities.

The individual contracts make clear that the law firms are not being retained to initiate any specific litigation matter on behalf of the fund and that the contracts are non-exclusive agreements with the firms.

Best practices in this area call for boards of [trustees] to adopt a formal securities litigation policy that incorporates a claims management process and we recommend that the Board of Administration adopt a Policy covering these issues. The Policy will provide guidance to the Board, the retirement system staff, the custodial bank, and the system's consultants in this area, including outside legal counsel and outside monitoring service providers, if any.

a. Securities Litigation Protocol

Boards of trustees should adopt a formal securities litigation policy that establishes the board's decision-making framework and criteria for determining the nature and level of the pension fund's efforts to participate in and to recover losses relating to securities fraud. The board should acknowledge in the policy that securities litigation claims are plan assets and therefore, the trustees have a fiduciary duty to pursue recovery of those losses. In addition, the policy should include the following:

- (a) provisions outlining how, when and in what manner potential securities litigations will be identified and evaluated by the Board;
- (b) a statement of the board's philosophy and policy objectives in participating – either as an active or passive member of a class - in securities litigation cases;
- (c) the board's guidelines for participating in and for monitoring securities litigation cases;
- (d) a portfolio monitoring procedure, which may involve external advisors and/or consultants;
- (e) an effective claims management protocol, which should include written procedures designed to ensure timely filing of proofs of claim in all securities litigation settlements in which the fund is eligible to file, including government settlements; a claims monitoring procedure; and a claims audit and verification procedure;

- (f) identification of the key internal and external participants in each of the above processes, including third party participants such as outside legal counsel, monitoring services and the custody bank, and a summary of their respective roles and responsibilities; and
- (g) reporting obligations.

b. Claims Management

Claims Management Process: A claim should be filed on behalf of the pension fund in connection with every securities class action litigation settlement in which the pension fund is a qualified member of the class, unless the Board (or a Committee of the Board established for this purpose) determines, based on expert advice, that it is in the interest of the Fund not to do so.

Responsibility: This function is typically performed by the custody bank but it may also be performed by a law firm or a securities class action monitoring firm. The responsible party should accept 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 – (a) assures that the responsible party has the list of pension fund claims over the threshold in order to consider whether to object/comment/opt out, and timely forwards proposed settlements of such claims to the designated party (e.g., evaluation counsel) for evaluation; (b) assures that claim payments are accurate; (c) provides that guidelines to custodian for investing and accounting for proceeds of claims; (d) provides for a claims reconciliation process and an internal audit process to check accuracy of claim filing activity;¹⁶ and (e) requires that the pension fund's custodian to provide monthly report, with annual cumulative report, to the pension fund, for each notice of settlement received. The report should identify:

- Name of security, CUSIP number, 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, and
- Distribution of proceeds for investment.

¹⁶ The details of the securities litigation internal audit process should be set forth in a separate audit procedure.

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The Board of Administration should establish a formal written securities litigation policy that memorializes the Board's philosophy and policy considerations regarding all aspects of the securities litigation case review, evaluation and on-going monitoring of potential cases. The policy should include procedures for filing proofs of claim, monitoring securities litigation claims, and managing the claims collection process, which should include periodic auditing of claims collections. Finally, the policy should also include a protocol for determining whether or not to opt out of a securities litigation case.

2b. Organizational Structure

The Los Angeles Department of Power and Water Employee Retirement Plans (WPERP) currently serves a population of 8,103 active members as of fiscal year end 2007, with 6,924 retirees and 1,868 surviving spouses and beneficiaries on the retiree payroll. In addition, WPERP operates a service credit buy-back program (FY 2007 volume: 1,086 contracts), temporary and permanent disability programs (1,092 temporary claims and 67 on PTD), and a Death Benefit program with standard and optional components. There have been discussions about implementing a Deferred Retirement (DROP) program, but no decision has been reached on whether to start such a program. WPERP operates with an authorized staff count of 61, of which 52 positions were filled at the time of our on-site visit.

The Benefits Administration area, includes the Membership, Retirement, and Disability / Death Benefits Sections with an authorized staff count of 23, with no vacancies reported at the time of our visit. Other select indicators of annual volume for the Benefits Administration area include (based on June 2007 Annual Report, the end of the last published fiscal year):

- Active Temporary Disability Claims Processed: 1,092
- Retirements processed: 182
- Contribution Refunds for Non vested Members Leaving System Processed: 58
- Deaths Processed: 25 Active and 261 Retiree Deaths

While the Department offers retiree health, this is not administered by WPERP.

During our review of the Benefits Administration Areas of WPERP, including Disability Processing, we conducted interviews with twenty employees across all benefit units and consultants during the period of May 5–9, 2008. In addition, we requested and reviewed comprehensive documentation WPERP provided in response to our discovery request.

Principles

An effective organizational structure should have clear lines of authority and accountability, spans of control that are reasonable for each executive or manager, and reporting ratios that neither over nor underutilize a manager. In a benefits administration organization that deals with a large beneficiary payroll function, the fiduciary nature of the organization also requires separating duties to reduce the ability of any one manager to commit fraudulent activities. The scope of our organizational review covers the benefit administration function including retirement, disability, and death benefits although we include comments regarding non-benefit administration areas where we observed a benefits administration impact.

In an optimally configured organization, operating managers will have a clear picture of which area is responsible for each key function, because like functions are typically grouped together. The size of the organization and the complexity of the work play a large role in determining how managers should design work processes and allocate responsibilities as they coordinate diverse organizational tasks and outputs of internal departments, and seek to optimize the flow of information throughout the organization. During our on-site inspection, we questioned interviewees about the organizational structure and whether they clearly understood which managers/sections were responsible for the functions that impacted them and their area.

Optimally configured organizations will also have clear accountability for key functions and projects, with the exception of cross-organizational projects whose nature crosses section or department boundaries.

Spans of control (i.e., the number of supervisors per employee in an organization) are measured in two dimensions: (1) reporting relationship ratios and (2) breadth and complexity of knowledge required to effectively supervise the reporting functions. At senior levels, high performing organizations generally have a manager: direct report ratio of 1:5, while at section levels for administrative/processing functions, the Federal Government has set supervisor: staff ratios of up to 1:15 as targets for efficient departments. We use these standards for our baseline assessment. We also look at whether like functions are grouped together to promote economies of scope and scale and to encourage sharing ideas internally, and to support customer and stakeholder ease of access to the appropriate part of the organization.

Risks

An organization with a non-optimal organization structure is at potential risk of decreased effectiveness and efficiency, increased time to resolve issues, disgruntled employees due to lack of access to upper management or delays in receiving information or answers to issue and concerns, inability of managers to perform effectively and provide appropriate supervision and support to their staff, higher error rates due to inadequate supervision, or cost inefficiency if managers are underutilized due to errors in scope.

An organization with a fiduciary role that does not adequately consider separation of duties in its organizational structure exposes itself to risk of malfeasance and improper use of member funds and resources.

An organizational structure that does not clearly assign all key responsibilities and communicate those assignments throughout the organization is at risk of failure to comply with legal requirements of its operation, along with the risk of less than optimal resource utilization.

Observed Conditions

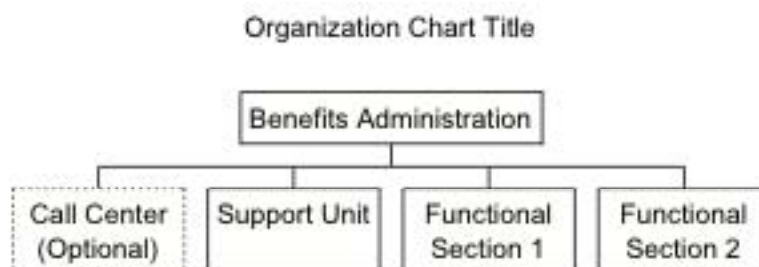
Two organizational structures commonly used in benefits administration areas include: (1) a function based structure where sections or units are established to handle specific types of transactions, and (2) a member-facing structure, organized primarily by member status, with units organized to process most transaction types required by members in a particular status (e.g., Active Members, Members in Transition, and Retired Members).

In a member-facing structure, services for each member status type are consolidated under the appropriate member facing unit, with common support functions (such as input and data verification) often located in a support unit that supports all member facing units. In an organization that establishes member facing units, a specialized role of counselor is sometimes created as the primary interface of the member with that unit.

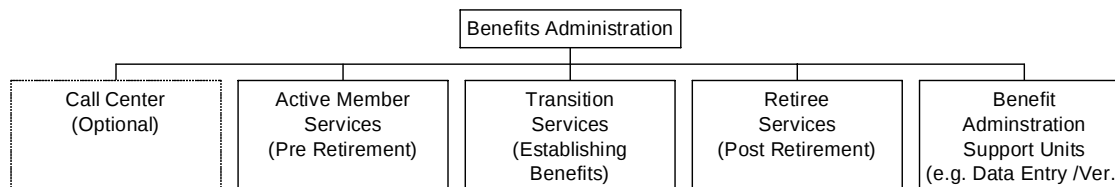
A function based structure, when like transaction types are combined within a section, can often achieve efficiencies based on volume that may not be achieved in a member-facing structure. A member-facing structure can often achieve higher levels of customer service and member satisfaction through a "single point of contact" approach for members in each status type. Call centers, when used in either environment give members a single point of contact for routine transactions, with specialists in the sections handling complex or higher level transactions.

Typical Benefits Administration Organizational Structures

Functionally Based Structure



Customer Facing Structure
(Organized by Member Status)



Based on the organization charts WPERP provided, their current organizational structure is typical of a member facing structure used by many benefits administration organizations with the exception of enrollment in supplemental death benefits, which causes services for current members to be split between Membership and Disability and Death Benefits.

WPERP's benefits administration area is currently organized by the following member facing" specific sections:

Area	Employee Counts
Membership	7
Retirement	9
Disability and Death Benefits	7

In the absence of any customer satisfaction metrics, we are unable to determine whether the current structure at WPERP is adequately serving members. Staff members interviewed, however, report few cases of member complaints.

WPERP has been adding the role of Principal Clerk, Utility to provide an additional supervisory level. In the absence of any performance metrics, we were unable to measure the effectiveness of this change in structure. Management notes that it began collecting workload statistics in February of 2008 to be used as part of performance evaluation.

In a typical retirement fund organization, most major units report into an Assistant Retirement Plan Manager, with Chief Analyst or equivalent positions heading the major sub units. WPERP follows this structure, with each benefits section reporting into an Assistant Plan Manager.

Currently members must call the general WPERP phone number, or call directly into the section that handles each particular request. A member's ability to identify the correct section is based on the information available in member publications, on the WPERP web site, or in letters and other communications sent out by WPERP. WPERP does not track call volumes, transfers,

or misdirected calls, and we are unable to determine whether the current arrangement causes confusion.

WPERP's web site currently provides benefit plan information. The web site includes a directory with phone numbers for inquiries about specific transaction types, and a limited selection of downloadable reports and forms.

WPERP does not have a call center, although each section maintains a section specific inquiry number. Incoming calls and inquiries from members are routed directly to staff in each section based on the type of inquiry, and each section sets its own methodology on how to handle incoming calls. Organizations that adopt a call center structure generally find higher levels of customer satisfaction, more consistency in responses, less "shopping" by members among specialists, and a better ability to handle call spikes due to notifications or other "mass" issues. Through proper training, call centers can deliver a consistent high quality experience. We note that most section heads interviewed thought that a call center structure "could if properly implemented" be effective at WPERP.

In benefits administration organizations that have adopted a call center structure, the call center handles calls of a general nature, questions about plan features, requests for forms, setting appointments, status questions about cases, and other first level calls, including most calls whose answers can be found in summary plan descriptions. More complex questions about cases in progress (other than status) are generally referred to a specialist unit in a call center situation. In the absence of any tracking data on call volumes, we were unable to assess whether call volume is sufficient to support a call center structure at WPERP.

Within the Benefits Administration area, section heads and employees are generally aware of the functions of each section and key personnel and report that other sections within Benefits Administration are generally accessible and helpful.

- The Benefits Administration area generally has a clear understanding of what transactions happen within each section, and section boundaries are clearly delineated. WPERP publishes internal and web based information to serve as a directory for WPERP employees.
- WPERP uses the concept of "roles" within sections to facilitate cross training and broaden employees' exposure to a multitude of benefit administration functions.
- WPERP also has published some Desk Manuals that outlines the key steps of selected processes with examples of forms and computer screens and instructions on how to process work. We note that the provided samples appear to be dated,

with multiple cross outs where individuals responsible for specific activities have changed.

While not entirely a Benefits Administration area function, and therefore partially outside the scope of this audit, we note that there are no specific individuals charged with measuring department wide quality assurance, overseeing physical and data security, developing performance goals and metrics, measuring member and stakeholder satisfaction within WPERP, or performing an internal audit function. These functions are usually found in organizational structures of highly performing Benefits Administration organizations.

DWERP is in the process of developing and implementing a new computer system for Benefits Administration called Penfax. While senior level personnel appear knowledgeable about the upcoming Penfax implementation, and many interviewees noted that they had been interviewed as part of developing user requirements, personnel are less clear about how business processes will change when the system is implemented, and how the WPERP organization structure might be modified to maximize the benefit of automation.

- While senior management mentioned that a consultant had been hired to assist in redesigning organizational work flow, documents received for review and comments from interviewees provide differing opinions on whether the system will provide automation that matches existing processes, or stimulate the redesign of processes for maximum efficiency and effectiveness.
- In addition, multiple interviewees noted that they believe responsibility for providing end user for Penfax has not been assigned, and they expressed concern that this as a critical “hole” in the Penfax implementation plan. Management reports however that these responsibilities have been assigned, so this may instead be a communications issue rather than a “hole” in the implementation plan.
- Authority and accountability for systems issues are unclear to non-senior interviewees, who in most cases, report being disconnected from the planned implementation.
- We also note that many of these issues have been identified in the Draft Strategic Plan recently submitted to the Board for approval.

In observing processes for quality assurance and separation of functions, we noted that all sections reported a double check process for key calculations to minimize errors and for reviewing payroll and reimbursement runs for accuracy. We did not observe any organizational structural instances where processes were combined within a section that would raise unusual opportunities for malfeasance.

We note that in the absence of fully documented procedures, we were unable to review processes for appropriate separation of duties, although a number of interviewees mentioned separate of duties in describing current procedures.

Task Area 2b Recommendations 1-6

WPERP benefits management should identify roles and assign responsibility for establishing appropriate procedures within for protecting the privacy and security of member records and data. If the role currently exists, communicate to the organization, along with current policy on privacy and security.

WPERP benefits management should identify roles and assign responsibility for monitoring and ensuring compliance with regulations and laws that apply to WPERP (such as data privacy and protection). If the role currently exists, communicate to the organization.

WPERP benefits management should identify roles and assign responsibility for the development, regular revision and maintenance of a business continuity plan for WPERP. If the role currently exists, communicate to the organization.

WPERP benefits management should consider establishing a Call Center as a single contact point for members if call volume justifies it.

WPERP benefits management should ensure that the consultant engaged to revise workflows has a scope that includes reviewing the organizational structure and work distribution that will maximize efficiency and service levels post Penfax implementation.

WPERP benefits management should continue to evolve the web site as a source of benefit, counseling, and self-service resources.

2c. Organizational Efficiency and Effectiveness

Principles

For a Benefits Administration operation, organizational effectiveness can be assessed in terms of timeliness and accuracy of the performance of the operation's key functions while minimizing the time, effort, and costs involved. As part of our review of the WPERP organization, we assessed three primary functions:

- Accuracy and timeliness of preparation of the pension payroll, including on boarding of new retirees;
- Accuracy and timeliness of preparation of medical/health reimbursement payments of death benefits and disability payments; and
- Comprehensiveness and completeness of counseling and enrollment services for active members and members approaching retirement.

In addition, as we conducted our review, we looked for indicators of effective operation typically found in high performing organizations, such as clearly communicated organization objectives and individual performance goals; performance metrics; strong internal communications (i.e., both "bottom up" and "top down"); workflow controls including systems that track the presence of and timely case completion and transaction requests; and well documented procedures. The presence and use of these indicators are significantly correlated to effective and efficient organizations.

Effective organizations are also characterized by a strong focus on quality control, with processes that encourage quality, internal measurement systems that track the quality of service delivery, and external measures that evaluate member and stakeholder satisfaction with the quality of service delivery.

An efficiency assessment focuses on whether the organization consistently delivers its key services on a cost effective basis in terms of labor and other resources expended to achieve its goals. For an organization to approach "best practice" levels in efficiency, it must meet a number of criteria:

- Awareness of the resource cost of delivering each service;
- Management and staff focus on how to streamline and improve the efficiency (and effectiveness) of service delivery; and

- Performance management system that encourages efficiency and effectiveness.

In an organization that operates primarily within a civil service system, efficiency is sometimes impacted by civil service rules that limit the ability of an organization to flexibly deploy personnel due to the rules that govern working out of grade or assignment.

Risks

If an organization is not optimally effective, it will have direct negative impact on its members measured in delays timely payments processing and other requests; on members selecting non-optimal retirement benefit configurations due to insufficient or incomplete counseling; and additional costs incurred to correct errors.

An inefficient organization will not properly steward resources held for its members; incur larger than necessary administrative costs, potentially resulting in the need for the Department of Water and Power to pay larger contributions. In addition, the inefficiencies may distract management from focusing on more important or impactful long term issues that could improve the effectiveness of the Benefits Administration area.

Observed Conditions

Currently WPERP does not subscribe to CEM Administrative Benchmark data, and does not generate any internal statistics that track timeliness, transaction costs, labor/resource cost per transaction for major transaction types, backlogs, or other performance metrics (other than transaction counts). In addition, WPERP does not have standard measurement systems in place to track quality of service delivery or member satisfaction. Therefore we are unable to statistically assess the effectiveness of WPERP operations or evaluate member and stakeholder satisfaction with service delivery. We draw our observations and conclusions from interviews with staff only, which are subjective without independent statistical confirmation. In addition, during our review, we looked for other indicators that are typically found in high performing organizations, such as:

- A strategic plan with time bound, specific, measurable organizational goals, used as a management tool to drive organizational focus and performance;
- Clearly communicated organization, section, and individual performance goals and appropriate performance metrics;
- Strong internal communications (both bottom up and top down);

- Workflow controls including systems that track the presence of and timely completion of cases and transaction requests;
- Well documented procedures;
- Strong quality control focus, with processes that encourage quality, internal measurement systems that track the quality of service delivery, and external measures that evaluate satisfaction of members and other stakeholders in the quality of service delivery;
- Strong project management processes and procedures;
- Clear procedures for determining and communicating policy; and
- Personnel management systems and practices that encourage regular performance reviews, long term staffing planning, and planning for turnover of key personnel.

These indicators significantly correlate to effective and efficient organizations.

1. Accuracy of Pension Calculations

Our review of pension calculations did not identify any significant errors or miscalculations. Our findings are presented in detail in our discussion of our audit of specific pension calculations (see *Review of Retirement Calculations for Accuracy and Compliance with Plan Provisions*) later in this Report.

WPERP self reports insignificant error rates in its transaction processing, and all sections interviewed noted duplicate (and occasionally triplicate) checks on all calculations. No supervisor reported significant time spent on error corrections beyond normal reconciliation reviews of transaction logs. In the absence of statistical data, we are unable to independently assess this, as WPERP does not generate statistics on accuracy or errors.

2. Indicators of Highly Performing Operations

We observed the following in assessing the WPERP benefits administration area against the indicators of highly performing organizations noted at the beginning of this Section:

Lack of Presence of Strategic Plan

WPERP did not provide a strategic plan for review.

Lack of Performance Goals and Metrics

WPERP does not have clearly communicated section, organizational or individual performance goals.

All interviewees stress that WPERP is universally committed to serving its active and retired members, and this message is communicated consistently at all levels of the organization. WPERP is highly focused on completing transaction requests in house in time for the next payroll run, and interviewees report no significant difficulties in meeting this goal. They also note that the Plan has never missed a payroll.

WPERP does not collect performance or cost metrics beyond actual expenses vs. budget and transaction counts. Highly performing organizations typically collect statistics such as turnaround time, cost per transaction, labor time per transaction, backlogs, and error rates to monitor, manage, and reward performance. This opportunity for improvement is recognized by Plan management.

Interviewees did not note any formal performance goals although they noted the strong organizational expectation of processing transactions accurately and in time for the next payroll run. No interviewee mentioned tracking any measures of efficiency, although a number of interviewees mentioned changes to processes that helped improve efficiency.

No Formal Internal Communications Program

WPERP' efforts to date to promote strong internal communications and an open environment where employees feel comfortable raising issues and concerns and in working together to resolve those concerns have met with mixed response according to interviewees, although some interviewees noted that the environment was improving. However, many interviewees noted that the organization was lacking direct communications from the Plan Manager to the organization – most communications filter top down through intermediary managers.

There is general agreement among those interviewed that WPERP would benefit from improving its internal communications and fostering an environment that encourages open exchanges of ideas and approaches.

There appears to be insufficient communications within WPERP over the status of the Penfax computer system, and any changes that might result from the system implementation. Management notes that it has promoted open communications on Penfax implementation, and that the process solicited and encouraged input from subject matter experts throughout the organization. Management also notes that it gives regular updates on implementation during staff meetings held twice monthly along with updates at every board meeting. As perceptions of

management and many of the staff differ on the effectiveness of these communications, there is an opportunity for WPERP to explore how to improve communications on this critical implementation.

Workflow Controls and Tracking

WPERP does not have systems based workflow and case tracking for transaction work in house such as retirement estimate backlogs. While some informal logs exist, WPERP would benefit from a comprehensive review of how best to track cases and work in-house. We were not able to determine plans for using Penfax for tracking work in house.

The Systems area supports ad hoc database requests, and is tracking some of the several ad hoc databases that WPERP relies on for daily processing. However, there does not appear to be a comprehensive list of databases available, any system-wide life cycle management plan for these databases, documentation on their maintenance or use, source code control or controls over the backing up the data they contain. We note that the ad hoc spreadsheets and databases may be automatically backed up if they reside on a departmental server rather than individual computers, but we are not aware of any policies to ensure this, or security procedures in place to control access. We also note that Systems is reviewing a limited number of specific databases and is considering selective enhancement/replacement. The large number of ad hoc database, spreadsheets, and manual systems suggests that there is significant duplication of data and data entry across the benefits administration area.

Many sections stated that they did not have sufficient time or staff to focus on process documentation, and that leadership had not emphasized it as a priority. WPERP may wish to consider engaging a consultant or adding one or more staff members to facilitate the completion of this project.

Quality Assurance Culture and Measurement

The WPERP organizational culture, universally confirmed by all interviewees is a culture that promotes accuracy, timeliness, and high quality delivery of service to WPERP members. WPERP is to be applauded on clearly communicating this organization goal. However, WPERP does not currently have internal service delivery standards and measurements and does not produce metrics to assess its performance in this area, nor does it regularly assess member satisfaction with service delivery.

Interviewees self report generally low error and complaint rates that they attribute to processes and procedures that require all data entry and calculations to be performed twice or double checked against input source documents. In the absence of metrics, we are unable to independently confirm this self- assessment. Our Commissioner interview did not note any concerns in this area that had risen to the Board level.

Project Management

During our assessment of the Benefits Administration Area, we did not observe any project management processes and procedures. We did not identify any standard methodology used within WPERP to manage projects to successful completion. We did not note any project status report (other than status reports on Penfax implementation).

Personnel Policy

WPERP has instituted standard days off of Friday, with a combination of 5/40 and 9/80 work schedules. In addition, WPERP has implemented a reduced walk-in schedule to provide down time for employees to complete paperwork and other duties.

Interviewees noted dissatisfaction with what they viewed as an inflexible approach to scheduling, although they acknowledged the potential benefits from standardizing schedules.

One interviewee noted that the standard "Friday Day Off" resulted in difficulty in attending off-site training, as such training was rarely available on a "Friday only" schedule. We did not determine if this was a widespread concern.

Hiring and Recruitment

A WPERP turnover report for FY 2007/2008 as of May 2008 notes significant turnover of over 20% per year (14 employees on a base of 61 authorized positions.). Possible reasons include lack of career ladders within WPERP; use of WPERP as an entry point into DWP; and normal turnover due to retirement.

A number of interviewees have noted that some of the more experienced employees are planning to transfer or retire one or two years of retirement from the Department. WPERP does not appear to have an articulated plan for capturing their institutional knowledge or identifying or training their successors. While some institutional knowledge will reside in other members of the sections there may not be sufficient backup to replace critical institutional knowledge, and we encourage WPERP to explore increasing its efforts in this area.

There is not a formal cross training program in place, and employees do not have formal backup duty positions. This differs from best practice. However, WPERP has implemented a "Roles" program in which section employees rotate between various functional roles within the section, to provide job enrichment and cross-training experience.

WPERP does not have formal training programs established for indoctrinating and training new employees or employees who transfer to new positions within WPERP. Training

consists of on the job “over the shoulder” training, review of documentation and manuals, review of the plan documents and MOUs, and one on one interactions with experienced employees familiar with the job duties. WPERP may wish to explore developing more formal training in tandem with completing its process documentation. We note that the turnover rate within Benefits Administration of over 20% suggests the opportunity for efficiency gains if the training period can be reduced through improving effectiveness of training.

WPERP notes that it is handicapped by the requirement that all positions be put out for bid first within DWP before they can be put out for bid LA City Wide. This results in a four to six month time to fill positions that become vacant.

Web Site/Member Communications

WPERP's web site provides a limited selection of downloadable forms, plan information, contact information, and limited counseling information. There are no current self-service options.

The design of the web site does not match industry best practice for look and feel, breadth of information available, or self-service.

The current web site does not contain any FAQ (frequently asked question) lists. WPERP should consider creating FAQ lists of commonly asked questions to aid members who are seeking information online.

Management notes that the web site will be revisited in conjunction with the Web module of Penfax, which is part of Phase 3 of the implementation. Depending on how far out this is scheduled, WPERP may wish to consider an interim update for look, feel, and content, with the addition of self service capabilities as part of Phase 3 implementation.

Security

WPERP has a policy of maintaining its files within locked central storage with limited access. Files are primarily paper based at this time, and pose a high risk of possible destruction due to water or fire damage. WPERP notes that they are considering a project to scan all paper-based documents.

WPERP does not have a formal security management plan.

WPERP does not have a formal business continuity plan, although there are identified backups for key systems in the event the facility cannot be used.

Other Observations

There is no formal tracking of backlogs or delays, leaving no visibility to executive leadership unless the impacted supervisor escalates the issue.

WPERP does not have a formal program in place to mask or restrict access to social security and other "high value" information and data elements that could be used for identity theft. Management notes that it does have a policy on privacy and has furnished that to IFS. In addition, it notes that system access is restricted by security levels and job functions, and that requests for access undergo an approval process.

In attempting to review the Benefits Administration area for operational efficiency, we were hampered by the lack of internal metrics or external comparative data.

Task Area 2c Recommendations 1-21

Management should develop an assessment tool for measuring the effectiveness of group, individual, and self-service counseling tools.

Management should consider developing "Important Fact" checklists for use in counseling sessions to alert members in writing of the potential impact of specific decisions they are making that can impact their benefits or the benefits of their survivors or partners to minimize member confusion. Maintain a signed copy of the checklist in the member's file.

Management should clarify the status of the Penfax implementation, including who will have responsibility for end user training and support responsibilities, and communicate current project to the organization.

Management should establish transaction cost and other performance metrics to measure organizational efficiency.

Management should consider subscribing to CEM Administrative Benchmark Data to acquire comparative efficiency data.

Management should establish internal and member based instruments for assessing quality of service delivery, and monitor and track trends over time.

Management should establish service delivery metrics and track and monitor service delivery performance over time, including department and individual efficiency and error rates in order to improve benefits administration efficiency and effectiveness.

Management should assign a strong project manager to the process documentation project; set firm deadlines; and bring this project to completion. This will help WPERP capture institutional knowledge and provide a baseline for maintaining stable operations.

Task Area 2c Recommendations 1-21

Management should develop a long term staffing plan that identifies likely retirement dates of key personnel, and institutes a program to capture the institutional knowledge of these long-term employees.

Management should develop a formal cross-training program to ensure that there is a designated backup employee with the skills and training to fill any critical gaps caused by normal or unexpected turnover or absences to the extent that this would not conflict with MOU provisions.

Management should establish formal goals and measures and metrics for each section that will capture the timeliness, accuracy, cost, and resource utilization for each key service provided.

Management should review whether Penfax will fill the role of a department wide case/transaction tracking system to track status, manage time to completion and backlogs, and minimize the number of places/systems where member data is stored and consider a supplemental tracking system if appropriate.

Management should prepare a department wide inventory of ad hoc spreadsheets, databases, and manual tracking systems and logs and review for backup, security and access control, and develop a plan for minimizing the number of ad hoc systems required for benefits administration. Ensure that each system is documented and backed up, and develop life cycle management plans where appropriate.

Management should develop a business continuity plan for benefits administration and the systems that support it with a regular update schedule, and communicate roles, responsibilities, and communications methods to all employees.

Management should develop a physical and electronic data security plan for benefits administration and member data.

Management should develop a specific privacy protection plan and processes to ensure that WPERP complies with applicable HIPAA and other privacy regulations.

Management should consider conducting an end to end review of benefits administration processes upon completing the current process documentation process to identify opportunities for improving efficiency and effectiveness.

Management should establish an internal quality assurance process that includes both internal self assessment and external (i.e., internal audit) assessment of each section's functions.

Management should establish performance goals and metrics for each Section Head that include both transactions-based and long term project goals and

Task Area 2c Recommendations 1-21

metrics, and develop a system of accountability that encourages completing both short term and long term goals.

Management should consider the addition of two to three staff positions that can provide long term project support to the sections for projects such as process documentation, scanning, and development of training programs.

Management should consider establishing a first level call center to handle routine inquiries from members. (This recommendation has also been noted under Organization Structure and is repeated here because of its potential impact on efficiency and effectiveness.)

2d. Staff Adequacy

Principles

Staffing is the process of attracting, organizing, and retaining employees of sufficient quantity that possess the skills sets that, in the aggregate, enable an organization to carry out its mission and objectives effectively and efficiently.

Risks

Inadequate staffing exposes an organization to a variety of otherwise controllable risks, including governance risk as well as implementation risks (both tactical and operational).

Observed Conditions

At the time of our audit, WPERP has budgeted for '07/'08 ten full time positions that are related to its investment management function. Seven of the ten positions are filled.

The Investments section is primarily responsible for implementation and oversight of the WPERP investment program. We understand that the investment section provides periodic cross-training.

The Benefits Administration Area (Membership, Retirement, and Disability and Death Benefits) had an authorized employee count of 23 with one vacancy for a vacancy rate of 4.3%. (The Department shows an authorized count of 61, with nine vacancies and a vacancy rate of 14.7%. Department wide turnover for FY 2007/2007 based on FY 2007/2008 Turnover Report as of May 2008 is over 20%.)

- No area reported difficulty processing current transaction volumes with current staffing levels, with the exception of benefits estimates, although some areas reported seasonal peaks and busy times. In the absence of backlog and performance metrics we were not able to statistically assess the adequacy of authorized or actual staffing levels.

Most supervisors and many individuals interviewed in benefits identified at least one person who had the knowledge and experience to fill in for them as a temporary replacement, although in some cases there was not a formal cross-training process in place, and the backup might come from a different section. We could not assess the potential impact on the section donating an employee to cover a temporary vacancy.

As noted earlier, the high annual turnover rate observed could result in a decrease in knowledge and skills within the organization over time. We recommend that WPERP consider establishing a succession planning process.

Most areas noted that they did not have sufficient capacity to focus on longer term strategic projects such as developing procedure and process documentation or planning for Penfax implementation within their sections.

Task Area 2d Recommendations 1-5

Management should evaluate the active employee count needed to effectively process current work volumes and determine a "minimum filled" position count needed to operate effectively.

Management should consider establishing a Benefits Specialist or similar position to provide a career track within the Department to assist in retaining seasoned employees.

Management should consider developing a multi-year projection of expected transaction workloads to develop a long term staffing plan, based on examining age and time in service of current active members to estimate future workloads.

Management should consider developing a contingency plan for covering the duties of section heads and other key benefits administration personnel during temporary vacancies or while replacements are being recruited.

Management should consider creating "bench" positions of one to two benefits specialists, senior clerk typists, and other positions that typically have vacancies so that you will have "swing" personnel on staff to fill vacancies as they occur or support sections during peak demand or special transaction project periods.

2e. Use and Sufficiency of Resources

Principles

Resource allocation throughout an organization is one of the key tasks that management must carry out consistently. Ensuring that appropriate funds are allocated to the procurement and maintenance of systems, personnel, business unit operations, and communications are crucial to the ongoing success of a given enterprise. With regard to pension systems, some of the key considerations in this area relate to the resources allocated to items such as IT, staffing, training and development, as well as member plan administration.

Risks

The lack of sufficient resources within an organization can undermine/hinder its ability to perform.

Observed Conditions

Benefits administration staff interviewed identified the following areas of insufficient resources: lack of formal training programs for new hires, insufficient staffing to focus on non transaction related projects such as documenting procedures, insufficient staff to support the planned scanning project, and temporary backlogs in producing benefits estimates.

- In the absence of any type of performance metrics, we were unable to independently assess staffing adequacy. We were also unable to ascertain the impact on Penfax implementation on staffing utilization due to lack of information available;
- Currently, training within the benefits administration area is handled section by section, primarily through shadowing and on-the-job training. Many interviewees reported additional self-training by reading the plan document and MOUs; and
- WPERP could benefit from establishing a more formalized training program aimed at reducing the time it takes for a new employee to become fully trained in his or her job duties. Many employees were aware of training programs on general skills offered by the City although they noted the difficulty in attending programs outside the office due to scheduling constraints.

Task Area 2e Recommendations 1-3

Management should consider developing formal skills and knowledge based training programs for new hires with a design objective to reduce the time from hire to effectiveness.

Management should consider establishing training in duties and processes of multiple sections for select employees to increase WPERP flexibility in assigning personnel across section boundaries to help in backlog or special project situations.

Management should clarify roles, responsibilities, and duties required of benefits administration personnel in the event of a business disruption and ensure personnel are aware of how communications will occur in such an event.

2f. Use of Investment Consultants and Provision of Contractual Services

Principles

Most pension funds hire experienced professionals to assist them in fulfilling their investment oversight responsibility. Investment consultants provide a variety of information that helps Board members and staff make better investment decisions, although the level of reliance on the investment consultant varies from fund to fund. Best practices suggest that Board members or fund staff should employ an investment consultant that has the necessary experience, independence, objectivity and resources to provide a diversity of expertise. If there are gaps in that expertise, the fund's leaders may be unable to make effective and successful decisions.

An investment consultant's specific duties, responsibilities and reporting lines of authority should be clearly defined in writing. An essential component of good governance is an understanding and clear articulation of the respective role and responsibilities of the investment consultant.

An investment consultant's contractual "scope of work" should establish its role and responsibilities to the fund. The investment consultant's functions typically revolve around the selection and monitoring of investment managers and their performance and the development of investment policy and guidelines. However, the investment consultant's role differs from fund to fund. Typically, the consultant's functions include:

- Asset allocation recommendations;
- Investment policy development;
- Investment structure and roles for particular investment managers;
- Manager search and selection;
- Drafting individual account guidelines;
- Calculating and reporting investment returns;
- Comparing those returns to benchmark returns and peer group performance;
- Calculating portfolio risk statistics; and
- On-going manager monitoring and compliance checks.

Consultants are also frequently called on to provide advice about custodial operations, trading and brokerage practices of investment managers, proxy voting, and the educational needs of Board members.

Risks

A Board's ability to prudently invest and monitor a fund's assets could be impaired if they do not have an objective expert to advise them. Absent a capable, objective consultant, a fund's investment program could be exposed to undue risk, undue costs or inferior returns.

The absence of a well-defined scope of services setting forth a detailed listing of the consultant's functions could expose a fund to unnecessary risk due to the potential for misunderstanding and/or lack of continuity, which could increase governance and fiduciary risk.

Observed Conditions

WPERP employs on retainer a general investment consulting firm, Pension Consulting Alliance ("PCA"), to advise the Board and staff. PCA is also retained as the alternative investment consultant, as discussed below for private equity. At the time of our due diligence, the Board was in the process of hiring a real estate consultant, that has since been retained (Courtland Partners - as discussed below) to replace PCA in this area.

The following table lists typical general investment consulting services in the first column and compares them to:

- the services required in Contract No. 156 commencing as of May 22, 2005 (through May 21, 2008 and extended through June 30, 2008) between the Board and PCA and amended as of January 1, 2007¹, and
- the services actually provided in practice to WPERP by PCA based on our interviews and documents provided by the Fund to IFS.

The services noted in the chart are explained in the text that follows. As can be seen in this table, the scope of services in PCA's contract is fairly complete.

Table 2f-i: Analysis of General Consulting Services		
Typical General Consulting Services	Service Required by the Contract	Service Provided in Practice by Consultant
• Consultant acknowledges fiduciary status	✓	✓
• Produce capital markets assumptions		✓

¹ A new contract with PCA (Contract No. 184) was effective July 1, 2008 through June 30, 2011. We did not review this contract in detail.

Table 2f-i: Analysis of General Consulting Services		
Typical General Consulting Services	Service Required by the Contract	Service Provided in Practice by Consultant
• Produce asset allocation study	✓	✓
• Make asset allocation recommendations	✓	✓
• Produce asset/ liability report	✓	✓ (Joint venture with EFI)
• Advise on asset allocation rebalancing	✓	✓
• Prepare or review fund's Investment Policy Statement	✓	✓
• Review and recommend Fund's investment structure		✓
• Recommend performance benchmarks for asset classes and investment managers	✓ (included in total Plan and individual manager guidelines)	✓
• Produce quarterly investment performance reports	✓	✓
• Calculate investment rates of return for total Fund and asset classes	✓	✓ (LDZ Group does calculations)
• Calculate investment rates of return for external investment managers	✓	✓ (LDZ Group does calculations)
• Rank Fund and managers against appropriate peer universes	✓	✓
• Produce portfolio characteristics or risk analytics for each asset class and total fund		Prepares some risk statistics for total fund but not each asset class
• Produce portfolio characteristics or risk analytics for each investment portfolio		✓
• Reconcile return calculations with external managers		
• Conduct searches and recommend external investment managers	✓	✓
• Prepare profiles or analysis of recommended external managers		✓
• Prepare guidelines for managers hired by Fund	✓	✓ (guidelines are for asset classes, not individual managers)

Table 2f-i: Analysis of General Consulting Services		
Typical General Consulting Services	Service Required by the Contract	Service Provided in Practice by Consultant
• Check compliance of external managers with Fund guidelines	✓	Advises on guideline compliance issues
• Monitor personnel, process and business issues at external managers	✓	✓
• Attend Board meetings	✓	✓
• Advise on other investment subjects	✓	✓ (as requested)
• Recommend new investment opportunities	✓	✓
• Conduct educational programs for Board and staff and provide ad hoc research on investment topics	✓ (shall also appear before government officials and local bodies to provide expert testimony or consult as requested)	✓ (as requested – have not had to provide expert testimony)
Ancillary Services:		
• Assist in custodian search and selection	✓	✓
• Custodial evaluation or monitoring		
• Securities lending analysis		
• Brokerage analysis		
• Commission recapture or brokerage discount analysis		
• Advice on transition management services	✓	✓
• Advice on proxy voting policies and monitoring	✓	✓
• Other (special projects)	✓ upon request, “if normally considered within the scope of a full service retainer relationship”	✓
• Additional atypical contract items	• Assist with fiduciary audit	✓
	• Actuarial searches	Not their area of expertise – is not in new contract (replaced with “other consultants”)
	• Advice on investment-related system improvements and other resources	✓

Table 2f-i: Analysis of General Consulting Services		
Typical General Consulting Services	Service Required by the Contract	Service Provided in Practice by Consultant
	• Advice on governance process and Board structure	✓
	• Advice on investment staff org structure	Have not been asked
	• Assist Board in developing internal reports	✓

PCA appears to perform the vast majority of services typically performed by general investment consultants and its contract also provides for some additional more atypical services as noted in the table above. WPERP might benefit from requiring PCA to provide advice on a few additional ancillary issues related to brokerage and securities lending as PCA should have substantial experience with the ways in which its other pension fund clients monitor these areas. PCA may be able to help WPERP generate additional revenue and/or reduce risk (securities lending) and/or reduce costs (brokerage). PCA indicated that while they do not currently provide any ongoing services in these areas, they would execute the assignment under a project-type scenario if asked to review one or more specific areas. We recommend that the Board consider amending the contract with PCA to specify that the consultant provide periodic review and recommendations regarding commission recapture, brokerage discount practices, securities lending, etc.²

Although the contract refers to asset liability and asset allocation studies “as required,” we understand that in practice the consultant has prepared an asset allocation/asset liability twice since it was hired in 2002 (detailed in Task Area 3d–Asset Allocation). We believe that it is helpful to conduct a simpler asset allocation review every year or two, between the full-blown studies. The new contract with PCA differentiates between “standard Asset/Liability” using Mean-Variance Optimization, which is included in the retainer fee, and the more complicated Asset/Liability study conducted using the PCA/EFI joint venture, for an additional fee (see additional discussion on this type of study in Task 3c).

Typically an investment consultant measures investment performance and prepares quarterly reports detailing investment performance, manager skill, and diversification. PCA uses a third party firm (LDZ Group) to calculate performance and produce these reports.

² Staff indicated in their comments to this Report that they were reviewing a commission recapture program.

In general, we found that the services specified in the contract are consistent with the actual services provided by the investment consultant. There are a couple of minor exceptions, noted in the above table, and these include some of the more atypical items, such as assisting with actuarial searches as well as what PCA's actual compliance monitoring duties are. Staff reports that they have the primary role for monitoring manager compliance, but this is not explicit in PCA's contract.

The SEC requires that consulting firms offer their SEC Form ADV annually to clients. Contract No. 156 does not require the consultant's Form ADV Part II be submitted annually; however the new contract with PCA requires them to provide the Board with the Form ADV and to provide "a copy of any updates without further written request."

Task Area 2f Recommendations 1-3

The Board should consider expanding PCA's contract to include specific, periodic review, analysis and advice on the quality and effectiveness of, and if appropriate, selection of securities lending services; and brokerage services (e.g., assistance with commission recapture programs, trade execution measurement services, etc.).

The Board should include an annual or bi-annual asset allocation review as a specific task in the consultant's contract.

The Board should clarify the investment consultant's involvement in the compliance monitoring process in their contract and in the IPS.

1. Best Practices and Consultant Services

Principles

Good investment consulting advice requires consultants with broad and deep experience in the areas of capital markets behavior, asset allocation theory and practice, investment strategies, brokerage practices, custody services, investment performance measurement, pension fund governance, and presentation skills. Additionally, the consultant's reports must be accurate, comprehensive and clear.

A board must have a very high degree of confidence in the advice and analysis of the consultant to be effective.

Risks

If a board relies upon the advice and analysis of a substandard investment consultant, the board risks making imprudent decisions for the fund.

Observed Conditions

PCA has provided investment consulting services to the Fund since 2002. As noted above, the investment consultant advises the Fund on a full service retainer basis. The consultant is generally well regarded by the staff and Board, based on our interviews. The Board renewed PCA's contract for general investment and alternatives in 2008.

The consultant appears to have sufficient knowledge and experience regarding investment management, pension plan management and the consulting services it provides to WPERP. PCA's consulting services appear to be of sufficient quality to meet WPERP's general consulting needs. We understand that in many areas, such as manager search and monitoring, PCA serves like an extension of staff and drafts reports and memos as needed. WPERP has not historically had an experienced investment staff and has relied very heavily on its consultant. We understand from staff's comments on this Report that a Chief Investment Officer (CIO) has been hired who will start shortly; this should lessen the reliance on the consultant along with the improving level of experience of other investment staff.

The consultant's work that we reviewed is of good quality and the reports prepared by the consultant are clear. The consultant's latest asset liability documentation and recommendations were satisfactory and the investment structure analyses were thorough and well executed. We found the content of and analysis provided within these documents to be generally consistent with industry best practices, although we did make a number of recommendations (see corresponding Task Areas), which we believe will improve WPERP's investment program in the above subject areas.

PCA's consultants interact with staff frequently and we understand that either the lead consultant or another consulting team member is generally available by telephone or email for questions, and there is a PCA representative at all Board meetings.

As mentioned above, the general consultant position was rebid during 2008, and PCA was renewed as the general and alternatives consultant after the due diligence process. Otherwise, we found no reference to a periodic consultant review by the Board and no other documents that memorialize such an event's occurrence in previous years. However, staff reports having conducted on-site due diligence visits at the consultant's headquarters. Periodic, generally annual, reviews of retainer consultant performance are an industry best practice.

Task Area 2f Recommendations 4-5

The Board should review WPERP's retainer consultant at regular intervals (e.g., annually) through a formalized process on its timeliness, depth of research, understandability of their material, and their overall availability.

Task Area 2f Recommendations 4-5

The Board should organize and document its periodic review of the consultant to include checking all contractual deliverables and services to ensure that the consultant performed on all requirements.

2. Consultant Fiduciary Responsibility

The Board's fiduciary role is discussed in great detail above (Section 1). Such a role generally compels a board, which may lack the necessary investment skill and knowledge, to rely on qualified investment consultants and investment managers to assist it in fulfilling its responsibility.

Principles

Although a plan's investment consultant is not legally required to be a fiduciary, fiduciary status imposes on the consultant the ERISA fiduciary standard. This means that the investment consultant accepts fiduciary responsibility along with a plan's board for the advice it renders.

The inclusion of fiduciary responsibility in a consultant's contract reduces a fund's risk and conforms to best practices in the consulting industry.

Even if an investment consultant's contract does not expressly classify the consultant as an ERISA fiduciary, the consultant's conduct may cause it to be deemed a fiduciary.

Risks

If the investment consultant does not serve in the capacity of a fiduciary, a fund risks that the quality of advice it receives from its consultant may not be the highest.

If an investment consultant is not designated a fiduciary per se, it may not be subject to ERISA fiduciary standards, including the duties of prudence and loyalty.

The absence of a required duty of loyalty is particularly significant in terms of avoiding potential conflicts of interest, such as self-dealing, given the many forms of "pay to play" monies from investment managers that may compromise a plan's investment consultant's objectivity.

Observed Conditions

PCA's contract with WPERP states: "The Contractor acknowledges that it is a Plan fiduciary....actions taken in connection with this agreement shall be taken with the care, skill,

prudence and diligence under the circumstances then prevailing that a prudent expert acting in a like capacity and familiar with such matters would use in like situations.”

The inclusion of fiduciary responsibility in the PCA contract should reduce risk for WPERP, and in this respect, the contract with PCA conforms to best practices in the consulting industry. See earlier discussion in Task Area 1–Governance.

3. Consultant Conflicts of Interest

Background

Conflicts of interest are pervasive in the financial services business. The potential for conflicts, particularly at multi-service financial services firms that provide services to and receive revenues from several categories of sources, are substantial.

Some consulting firms derive a portion of their revenues from clients through security transactions (in the form of brokerage commissions), manager searches (for which additional payment is required from investment managers, e.g., some consultants may charge a fee to be in the consultant's manager database), asset management, or through the consulting firms' own direct services to the investment managers their clients employ, e.g., marketing guidance, performance measurement, receipt of brokerage commissions, educational conferences, and strategic advice. However, investment consulting firms often do not disclose in writing to their consulting clients the amount or source of the compensation they receive for services provided to investment managers.

These multiple lines of business have the potential to create significant conflicts of interest for consulting firms. The investment consultant plays an integral part in a pension system investment program. Board members and staff often rely extensively on the consultant for input in developing manager search criteria, narrowing the list of qualified candidates, identifying distinguishing characteristics and, after hiring, on-going monitoring and firing.

Given the level of reliance on the consultant and the degree of judgment inherent in the process, any bias (positive or negative) by the consultant toward an individual asset management firm can have, or be reasonably perceived to have, a significant impact on the quality and objectivity of the consultant's advice. For example, can the consultant objectively monitor managers on behalf of a fund (or be perceived as being objective) when those same managers are also clients of the consultant? At the same time, however, these multiple lines of business can provide the consulting firm greater resources, e.g., more accessible working capital to pay for superior research departments, and advanced technology.

In recent years investment consulting firms have come under significant pressure to disclose such relationships. In 2002, the Investment Management Consultants' Association (IMCA) released final Standards of Practice for investment management consultants. One goal of the Standards is to ensure ethical behavior among investment consultants. To achieve this goal, the Standards require:

- Full disclosure of conflicts of interest; and
- Full disclosure to clients of all consulting services provided and all compensation received and compensation paid, in all forms, including all financial relationships, direct and indirect, between the consultant and investment managers, plan officials, beneficiaries, and sponsors, and third-party affiliations.

The CFA Institute (formerly known as the Association for Investment Management and Research, or AIMR) also has disclosure requirements for consultants regarding conflicts and additional compensation arrangements.

In May, 2005, the Office of Compliance Inspections and Examinations of the Securities and Exchange Commission released a staff report concerning the SEC's examination of a number of investment consultants. The SEC described its analysis as follows:

Under the Investment Advisers Act of 1940 (Advisers Act), an investment adviser providing consulting services has a fiduciary duty to provide disinterested advice and disclose any material conflicts of interest to their clients. In this context, SEC staff examined the practices of advisers that provide pension consulting services to plan sponsors and trustees. These consulting services included assisting in determining the plan's investment objectives and restrictions, allocating plan assets, selecting money managers, choosing mutual fund options, tracking investment performance, and selecting other service providers. Many of the consultants also offered, directly or through an affiliate or subsidiary, products and services to money managers. Additionally, many of the consultants also offered, directly or through an affiliate or subsidiary, brokerage and money management services, often marketed to plans as a package of "bundled" services. The SEC examination staff concluded in its report that the business alliances among pension consultants and money managers can give rise to serious potential conflicts of interest under the Advisers Act that need to be monitored and disclosed to plan fiduciaries.

The SEC examined in detail the practices of 24 major pension consulting firms who are registered investment advisers. The SEC found that:

- More than half of the firms provided services to both pension funds and investment managers;
- A significant number hold conferences that involve the participation of both pension fund clients and investment managers;
- Many sell the consulting firm's performance evaluation software to investment managers;
- A majority are affiliated with broker-dealers, and they often receive payment for their consulting services based on the amount of client brokerage directed through the affiliated broker-dealer;
- Many consultants do not consider themselves to serve their pension fund clients in the capacity of a fiduciary; and
- Many do not maintain policies and procedures designed to prevent conflicts of interest and to disclose the nature of the consultants' other business relationships.

The SEC report reminded consultants that, under Rule 206(4)-7 of the Investment Advisers Act, consultants have an obligation to adopt policies and procedures to identify conflicts and compliance risks. The report suggested that consultants take action to insulate their advisory activities from other business activities, to disclose all business relationships to their consulting clients, and to prevent conflicts associated with brokerage activities or gifts and entertainment given to clients.

Principles

If an investment consultant receives revenue (e.g., commissions) or other payments from investment managers, the consultant has competing interests/loyalties and thus may not be totally independent and objective in its assessment of the investment manager's performance. In such cases, the consultant may be influenced in its recommendation of new investment managers to the client (or to keep an underperforming manager) if the manager has (or will) generate commissions for the consultant or its affiliates or if the consultant identifies managers which will do very little trading.

Investors that rely on consulting firms for advice concerning service providers that are also sources of revenue for those consulting should install processes to effectively identify such conflicts and properly manage them.

By the same token, the consulting firms should install processes to identify and disclose conflicts to their clients as well as manage them to mitigate the conflict or eliminate them altogether. The latter is preferable.

Risks

Conflicts of interest create a risk that (i) the consultant's objectivity will be or has actually been compromised, and (ii) in appearance the consultant's objectivity will be or has been compromised. Both the fact and the appearance of an impairment of objectivity are appropriate matters of concern.

Observed Conditions

Although many investment consultants are compromised by conflicts of interest, PCA does not appear to have any of the conflicts of interest outlined above. Non-discretionary investment consulting is PCA's only line of business. PCA does not manage money, or maintain any relationships with money management firms, financial or otherwise. PCA does not own any part of a money management firm or broker-dealer.

The Board has also hired PCA as the alternative/private equity investments consultant regarding professionally managed private equity funds. PCA is paid a flat fee for this service, and this lessens the appearance of a potential conflict of interest. If the alternatives consultant were paid on a percentage of assets basis, PCA would be in the conflicted position of recommending the asset allocation as the general consultant while also being remunerated for the size of one of the asset classes. PCA does review the performance of the private equity program as part of its quarterly performance review.

Currently, the contract does not require PCA to notify the Board if PCA develops any conflicts of interest. Best practices dictate that a consultant annually certify that they do not have any conflicts of interest and that a consultant be required to notify the fund upon entering into a conflict of interest (see Section 2a–Board Governance – Policies, Practices & Procedures for discussion and recommendation regarding annual certification from service providers).

Task Area 2f Recommendation 6

The Board should include the requirement that the consultant submit at least annually a certification regarding conflicts of interest, and that the consultant must provide notification as soon as a conflict arises.

4. Role of the Private Equity Consultant

Principles

Private equity is an asset class that is often used by large institutional funds and one that differs markedly from publicly traded assets like stocks and bonds. Both private equity and real estate are relatively illiquid assets that are complicated to acquire and to sell. Once invested, an owner cannot exit easily, and when an asset fails to meet expectations, the investor may find it necessary to become more directly involved in management of the underlying business. Private equity, which includes venture capital and some private debt, offers the potential for substantial returns, but with the likelihood of greater risk. In any event, such investments are relatively labor-intensive from the investor's point of view.

Private equity consultants provide more in-depth knowledge of the workings of private markets, possess up to date information on managers and funds, and can deliver access to investment vehicles that would otherwise be unavailable to the investor. Although the content is different, the types of services and advice they offer to investors resemble that of general investment and real estate consultants.

Essential services by a private equity specialist include:

- Development of an overall strategy for investment in the asset class;
- Creation of an investment policy that guides the fund's efforts;
- Advice about how to structure an appropriate blend of leverage buy-outs, venture capital, mezzanine financings, secondary funds, distressed debt, private debt, and other private assets;
- Advice about the selection of limited partnerships, sector-specific funds, and fund-of-fund vehicles;
- Due diligence on the most appropriate candidates for investment;
- Identification and evaluation of specific managers and partnerships;
- Assistance in negotiating advantageous terms when making an investment;
- Monitoring the portfolios and operations of those managers selected by the fund;
- Construction of benchmarks or indexes for comparison to manager returns;
- Performance reporting and calculation of investment returns; and
- Documenting the procedures employed by the client in this asset class.

Other common services may include:

- Longer-range planning for the client's program;
- Accounting for cash flows into and out of the investment vehicles;
- Access to the consultant's database of manager and partnership returns;

- Research on general topics in the field;
- Preparation of educational materials and presentations for the Board;
- Participation on the advisory boards associated with many partnerships or managers;
- Arranging for background checks on managers; and
- Responsibility for “discretionary” management of investments or for provision of a fund-of-funds vehicle.

Depending on the role of a fund’s own investment staff, the specialist consultant may provide some of these additional services.

Risk

For funds of virtually any size, to the extent that its private equity program extends beyond use of a few fund-of-fund vehicles, use of a private equity or alternatives specialist represents a best practice.

Observed Conditions

WPERP employs PCA as its specialist alternative investments consultant for private equity. We understand that PCA recommended investing in alternatives as a result of the 2002 asset liability study, but the first investments in private equity were not made until 2006 and the first hedge fund investments were made in 2007.

PCA’s contract with WPERP details the services the consultant provides. This list of services is consistent with the services we consider to be essential in this asset class and includes:

- Initial process of education and strategic analysis for Board and staff
- Development of investment objectives and policies for the Alternative Investments asset class portfolio
- Screen for, perform due diligence on and assist Board in selecting investment managers
- Review and monitor investment vehicles utilized
- If needed, assist in determining appropriate investment staffing structure for asset class
- Assist Board in developing and updating Alternative Investments Investment Policy
- Periodically review compliance of portfolio with Investment Policy
- Provide semi-annual Alternative Investments performance reports [we understand that these will be provided quarterly going forward]
- Research general alternative investment subjects

- Review new investment proposals and transactions to assure compliance with investment objectives
- Provide annual report to Board reviewing Alternative Investments Investment Policy in relation to aggregate investment portfolio
- Assist staff in development of procedures and guidelines to implement approved policy, if needed, and
- Attend Board meetings as requested.

PCA serves as a non-discretionary consultant. By comparison, many large public funds have granted full or limited discretion to their private equity consultants in order to expedite the investment process and lessen Board involvement. Private equity deals do not generally remain open for months while investors decide whether to participate.

In order to ramp up the alternatives investment program, the Board has chosen to invest only in fund-of-funds up to this point, but will invest more in direct partnerships over the longer-term. We understand from our interviews that PCA does an annual investment plan with investment updates and pacing. PCA is also responsible for preparing customized private equity performance reports using dollar weighted returns (IRR) – custodian bank numbers and time weighted returns are used for the Total Fund and staff reportedly also calculates Private Equity IRR through the Private I system. The PCA private equity consultant attends Board meetings as required.

IFS reviewed the private equity consultant's 2008 Investment Strategy. Given the newness of the private equity program and the emphasis to date on fund-of-funds, we found the content of and analysis provided within these documents to be consistent with industry standards. We did not receive for review any separate private equity performance reports, which we understand will now be produced quarterly, rather than semi-annually. Our review of the investment consultant's work product and interviews with WPERP staff indicate that the consultant appears to have substantial knowledge and experience regarding private equity investment management.

Our interviews with the Board, staff and the consultant indicate that the services specified in the contract are generally being provided in practice. Given the newness of the program and the limited staff resources available at WPERP to date, staff relies heavily on the consultant for evaluation of candidates for new investment and on monitoring the total portfolio of private assets.

Task Area 2f Recommendation 7

The Board should continue to employ a private equity specialist to provide a comprehensive range of alternative investments advisory services.

5. Role of the Real Estate Consultant

Principles

Many large institutional investors employ a specialist consultant to advise the Board on investment strategies and opportunities in real estate. These assignments can take a variety of forms, some with discretion to make investments on behalf of the client, while others may only provide advice to decision makers (Board or staff) at the fund. The traditional distinction between investment consultant and investment manager seen in the worlds of publicly traded investments (like stocks and bonds) is often less clear in real estate because the consultant sometimes performs duties that more closely resemble those of a discretionary asset manager. The distinction is further blurred depending on the extent to which the fund itself employs staff with significant skills in real estate acquisition and management. Some consultants work closely with fund staff to implement a real estate plan. Others focus on advising the Board on the selection of discretionary real estate managers and calculation of investment rates of return.

Generally, the real estate consultant will advise the Board on:

- Market conditions;
- Strategy and investment policy;
- Investment structure and roles for managers;
- Manager or real estate Fund selection;
- Manager guidelines;
- Preparation of an investment performance report;
- Portfolio risks; and
- On-going manager monitoring and compliance.

To the extent that the consultant also has the discretion to select specific properties for purchase by the Fund, the consultant will take responsibility for:

- Sourcing potential investments;
- Evaluating the extent to which a specific investment meets the Fund's requirements or guidelines;
- Due diligence on the property under consideration, including review of financial data, evaluation of tenancy and leasing, and visits to the property;
- Negotiation with the seller;
- Closing the transaction;
- Selection of property manager, leasing agent, maintenance firms and other service providers;

- Preparation of regular reports on the property;
- Capital budgeting and improvements; and
- Disposition of properties when market circumstances or Fund needs so warrant.

To the extent that the real estate consultant recommends specific investments or vehicles for a fund, it should serve the fund as an investment fiduciary. If the consultant does not serve in the capacity of a fiduciary, a fund risks that its investment portfolio may not be managed to the highest standard of duty and care.

Risks

Like private equity, real estate is a complex asset class that involves unique risks and opportunities. The skills required to advise a fund in this asset class typically go beyond those offered by most general investment consultants or in-house fund staff. Boards need specialist advice to set policy, select investments and monitor results. For a real estate program of any size or complexity, the absence of a real estate consultant increases the likelihood that a fund will fail to achieve the investment returns it seeks from this asset class.

Observed Condition

WPERP was in the process of retaining Courtland Partners ("Courtland") to replace PCA in its role as non-discretionary real estate consultant at the time of our review. Courtland is a nationally recognized real estate consultant. The contract between Courtland and WPERP was effective as of May 22, 2008, after the time frame of our review. Courtland had yet to prepare any materials or recommendations for WPERP's use. Therefore, the extent of IFS' review is limited.

The scope of services in Courtland's contract is very similar to the scope for the previous PCA real estate consulting services. These services are generally consistent with the services an institutional investor would require from a specialist firm and are summarized below:

- Provide guidance to Board through initial process of education and strategic analysis;
- Assist Board and staff in development of investment objectives, guidelines, policies and strategy;
- Screen for, perform due diligence on and assist Board in selecting appropriate investment advisors/managers;
- Review and compare real estate funds;
- Review and monitor real estate investment managers and their performance report to Board;

- Assist in determining appropriate investment staffing structure for managing real estate assets;
- Provide Board with quarterly real estate performance and analysis reports of portfolio;
- Provide annual report to Board reviewing real estate investment policy;
- Research general real estate investment subjects and upon request, provided data to Board and staff;
- Review proposals and transactions to assure compliance with established investment objectives; and
- Attend Board meetings as requested.

Task Area 2f Recommendation 8

The Board should continue to employ a real estate specialist to assist the Board and staff with developing and implementing the real estate portfolio.

2g. Use of Legal Counsel

1. Evaluate the Procedures in Place Relating to Legal Advice Provided to the Board and Staff

Principles

Boards and staff members of public pension systems should have access to expert legal advice, as needed. Laws are continuously changing which requires management and boards to assess how they affect their organization and operating environments. In many organizations, the role of a legal function is not only to keep an organization's board and management informed about such changes, but to help ensure that the organization is in compliance with applicable laws, rules and regulations. In addition, it is not uncommon for the legal function to serve as an advocate and represent organizational interests. In this context, the specific organization, rather than an external entity, determines how best to accomplish all of their legal needs, including, evaluating whether they have enough legal-related issues to warrant in-house legal expertise; to rely upon outside legal resources; and/or to use a combination of both options.

A public pension fund is different from other governmental agencies in that its governing body, the Board, has a specific fiduciary duty to the members of the System. Accordingly, a public fund is best served by an attorney whose duty runs exclusively to the fund's fiduciaries, unimpaired by a simultaneous duty to other public officials who do not have a fiduciary responsibility to the fund's participants and beneficiaries.

Granting the board the exclusive authority to contract for legal services is reflective of best practices for public pension funds.¹ A report stemming from an investigation of the San Diego City Employees' Retirement System and the City of San Diego Sewer Rate Structure, the drafters echo this best practice, stating that to *"to enhance the likelihood that [the retirement system] will act for the sole benefit of the system's beneficiaries, independent of the City, [the retirement system] must be free to retain its own independent legal counsel."*² We agree with the Kroll Report. To be consistent with best practices, the board must be empowered to independently select its legal advisor(s), which may be in-house legal counsel and/or external legal counsel (including using the state, county or city attorney's office or a private law firm). Indeed, a board given authority and discretion to select its legal counsel could and often does also choose to use the sponsoring government's attorney for certain issues when a combination of expertise, convenience and cost renders such a choice prudent.

¹ Uniform Management of Public Employee Retirement Systems Act, Sec. 5(a) (2).

² Report of the Audit Committee of the City of San Diego. August 8, 2006 (The Kroll Report)

While granting pension funds the authority to independently retain its legal advisors is consistent with best practices, it is not necessarily the common practice. In a number of states and municipalities, the state, county or city attorney is the constitutional or statutorily designated legal advisor to the pension fund. Notwithstanding such designation, a number of the respective Boards have nevertheless been authorized to retain their own in-house legal counsel.

A myriad of arrangements exists where the applicable legal framework does not empower the pension fund to independently retain legal counsel. Where statutory provisions dictate that the attorney for the sponsoring government also serve as the fund's attorney, precise and enforceable procedures should be established for identifying situations in which conflicts of interest or lack of specific expertise require the engagement of separate counsel.

Risks

If a public fund attorney's loyalty and independence are compromised, the fund is at risk of being guided by legal advice colored by conflicting obligations and the attorney's need to accommodate interests other than the interests of the fund's participants and beneficiaries. The fund also risks violating applicable rules and regulations and entering into binding agreement(s) that do not represent the organization's best interest.

An attorney who represents the pension fund but is employed by the sponsoring governmental entity may be viewed as representing two clients with potentially conflicting interests without the consent of both clients, since the pension fund does not have the discretion to select the attorney.

a. Adequacy of Legal Resources

Managing pension fund assets requires expert legal advice. The trustees of a public pension fund need attorneys knowledgeable in the interpretation and application of the complicated laws governing their funds, experienced in reviewing and negotiating agreements with investment managers, consultants and service providers and familiar with the legal issues surrounding emerging investment issues such as private equity, venture capital, class action litigation and corporate governance. Given that a public pension board typically consists of trustees who, although appointed by various stakeholders, owe a duty to the fund's participants and beneficiaries, the attorney for the board should have undivided loyalty to the fund.

While fund attorneys are generally not considered "fiduciaries" in the same way that trustees are, they have a similar duty of loyalty derived from the professional canons of ethics which govern the legal profession. As 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 California Rules of Professional Conduct require attorneys to avoid representing clients with potentially conflicting interests unless both clients consent.³

A number of California public retirement systems employ independent in-house counsel including CALPERS, CALSTRS, LACERA, San Diego, Orange County, San Bernardino, Alameda County, and Santa Barbara County.

General Observations

In general, the Board members and staff appear to have a healthy respect for the legal work provided by the City Attorney's office to the pension fund, finding the assigned lawyers to be knowledgeable about fiduciary, investment, benefit, and municipal, issues in general.

A number of interviewees felt the Board should have the autonomy to select their own internal legal counsel. Other Board members commented that the current arrangement whereby legal support is provided by the City Attorney works fine.

Observed Conditions

Legal services are provided to the pension fund by the Los Angeles City Attorney's Office (the "City Attorney"). The City Attorney is a separately elected official whose powers and duties include, among other things, serving as "legal advisor to the City, and to all City boards, departments, officers and entities." (See Article II, Section 271 of the Los Angeles City Charter, emphasis added.) In addition, the City Attorney may engage outside counsel (at the fund's expense) when a particular matter before the Board (such as tax, private equity or securities litigation) requires specialized expertise that is not available within the City Attorney's Office.

The City Attorney's Office provides or obtains through the use of private external law firms a variety of legal services, including:

- Investments (private equity, hedge funds, real estate) – typically handled through the use of external legal counsel;
- Divorces/dissolutions;
- Charter changes (administrative forms, procedures);
- Litigation;
- Monitoring of procedural compliance related to Board meeting/minutes (governance, ethics matters, public services/disclosure);
- Tax counsel;
- Power of attorneys; and

³ California Rules of Professional Conduct, Rule 3-310(C)(1)

- Member inquiries/questions (coordinated with member attorneys to provide independent advice to the System).

The City Attorney determines which attorneys, the number of attorneys and the level of experience of those attorneys who are assigned to the pension fund. Currently, the City Attorney's Office has assigned one attorney to represent the Board of Administration on investments and general pension fund matters and a second attorney to represent the Board of Administration on benefits matters. Both attorneys report to the City Attorney. A different unit in the City Attorney's Office handles all legal issues, with the exception of retirement system matters, for the Department of Water and Power. We support the City Attorney's position that separate legal counsel should be assigned to the retirement system. This view comports with the assertion that the pension fund is separate and distinct from the Department of Water and Power.

As discussed earlier, the City Attorney's representative assigned to the Board of Administration attends every Board and committee meeting and believes the Board, the retirement staff and the City Attorney's Office have developed a very good working relationship. This belief is shared as well by various board members.

Board members also indicated that they received some fiduciary training from outside attorneys, although there is no separate formalized education program regarding applicable laws and regulations. See Section 2a.7 Travel and Education for a more complete discussion on Education and Training.

The fact that the City Attorneys assigned to the Board of Administration are employees of and under the control of the City Attorney creates an inherent structural conflict of interest. The City Attorney's control over the attorneys from the City Attorney's Office is inconsistent with the Board's status as an independent decision-making body with a fiduciary responsibility to the Water and Power participants and beneficiaries. In reality, the interests of the City Attorney are not necessarily always aligned with the interests of the Board of Administration. This is not unique to the Board of Administration. In fact, with respect to litigation, particularly litigation relating to benefits, it is quite likely that the City's interests may be at odds with those of the pension fund.

The lawyers in the City Attorney's Office believe they can adequately represent both the interests of the Board of Administration and those of the City. The designated lawyer believes the City Attorney's Office provides the attorneys with sufficient latitude to carry out their legal responsibilities to the Board of Administration without facing any conflicts of interest. They believe their role is to serve as general counsel to the Board.

The City Attorney lawyers are assigned to the Board of Administration on the basis of both availability and nature of the legal issue/matter. The City Attorney's Office has not

designated areas of specialization for each lawyer. The Board of Administration does not have the ability to insure that their work is given priority or that the lawyer with the best expertise is assigned to a given matter.

In addition to serving the Board of Administration, designated lawyers in the City Attorney's Office are responsible for delivering legal services to the City's other pension systems (LAFPPS and LACERS) and to the Department of Water and Power. The City Attorney charges the Department quarterly for services provided to WPERP. The Board of Administration has a fiduciary obligation to monitor those services and the costs associated with the provision of services.

Task Area 2g Recommendations 1-6

The Board of Administration should seek authority to hire its own internal legal counsel, who should report to the Pension Fund Manager. The autonomy we contemplate would include the authority to decide to use the City Attorney for certain issues that do not raise potential conflicts, and as to which familiarity with California law would render reliance on the City Attorney prudent.

Prior to hiring its own attorney, the Board should evaluate the responsibilities and legal skill sets required and then evaluate the economics of hiring an in-house lawyer versus the shared expense cost of maintaining the current arrangement.

If the Board hires its own attorney, the Board should establish in its Governance Documents the scope and limits of that attorney's authority, as well as the relationship between any in-house attorneys the Board of Administration may hire and the City Attorney's Office.

The Board should work with the City Attorney to develop and institutionalize, in advance, a process that will be invoked in the event a potential conflict of interest arises.

The Board and staff should request a meeting with the City Attorney's Office to discuss how to enhance the overall effectiveness of the services delivered by the City Attorney's Office.

The Board should seek the cooperation of the City Attorney's Office to establish procedures to ensure that the Board plays an integral role in determining the number of attorneys and the level of expertise of attorneys assigned to provide legal support to the pension fund.

The City Attorney's lawyers conduct a competitive bid process to select outside legal counsel. The City Attorney has hired outside fiduciary, tax, securities litigation, real estate and alternative investment, and securities litigation counsel to assist it in the provision of legal

services to the Board. According to the City Attorney, the need for and process for selecting outside counsel rests solely with the City Attorney.

The City Attorney's Office compensates external legal counsel on the basis of time spent.

Task Area 2g Recommendations 7-8

Under the current structure, the Board of Administration should have more autonomy in determining when there is a need for outside legal assistance and, if a need arises, the Board should be allowed to participate in the process for selecting a law firm(s) to provide those services.

The Board of Administration and the City Attorney should execute a formal memorandum of understanding which specifically identifies the process for selecting and terminating outside counsel. This process should also be incorporated into the Board's Governance Documents.

The role of the City Attorney, and more specifically the attorneys assigned to Board of Administration, are not defined in the Governance Documents; consequently, Board members have divergent views on the appropriate role of the City Attorney and the attorneys assigned to the Board of Administration.

Task Area 2g Recommendation 9

If the current structure is maintained, the Board's Governance Policies should be revised to clearly define the role and responsibilities of the City Attorney assigned to the Board of Administration.

With very few exceptions, the City Attorney must approve all draft contracts executed by the retirement system "as to form." (See Administrative Code, Section 370.) The Code does not define the scope of this "approval;" therefore, it is not clear whether or not this is a substantive review.

The pension fund does not have its own in-house legal counsel to draft contracts and other legal documentation. (We understand that outside counsel is used to draft documentation relating to private equity and real estate investments.) We were informed that the City Attorney has utilized standardized contracts for several years. However, it is our understanding that the standardized contract is not particularized to address matters specific to the investment industry.

Task Area 2g Recommendations 10-11

The Board should direct the City Attorney to develop a model investment contract to improve efficiency and streamline the contract review process. A number of public pension funds make use of model contracts for this very reason.

The Board should conduct a legal compliance review with the City Attorney's Office. Alternatively, the Board of Administration should consider establishing an internal compliance function and hire a staff to perform such responsibilities.

2h. Skill Sets and Position Descriptions

Principles

It is important for organizations to identify and define the skill sets required of its key executives, managers and staff accurately in order to develop a well-trained workforce which is essential to achieving both strategic and operational goals.

From an organizational performance perspective, staffing skill sets serve several important purposes. In particular, they provide important indicators to guide the determination of overall staffing needs, recruiting requirements, training and development priorities, as well as employee performance evaluations over a given time period. In this sense, the clear definition of staff skill sets plays a fundamental role in helping the organization meet its commitments to key stakeholders and constituents.

Risks

Poorly defined staffing skill sets and position descriptions can undermine organizational performance in several ways, such as failing to identify and hire managers and staff who possess the appropriate skills and experience necessary to effectively perform the jobs required for operational and strategic success.

Observed Conditions

WPERP uses both City Civil Service and DWP Classification minimum requirements bulletins to communicate work qualifications, roles/tasks and responsibilities.

We reviewed the classification minimum requirements for one representative position for each job title within the Benefits Administration area and the Investments area (i.e., CIO and IO positions). For the selected positions, we asked the incumbent to identify their prior work experiences.

We were unable to validate the accuracy, since most of the job descriptions provided to us during the audit did not identify the skills, knowledge and abilities (SKAs) required to perform the assigned job duties and responsibilities. The job description provided for the Assistant Retirement Manager – Benefits, and for the Chief Investment Officer and Investment Officer are exceptions, since they clearly identify specific SKAs needed by incumbents to perform the job. *(Subsequent to our onsite work, management reported in September 2008 it had completed PDs, SKAs and DDRs for all positions.)*

- The classification requirements provide an overall summary of the duties and responsibilities, but these mainly contain information pertaining to recruitment, including requirements, where to apply, selection process and notes. They serve to evaluate whether applicants' experiences and qualifications meet the position requirements.
- As a result, classification requirements do not enable the WPERP to communicate the job duties and responsibilities to position incumbents and/or to assess individual performance and/or staff development needs.
- Although we did not receive any resumes, we assume the backgrounds of WPERP managers meet the qualifications contained in the class specification since they currently occupy the positions. Given the City's hiring/selection process, WPERP position incumbents met the minimum class specifications to compete for their respective positions.
- In addition, the Retirement Plan Manager has over 10 years of services within WPERP and served as an Assistant Retirement Plan Manager prior to being appointed to the current position.
- Also, based upon our interviews, the two incumbents of the Assistant Retirement Plan Manager position have significant prior relevant work experience with the City and/or WPERP as does the Investment Officer II.
- Further, WPERP only conducts performance reviews during the probationary period. As a result, WPERP has no formal process in place to provide employee feedback and to promote staff development. The conduct of annual employee evaluations/appraisals is common practice among public pension funds.

Task Area 2h Recommendations 1-2

Management should develop job descriptions to communicate specific job duties and responsibilities to employees. The descriptions should also, at a minimum, contain the skills, knowledge, and abilities included in classification requirements.

Management should develop and conduct annual performance evaluations to identify and assess staff contributions and to discuss employee development needs and opportunities.

2i. Span of Control

Principles

Span of control and management layers are components of organizational structure. Span of control refers to the number of employees reporting to a supervisor. (Management layers refer to the number of layers in an organization excluding the bottom level of non-supervisory line workers.) The span of control and organizational structure of different entities is important because they affect communication, decision making, flexibility, employee morale, and resource allocation. While not uncommon, incremental changes to staffing arrangements without an overall strategy can be detrimental to an organization's overall performance. Lack of planning and flexibility may result in abrupt organizational changes, which may negatively affect employee morale and an organization's ability to respond to changing external conditions (i.e., economic, social).

In addition to highlighting the reporting relationships within an organization, an analysis of the span of control addresses other issues:

- Appropriateness of coordination through direct supervision;
- Opportunities to leverage wider spans of control when possible (i.e., when other management tools are used to coordinate tasks or when subordinates' tasks are sufficiently similar or routine in nature); and
- Consideration of an organization's size that may require a wider span (i.e., larger ratio of supervisors to subordinates).

Risks

The absence of an appropriate span of control may undermine the performance of an organization in a number of ways, including increased work backlogs, marked declines in product or service quality due to insufficient management oversight, and lack of timely constructive performance feedback to subordinates.

Observed Conditions

Within WPERP the Investments section the management/staff ratio is one Chief Investment Officer to four investment officers and five support staff. At the time of our management audit the CIO slot was vacant and the RPM was the acting CIO. (WPERP has since filled the CIO position.) Staff have responsibility for different asset classes and the CIO is

responsible for oversight of the entire investment program. Staff appeared clear on their responsibilities and lines of reporting among CIO, the Board, and the RPM.

The Investment Consultant (PCA) serves as a third party to perform additional oversight of the fund. Investment decision making authority remains with the Board and this is clear to investment staff.

The overall span of control in the Investment Division is appropriate for WPERP given its extensive use of external management.

1. Benefits

WPERP's manager/supervisor to staff ratios in the Benefits Administration area are as follows:

Area	Direct Report Counts (Excluding Admin Asst.)	Ratio	Note
Retirement Plan Manager	4	1:4	1
Assistant Retirement Plan Manager, Benefits Administration	4	1:4	2
Membership	6	1:6	
Retirement	8	1:8	
Death and Disability Benefits	6	1:6	

Notes:

1. Typically this position has the Assistant Retirement Plan Managers as a sole or one of few direct reports. In WPERP, the top four managers report to this position. This reporting ratio includes direct reports outside of Benefits Administration as well.
2. Typically this position has the main section head positions reporting to it, which is the case at WPERP.

We note no unusual span of control conditions.

In reviewing management levels shows a maximum of three levels of supervision below the General Manager level. We did not observe any conditions of excessive levels of management.

Task Area 2i Recommendations 1-3

Management should consider reducing the number of direct reports reporting to the Retirement Plan Manager. Typical retirement organizations have only the Assistant Retirement Plan Managers (plus, possibly, an administrative assistant) reporting to the Retirement Plan Manager to maximize the RPM's ability to focus on long term and strategic issues. (However the current reporting ratio is not excessive.)

Management should consider an organization structure that has the existing Assistant Retirement Plan Manager Positions assume some of the direct report responsibilities currently reporting to the Retirement Plan Manager if the incumbents have the required skills to assume those responsibilities. This will enable the Retirement Plan Manager to focus more on strategic and long term issues.

Management should consider establishing a formal or informal team structure within sections when their size approaches a 1:10 or greater supervisor: staff ratio.

2j. Opportunities for Enhanced Efficiency and Effectiveness

Principles

There is a widely perceived obligation on local government to its taxpayers to provide effective government services in an efficient manner.

In periods of increasing cost to taxpayers for almost all services, it is the further obligation of government to explore means to reduce the effect of increased costs on taxpayers by increasing government efficiency, if not by reducing services.

In a public pension fund where many benefits are guaranteed by the local government or, at least extremely difficult to reduce, there is an enhanced emphasis on the obligation to find more efficient means to provide the services and benefits.

Years of increasing benefit provisions for retired employees and their beneficiaries granted by the legislative bodies of local governments are coming to bear in the form of tangible and substantially higher benefit payments and liabilities. Witness the recent disclosure under GASB Statement 45 of these liabilities for retiree health care and other post-employment benefit commitments.

Governments across the nation have found real and projected savings and efficiencies through economies of scale gained by consolidation of multiple groups responsible for providing the services.

Consolidation of services and service providers can often enhance the services and by no means needs to result in reduced services and benefits.

Risks

Opportunities for significant cost reduction may be missed.

Observed Conditions

The City of Los Angeles employees are served by three separate pension Departments: WPERP, LACERS and LAFPPS.

The three pension Departments provide very similar services to their members and beneficiaries.

Each pension Department has a chief executive (the General Manager or Retirement Plan Manager) and separate Investment and Benefits Administration staffs.

Each pension Department has a Chief Investment Officer (CIO).

Each pension Department separately hires several investment consultants, a custody bank, an actuarial firm, an auditor, and uses the City Attorney and outside law firms for legal advice, among other services that are common to the three Departments.

Each pension Department maintains a member and benefits database system.

In several areas the professional services provided to the pension Departments are performed by the same entity, e.g., consultant, custodian, some of the same managers, and same legal counsel.

The most significant areas of cost and estimated savings, where services are provided by the same or overlapping entities are:

Table 2j-i

Overlapping Area	Approximate LACERS Cost¹	Approximate LAFPPS Cost	WPERP Current Cost	Estimated Cost of Combined²	Estimated Savings
Audit	\$96,000	\$83,000	\$96,000	\$82,000	\$193,000
Investment Manager Fees	\$24,354,000	\$46,317,000	\$18,330,000	\$74,890,000	\$14,111,000
Legal Services	\$699,000	\$517,000	\$60,000	-	NRD ³
Investment Consulting	\$1,855,000	\$852,000	\$752,000	\$847,000	\$2,612,000
Custody (if \$0, costs are net of securities lending revenues)	\$0	\$0	\$0	\$0	NRD
Estimated Annual Savings					\$16,916,000

This estimate does not take into consideration increased revenues from securities lending or other investment opportunities due to greater negotiating leverage and scale. We expect these additional savings would be substantial. Projecting these savings out over the time horizon of a public pension fund, typically 30 years, the savings would be in excess of \$500 million. We

¹ Approximate cost for LACERS and LAFPPS is taken from their management audit reports and for the year ended June 2006.

² Estimated using RV Kuhns *Public Fund Universe Analysis Report* June 30, 2006. Page 46 of the Kuhns report lists average costs in basis points for these categories for public funds over \$20 billion. The asset number for combined funds for this chart is estimated at \$27.3 billion.

³ Not readily determined. In some cases the cost of investment legal and administrative legal expenses are combined. Custody fees are paid through securities lending income. In both cases we would anticipate substantial savings.

think this is a reasonable and conservative estimate of the savings to be gained by combining the investment programs of the three LA pension departments. Substantial additional savings can be gained from combining the benefits administration functions of the three pension departments.

We see numerous benefits from consolidation. Done properly, consolidation can:

- Create efficiencies that will improve benefits administration and investment management, reduce overall costs and enhance investment returns.
- Over time consolidation will reduce the administrative costs resulting from operating two separate benefits and investment functions.
- Better coordinate benefits administration and investment management for all pension funds involved.
- Better coordinate staffing and alleviate the movement of staff among the Departments which can result in loss of productivity.
- Take advantage of economies of scale in implementing investment strategies; increased asset class allocations can result in:
 - Better bargaining power for investor rights and enhanced opportunities in portfolio construction; and
 - Fee schedules and break points that are more favorable to the fund.
- Take advantage of economies of scale in reducing cost of service providers:
 - Benefits database systems;
 - Investment consultants;
 - Investment managers;
 - Custodian;
 - City Attorney and other legal services; and
 - Financial auditing.
- Poise a consolidated investment program to take certain asset management in-house; through the attractiveness of the combined investment pool and staff:
 - open opportunities to bring more management in-house in areas that do not require a lot of high priced fundamental research;
 - increase individual investment officer salaries while reducing overall cost ratio of staff to assets under management; and

- o be more attractive to the pool of qualified investment professionals in the industry.
- Significantly reduce overall costs to fund the retirement of in the long run to the City and taxpayers.

Lastly, any consolidation should operate under a state of the art governance model that is consistent with fiduciary responsibility to the members and beneficiaries of the pension funds, the City Charter, other applicable laws, and the other related observations and recommendations contained in this report.

Task Area 2j Recommendation 1

With the primary objective of creating cost savings through new economies of scale, the City should consider, through appropriate legislative and administrative processes, consolidation of all aspects of WPERP's benefits administration and investment program into LACERS. Consistent with our prior management audit reports on LACERS and LAFPPS, the City and the Departments should ultimately consider combining the investment and benefits programs of all three pension Departments to maximize the savings from efficiencies and economies of scale.

Task Area 3 - Investment Program

3a. Investment Performance

Principles

A pension fund board should measure and evaluate the performance of each major segment of the portfolio and the portfolio as a whole against objective market benchmarks and internally adopted benchmarks over various time periods.

Risks

Poor performance puts a fund at risk of not having sufficient assets to pay benefits and of having to increase contributions paid by the plan sponsor.

Observed Conditions

IFS reviewed the cumulative investment performance history of the Total Fund and each underlying asset class investment over one, three, five, seven and ten year time periods ending December 31, 2007. IFS also evaluated the returns on an annual basis for the past ten years. Investment performance data was computed by linking historical returns provided to IFS by WPERP. IFS did not perform an analysis testing the accuracy of the data.

Presented below are summary investment performance tables for the Total Fund and each asset class along with their respective policy benchmarks through December 31, 2007. IFS compared the returns of the Total Fund against a universe of Public Sponsor Defined Benefit Plans (Wilshire Cooperative¹). IFS also compared the segment returns of each asset class against a universe of Total Funds, compiled from Public, Taft-Hartley, Corporate, and other Plan Sponsors. In addition, IFS also calculated risk-adjusted returns for the Fund over five and ten year time periods.

It is important to note that the returns provided by WPERP are slightly different than the returns that are used to create the asset class universes. The peer asset class universes are derived by taking the segment return of a total fund composite, which excludes the cash position. The data provided by WPERP is a composite return of each asset class, which includes cash. This would most likely result in a slightly lower ranking of WPERP's individual asset classes during

¹ The Wilshire Cooperative is a collaboration between Wilshire Associates and more than 60 independent investment consulting firms to provide performance measurement and analytical services to their plan sponsor clients. The investment performance data for the Wilshire universe comparisons are generally composed of gross-of-fee returns.

periods of strong positive performance, and a slightly higher ranking in periods of negative performance, due to the contribution of the cash return on the composites.

1. Total Fund: Cumulative Performance

As can be seen in Table 3a-i, the Fund ranked between the 17th and 50th percentile² of the Total Fund Public Sponsor Universe over the short, medium and long term time periods evaluated. It appears that WPERP's asset allocation may have played a significant role in its historical returns, as its Policy Index ranked very similarly to the Fund, between the 18th and 49th percentile, over the same time periods. WPERP outperformed its Policy Index slightly over the one and seven year periods.

On a risk adjusted basis, the Fund earned a lower rate of return for a given level of risk, as measured by their Sharpe ratio³, over the five year time period ended December 31, 2007. For the five year time period, WPERP's Sharpe ratio measured 1.30 compared to 1.38 for its Policy Index. The lower Sharpe ratio was due to lower relative returns. Over the ten year time period, its Sharpe ratio was higher than that of its Policy Index measured at 0.40 compared to 0.37, respectively. The higher Sharpe ratio was a result of lower volatility for the Total Fund.

Table 3a-i: Total Fund Returns - Cumulative Performance - As of December 31, 2007							
	1 Year	3 Year	5 Year	7 Year	10 Year	5 Year Sharpe	10 Year Sharpe
WPERP	9.03%	9.49%	10.99%	6.32%	7.28%	1.30%	0.40%
WPERP Percentile	17	28	50	47	38	--	--
Policy Index	8.90%	9.55%	12.12%	6.25%	7.44%	1.38%	0.37%
Policy Index Percentile	18	27	29	49	29	--	--
Universe Median	6.89%	8.43%	11.03%	6.20%	7.10%	--	--
Note: Performance for periods longer than one year is annualized							
*Universe: Wilshire Cooperative Total Returns of Total Fund Public Sponsor Portfolios							

2. Total Fund: Consecutive Performance

As can be seen in Tables 3a-ii and 3a-iii below, WPERP's Total Fund ranked in between the 2nd and 89th percentiles on an annual basis over the last ten years. It appears that WPERP's worst year on a relative basis was during the "technology" bubble of the late 1990's, which was followed by its best year on a relative basis. Overall, WPERP ranked above the median for seven

² Universe percentiles are measured on a linear basis, a score of one indicates the highest ranking, 100 is the lowest.

³ Sharpe Ratio a statistical measure developed by William F. Sharpe, calculated using by subtracting the return of the portfolio minus the risk free asset (91 day T Bills) divided by standard deviation of the portfolio. The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance.

of the ten annual time periods but only outperformed its Policy Index on an annual basis for four of the last ten years.

Table 3a-ii: Total Fund Returns - Consecutive Annual Performance					
	2007	2006	2005	2004	2003
WPERP	9.03%	13.02%	6.53%	9.09%	17.62%
WPERP Percentile	17	39	47	63	67
Policy Index	8.90%	13.33%	6.53%	10.71%	21.72%
Policy Index Percentile	18	35	47	35	31
Universe Median	6.89%	12.18%	6.43%	9.76%	19.54%
*Universe: Wilshire Cooperative Total Returns of Total Fund Public Sponsor Portfolios					

Table 3a-iii: Total Fund Returns - Consecutive Annual Performance					
	2002	2001	2000	1999	1998
WPERP	-8.09%	-0.77%	10.27%	3.72%	14.97%
WPERP Percentile	46	28	2	89	44
Policy Index	-10.33%	-3.76%	-1.64%	12.76%	20.89%
Policy Index Percentile	77	67	75	42	5
Universe Median	-8.41%	-2.64%	1.25%	11.51%	14.49%
*Universe: Wilshire Cooperative Total Returns of Total Fund Public Sponsor Portfolios					

3. Domestic Equity: Cumulative Performance

As can be seen in seen in Table 3a-iv below, WPERP's domestic equity portfolio ranked between the 18th and 44th percentiles over the short, medium and long term and outperformed its policy benchmark over the same time periods.

On a risk adjusted basis, WPERP outperformed its policy benchmark for both the five and ten year time periods. WPERP's Sharpe ratio over five and ten years measured 1.07 and 0.24 compared to 1.02 and 0.14 respectively for its policy benchmark. For both time periods, the higher Sharpe ratio was due to excess returns earned and lower volatility relative to the policy benchmark.

Table 3a-iv: Domestic Equity Returns - Cumulative Performance - As of December 31, 2007							
	1 Year	3 Year	5 Year	7 Year	10 Year	5 Year Sharpe	10 Year Sharpe
WPERP	8.95%	10.13%	14.05%	5.62%	7.43%	1.07	0.24
WPERP Percentile	18	27	44	26	29	--	--
Policy Benchmark	5.13%	8.90%	13.63%	4.00%	6.21%	1.02	0.14
Policy Benchmark Percentile	55	50	53	55	41	--	--
Universe Median	5.57%	8.92%	13.83%	4.27%	5.88%	--	--
Note: Performance for periods longer than one year is annualized							
*Universe: Wilshire Cooperative Equity Returns of Total Fund Portfolios							

4. Domestic Equity: Consecutive Performance

As can be seen in Tables 3a-v and 3a-vi below, WPERP's domestic equity portfolio ranked between the 10th and 89th percentiles over the past ten years on an annual basis. WPERP ranked above the median fund for six of the ten annual periods and outperformed its policy benchmark five of the last seven years as well.

Table 3a-v: Domestic Equity Returns - Consecutive Annual Performance					
	2007	2006	2005	2004	2003
WPERP	8.95%	14.56%	7.01%	11.68%	29.36%
WPERP Percentile	18	54	49	64	65
Policy Benchmark	5.13%	15.74%	6.13%	11.95%	31.04%
Policy Benchmark Percentile	55	37	62	62	53
Universe Median	5.57%	14.93%	6.97%	12.98%	31.37%
*Universe: Wilshire Cooperative Equity Returns of Total Fund Portfolios					

Table 3a-vi: Domestic Equity Returns - Consecutive Annual Performance					
	2002	2001	2000	1999	1998
WPERP	-18.77%	-6.48%	10.51%	6.05%	19.23%
WPERP Percentile	28	36	10	89	48
Policy Benchmark	-21.55%	-11.46%	-7.46%	20.89%	24.13%
Policy Benchmark Percentile	51	69	69	39	29
Universe Median	-21.47%	-8.90%	-3.49%	18.46%	19.09%
*Universe: Wilshire Cooperative Equity Returns of Total Fund Portfolios					

5. Fixed Income: Cumulative Performance

As can be seen in Table 3a-vii, WPERP's fixed income portfolio ranked between the 27th and 57th percentiles over the short, medium and long term time periods. WPERP's fixed income portfolio slightly outperformed its policy benchmark over the three and seven year time periods and slightly underperformed its policy benchmark over the one, five, and ten year time periods.

On a risk adjusted basis, as calculated by the Sharpe ratio, WPERP earned a lower level of return, for a given level of risk, over the five and ten year time periods. WPERP saw a five and ten year Sharpe ratio of 0.48 and 0.62, respectively, as compared to its policy benchmark which saw a five and ten year Sharpe ratio of 0.57 and 0.73. For both the five and ten year time periods, the lower Sharpe ratio was a result of lower returns relative to the policy benchmark combined with higher volatility relative to the policy benchmark.

Table 3a-vii: Fixed Income Returns - Cumulative Performance - As of December 31, 2007							
	1 Year	3 Year	5 Year	7 Year	10 Year	5 Year Sharpe	10 Year Sharpe
WPERP	6.40%	4.92%	4.72%	6.17%	6.04%	0.48	0.62
<i>WPERP Percentile</i>	57	27	31	25	38	--	--
Policy Benchmark	6.52%	4.74%	5.00%	6.12%	6.08%	0.57	0.73
<i>Policy Benchmark Percentile</i>	54	36	26	28	34	--	--
Universe Median	6.77%	4.57%	4.42%	5.75%	5.96%	--	--
Note: Performance for periods longer than one year is annualized							
*Universe: Wilshire Cooperative Fixed Income Returns of Total Fund Portfolios							

6. Fixed Income: Consecutive Performance

As can be seen in Tables 3a-viii and 3a-ix below, WPERP's fixed income portfolio ranked between the 14th and 93rd percentiles over the ten annual time periods evaluated, with seven of the years being above median. WPERP's fixed income portfolio outperformed its policy benchmark for six of the ten annual periods.

Table 3a-viii: Fixed Income Returns - Consecutive Annual Performance					
	2007	2006	2005	2004	2003
WPERP	6.40%	5.22%	3.15%	3.76%	5.11%
<i>WPERP Percentile</i>	57	22	17	59	37
Policy Benchmark	6.52%	4.98%	2.74%	4.96%	5.83%
<i>Policy Benchmark Percentile</i>	54	27	32	28	25
Universe Median	6.77%	4.43%	2.34%	4.16%	4.59%
*Universe: Wilshire Cooperative Fixed Income Returns of Total Fund Portfolios					

Table 3a-ix: Fixed Income Returns - Consecutive Annual Performance					
	2002	2001	2000	1999	1998
WPERP	10.22%	9.50%	11.03%	-2.89%	9.66%
WPERP Percentile	31	14	42	93	14
Policy Benchmark	9.83%	8.09%	10.82%	0.17%	7.30%
Policy Benchmark Percentile	41	61	45	31	81
Universe Median	9.25%	8.44%	10.64%	-0.59%	8.63%
*Universe: Wilshire Cooperative Fixed Income Returns of Total Fund Portfolios					

7. International Equity: Cumulative Performance

As can be seen in Table 3a-x, WPERP's international equity portfolio ranked between the 47th and 61st percentile for the time periods evaluated. WPERP's international equity portfolio returns lagged when compared to its policy benchmark for the one, two, and three year periods. Given that WPERP has been invested in international equity for a short time frame, we didn't calculate a Sharpe ratio as it would not be that meaningful. Significant underperformance in 2007 and 2005, shown below, detracted from the cumulative returns.

Table 3a-x: International Equity Returns - Cumulative Performance - As of December 31, 2007			
	1 Year	2 Year	3 Year
WPERP	12.44%	18.71%	16.93%
WPERP Percentile	52	47	61
Policy Benchmark	17.12%	22.03%	20.37%
Policy Benchmark Percentile	28	18	28
Universe Median	12.87%	18.49%	18.12%
Note: Performance for periods longer than one year is annualized			
*Universe: Wilshire Cooperative International Equity Returns of Total Fund Portfolios			

8. International Equity: Consecutive Performance

As shown in Table 3a-xi below, WPERP's international equity portfolio ranked between the 52nd and 67th percentiles on an annual basis over the past three calendar years. WPERP ranked below the median for all of the three periods and underperformed its policy benchmark for all three periods, as well.

Table 3a-xi: International Equity Returns - Consecutive Annual Performance			
	2007	2006	2005
WPERP	12.44%	25.34%	13.43%
WPERP Percentile	52	62	67
Policy Benchmark	17.12%	27.15%	17.11%
Policy Benchmark Percentile	28	42	40
Universe Median	12.87%	26.47%	15.89%
*Universe: Wilshire Cooperative International Equity Returns of Total Fund Portfolios			

9. Real Estate and Alternative Assets

Statistically significant data is not available due to the recent funding of Real Estate and Alternative Assets (Hedge Fund of Funds and Private Equity).

10. Cash: Cumulative and Consecutive Performance

As can be seen in Table 3a-xii below, WPERP's Cash portfolio earned a return in excess of the Citigroup 3 Month T-Bill for the short and mid term time periods. However, the Citigroup 3 Month T-Bill outperformed WPERP's Cash portfolio over a rolling ten year time period due to significant underperformance in 2000 and 2001. WPERP outperformed the Citigroup 3 Month T-Bill for nine of the ten annual time periods measured.

Table 3a-xii: Cash Returns - Cumulative Performance - As of December 31, 2007					
	1 Year	3 Year	5 Year	7 Year	10 Year
WPERP	5.70%	4.72%	3.33%	3.10%	3.51%
Citigroup 3 Month T-Bills	4.74%	4.16%	2.95%	2.93%	3.63%
Note: Performance for periods longer than one year is annualized					

Table 3a-xiii: Cash Returns - Consecutive Annual Performance					
	2007	2006	2005	2004	2003
WPERP	5.70%	5.10%	3.37%	1.37%	1.17%
Citigroup 3 Month T-Bills	4.74%	4.76%	3.01%	1.24%	1.08%

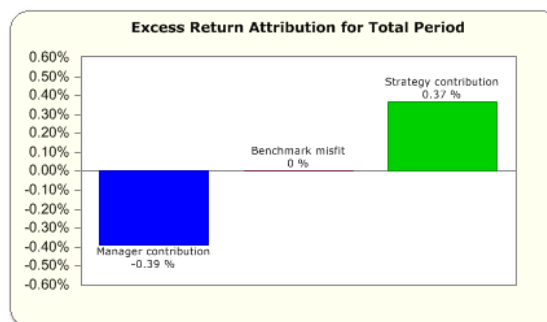
Table 3a-xiv: Cash Returns - Consecutive Annual Performance					
	2002	2001	2000	1999	1998
WPERP	1.86%	3.25%	2.66%	5.25%	5.46%
Citigroup 3 Month T-Bills	1.70%	4.06%	6.03%	4.73%	5.05%

11. Performance Attribution and Risk Analysis: Total Fund

We used MCube's AlphaEngine® software to determine the value added by WPERP's actual allocation strategy and active managers on a Total Fund basis. Using aggregate asset class data provided by the System, it appears that over the period analyzed (January 2003 through December 2007) we found that the portfolio benefited primarily from asset allocation deviations from target and was hindered by lack of manager alpha.

Table 3a-xv

LA Water D1			Evaluation Period : 01/01/2003 - 12/31/2007	
Aggregated Performance				
	Fiscal Year to Date	Total Period		
Excess Annualized Return	1.25%	0%		
Tracking Error	0.45%	0.69%		
Information Ratio	2.75	0		
M2 Excess Return	1.08%	-0.43%		
Maximum Excess Drawdown	-1.79%	-2.03%		
Ratio of Excess Good Risk to Bad Risk	1.53	0.67		
Benchmark Annualized Return	7.72%	11.95%		
Portfolio Annualized Return	8.97%	11.95%		
Confidence in Skill	99.69%	48.36%		
Success Ratio	75%	51.67%		



As can be seen in the above table, the annualized benchmark return for the static portfolio (e.g., a passively managed portfolio at policy benchmark weights) over the time period analyzed is 11.95%. Actual asset allocation strategy added 37 basis points annualized to the overall portfolio, whereas manager contributions detracted 39 basis points annualized for this period. As a result of compounding, the net excess over the entire time period was zero.

The table below shows that actual performance, which includes actual manager returns, added no alpha (0 basis points annualized) for the evaluation period (January 2003 through December 2007). Volatility increased from 5.77% to 6.03%, and maximum drawdown and worst single negative performance also worsened. However, average return when the benchmark is positive (1.80% vs. 1.69%) and average return when the benchmark is negative was slightly better (-1.17% vs. -1.24%). Overall, the actual allocation combined with manager returns added

no value with unfavorable risk statistics over this period. We describe the impact of only the actual allocation in the next section.

Table 3a-xvi

Performance Summary Aggregate									
Total Period									
		Annualized Return	Annualized Standard Deviation	Annualized Return-Risk Ratio	M2 Return	Average Return when Positive	Average Return when Negative	Maximum Drawdown	Worst 'Single' Negative Performance
Total	BMK	11.95%	5.77%	2.07	11.95%	1.69%	-1.24%	-2.54%	-2.4%
	Portfolio Decision	11.95%	6.03%	1.98	11.52%	1.8%	-1.17%	-2.74%	-2.45%
	Excess	0%	0.69%	0	-0.43%	0.13%	-0.14%	-2.03%	-0.67%

The table below shows detailed performance of the asset allocation strategy (akin to an asset allocation benchmark, exclusive of actual manager results) versus the Policy Index for the Total Fund.

Table 3a-xvii

📊 Performance Summary										
Total Period										
		Annualized Return	Annualized Standard Deviation	Annualized Return-Risk Ratio	M2 Return	M3 Return	Average Return when Positive	Average Return when Negative	Recovery Period	Maximum Drawdown
Total	BMK	11.95%	5.77%	2.07	11.95%	11.95%	1.69%	-1.24%	4	-2.54%
	Strategy	12.31%	6.06%	2.03	11.82%	10.62%	1.76%	-1.33%	5	-2.75%
	Excess	0.37%	0.43%	0.86	-0.13%	-1.33%	0.1%	-0.1%	17	-0.46%
		Maximum Drawdown Occurred On	Correlation With BMK	Ratio of Good/ Bad Risk	Down Side Risk - 1%	Down Side Risk - 5%	Confidence in Skill	Success Ratio	Worst 'Single' Negative Performance	Longest Under-Performance
Total	BMK	12/31/2007	1	1.52	1.43%	0%	N/A	N/A	-2.4%	6
	Strategy	12/31/2007	1	1.57	1.7%	0%	N/A	N/A	-2.43%	7
	Excess	11/30/2007	0.66	0.92	0%	0%	96.66%	63.33%	-0.26%	18

The Fund added 37 basis points with 43 basis points of tracking error by deviating from their asset allocation policy. The information ratio is about 0.86. On a risk adjusted basis, the "Strategy" return is 13 basis points lower than the Policy Index return. In addition, most of the other performance statistics such as worst single performance, longest underperformance, recovery period, maximum drawdown, bad risk, downside risk, average return when benchmark positive and average return when benchmark negative are very similar to that of the benchmark. The Success ratio is quite attractive at 63%, suggesting that 63% of the months had non-negative excess returns.

12. Performance Attribution and Risk Analysis: Asset Class

We used MCube's AlphaEngine® software to determine the value added by WPERP's active managers at the asset class level. The table below shows overall Manager Portfolio and benchmark performance for January 2003 through December 2007. The analysis is conducted on a purely static basis assuming fixed weights to each asset class (using the 2003-2007 policy weights), and actual performance from external management compared to the benchmark for each asset class.

- The overall Fund annualized benchmark return is 11.95% with a standard deviation of 5.77%. Maximum drawdown of the fund is -2.54% and occurred in December 2007.
- Over this window, on a purely static basis, the benchmark outperformed the fund by 0.36% annualized – i.e., external managers detracted from overall performance. Volatility for both the fund and benchmark were the same (5.78% vs. 5.77%). The maximum drawdown for the fund was slightly higher than the benchmark (-2.66 vs. -2.54%). This analysis is not precise because of the static nature of the analysis, but suggests that adding external managers worsened risk management by way of increasing drawdowns. The individual asset class segments are more relevant. In short, based on the assumptions made for the analysis, it appears that diversification is not being provided by external management in total as some risks appear to be higher at the full Fund level.

Table 3a-xviii

Performance Summary - Total Period									
Name	Annualized Return	Annualized Standard Deviation	Annualized Return-Risk Ratio	M2 Return	M3 Return	Average Return when Positive	Average Return when Negative	Worst 'Single' Negative Performance	Longest Under-Performance
Portfolio Decision Aggregate									
BMK	11.95%	5.77%	2.07	11.95%	11.95%	1.69%	-1.24%	-2.4%	6
LA Water Mgr 2003-06	11.58%	5.78%	2	11.56%	10.53%	1.74%	-1.12%	-2.4%	7
D4 : LA Water Mgr 2003-06 D4	-0.36%	0.73%	-0.5	-0.38%	-1.42%	0.11%	-0.15%	-0.92%	60
Excess									
Name	Recovery Period	Maximum Drawdown	Maximum Drawdown Occurred On	Correlation With BMK	Ratio of Good/ Bad Risk	Down Side Risk - 1%	Down Side Risk - 5%	Confidence in Skill	Success Ratio
Portfolio Decision Aggregate									
BMK	4	-2.54%	12/31/2007	1	1.52	1.43%	0%	N/A	N/A
LA Water Mgr 2003-06	4	-2.66%	03/31/2003	0.99	1.5	1.5%	0%	N/A	N/A
D4 : LA Water Mgr 2003-06 D4	7	-4.1%	05/31/2007	-0.05	0.62	0%	0%	13.28%	46.67%
Excess									

Detailed reports of each asset class are attached separately as Exhibit C. To summarize:

- Only Domestic Equity and Cash beat their benchmark on an annualized basis over this period, but the allocation to Cash is miniscule. The underperformance is quite

significant for International Equity and Fixed Income also underperformed. There was not enough data to evaluate other asset classes.

- On a calendar year basis,
 - Domestic Equity had three negative years and two positive years even though overall returns were positive over the entire horizon.
 - International Equity: This asset class has had negative performance relative to the benchmark in every year. Although the history is short, this would suggest a serious review is required if the data is accurate.
 - Fixed Income also had three negative years and two positive years for an overall underperformance over the entire horizon.
 - Cash seems to have outperformed its benchmark in almost every year, though there is one unexplained blip in the data (2000-2001).
- In Fixed Income and Cash, the volatility of the external managers in aggregate was greater than the benchmark. Therefore, an investor should expect to earn higher returns, but on a risk-adjusted basis (M-square measure), only Cash has positive excess.
- Maximum drawdown was better than or equal to that of the benchmark for Domestic Equity, International Equity and Cash. In Fixed Income, it was significantly worse.
- Overall, this suggests that risk management needs to be enhanced in manager selection in these asset classes.

3b. Appropriateness of Investment Performance Benchmarks

Principles

Performance benchmarks are objective standards used to assist in evaluating a manager or fund's investment performance. A good benchmark should have the following characteristics:

- act as a representative opportunity set;
- transparent,
- objective,
- exhaustive, and
- composed of investable securities or assets.

Institutional investors typically use at least two types of performance benchmarks: "policy" benchmarks and "strategic" benchmarks.

Policy benchmarks should represent the broad asset class and are used as a reference point against which the investor can compare its total asset class returns. For example, a domestic equity investment structure designed to provide broad asset class exposure may use the Wilshire 5000 Index or the Russell 3000 Index (broad measures of the domestic stock market) as a policy benchmark as opposed to the S&P 500 Index, which is more concentrated in larger-capitalization stocks. Policy benchmarks also help define the types of investment managers that should be used to achieve the investment objectives for the asset class and the nature of the manager's investment mandate.

Strategic benchmarks are generally more narrowly defined and typically focus on a particular investment "style" within the asset class. They more clearly describe the expected range of investment opportunities for a given manager and more objectively measure the manager's value added, or the manager's return independent of its investment style.

For example, an investor setting a strategic benchmark for a domestic equity investment manager that seeks to purchase large capitalization stocks that it believes will grow their earnings above the average rate relative to the market (a "large cap growth" manager) may select a large cap growth benchmark such as the Russell 1000 Growth Index as an appropriate strategic benchmark.

Therefore, the manager's excess return above the "comparable style" strategic benchmark is generally due to its active decisions as opposed to its investment style being "in favor" relative to a style-neutral strategic benchmark.

As an additional measure, many funds also (as a matter of policy) establish an "Asset Allocation" index. This also is constructed using published market benchmarks.

In contrast to the Policy Index, the Asset Allocation Index's asset class weights change to reflect the actual asset allocation of the fund as it "drifts" or as tactical decisions are made to overweight or underweight an asset class.

Therefore, this benchmark adjusts for the asset allocation drift over time. A fund's excess or under-performance versus the Asset Allocation Index is mainly attributable to the performance of the underlying investment managers (internal or external).

Risks

An inappropriate benchmark may not provide an investor with an accurate and appropriate measurement with which to compare its investment performance and/ or volatility.

Observed Conditions

WPERP currently works with the investment consultant, Pension Consulting Alliance (PCA), in determining appropriate benchmarks for the Total Fund, each asset class and each investment manager. WPERP reviews and sets its Total Fund Policy Index when addressing its asset allocation decisions. Asset class benchmarks are reviewed when new sub-asset class strategies are introduced to the portfolio as well.

1. Domestic Equity

WPERP currently uses the Russell 3000 Index to measure the overall domestic equity portfolio, as documented in PCA's quarterly report and in the IPS. The Russell 3000 Index measures the performance of 3,000 U.S. companies based on total market capitalization, representing approximately 98% of the investable U.S. equity market. We have found that the majority of pension funds appear to use either the Russell 3000 or the Wilshire 5000¹ as the benchmark to represent the broad domestic equity market. We believe the Russell 3000 Index is an appropriate policy benchmark for WPERP'S equity allocation.

¹ The Wilshire 5000 Index (as of 12/31/07) measures the performance of 4843 companies based on total market capitalization, representing approximately 100% of the investable U.S. equity market.

WPERP uses subset indices from the Russell 3000 as strategic benchmarks for its eight equity style mandates. For example, WPERP uses the Russell 2000 Value Index to measure the performance of its small cap value managers. WPERP uses the Russell 1000 as benchmarks for its passive equity investments.

While we did not analyze the investment strategies of the individual underlying investment managers, we did perform a holdings based analysis of WPERP's equity managers along with a review of the investment manager guidelines. Based on this analysis, it appears that WPERP is using the appropriate strategic benchmarks for its individual managers. (Please see Exhibits - Section IV, for our Holdings Analysis.)

2. International Equity

According to the IPS and as documented in PCA's quarterly investment report, WPERP currently uses the MSCI ACWI ex US as the benchmark for the total international equity segment. The MSCI ACWI (All Country World Index) ex US² is a free float-adjusted market capitalization index that is structured to measure equity market performance in both the *developed* and *emerging* markets.

As of December 31, 2007, WPERP'S international equity portfolio consisted of five managers.

- Three of the managers are benchmarked to the broad developed market index of the MSCI EAFE + Canada Index³. The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is structured to measure the performance of the *developed* international equity markets, excluding the US & Canada; but in this case, WPERP adds Canada into the index. As of June 2007, the MSCI EAFE Index consisted of 21 developed market country indices. IFS typically would recommend using the MSCI World Ex US index, which is an index that includes all the developed markets (excluding the US), but it is our understanding that this change has recently been implemented.

² The underlying countries that make up the MSCI ACWI ex US are the following: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Jordan, Korea, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Russia, Singapore Free, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the United Kingdom, and Venezuela. MSCI targets 85% of the free float-adjusted market capitalization in each industry, in each country for inclusion in the benchmark.

³ The underlying countries that make up the MSCI EAFE Index are the following: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

- The two other international managers are dedicated emerging market managers and currently benchmarked to the MSCI Emerging Market Index. The MSCI Emerging Market Index consists of 25 *emerging* market country indices.
- IFS reviewed the investment manager guidelines and the quarterly report exhibits of the international equity managers as presented by PCA. In reviewing these documents, it appears WPERP is using the appropriate strategic benchmarks for its underlying managers.

Given WPERP'S current mix of both *developed* and *emerging* market managers, we believe the use of the MSCI ACWI ex US Index is an appropriate policy benchmark for the total international equity allocation. As of December 31, 2007, WPERP had a policy allocation target of 90% developed markets and 10% emerging markets. Typically IFS would recommend WPERP also consider using an asset allocation index since it has policy allocation targets of 90% Developed Markets and 10% Emerging Markets, which are significantly different from the broad market. The broad international equity markets is currently 81% developed markets and 19% emerging markets. IFS learned through the interview process that the policy recently was updated, but not implemented, to 80% Developed Markets and 20% Emerging Markets which now very closely mirrors the broad market.

3. Domestic Fixed Income

The current policy benchmark used in the quarterly report for the entire domestic fixed income portfolio is the Lehman Brothers Universal Index⁴. The Lehman Brothers Universal Index includes all of the securities that make up the Lehman Brothers Aggregate Index⁵ (Treasury, Government Related, Corporate and Securitized Securities) along with other securities such as high yield corporate bonds, 144A securities⁶ and dollar denominated Emerging Market bonds.

WPERP's fixed income allocation consists of four managers: two core managers and two high yield managers. In reviewing the investment manager guidelines and reviewing the PCA quarterly report, it appears that the universe of securities for the two core fixed income managers is consistent with the securities that make up the Lehman Brothers Aggregate Index. It appears that WPERP does not invest in the non-index securities for these mandates. IFS also reviewed

⁴ The Lehman U.S. Universal Index represents the union of the U.S. Aggregate Index, the U.S. High-Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, the non-ERISA portion of the CMBS Index, and the CMBS High-Yield Index

⁵ The **Lehman Brothers U.S. Aggregate Index** represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

⁶ Securities for resale to qualified institutional buyers exempt from the registration requirements of Section 5 of the 1933 Act.

the investment manager guidelines and quarterly report information regarding the Fund's two high yield managers. Based on the information in these documents, the use of the Lehman Brothers High Yield Index appears to be appropriate.

At the asset class level, WPERP's use of the Lehman Brothers Universal Index is an appropriate benchmark for its fixed income portfolio. While WPERP does not invest in all the securities within the index, IFS believes the LB Universal Index to be the best representation of the Fund's opportunity set in the fixed income markets. WPERP may want to consider using an asset allocation index for their fixed income allocation. As of 12/31/07, the LB Universal consisted of securities from the Lehman Aggregate Index 86.6%, the Lehman High Yield 5.4% and other fixed instruments such as eurodollar bonds, dollar denominated emerging market debt, 144A securities and commercial mortgage backed securities, 8%. Given the Fund's allocation does not look like the broad market, the Fund may want to use an allocation index to determine if excess or underperformance is a result of manager alpha or through the Fund's overweight to high yield bonds.

4. Real Estate

WPERP currently uses the NCREIF (National Council of Real Estate Investment Fiduciaries) Property Index (NPI) to measure the private real estate portion of the portfolio as reported in its quarterly report and Strategic Real Estate Plan.

- As of March 31, 2008, the NCREIF Property Index (NPI) contained over 5,976 properties in the Apartment, Industrial, Office or Retail sectors, with a total market value over \$328 billion.
- In order to be included in NPI, these properties must have been acquired on behalf of tax-exempt institutions and held in a fiduciary environment.
- The NPI is the broadest most encompassing benchmark for the private real estate market.
- The NPI is also widely accepted and utilized despite its few known "flaws," such as the fact that it does not include the use of leveraged properties, is gross of fees, which tend to be substantial in this asset class, and the lag in appraisal valuations result in distortion of reported volatility of the asset class.

WPERP's current investment in real estate is made up of various commingled funds that invest primarily in core real estate properties. WPERP's use of the NPI is an appropriate benchmark for the real estate portfolio based on the current investment structure

5. Hedge Fund of Funds

As of December 31, 2007, WPERP had a 1% allocation to hedge fund of fund investments. LAWDP currently has two hedge fund of fund managers who are benchmarked to the 91-Day Treasury Bill plus 3%. IFS has found most hedge fund of funds managers to target an absolute return index (typically LIBOR or the 91-day T-Bill) plus a risk premium. IFS has seen managers with risk premiums of 3-10% depending on the underlying strategies. IFS did not review the underlying hedge fund of fund investments and therefore cannot make a definitive recommendation on the underlying benchmark. While the 91-day T-Bills plus 3% appears to be reasonable, a higher risk premium may be appropriate depending on the underlying fund strategies.

6. Private Equity

There currently are no standard institutional benchmarks for how to evaluate private equity returns. A common approach to benchmarking Private Equity investing (using time weighted returns) has been to take a public equity benchmark, such as the S&P 500 or Wilshire 5000 and add a "liquidity" premium of three to five percent to the return. Alternative benchmarks used for private equity investments are those created by Cambridge Associates and Thomson Venture Economics, which compare investments on an IRR basis using a vintage year approach. These benchmarks are composed of various private equity manager/partnership reported returns and weighted to create an "average" return for the asset class.

WPERP currently uses three benchmarks to assess the performance of the private equity portfolio. The first benchmarks used are the Cambridge Associates US Private Equity Index (85%) and Cambridge Associates US Venture Capital Index (15%). IFS finds this blended benchmark to be an appropriate measure of the Private Equity allocation. WPERP has a long term target (5-10 years) of outperforming the Russell 3000 Index plus 3%. Additionally, WPERP also has a long term absolute return target of 15%. IFS find this target as well to be a reasonable target for the Private Equity allocation.

7. Total Fund

WPERP'S current policy index is composed of 40% Russell 3000 Index, 15% MSCI ACWI ex-US, 35% Lehman Brothers Universal Index, 4% NCREIF Property Index, 3.4% Cambridge US Private Equity, 0.60% Cambridge US Venture Capital, 1% 91-Day T-Bills +3%, and 1% 90 day T-Bill. WPERP has included all the underlying asset class benchmarks into its total Fund Policy Index. IFS finds this benchmark to be reasonable and representative of its investment universe.

Task Area 3b Recommendation 1

Going forward, if WPERP decides to make any changes to its asset class benchmarks, a subsequent change should be made to the Total Fund Policy Index as well.

3c. Asset Allocation, Diversification, Risk and Return

Principles

Given its fundamental importance, best practices dictate that asset allocation decisions be made at the Board level, where they can be coordinated with funding policies, actuarial conditions and investment objectives. In our view, the ultimate fiduciary decision-maker should seek to understand the process used to develop the assumptions and to assure that the process is reasonable and fundamentally sound. The Board should also be made aware of the risks involved with various asset classes and asset allocations.

Overall, we believe a full Asset/Liability Model (ALM) is superior to the “plain vanilla” asset allocation used by many institutional investors and/or investment consultants, although it is not necessary to perform such a study as frequently as a simple asset allocation study. A pension plan should have a unique asset allocation study (or preferably an asset liability study) prepared due to its individual demographics, funding level and cash flow requirements. Changes in one or more of these areas can be analyzed through an asset liability study.

A more mature pension plan might desire a less volatile asset allocation and it would eventually need to consider the time horizon and liquidity of various asset classes (such as private equity and real estate), even while maintaining an overall total return approach to investing. Such a plan might also choose to make structural decisions in the portfolio in response to the shortening duration of the liabilities.

Asset allocation is distinguishable from portfolio structure, the former of which can be modeled using MVO, while the latter includes various policy judgments and some quantitative work (such as possible use of risk budgeting), but not full-blown MVO (portfolio structure is described more fully in Task Area 3f–Investment Management Structure).

Risks

Not using any type of quantitative model to conduct the asset allocation analysis would put a board at risk of setting an inefficient asset allocation and not acting in accordance with both best and common practices. An undisciplined asset allocation process could result in an inappropriate asset allocation made without proper authorizations.

In addition, not taking into account a fund's liabilities would put a board at risk of an unintended mismatch between assets and liabilities.

Observed Conditions

WPERP's IPS states that it "has a long-term investment horizon, and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets." The IPS also charges the Board with the responsibility for adopting and implementing the asset allocation and the Board is supposed to take into account:

- A projection of actuarial asset, liabilities, benefit payments and required contributions;
- Historical and expected long-term capital market risk and return behavior;
- An assessment of future economic conditions, including inflation and interest rate levels; and
- The current and projected funding status of the Plan.

The IPS requires the Board to monitor the asset allocation quarterly and notes that "it is anticipated the Plan's asset allocation policy may be subject to periodic revision. From our interviews with staff, the consultant and the Board, it is our understanding that the Board has conducted a formal asset allocation/asset liability study every few years since PCA was hired 2002, but has not conducted an annual asset allocation review, which we believe is a best practice, especially the given the changing nature of WPERP's asset allocation. PCA last conducted an asset liability study in August through October 2007 (the "2007 Study"). This was a joint venture project with EFI, an actuarial firm (for an additional fee of \$140,000).

Prior to 2002, WPERP had been invested conservatively in a 60/40 domestic equity/fixed income split. The 2002 Study resulted in the Board adopting new allocations for WPERP to international equity, real estate and alternatives, while the RHBF maintained the previous 60/40 allocation. In the 2007 Study, PCA compared WPERP's asset allocation to other large California public plans and to other third party universe data in terms of allocations to private assets, domestic equities, international equities and stable assets, showing that WPERP had lower allocations to equity-oriented asset classes than its peers. A goal of the 2007 Study was to "review and potentially modify current strategic framework" after the more dramatic changes were made as a result of the 2002 Study.

The stated objectives of the asset-liability study were as follows:

- Develop an understanding of how the financial condition of the Plans (WPERP and RHBF) might vary under a variety of market outcomes;

- Establish a consensus definition and view of the Plans' financial risk(s);
- Determine whether the two Plans require two separate allocation policies, or can utilized one universal allocation policy; and
- Select an appropriate policy portfolio once a view/tolerance for plan risk has been established.

It appears that PCA/EFI spent a significant amount of time meeting and discussing the asset-liability process/study with the Board and the Board was able to be actively involved in the process, especially in the determination of the consensus view of their risk tolerance through the use of decision factors (a process exclusive to EFI). While more expensive, the 2007 Study conducted by PCA/EFI is more sophisticated than a typical mean variance optimization or Monte Carlo analysis. Their model uses a re-sampling process to develop asset class return assumptions, which is a more dynamic model and does not rely on static capital market assumptions. Re-sampling "explicitly pulls from return history" creating a multi-period model, and the "EFI process explicitly models inflation autoregressive behavior, does not require return independence."

The PCA/EFI process also incorporates "Decision Factors" which are defined as:

- (i) a variable that describes the financial condition of the plan and*
- (ii) a Board determined threshold level (or goal) for that variable*

The stated purpose behind using Decision Factors is to "allow decision makers to define and quantify their tolerance for risk using intuitive metrics, allowing Boards to easily establish a consensus risk tolerance." Examples include: minimize contributions, avoid contribution spikes, etc.

In their study, PCA/EFI reviewed the projections and characteristics associated with the WPERP and RHBF Plans, including projected benefits, contributions as a percent of payroll, projected asset values and funded ratios, among other items. They helped the Board determine what Decision Factors to employ in the model and the report shows that they used the following six factors:

- Achieve the lowest average actuarial cost;
- Avoid actuarial cost spikes;
- Achieve full funding;
- Avoid a low funding ratio (under 85%);
- Achieve high average rate of return (8% nominal); and

- Avoid real rate of return below 4%.

WPERP has an assumed actuarial rate of 8.0%. This rate is in line with peer funds (as reported by Greenwich Associates and based on IFS' experience) and is the median actuarial interest rate of assumption according to the Wilshire Consulting 2006 Report on City & County Retirement Systems: Funding Levels and Asset Allocation. The RV Kuhns Public Fund Universe Analysis Report for December 31, 2007 shows 8.0% to be the most frequently reported actuarial rate assumption. Wilshire Consulting estimated the funding ratio of the pension plans in the survey was 87% in 2005, and 77% of the 66 city and county retirement systems that provided actuarial data for 2005 were underfunded, with the average underfunded plan at 81%.

One result of the 2007 Study is that the Board decided to use the same asset allocation for both the defined benefit and healthcare funds. Based on our experience this is not uncommon, although asset allocations for healthcare liabilities are an emerging topic. Some funds (e.g., Ohio PERS) do develop distinct asset allocation policies for healthcare trust funds due to the disparities in the liability streams. It is a best practice that to consider both plans separately in terms of deciding upon the asset allocation policy.

Another result of the 2007 Study was to break out alternatives into private equity as a stand alone asset class and create a real return asset class, which would encompass hedge funds and TIPS (at least initially). It is our experience that the use of a real return or absolute return asset class is increasingly common practice with large institutional investors.

Unlike with typical asset allocation studies, the consultant did not come up with one or two recommended policy portfolios and discuss the risk/return characteristics of each option. Instead, the proposed policy portfolio was an outgrowth of the voting process by the Board using the Decision Factors and prioritizing them.

Ultimately, the Board adopted an evolving policy to allow for a slowly increasing allocation to private market based asset classes (i.e., real estate, private equity and real return) over the next four years. The new policy has a lower fixed income allocation and higher equity-type allocation with scheduled increases to real estate, private equity and real return, offset by reductions to the public market asset classes. We find this approach to be reasonable.

Task Area 3c Recommendation 1

The Board should consider adopting the requirement to conduct a complete asset liability study every five to ten years and formally review asset allocation annually, with asset allocation studies conducted as needed.

Additionally, WPERP does not participate in the R.V. Kuhns Public Fund Universe Analysis Report. The Board should consider providing data on the

Task Area 3c Recommendation 1

Plan to RV Kuhns in order to participate in this valuable analytical tool. There is no cost.

1. Asset Classes Used and Peer Comparison

Principles

Major institutional investors, including pension funds, tend to diversify their investments across many asset classes, in an effort to maximize expected return at the lowest feasible levels of risk, and in light of their respective investment policies. The opportunity set of available asset classes has grown over the last 10 to 20 years, with increased investments in hedge funds (including new types of derivatives), private equity and other alternatives, inflation protected securities, etc. A recent survey of 76 corporate, public and nonprofit funds conducted by The Bank of New York¹ shows that “only about 15% of participants were investing in hedge funds five years ago, in the next five years, 45% expect to invest in hedge funds.”

The appropriate asset allocation for any given fund depends on numerous factors, including, e.g., its investment policy, liability structure, cash flow needs, investment horizon, risk controls, organizational structure (including staffing and resources appropriate for managing certain types of assets and risks) and other matters. Even though the appropriate asset classes and asset allocation for a given investor depend on its individual circumstances, comparisons to peers may provide useful reference points.

In recent years, many pension plans have found it difficult to meet their actuarial assumed rate given the decreased return expectations for some of the typically employed asset classes (e.g., domestic equity). In addition, the volatility of funded ratios and need for increased contributions has caused pension plans to suffer increased scrutiny. These factors have helped to rekindle an interest in strategies that focus on matching liabilities (which is generally accomplished with fixed income instruments and, more recently, with synthetic securities), rather than focus only on maximizing returns. There is often a trade-off between seeking higher total return and optimizing a portfolio to better match liabilities, and it is generally more difficult to make up a funding deficit with a portfolio more heavily tilted towards bonds. Historically the more volatile asset classes have also produced the highest returns over time, despite occasional periods of sharp decline.

Including less traditional asset classes and investment strategies, along with traditional publicly traded stocks and bonds, generally results in a total portfolio with a higher expected rate of return and a lower overall expected standard deviation or variability. Non-traditional

¹ “New Frontiers of Risk: The 360° Risk Manager for Pensions and Nonprofits,” October 2005.

investment strategies (i.e., investments in properties and appraised assets that are not traded on an exchange that provides objective, readily ascertainable prices and strategies using derivatives) generally exhibit two characteristics that are favorable to the total fund's investment characteristics: higher expected performance than traditional classes of investments and/or a correlation that generally reduces total portfolio variability.

Each additional asset class in a fund adds an incremental degree of return and risk to the total portfolio, which can be positive or negative. Return is additive; the return of the portfolio is the weighted average of the returns of its components. Risk, defined as variability of returns or the degree to which long term average returns fluctuate over short periods (e.g., standard deviation), is a complex concept because variability of two instruments can moderate one another or can amplify one another.

The degree to which two instruments move similarly to one another is measured by their correlation. When two instruments tend to move in the same direction in response to particular economic events, they tend to change value in the same direction at the same time, and so the combination of the two movements is additive (i.e., positive correlation). When they react differently to particular events, they tend to change value in opposite directions, so they tend to offset one another (i.e., negative correlation). Correlation is statistically measured between pairs of investments and can be used to calculate the variability of portfolios holding different mixes of investments. Correlations range from positive 1.0 to negative 1.0, with 1.0 signifying perfect correlation.

Risks

By not investing in all available (and advisable) asset classes, a board risks the pension fund not being appropriately diversified. Adding nontraditional asset classes and strategies should lower volatility of returns (risk), enhance risk adjusted returns and potentially increase absolute returns.

Observed Conditions

The 2006 Greenwich Associates Market Dynamics Report shows there has been a slight shift in recent years away from domestic stocks and bonds and toward international stocks and alternatives. The average amount allocated to domestic stocks and bonds has decreased to 45% from 47% and to 23% from 28%, respectively; while the allocation to international stocks has increased to 15% from 11%. Allocations to equity real estate, private equity and hedge funds all increased 1% from 2002 to 2006 to 4%, 4% and 2%, respectively, as shown in the table below.

In Table 3c-i below, we compare WPERP's current and long-term policy target asset allocations to various third parties.

Table 3c-i Asset Class	WPERP 2008 Target Allocation	WPERP Long-Term Target Allocation	Third Party Asset Allocation Data			
			Greenwich Associates 2006 Public Funds over \$5 billion ²	Greenwich Associates 2006 Total Fund	Wilshire City & County Average ³	RV Kuhns 12/31/2007 All Funds
U.S. Stocks	40%	34.0%	42.1%	44.7%	46.5%	35.3%
Non-U.S. Stocks	24%	24.0%	18.8%	15.0%	14.4%	18.2%
Global Equity	-	-	-	-	-	3.3%
Total Publicly-Traded Stocks	64%	58.0%	60.9%	59.7%	60.9%	56.8%
U.S. Fixed Income	30%	24.0%	27.1%	22.9%	29.3%	24.0%
Global/Non-U.S. Fixed Income	-	-	-	-	1.2%	1.6%
Total Fixed Income	30%	24.0%	27.1%	22.9%	30.5%	25.6%
Equity Real Estate	2%	5.0%	5.9%	4.1%	4.7%	6.9%
Private Equity	1%	5.0%	4.5%	3.8%	1.3%	8.0% ⁴
Hedge Funds/Real Return	2%	7.0%	0.4%	2.1%	-	-
Other	-	-	1.2%	7.4%	2.7%	1.3%
Cash	1%	1.0%	-	-	-	1.4%
	100%	100.0%	100.0%	100.0%	100.0%	100.0%

WPERP's 2008 allocation has a slightly greater allocation to publicly-traded equity than the peer survey data shown below, which is due primarily to its greater allocation to non-U.S. stocks. Its long-term target to public equity is in line with peers, while skewed slightly towards non-U.S. stocks. Current trends in this area are also leading to greater allocations to non-U.S. stocks and more global portfolios.

WPERP's current allocation to fixed income is also on the high side, but is expected to come down over the next few years as its alternative allocations increase. WPERP's current allocations to private equity and real estate are low, but will be more in line with peers once the long-term allocations are reached. The long-term allocation to real return is greater than peer averages, but this is a relatively new "asset class" and we would expect allocations to it to increase over the coming years.

JPMorgan recently (June 2008) conducted a survey of 191 funds (50 public, 76 corporate, 56 endowments and foundation and 9 other) with \$1.26 trillion in assets on alternative investing (this is defined as including real estate, real assets, private equity, absolute return/hedge funds, infrastructure, green/sustainable investing, portable alpha and net long). They found that public funds allocation to alternatives grew from 11% of assets in 2004 to 16% in 2007 and is projected

² Greenwich Associates data is as of late 2006 and is dollar-weighted. Public Funds universe included 296 plans, 194 Municipal Funds and 95 State Funds. Total Funds universe included 1950 funds.

³ Survey of 107 city and county retirement systems, September 14, 2006. Fund data is primarily from 2005.

⁴ This category includes private equity (79.8%), distressed debt (2.5%), timber/oil (0.3%), hedge funds (10.5%) and other alternatives (6.8%).

to grow to 18% by 2010 (compared to 36% for endowments and foundations and 22% for all funds in 2010). Growth is expected across the range of alternative strategies, with the most growth in absolute return/hedge funds (40% of net inflows).

WPERP's long-term policy allocation to alternatives is fairly comparable to the average current public fund allocation to alternatives. The JPMorgan survey shows the asset allocation to the various types of alternatives by public funds (prospective and existing investors in 2007 vs. 2010) was as follows:

- 3.9% absolute return/hedge funds, growing to 5.8%;
- 4.4% private equity, growing to 5.1%;
- 7.2% real estate, growing to 7.3%; and
- 0.6% infrastructure and other real assets, growing to 1.2%.

The asset allocation to the various types of alternatives by *existing* investors in 2007 was as follows (large allocations by endowments and foundations boost these averages):

- 11.5% absolute return/hedge funds;
- 6.6% private equity;
- 6.6% real estate;
- 2.4% infrastructure; and
- 4.5% other real assets.

Greenwich Associates 2006 study showed that absolute-return strategies have been implemented by 21% of all funds, but 45% of endowments and 16% of public funds.

PCA/EFI also noted in the 2007 Study a few large funds that have adopted an absolute return or a real return allocation. Overall, we believe that WPERP's asset allocation appears to be reasonable.

2. Capital Market Assumptions Used

Principles

The following inputs need to be developed to perform an MVO analysis:

- Average expected return for each asset class;
- Expected asset class risk (or standard deviation); and
- Correlation between asset class returns.

Expected returns should be developed using both historical analysis and forward-looking observations, given various historical and current market valuation measures. The inputs into the model should generally be forward looking, rather than purely historical averages and should reflect expectations for the time horizon being considered i.e., they in effect project how each asset class may be expected to perform in the future. Thus, uncertainty exists and simple mechanistic extrapolations of past data may ignore changed environments and may fail to consider where various markets currently are within their cycles.

The combination of these three elements produces optimized portfolios. Asset allocation modeling is only as sound as the quality and objectivity of the inputs employed in the process. The assumed levels of risk, return and correlation for each asset class are critical to the process, both on an absolute basis and relative to other asset classes. Small adjustments to any of the assumptions can profoundly alter the conclusions as to which portfolios are efficient.

Risks

Using overly optimistic return assumptions would cause a pension fund to run the risk of the actual portfolio not generating the needed return and thus, risk eventual underfunding, the need for unexpectedly high contributions, and/or decreased benefits.

Conversely, using overly pessimistic return assumptions might cause a pension fund to take on a more aggressive asset allocation than actually necessary in order to achieve the actuarial return.

Observed Conditions

In the following tables, we compare return assumptions used by WPERP's investment consultant (PCA) in the last study it conducted for WPERP in October 2007 versus the current assumptions used by IFS and other representative national consulting/investment management firms as well as the Greenwich Associates 2006 Survey. As mentioned above, PCA starts with their capital market assumptions and then conducts resampling "to develop a robust range of potential outcomes."

It is important to note that PCA's return assumptions shown below are arithmetic return assumptions, whereas the other firms surveyed use or publish geometric return assumptions (Ennis Knupp and JP Morgan both show the arithmetic return in their published capital market assumptions paper as well and we show both below). An arithmetic return assumption is generally for a single-year and involves no expected uncertainty or volatility and will be higher than the geometric average return whenever there is volatility. The geometric average return takes uncertainty into account (expressed in terms of standard deviation) and is generally considered to be more appropriate as an "expectation" for the long-term investor. We note that the MVO model that IFS uses is configured so that it can accommodate both arithmetic and

geometric return inputs (so that volatility is not double counted) and can provide return expectation outputs in either form. PCA's return assumptions appear reasonable.

Table 3c-ii: Comparison of Arithmetic Return Assumptions			
Asset Class	PCA 2007 Mean Variance Assumptions (Arithmetic)	Ennis Knupp January 2008 (Arithmetic)	JPMorgan November 2007 (Arithmetic)
Domestic Equity	9.00%	8.3%	9.14% (large cap)
International Equity	9.00%	8.4%	9.90% (EAFE)
Emerging Markets	-	-	12.78%
Private Equity	12.50%	13.7%	11.95%
Hedge Funds	-	-	7.46%
Real Estate Equity	7.00%	7.3%	6.99%
Domestic Fixed Income - Core Bond	5.25%	5.2%	5.31%
High Yield	-	-	7.77%
TIPS	5.00%	-	4.64%
Cash (STIF)	4.50%	-	4.50%
Inflation	-	-	2.51%

Table 3c-iii: Comparison of Geometric Return Assumptions						
Asset Class	IFS 2008 (Geometric)	Ennis Knupp January 2008	Ennis Knupp 2007 Survey Consultants and Managers	Greenwich Associates Total Funds 2006	Wilshire 2008⁵	JPMorgan November 2007
Domestic Equity	8.25%	7.0%	7.7%	8.2%	8.25%	8.00% (large cap)
International Equity	8.50%	6.7%	7.8%	9.7%	8.25%	8.75%
Emerging Markets	-	-	-	-	8.25%	9.50%
Private Equity	11.00%	9.2%	10.6%	11.7%	11.25%	9.00%
Hedge Funds	7.75%	-	-	8.8%	-	7.25%
Real Estate Equity	6.75%	6.6%	8.0%	8.8%	6.50%	6.75%
Domestic Fixed Income - Core Bond	5.25%	5.0%	5.4%	5.2%	5.00%	5.25%
High Yield	-	-	-	-	7.00%	7.50%
TIPS	4.75%	-	-	-	4.00%	4.50%
Cash (STIF)	3.75%	-	-	-	3.00%	4.50%
Inflation	2.75%	2.3%	2.5%	-	2.25%	2.50%

⁵ IFS subscribes to Wilshire Compass and Co-op and has access to Wilshire's capital market assumptions.

In the table below, we compare the risk assumptions (as measured by standard deviation) used by PCA to those used by IFS and a couple other nationally known consulting and investment management firms. PCA's assumptions are generally line with peers.

Table 3c-iv: Comparison of Risk Assumptions (Standard Deviation)					
Asset Class	PCA 2007 Mean Variance Assumptions	IFS 2008	Ennis Knupp January 2008	Wilshire 2008⁶	JPMorgan November 2007
Domestic Equity	15.0%	17.00%	16.2%	16.00%	14.75% (large cap)
International Equity	18.5%	18.50%	18.3%	17.00%	14.67%
Emerging Markets	-	-	-	24.00%	24.08%
Private Equity	32.0%	30.00%	30.2%	26.00%	22.95%
Hedge Funds	-	7.00%	-	-	6.31%
Real Estate Equity	10.0%	11.00%	11.7%	12.25%	7.13%
Domestic Fixed Income - Core Bond	5.0%	5.50%	6.6%	5.00%	3.46%
TIPS	4.5%	6.00%	-	6.00%	5.09%
Cash (STIF)	2.0%	1.00%	-	1.00%	0.49%
Inflation	-	--	-	1.00%	1.15%

Similar to PCA, IFS does not consider small, mid and large cap stocks to be distinct asset classes for modeling purposes (especially if divided further amongst core, value and growth) because, in our opinion, while these sub-sets of the total domestic equity market may perform differently over shorter time periods, the basic characteristics of risk, return and correlation among these three are not sufficiently distinct or fundamental to use different inputs in a long-term quantitative model. In addition, IFS' and PCA's assumptions for international equities cover both developed and emerging markets. While as a firm IFS does not develop assumptions for emerging market equities or high yield fixed income, it is not uncommon to do so and valid arguments are made for their being distinct asset classes.

IFS also has developed risk, return and correlation assumptions for hedge fund-of-funds, while many consultants do not. While we believe that hedge funds are not a true separate asset class, we believe it can be worthwhile to model them. Hedge funds are used primarily for either absolute return or portable alpha strategies.

⁶ IFS subscribes to Wilshire Compass and Co-op and has access to Wilshire's capital market assumptions.

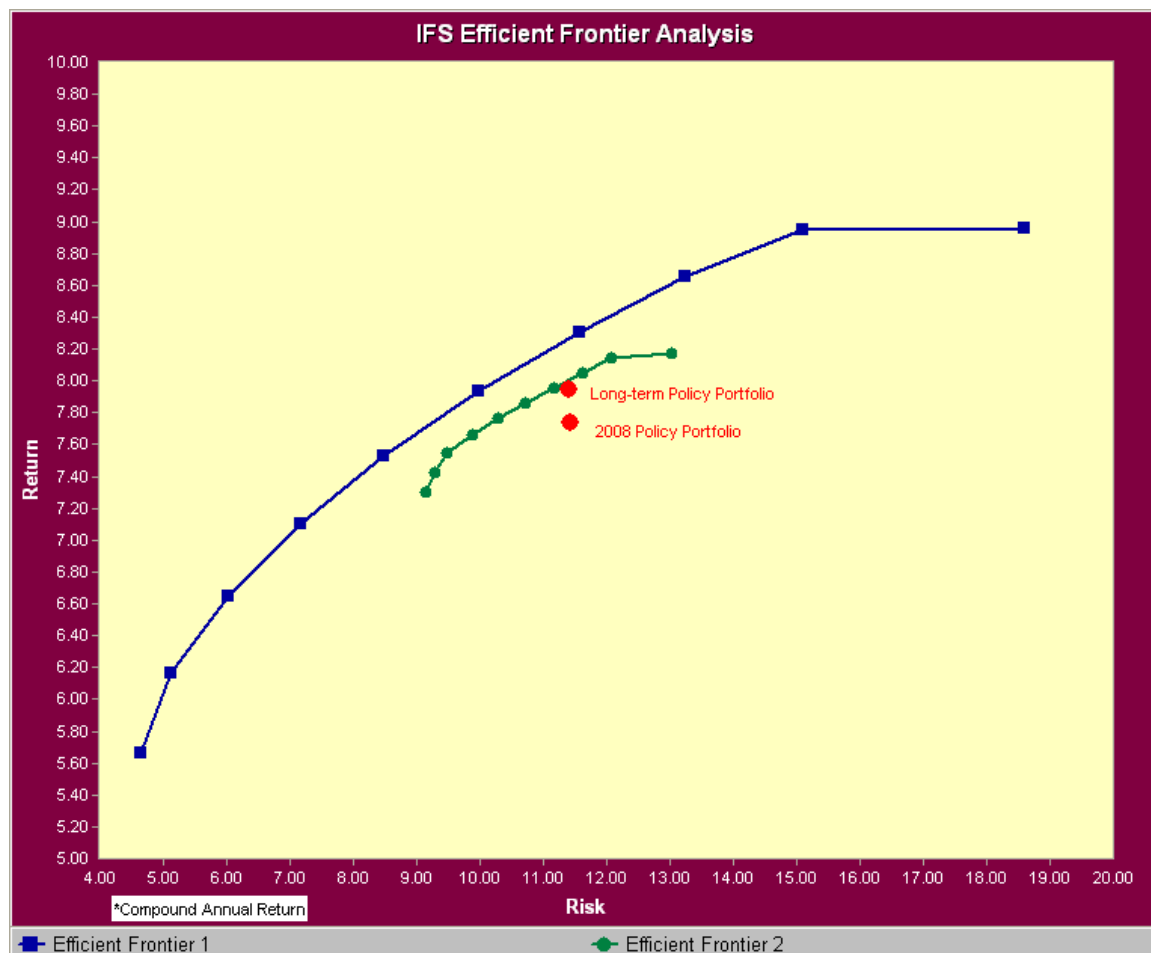
3. MVO Analysis Performed by Independent Fiduciary Services

IFS performed a Mean Variance Optimization analysis using our 2008 assumptions and produced sample efficient frontiers to evaluate the efficiency of WPERP's target asset allocation. We compared the 2008 and proposed long-term target asset allocations to our model efficient frontiers and calculated the probability of these portfolios meeting their actuarial rate of return over various time periods. Our analysis is not intended to replace a full asset allocation study; it is provided primarily to demonstrate the sensitivity of MVO analysis in general and to raise issues for the Board to discuss.

We calculated two efficient frontiers using two different sets of constraints on our analysis (setting the minimum and maximum amounts allowed in a few asset classes). Efficient Frontier #1 has much looser constraints, while Efficient Frontier #2 uses the same constraints utilized by PCA/EFI in their study and is arguably more realistic, given the liquidity concerns associated with the private market assets. IFS does not develop assumptions for "real return" so we used both our TIPS and hedge funds assumptions and constrained their combined model allocations. We show IFS' risk and return assumptions for 2008 along with the imposed constraints in the following table:

Table 3c-v: IFS' 2008 Capital Market Assumptions						
Asset Class	Expected Return	Expected Risk	Eff. Frontier #1		Eff. Frontier #2	
			Asset Min. %	Asset Max. %	Asset Min. %	Asset Max. %
U.S. Stocks	8.25%	17.00%	0%	100%	25%	50%
Int'l Stocks	8.50%	18.50%	0%	100%	10%	25%
Fixed Income	5.25%	5.50%	0%	100%	20%	40%
Real Estate	6.75%	11.00%	0%	10%	4%	5%
Private Equity	11.00%	30.00%	0%	10%	4%	5%
Hedge Funds	7.75%	7.00%	0%	10%	0%	7%
TIPS	4.75%	6.00%	0%		0%	
Cash	3.75%	1.00%	0%	5%	1%	1%

As can be seen in the graph below, the target asset allocations do not lie directly on the more unconstrained efficient frontier, and while the 2008 Policy Portfolio does not lie on either frontier, the Long-term Policy Portfolio is very nearly on the more constrained efficient frontier (#2). The MVO model tends to favor asset classes such as real estate, private equity and hedge funds due to their lower correlation with publicly traded stocks and bonds and relatively high returns.



Using IFS' 2008 capital market assumptions, we calculate a projected nominal return of 7.7% for the 2008 Policy Portfolio, with a risk of 11.4% for a return/risk ratio of 0.68 and for the Long-Term Policy Portfolio we calculate a 7.94% expected return, 11.4% standard deviation and 0.70 for return/risk. With the addition of manager alpha, WPERP should be able meet its actuarial expected return of 8.00% over the longer-term.

The tables below show the return, risk (standard deviation) and the return/risk ratio for ten sample portfolios that lie on the two efficient frontiers in the above graph. Since the Policy Portfolios do not lie directly on the efficient frontier, other portfolios would offer a higher or equal rate of return at a lower risk level. For example, Portfolio 7 on Efficient Frontier #2 would offer very nearly the same level of return as the Long-Term Policy Portfolio at a slightly lower level of risk for a similar risk/return ratio. For reference, this particular portfolio consists of 30% domestic equity, 25% international equity, 27% fixed income, 5% real estate, 7% hedge funds and 5% private equity and is fairly similar to WPERP's Long-Term targets.

Portfolio 7 on Efficient Frontier #1 offers a higher level of expected return, 8.31%, at a slightly higher risk level and with a similar return/risk ratio. This portfolio, however, allocates 10% to each of private equity, real estate and hedge funds. It would be difficult for WPERP to gain a 10% allocation to those three asset classes quickly and prudently. IFS' result is in line with the analysis presented by PCA in their 2007 review and the reasoning behind the incremental adjustments to the private market asset classes over the next few years.

Table 3c-vi: Efficient Frontier #1											
Asset Class	2008 Policy Target %	1	2	3	4	5	6	7	8	9	10
Return	7.73	5.66	6.16	6.64	7.1	7.53	7.93	8.31	8.65	8.95	8.96
Risk	11.44	4.65	5.12	6.03	7.16	8.48	9.97	11.57	13.23	15.09	18.61
Return/Risk	0.69	1.22	1.20	1.10	0.99	0.89	0.80	0.72	0.65	0.59	0.48

Table 3c-vii: Efficient Frontier #2											
Asset Class	Long-Term Policy Target %	1	2	3	4	5	6	7	8	9	10
Return	7.94	7.3	7.43	7.55	7.66	7.76	7.86	7.96	8.05	8.14	8.18
Risk	11.41	9.14	9.28	9.48	9.87	10.28	10.71	11.16	11.61	12.07	13.03
Return/Risk	0.70	0.80	0.80	0.80	0.78	0.76	0.73	0.71	0.69	0.67	0.63

We believe that one useful way to look at the overall "risk" of WPERP's current asset allocation is to examine the probability of it achieving (or not achieving) certain rates of expected return over short and longer-term periods.⁷ The Long-Term Policy Portfolio has slightly better odds of achieving the desired return of 8%. As Table 3c-viii below shows, IFS' analysis indicates that WPERP's 2008 target asset allocation has a 75.9% probability of avoiding a negative return in any one year (or, conversely, a 24.1% probability of producing a negative return in any one year). Similarly, this analysis also indicates that WPERP's target asset allocation has a 46.4% probability of earning at least an 8.0% rate of return (the assumed actuarial rate of return) over ten years (or, conversely, a 53.6% probability of not earning the actuarial rate over ten years). The probabilities are set forth immediately below:

⁷ This analysis uses Monte Carlo simulation to calculate the log normal median.

Table 3c-viii: Probabilities of Return				
Consecutive Time Periods	2008 Policy Portfolio		Long-Term Policy Portfolio	
	Probability of Return > 0.0%	Probability of Return > 8.00%	Probability of Return > 0.0%	Probability of Return > 8.00%
1 Year	75.9%	48.7%	76.7%	49.2%
5 Years	94.9%	46.8%	95.6%	48.0%
10 Years	98.6%	46.4%	98.9%	48.1%

In addition, we used M^{Cube}'s AlphaEngine[®] software to compare the historical performance and risks associated with the previous asset allocation policy (in place from 2003-2007) to the Long-term Policy target (labeled LA Water 2007 Policy D2 in table below). For the purpose of this analysis, the benchmark data for each of the asset classes was used from 2003-2007, to evaluate the impact on performance and returns over the sample data period. We present a historical analysis of the two policy options, in order to highlight possible risks, but with no comment as to what may happen in the future.

Table 3c-vix

Performance Summary - Total Period										
Name		Annualized Return	Annualized Standard Deviation	Annualized Return-Risk Ratio	Average Return when Positive	Average Return when Negative	Worst 'Single' Negative Performance	Longest Under-Performance	Recovery Period	Maximum Drawdown
Portfolio Decision										
LA Water D1 : LA Water D1	BMK	11.95%	5.77%	2.07	1.69%	-1.24%	-2.4%	6	4	-2.54%
LA Water 2007 Policy D2 : LA Water 2007 Policy D2	BMK	13.96%	5.64%	2.48	1.79%	-1.14%	-2.22%	3	1	-2.4%
Name		Maximum Drawdown Occurred On	Ratio of Good/ Bad Risk	Down Side Risk - 1%	Down Side Risk - 5%					
Portfolio Decision										
LA Water D1 : LA Water D1	BMK	12/31/2007	1.52	1.43%	0%					
LA Water 2007 Policy D2 : LA Water 2007 Policy D2	BMK	12/31/2007	1.43	1.63%	0%					

Over the historical period, the Long-term Policy benchmark portfolio would have added about 201 basis points of additional returns relative to the policy portfolio implemented over the 2003-2007 period. Interestingly, the Long-term Policy portfolio has slightly better risk characteristics across the board with lower volatility (Annualized Standard Deviation of 5.64% versus 5.77%), lower drawdowns (Maximum Drawdown of -2.4% versus -2.54%) and Worst Single Negative Performance (-2.22% versus -2.4%). The Ratio of Good/Bad Risk deteriorates a bit (from 1.52 to 1.43), but both numbers are positive suggesting that the returns have the appropriate skew.

This analysis helps to substantiate IFS' analysis shown earlier in this section and our belief that the Long-term Policy appears reasonable and relatively efficient. Additionally, as discussed above, WPERP appears to have used an appropriate process in setting the asset allocation.

4. Awareness of Risks

Principles

It is essential that a board understand the process used to develop the asset allocation recommendations and that the process is reasonable and fundamentally sound. A board should also be made aware of the risks involved with various asset classes and asset allocations and be comfortable with the capital market assumptions used. Education on the asset allocation process is especially necessary for lay board members. Ideally, investment programs seek a desired return objective while minimizing risk. Adding asset classes that are viewed as risky in isolation (e.g., private equity) can reduce the overall risk level of the total fund when combined with other low correlated asset classes. The appropriate level of risk varies by pension plan, asset class as well as investment strategy.

A board should also be aware of risks such as benchmark/style drift, standard deviation or volatility of returns, among others. There are also security specific types of risk for all securities such as illiquidity, often associated with appraised assets like private equity or real estate, and risks associated with derivatives. Individual manager guidelines are useful to articulate and manage the particular risks associated with each manager's unique investment process, strategy and risk characteristics. It is important to evaluate what kind of risk a fund has undertaken to take corrective action or to achieve maximized performance returns.

One of the most widely used methods to measure portfolio risk is calculating a fund's total standard deviation over a specific time frame or over rolling time periods. In essence, standard deviation measures the movement of returns over time, and it is one of the most common and easiest risk statistics to calculate.

As described above, asset allocation is the primary determinant of a fund's return (and risk) profile and deviation from the policy asset allocation results in tracking error risk. Once the asset allocation decision is determined and total expected absolute risk is quantified, the Board (with advice from its consultant and investment staff) makes portfolio structure decisions within each asset class, resulting in tracking error.

Risk budgeting is a tool to allocate tracking risk (sometimes referred to as the amount of active risk) effectively and efficiently across a fund's allowable asset classes and portfolios so that there is an increased probability of achieving positive relative returns compared to the given benchmark or policy index, and over the long-term, achieve the fund's investment policy investment objective of meeting or exceeding the fund's actuarial assumption within a prescribed level of total risk (the "risk budget"). The goal is to attempt to achieve the desired level of alpha (or excess return) at an appropriate level of volatility or risk.

Risks

If a board is unaware of the asset allocation process and the fund's risk, then they are less capable of approving an appropriate direction for the plan. A lack of understanding of the risks inherent in a portfolio increases the likelihood of mismanaging that risk and jeopardizing returns.

Observed Conditions

Based on the interviews we conducted as part of our review, it appears that in general the Board members are comfortable with the asset allocation and with the risks involved with their asset allocation. Investing in "alternative" strategies and financial instruments can be difficult for non-investment professionals to understand. Most Board members do not have an investment background, so it is important for them to receive regular investment related education. In addition, as discussed above, WPERP has changed its asset allocation significantly over recent years to include allocations to "alternative" and private market assets which carry additional risks (e.g., illiquidity and sometimes higher volatility).

In addition, most Board members seemed to like the PCA/EFI asset liability approach and the use of decision factors as it got Board members more involved in the process, although some did not believe the extra expense was necessary. One goal of this process is to determine a "consensus" risk tolerance of the Board based on how individual Board members vote and prioritized the various decision factors. We think engaging the Board in this type of risk tolerance discussion process is a positive step.

In order to establish a risk (and return) framework around the Total Fund, WPERP's Policy Allocation has its associated Policy Benchmark. This benchmark is represented by a custom blend of indices which replicates WPERP's total risk and return based on the allocation

targets established in 2007. See also our recommendation regarding developing a risk management policy/procedure document to enhance WPERP's awareness of risks and how to deal with them in Task Area 3d–Investment Policy.

The Board's quarterly performance report compares the actual asset allocation to the Target and how it has changed from the prior quarter. The Total Fund risk versus return for the last three and five years is presented and compared to the Mellon Total Fund Public Universe and to the primary domestic equity and fixed income indices. For the periods ending December 2007, WPERP had generated slightly lower return than the universe, but at a higher level of risk over three years and a lower level of risk over five years.

In addition, see our analysis in Section D immediately above concerning the risk statistics associated with the asset allocation policies. See also Section 3a–Performance for IFS' calculation and discussion of WPERP's historical performance and risk over various time periods for the total Fund and the various sub-asset classes.

Task Area 3c Recommendations 2-3

The Board should continue to ensure that its members have access to and are satisfied with ongoing training on investment issues such as asset allocation and risk metrics.

The Board should consider working with the General Consultant to develop and implement an annual risk budget for the Total Fund and each asset class.

3d. Asset Allocation Process and Re-Balancing Process

Principles

Rebalancing is the process of re-adjusting the proportion of a portfolio invested in each of the major asset classes to within the permissible range around long-term targets. Over time, disciplined rebalancing can enhance performance and manage overall risk. A rebalancing program should be implemented and followed on a regular basis, e.g., monthly, quarterly, semi-annually, or annually.

Rebalancing ranges around long-term targets should be designed to ensure that asset allocation “drift” is controlled in a cost-effective way. The IPS should describe the process and timing for rebalancing. A fund may choose to rebalance only when an asset class exceeds its range, rebalance based on other market based hypotheses, or rebalance with a calendar based approach (e.g., rebalance to target every quarter, semi-annually or annually). Rebalancing more frequently can reduce tracking error to a fund’s policy benchmark, but it will also create additional transaction costs.

The policy should also prescribe whether or not the asset class should be rebalanced to target, half-way to target or whether there is discretion. Rebalancing to the target, rather than half-way to the target, will also reduce tracking error but again the fund will likely incur slightly higher transaction costs during the rebalancing due to the additional amounts of security transactions.

Recent studies on rebalancing¹ have shown that the most important factor is having a rebalancing policy. Secondary to that decision is the policy itself. A more risk adverse board that wants to have minimal tracking error and is willing to incur slightly higher transaction costs might choose to rebalance at every month end. Alternatively, the Board might decide that it prefers to let an outperforming asset class run up to the outer bounds of its range and rebalance only when outside the range and perhaps rebalance only half-way to target.

Risks

The lack of an adequate documented rebalancing policy could lead to an improperly managed asset allocation and unrewarded risk. It could cause rebalancing to occur too frequently (incurring unnecessary transaction costs, especially in a very volatile market) or not frequently enough, which could lead to significant policy benchmark risk.

¹ See for example Nesbitt, Stephen, “Asset Mix Range and Rebalancing Policy,” Wilshire Associates, May 31, 2001; and Masters, Seth J., “Is There a Better Way to Rebalance?” Alliance Bernstein, December 2003.

Overly frequent rebalancing may also occur if a policy range is too narrow or a target is set too close to the outer limit of a range. Therefore, a Board needs to consider its risk tolerance as well as the practical realities of implementing the rebalancing policy. Many retirement systems use cash flows to assist in their rebalancing to help minimize transaction costs.

Observed Conditions

In Section II – *Policies and Procedures 1.0 Asset Allocation Policy*, WPERP's IPS states, "The Board will monitor and assess the actual asset allocation versus policy quarterly and will rebalance as appropriate." Later, in Section III – *Investment Management Policy 5.0 Rebalancing*, the IPS states that they expect some divergence from targets due to market movements over time, but rebalancing is necessary to meet the management objectives set by the Board and "continual rebalancing" can be too expensive due to transaction costs. This section further states, "The Board is responsible for final approval of all rebalancing recommendations. The Board will not attempt to time rises or falls in equity or bond markets by moving away from long-term targets..." Staff and consultant are responsible for monitoring the portfolio and making "recommendations for rebalancing back to the mid-point between the end of the range that was exceeded and the target allocation, including the time frame for accomplishing the proposed rebalancing." Upon approval, staff implements the Board decisions.

The IPS also states that "rebalancing will generally not occur more frequently than every three months, and need not occur every three months... Rebalancing will not wait for scheduled monthly meetings, although rebalancing can occur at such meetings." Special meetings of the Board can be called if there is a need to rebalance between meetings. See our additional discussion and recommendation on the language in the IPS in Section 3e below.

WPERP's current asset allocation policy targets and ranges are shown in the table below:

Table 3d-i: Asset Allocation Targets and Ranges			
	Targets	Threshold Ranges	
Asset Class	2008 Allocation	Lower	Upper
U.S. Stocks	40.0%	34.0%	46.0%
Non-U.S. Stocks	24.0%	19.2%	28.8%
Fixed Income	30.0%	25.5%	34.5%
Equity Real Estate	2.0%	TBD	
Private Equity	2.0%	TBD	
Real Return	1.0%	TBD	
Cash	1.0%	0.5%	1.5%

In order to test the effectiveness of WPERP's rebalancing policy retroactively, we used M^{Cube}'s AlphaEngine[®] software. We do not have specific information as to how rebalancing was handled in practice historically and can not test this given available data. We are also not able to test rebalancing back to the mid-point of a range with multiple asset classes; therefore the following rebalancing strategies were tested:

- 1) Rebalance back to target using symmetric policy ranges (based on percentages applied to the Long-term Policy and approximated ranged for alternative asset classes): USEQ +/-5.1%; NUSEQ = +/-4.8%; Real Estate = +/-2%; Private Equity = +/-2%; Fixed Income = +/-3.6%; Real Assets = +/-2% and Cash +/-0.5%, (i.e., "Range Based"), and
- 2) Quarterly rebalancing: Return assets to neutral at the end of every quarter (i.e., "Calendar Based").

Table 3d-ii below provides a comparison of the performance and risks of the two naïve rebalancing strategies using the historical benchmark returns data from 2003-2007, as well as a SMART Rebalancing[®] strategy discussed in more detail below. Transactions costs are assumed to be zero for convenience.

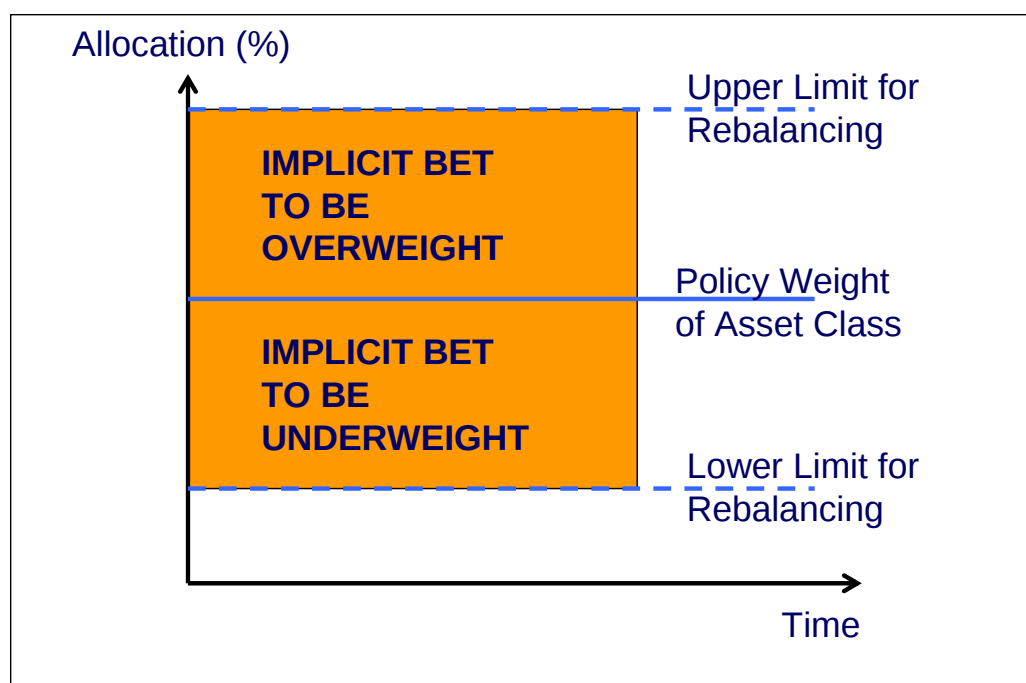
Table 3d-ii: Rebalancing Strategies

Performance Summary - Total Period									
Name		Annualized Return	Annualized Standard Deviation	Annualized Return-Risk Ratio	Worst 'Single' Negative Performance	Maximum Drawdown	Success Ratio	Annual Turnover	
Strategy									
LA Water D3 Range Rebalancing	BMK	13.96%	5.64%	2.48	-2.22%	-2.4%	N/A	N/A	
	Strategy	14.23%	5.79%	2.46	-2.39%	-2.59%	N/A	N/A	
	Excess	0.27%	0.28%	0.95	-0.17%	-0.44%	61.67%	2.4%	
LA Water D3 Calendar Rebalancing	BMK	13.96%	5.64%	2.48	-2.22%	-2.4%	N/A	N/A	
	Strategy	14.01%	5.67%	2.47	-2.25%	-2.43%	N/A	N/A	
	Excess	0.04%	0.08%	0.53	-0.03%	-0.18%	53.33%	5.13%	
LAW SMART Rebalancing	BMK	13.96%	5.64%	2.48	-2.22%	-2.4%	N/A	N/A	
	Strategy	14.61%	5.93%	2.46	-2.36%	-2.54%	N/A	N/A	
	Excess	0.65%	0.39%	1.65	-0.18%	-0.56%	65%	6.48%	

Of the two "naïve" rebalancing strategies, over the historical period, Range Based rebalancing produces higher returns with lower turnover than Calendar Based rebalancing. However, the standard deviation of returns for both rebalancing strategies is slightly higher than the benchmark volatility (5.64%). Worst Single Negative Performance and Maximum Drawdown (measures the maximum decline in the percentage value of the Fund) statistics are a bit worse when compared to that of the benchmark. The Success Ratio of these two rebalancing strategies is above 50% indicating reasonably good consistency in the excess returns.

Comparing Naïve Rebalancing Strategies with SMART Rebalancing® Strategy:

As the chart below demonstrates, many pension funds are often taking an implicit bet on markets when the portfolio is drifting within the range and the idea is to improve governance by managing the allocation decisions using a robust, repeatable, transparent process. Range based and calendar based rebalancing policies do not specify what to do as long as the asset classes are within the ranges, resulting in “unmanaged” allocations or implicit bets. The analysis also showed that rebalancing back to policy weights when markets declined did not reduce fund risk. Bets are also not eliminated by rebalancing policies that suggest rebalancing back to the mid-point of the range (as the policies tested before rebalanced to the targets).



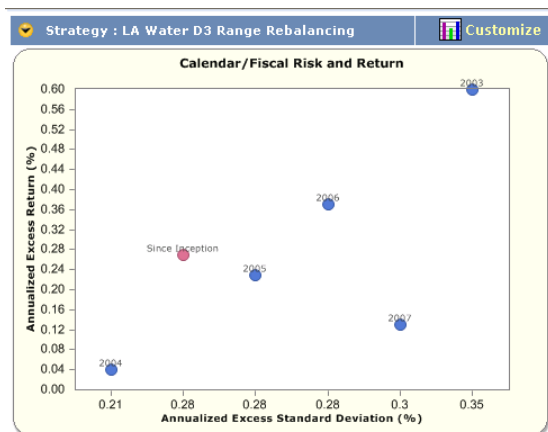
Under an approach termed SMART Rebalancing® adopted by some other public pension plans in California (e.g., San Diego County, Santa Barbara County), the policy ranges are set by the Board, and staff is delegated the responsibility to manage the allocations within the range using an analysis of current market factors. These market factors are converted into Rules to allow for a consistent application of economic analysis to evaluate the relative attractiveness of the assets in the portfolio – a process identical to the process used by WPERP’s external managers. Hence, if the fund is overweight stocks in the range and a systematic market analysis suggests that stocks are expensive, a rebalancing may be made prior to the range being hit.

For illustrative purposes only, we developed an extremely simple four factor model for WPERP (typically programs for other funds would have as many as 20 factors thereby

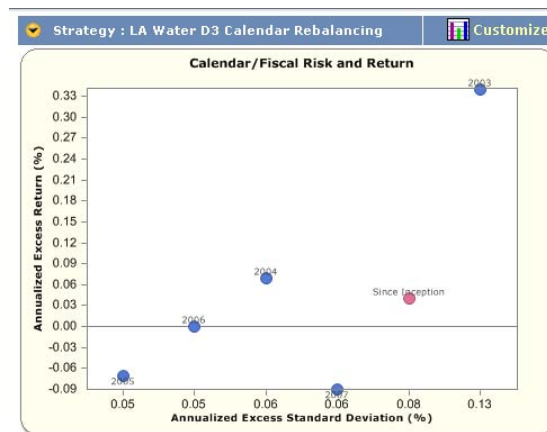
improving performance and diversification). The SMART Rebalancing® Strategy for WPERP case study uses the typical valuation factor of yield comparisons; macroeconomic factor such as the price of oil; seasonality factor as to when markets do well or badly and a sentiment factor based on the VIX (S&P 500 volatility index). These factors are used to make intelligent rebalancing decisions within the ranges across US Stocks, Bonds, International Stocks and Cash. Therefore, SMART Rebalancing® Strategy can be compared to other rebalancing policies and typically results in better governance and performance as other rebalancing policies have implicit bets embedded in them.

The last row in the Rebalancing Strategies table above shows performance statistics for the SMART Rebalancing® Strategy. This strategy added 65 bps annualized alpha with tracking error (0.39%) higher than the other two rebalancing strategies, leading to a higher information ratio. The volatility (or standard deviation) of this approach is similar to that of the benchmark, but the Maximum Drawdown is lower than that of the benchmark. The information ratio and Success Ratio (or hit rate) are much higher in SMART Rebalancing® Strategy case, while the Annual Turnover is marginally higher. The charts below show that on a calendar basis, there are only two negative excess years for Range Rebalancing whereas Calendar Rebalancing has a higher number of negative excess years with greater volatility in excess during those years. SMART Rebalancing® has one negative year. The period of analysis is short and the SMART Rebalancing® Model is very preliminary, but further analysis on improving governance, risk management and performance can be conducted on this approach if the client is interested.

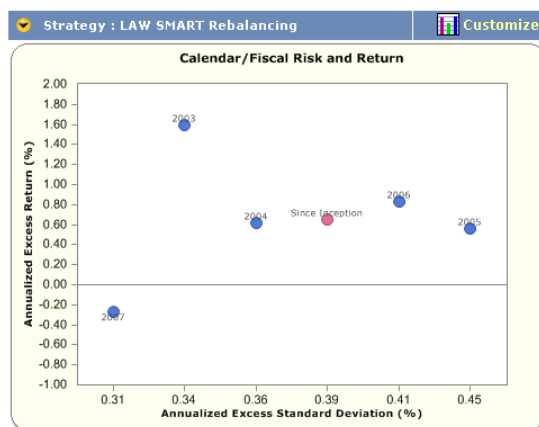
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WPERP Range Rebalancing



WPERP Calendar Rebalancing



WPERP SMART Rebalancing®

Overall, while we believe the rebalancing policy adopted by WPERP is generally in line with current public fund common practices, the Board and staff should consider adopting a SMART Rebalancing® strategy to add incremental value to the Fund and “convert implicit decisions into explicit decisions managing underweight and overweight positions of asset classes

within the range (HOW MUCH) by evaluating the relative attractiveness of assets using market factors (WHY).”²

Task Area 3d Recommendation

WPERP should consider adopting a SMART Rebalancing® strategy to rebalance the asset allocation.

² Mcube Rules – April '07. Beta vs. Alpha Separation – The Beta Management Discussion.

3e. Investment Policy Statement (IPS) and Guidelines

1. WPERP Investment Policy Statement

Principles

A thorough and clear investment policy statement ("IPS") is an industry standard document that serves as a critical part of the foundation for the ongoing supervision and management of an investment program. The purpose of an IPS is to articulate the consensus view of the board regarding the overall investment program and to document policies and procedures regarding major issues (e.g., developing a long-term strategic asset allocation, selecting service providers and performing due diligence, monitoring performance and investing assets consistent with appropriate fiduciary standard).

An IPS formalizes the board's agreement on the framework from which to direct the investment program. The IPS should address the following elements:

- A fund's mission and purpose;
- A fund's investment objectives;
- A fund's risk tolerance, including the liquidity needs of the fund;
- The roles and responsibilities of essential parties, e.g., Board of Commissioners, staff, the investment consultant(s), investment managers, custodian and the decision-making process;
- The long-term strategic asset allocation, including:
 - Specific targets and ranges for each asset class, and
 - The rebalancing process;
- Standards and measures of investment performance, including:
 - Benchmarks for each asset class and the fund as a whole;
 - The process for monitoring and evaluating performance of the fund and individual managers;
- Process for selection of external investment managers;

- Broad fund and asset class investment guidelines, including:
 - Permissible and impermissible asset classes, investment strategies and instruments;
 - Reasons and general parameters for each major asset class;
- Criteria and policies (or reference to separate policies and procedures) regarding specific miscellaneous subjects, including:
 - Securities lending,
 - Proxy voting, and
 - Brokerage practices; and
- A statement regarding the process for periodic review of the IPS.

Risks

The absence of a clear and complete IPS could cause a board, staff and service providers to act outside the determined policies of the board, which in turn could cause the fund to incur too much (or too little) investment risk or to not follow the board's policies in areas such as manager search, performance evaluation, etc.

Observed Conditions

The City Charter Section 1106(d)(1) requires the board of each pension and retirement system to "adopt a statement of investment objectives and policies for the system." The Charter also specifies many of the required component parts, including: "desired rate of return, acceptable level of risk for each asset class, asset allocation goals, guidelines for the delegation of authority, and information of the types of reports to be used to evaluate investment performance." The Board adopted the Statement of Investment Objectives Goals and Guidelines (which we refer to as an Investment Policy Statement or "IPS") on February 26, 2003 and most recently revised it on May 22, 2008. We reviewed the IPS to see whether, in our opinion, it contains all of the essential elements.

While the WPERP IPS is reasonable and complete in many essential respects, we identify several elements below that we believe the Board should consider adding and/or revising. In addition, we found the organization of the IPS to be less clear than optimal and believe that the

document could be rearranged for ease of understanding – see our discussion in the sections that follow below.

Task Area 3e Recommendation 1

We recommend that the Board consider rearranging the IPS so that it flows more clearly.

2. WPERP Mission and Purpose Statement

Principles

An IPS should discuss the mission and purpose of the fund (e.g., to accumulate funds exclusively for the benefit of its members and beneficiaries and to provide professional plan administration and sound investment practices). The IPS should also state the fiduciary standard of care to which the Board must adhere.

Risks

It is important for a board to have a clear understanding of the fund's mission and purpose to avoid breaching their fiduciary duty.

Observed Conditions

The City Charter Section 1106(a) states that the Board shall administer its “system for the following purposes:

- to provide benefits to system participants and their beneficiaries and to assure prompt delivery of those benefits and related services;
- to minimize City contributions; and
- to defray the reasonable expenses of administering the system.”

The WPERP IPS does not contain a section regarding the mission or purpose of WPERP, with the exception of the “overall goal” (listed as one of the General Investment Goals) being “to provide plan participants with post retirement benefits.” We believe that the Board should add a separate section or introduction that discusses the mission and purpose of WPERP. Although mentioned in the header on the top of page one in the IPS, this new section should clarify that WPERP includes two plans: the Retirement Plan (WPERP) and the Retiree Health Benefits Plan (RHBF).

One other item we look for in an IPS, which is not included in this document, is a description of the purpose of the IPS itself. For example, the purpose of the IPS is to provide a framework for the investment management of the assets of the Plan and to assist the Board of Administration in effectively supervising and monitoring the investments of WPERP.

According to the City Charter Section 1106(c) the Board is held to the prudent person standard, and the IPS General Investment Goals include the statement that "Investment actions are expected to comply with 'prudent person' standards."

Task Area 3e Recommendation 2

We recommend that the Board include a distinct section on the mission and purpose of WPERP.

3. Total Plan Investment Objectives

Principles

It is necessary to establish clear Total Plan performance objectives, (e.g., earn a rate of return in excess of inflation, which meets or exceeds the fund's assumed actuarial rate and is consistent with the fund's long-term Policy Index), to help shape the entire investment program. Establishing objectives for each asset class and strategy likewise can help shape their nature and structure. Investment objectives should grow out of – and conform to – the investment horizon of the fund, its current and expected future cash flow needs and take into account liability considerations (namely, funded ratio and employer contributions).

Risks

Not designating the most appropriate investment objectives for a fund in the IPS could put a board at risk for not achieving the assumed actuarial rate of return, which could lead to underfunding over the long-term. Investment objectives that are impractical and unachievable can lead to a misinformed evaluation of a fund's performance.

Observed Conditions

The City Charter Section 1106(d)(1) states that the IPS "shall include at least the desired rate of return..." The WPERP's IPS General Investment Goals section states that "A secondary objective is to achieve an investment return which will allow the percentage of Department revenues necessary to fund the Plan to be maintained consistent, or reduced, and which will provide for a full funding of the Plan's liabilities." It does not, however, specify the desired or expected rate of return." Additionally the IPS states the additional investment goals:

- to provide plan participants with post-retirement benefits ... this will be accomplished through a carefully planned and executed investment program
- Plan assets will be managed on a total return basis.
- Investment program shall at all times comply with existing and future applicable city, state, and federal regulations.
- All transactions undertaken will be for the sole benefit of the Plan's participants and beneficiaries...and defraying reasonable administrative expenses associated with the Plan
- Plan has a long-term investment horizon and utilizes an asset allocation which encompasses a strategic, long-run perspective of capital markets.
- Comply with "prudent person" standards

In general, we believe that these goals are reasonable, however although implied, the IPS does not explicitly state the additional goal of meeting or exceeding the actuarial rate over the long-term. The IPS also does not address the intention to achieve total returns in excess of a specified policy index, which we believe is important to add.

As discussed below, the investment objective should also be tied to a discussion on the risk tolerance of the Board, including liquidity needs and time horizon. The General Investment Goals do include reference to risk in relation to managing the portfolio on a "total return basis" and states "the principle that varying degrees of investment risk are generally rewarded with compensating returns...prudent risk taking is warranted within the context of overall portfolio diversification."

Task Area 3e Recommendations 3-4

The Board should include in the IPS "meeting or exceeding the actuarial rate over the long-term" as an additional long-term investment objective.

The Board should include in the IPS an objective "to achieve total returns in excess of the policy index" as an additional long-term investment objective.

4. Risk Tolerance and Liquidity Needs

Principles

Risk measures attempt to quantify the likelihood of investment loss given an expected or desired level of return. Some risks can be quantified in a straightforward manner, e.g., a fixed income portfolio's sensitivity to changes in interest rates through measures such as duration; while other risks are more difficult to quantify, e.g., the impact of external shocks to the economy that could cause economic sector meltdowns, etc.

A fund's ultimate decision makers (i.e., the Board) should determine and specify what types and level of risk are acceptable and have an awareness of the risk level of the fund's asset allocation. Risk tolerance is also affected by the funded status of a plan, i.e., if a plan is underfunded and is willing to take greater risk to increase the funded level or if a plan's benefit payments exceed its contributions and it needs greater liquidity.

The decision should be based on the fund's:

- Demographics: average age and years of experience, active/inactive ratio, retiree liability to plan assets (i.e., duration of liabilities);
- Plan status: funded ratios, actuarial assumptions, etc.;
- Time horizon;
- Cash flow: positive or negative, timing of contributions, benefits schedule;
- Investment objectives;
- System tolerance for short-term losses versus the chance of long-term gains or tolerance for unpredictable returns;
- Board member's comfort with fund performance volatility; and
- Other concerns and ancillary goals such as a campaign to increase benefits.

Risks

Without a good understanding of the appropriate risk level of the fund, the Board risks setting an inefficient or overly risky policy in order to meet its return objectives.

Observed Conditions

Total fund level risk and risk tolerance are not fully examined and discussed in the IPS, although the Investment Goal Statement makes reference to risk, as discussed above. It is appropriate that a discussion on risk be developed and included in the IPS to examine and document the Total Plan risk levels and the Board's risk tolerance, i.e., whether the Board is willing to accept above average market risk given its time horizon, or something similar. The IPS does not address risk tolerance relative to current and future cash flow needs.

Demographics, funded ratios and contribution rates are all discussed in the WPERP Annual Actuarial Valuation, but they are not discussed in the IPS, even at a high level. The IPS does not address current and expected future liquidity needs (i.e., whether the Plan is cash flow positive or negative, whether that is expected to change and how this impacts the risk tolerance), nor does it address situations such as how a sustained period of negative returns could cause WPERP to deviate from its asset allocation policy. The Board should have developed a fairly good sense of their risk tolerance as a result of the 2007 asset liability study and the use of the decision factors.

We believe that it would also be helpful to expand or supplement WPERP's risk discussion in the IPS with a separate more detailed practical policy/procedure document, referenced in the IPS, outlining exactly how "risk management" will be performed. This policy should include, for example:

- What metrics will be used to measure risk and how often they will be calculated;
- Table that compares/contrasts different risk metrics;
- Permitted financial instruments/strategies ;
- How risk goals will be communicated to investment managers;
- Events that could trigger a review of risk management policies and procedures;
- Job description of staff member(s) assigned to risk management process;
- Risk management link to any incentive compensation plans; and
- How to benchmark against other public pension funds with respect to risk management best practices.

Task Area 3e Recommendations 5-7

The Board should insert a discussion on risk in the IPS to describe and clarify the Board's risk tolerance, including reference to the WPERP's time horizon, liquidity needs, etc.

The IPS should acknowledge WPERP's level of risk with some discussion of how its risk level was developed, and include specific guidelines on how to identify and measure risk.

The Board should consider developing a detailed practical risk management policy/procedure document.

5. Identification of Roles and Responsibilities

Principles

An IPS should outline the assignment of responsibilities and clearly distinguish the roles and responsibilities of the essential parties, i.e., the Board, investment staff, consultant and any other service providers.

Risks

Not delineating the roles and responsibilities of the Board and various staff members could create confusion. It is important to note what staff is permitted to do without Board approval versus Board approval being required, as well as the role of the consultant in the overall process.

Observed Conditions

The City Charter Section 1106(d)(1) states that the IPS "shall include ... guidelines for the delegation of authority." The WPERP IPS does not include a distinct section that outlines the specific roles and responsibilities of the Board, staff, investment managers, general investment consultant and custodian. Rather, various responsibilities are scattered throughout the document, which makes them difficult to find and determine their completeness.

The IPS does includes some language on delegation of authority, such as where Section III. Investment Management Policy states that the "Board will retain external investment managers.....Managers will have authority for implementing investment strategy, security selection, and trade executions...Investment actions are expected to comply with 'prudent person' standards." However, we believe that the IPS should be expanded to include a section on "Duties of Responsible Parties." Both the Real Estate and Private Equity Investment Policy

statements contain sections on responsibilities and delegations (see Exhibit 1 of each IPS) and something like this should be created for the total Plan.

Task Area 3e Recommendation 8

Roles and responsibilities for key parties (e.g., Board, staff, and various service providers) should be more completely documented in a separate section in the Investment Policy Statement.

6. Asset Allocation

Principles

Another fundamental purpose of an IPS is to establish a fund's long-term asset allocation policy. The targets for each asset class should be based on and generally consistent with the results of the most recent asset allocation and/or asset liability study. It should reflect the balance between the Board's risk tolerance (willingness to accept short-term volatility of returns and the possibility of negative total return over short periods) and the desire to achieve the fund's long-term investment objectives. To further control risk, a fund should also diversify within each asset class by style, capitalization, sector, etc.

Risks

Not stating the asset allocation targets or the requirements as to how often and how asset allocation studies should be conducted, could put a board at risk of giving up part of its control over the fund's asset allocation, which is known to be the primary determinant in a fund's performance.

Observed Conditions

The IPS acknowledges in its investment goals the importance of asset allocation in achieving WPERP's investment objectives. Section II, Policies and Procedures 1.0 Asset Allocation Policy, details the Plan's long-term asset allocation targets. This Section also specifies that the asset allocation policy must consider "a projection of actuarial assets, liabilities, benefit payments and require contributions" as well as market and economic factors and its current and projected funding status. Although generally complete, we note that the asset allocation policy does not include direction on how often the asset allocation study should be performed.

See IFS' more detailed discussion and accompanying recommendations on asset allocation in Section 3c.

Task Area 3e Recommendation 9

The Board should specify in the Investment Policy Statement the timeframe for performing analysis and executing a new asset allocation and/or asset liability study (e.g., review asset allocation annually and conduct a formal study at least every five years).

7. Rebalancing

Principles

An IPS should also define the rebalancing process. Rebalancing ranges around the long-term targets should be set up to ensure that asset allocation “drift” is minimized. When an asset class exceeds the range around the long-term target, the IPS should describe the process and timing for rebalancing and whether it is to the target or half-way. Over time, disciplined rebalancing may enhance performance and manage overall risk.

Risks

The lack of a rebalancing policy could cause rebalancing to occur too frequently (incurring unnecessary transition costs) or not frequently enough, which could lead to significant policy benchmark risk.

Observed Conditions

The WPERP’s rebalancing policy is documented in Section III, Investment Management Policy 5.0 Rebalancing. [We note that the IPS would flow more clearly if rebalancing were addressed immediately following the asset allocation policy discussion.] This Section documents the target for each asset class and sub-asset class and the allowable ranges.

As discussed earlier in this Report, the Board is responsible for final approval of all rebalancing recommendations made by staff, with input from the investment consultant and staff implements the rebalancing. Based on our interviews and document review, it is our understanding that the Board desires to maintain control over non-security selection decisions. The Policy states, “If actual allocations to an asset class, or to a sub-asset class, fall outside the predetermined range, Staff, in consultation with the investment consultant, will develop recommendations for rebalancing back to the mid-point between the end of the range that was exceeded and the target allocation, including the time frame for accomplishing the proposed rebalancing.” Ultimately, as the Board becomes more comfortable with their asset allocation and gains confidence in the staff, we believe that the decision whether or not to rebalance could be delegated to staff.

The Policy also states that rebalancing should not occur more than every three months, which ties to the requirement under asset allocation that the Board monitor the asset allocation versus targets quarterly and rebalance as appropriate. This statement does conflict slightly with subsequent statements that rebalancing can occur prior to one month if market conditions generate a need. We suggest that the language in the asset allocation and rebalancing sections be conformed so that the Board must monitor asset allocation *at a minimum* quarterly, but will authorize rebalancing as necessary when asset class allocations fall outside their ranges.

The policy also briefly describe how staff should prioritize implementation procedures (using regular cash flows, selling overweighted assets and/or buying underweighted assets) and that if required within an asset class with multiple managers under a single mandate, an equal-weighted basis should be used, unless a manager in question is under review for under performance.

See additional discussion on rebalancing above in Section 3d.

Task Area 3e Recommendation 10

The Board should conform the rebalancing language in the asset allocation and rebalancing sections of the IPS.

8. Evaluation of Investment Performance

Principles

In addition to the overall investment objectives, an IPS should also establish the standards and measures of investment performance, including designating benchmarks which reflect performance expectations for each asset class and for the fund as a whole.

For the Total Plan, “best practices” suggest employing a Total Plan Policy Index and an Asset Allocation Index. Published market indices are weighted to create a “Policy Index” that matches a fund’s long-term target asset allocation and the weights remain fixed over time, until those targets are changed. The Policy Index serves as an objective measure of Total Plan performance. Differences in performance between a fund’s actual return and the Policy Index can be attributed to:

- asset allocation “drifts” from the long-term target,
- over or under-performance by the Plan’s investment managers, and
- tactical decisions to overweight or underweight an asset class.

As an additional measure, many funds also (as a matter of policy) establish an "Asset Allocation" index. This also is constructed using published market benchmarks. In contrast to the Policy Index, the Asset Allocation Index's asset class weights change to reflect the actual asset allocation of a fund as it "drifts" or as tactical decisions are made to overweight or underweight an asset class. Therefore, this benchmark adjusts for the asset allocation drift over time. A fund's excess or under-performance versus the Asset Allocation Index is mainly attributable to the performance of the underlying investment managers (internal or external).

Risks

Not establishing appropriate standards and measures of investment performance for a fund in the IPS could put a Board at risk for not evaluating the performance correctly, and not structuring portfolios optimally.

Observed Conditions

Section IV. General Investment Objectives and Guidelines 4.2 How the Investment Manager Monitoring Procedures Will Work includes a summary of the required ongoing and periodic monitoring activities to be performed by WPERP and/or the consultant. "WPERP (or its investment consultant) will evaluate investment performance on a quarterly basis using the investment performance criteria found in Schedule 1." [Note: Schedule 1 is not labeled as such in the IPS.] We believe that Board level reviews of investment performance occurring quarterly is appropriate. If a manager does not meet the various short, medium and long-term criteria it is cause for placing the manager on the watch status. This section of the IPS includes the steps to be taken once a manager is on watch.

The WPERP IPS outlines the manager structure of the publicly traded asset classes and the benchmarks to be applied to each asset and sub-asset class. However, it does not formally identify and establish a Total Plan level Policy Benchmark or Asset Allocation Benchmark, which we believe can serve as useful Total Plan benchmarks. We note that the quarterly performance report does include Total Plan return comparison with a Total Plan Policy Benchmark and each asset class and manager return is compared to appropriate, assigned benchmarks (see our discussion earlier in this section on benchmarks).

As described in the Principles section above, Policy Benchmarks and Asset Allocation Benchmarks provide yardsticks by which to evaluate the Board's policy decisions (including strategy decisions and implementation decisions). Strategy decisions (including deliberate or market influenced drift away from policy targets) are evaluated by measuring the difference between the Policy Benchmark and the Asset Allocation Benchmark, while implementation decisions (manager selection) are evaluated by measuring the difference between the Asset Allocation Benchmark and the fund's actual return. We note that reviewing performance

attribution analytics can also help determine whether or not asset allocation or individual portfolio managers add value.

Performance monitoring of real estate and the alternative asset classes are outlined separately in their individual investment policy statements, including the performance objectives and reporting/monitoring requirements.

Task Area 3e Recommendation 11

The Board should consider designating an Asset Allocation Benchmark as an additional Total Plan evaluation tool and document the Policy Benchmark and Asset Allocation Benchmark in the IPS.

9. Selection and Termination of Investment Managers

Principles

An IPS should designate who has primary and ultimate responsibility for the selection and subsequent termination of investment managers. The process for selection of investment managers is one of the fundamental decisions a Board must make in their fiduciary capacity. Therefore, it is important that a Board establish thorough and well documented procedures for implementation of the manager selection process.

Risks

The lack of an established policy on the selection (and termination) of investment managers could put the Board at risk of being inconsistent in its approach and not considering all of the best available managers for the strategy in question.

Observed Conditions

Section IV. General Investment Objectives and Guidelines 3.0 Selection Process of Investment Managers briefly describes how the manager search process should work. The Board has maintained the authority to determine when to originate a search and searches will be conducted by the Board and staff. The Policy states that the first step is to develop minimum criteria and then to design an RFP or RFI. The Policy does not state whether the Board needs to approve the minimum criteria. Staff and/or consultant shall score the responses and recommend finalists who will present to the Board for the ultimate selection.

The IPS does not include an outline of the initial criteria for manager selection (that are included in the alternatives asset class policy statements however). We would expect to see items such as the following:

- Organizational structure and resources, including institutional client history, staffing and assets under management;
- Investment philosophy and process;
- Historical/expected performance and risk levels;
- Fees;
- CFA Institute performance reporting standards.

4.0 *Process for Investment Manager Termination* enumerates the main reasons the Board would choose to terminate an investment manager, including:

- Failure to comply with guidelines;
- Failure to achieve performance expectations;
- Significant deviations from manager's stated investment style, philosophy and/or process;
- Loss of key personnel;
- Illegal or unethical behavior by manager; and
- Unwillingness to cooperate with reasonable Board requests.

Task Area 3e Recommendation 12

The Board should outline the critical manager selection items in the manager search policy in the IPS or create a separate manager search policy document and reference it in the IPS.

10. Guidelines

Principles

Many institutional investors distinguish between investment policy provisions applicable to the fund as a whole from more particularized investment guidelines for individual portfolios and investment managers (internal and/or external). Consistent with those institutional investors, we believe investment manager guidelines should be separate and distinct from the IPS. The IPS should reflect broad policy provisions that apply to all managers for the portfolio as a whole and for broad asset classes. Examples of broad policy provisions would include minimum levels of diversification and securities or strategies that are prohibited across all accounts (e.g., non-dollar denominated stocks or bonds, hedging, below investment grade fixed income, derivatives, etc.).

By contrast, customized guidelines should be developed for each manager or account to articulate and manage the particular risks and performance expectations associated with the unique investment process, strategy and risk characteristics of each. These documents should be tailored to and agreed upon by the manager and the investment fiduciary (typically the Board or

staff to whom they have delegated this function). (We discuss the individual investment guidelines in Section 3e.)

Risks

Constraints intended to apply to the entire pension fund or investment pool should be included in the IPS. The absence of individually tailored investment guidelines for the various investment managers would put the Board at risk of having investment managers who may take on undue risk and/or have style drift.

Observed Conditions

The WPERP IPS contains two main sets of investment guidelines: asset class level guidelines for domestic equities, non-US equities and fixed income in *IV. General Investment Objectives and Guidelines 1.0 & 2.0* and asset sub-class guidelines for publicly traded equity and fixed income in Sections V. – XIII. The IPS should, and does, contain higher level asset class guidelines, but we believe that active managers with separate accounts should have customized individual investment manager guidelines rather than the more generic ones provided for in the IPS. We review the individual manager guidelines in more detail in Section 3f –Compliance Monitoring.

Real estate, private equity and real return program guidelines are included in the separate investment policy statements for those asset classes in Sections XIV. – XVI.

Each asset class guideline, including private equity, specifies the investment objective and the authorized securities, which is standard practice.

Task Area 3e Recommendation 13

The Board should develop custom guidelines for each applicable investment manager or account.

11. Other Investment Related Policies

a. Proxy Voting Policy

Principles

Shareholders have the right and responsibility to vote proxies. Institutional shareholders and pension fund trustees were put on notice of the importance of proxy voting in February 1988 when the U.S. Department of Labor published a letter to Helmuth Fandl, Chairman of the Retirement Board of Avon Products. Known subsequently as the “Avon Letter,” the DOL stated

that proxies were plan assets that should be managed with the same care and prudence as other plan assets. Proxies could not be ignored and how they were voted mattered.

Public pension funds fulfill their proxy voting responsibilities in various ways. Most assign the responsibility to collect, evaluate, and vote proxies to their equity investment managers (with each manager responsible for the proxies associated with the holdings in the manager's portfolio). Some funds delegate proxy voting tasks to internal staff of the fund and provide their staff with sufficient resources to accomplish the job. An increasing number hire a "third party" specialist firm to collect, evaluate, and vote proxies, and they transfer that responsibility from the investment managers to the specialist firm. Regardless of how this responsibility is assigned, a Board must determine which party is responsible for setting the policies that will guide the fund's proxy voting program.

No matter what approach is employed to undertake the mechanics of proxy voting, board members retain the responsibility to set a policy that:

- Is motivated by an informed perspective on how shareholders can contribute to the governance of corporations;
- Anticipates many of the complex issues that populate the proxies of major corporations today; and
- Recognizes the differences between the accounting and corporate governance regimes in the United States and other countries.

Specifically, a comprehensive proxy voting policy should articulate the fund's philosophy on issues including:

- Election of directors and the balance between insiders and independent directors;
- Methods of shareholder voting, such as cumulative voting, confidential voting, and super-majority requirements;
- Opportunities for shareholder initiatives;
- Composition of the board and compensation of directors;
- Anti-takeover provisions;
- The role of the CEO on a company's board;
- Executive compensation, use of stock options, and performance standards;
- Expensing of stock options;
- Increases in the amount of common stock issued; and
- Reincorporation.

Among public pension funds, it is not uncommon for a fund's proxy voting policy to include positions on social issues such as:

- Corporate environmental practices, CERES Principles¹, and climate change;
- Production of tobacco products;
- Affirmative action in the workplace;
- Investment and business operations in Northern Ireland; and
- International labor standards.

The IPS should indicate who has responsibility for voting proxies. If investment managers are delegated the responsibility, the fund should establish a process by which voting can be monitored. The IPS should require periodic reporting of proxy voting (no less than annually) and it should indicate whether or not managers are permitted to “abstain” from voting on any issue or whether votes should be either “for” or “against.” Manager voting reports to the board members should summarize each proxy issue and indicate whether the manager’s vote was for or against management’s recommendation. The Board needs to make sure that managers receive written guidelines established by the Board, if any, and adhere to them.

Best practices indicate that a fund’s proxy voting policy should be written, specific with respect to the most frequent types of corporate governance resolutions, and regularly reviewed by the Board. To the extent that a fund has equity holdings in companies located outside of the United States, the fund should have a proxy voting policy that is tailored to the different issues that are presented to shareholders who invest in foreign companies.

Risks

If a fund does not have a proxy voting policy, the Board may not be fully availing itself of its rights as shareholder and the Board risks inconsistent proxy votes. Relying on investment managers to vote proxies is an inexpensive and operationally easy approach for an institutional investor, although it does carry certain governance risks. First, each manager may have different policies on a given issue (like executive compensation, classified boards, and anti-takeover provisions) and these policies may be inconsistent with one another. Second, if two managers hold shares in the same company, the client’s proxies may be voted differently on a resolution before that company’s shareholders. Third, the managers are likely to report their proxy votes in different formats and time periods, making it difficult for the fund to consolidate, compare and review the totality of the fund’s proxy votes. The evolution of institutional practices with respect to proxy voting has gone beyond reliance on investment managers.

¹ Created in 1989 by the Coalition for Environmentally Responsible Economies, the CERES Principles (formerly known as the Valdez Principles) are broad standards for evaluating corporate activity and useful for investors seeking to measure a corporation’s commitment to sustainable environmental practices.

Observed Conditions

The WPERP IPS includes a section on proxy voting, under *III. Investment Management Policy 3.0 Proxy Voting*.

Proxy voting rights will be managed with the same care, skill, diligence and prudence as is exercised in managing other assets. Proxy voting rights will be exercised in the sole interest of the Plan's members and beneficiaries in accordance with all applicable statutes consistent with the Board proxy policies, which are attached hereto as Exhibit D.

The Statement of Investment Objectives, Goals and Guidelines does not appear to have an Exhibit D, although we were provided with a copy of a memo from Glass, Lewis & Co. to the Board regarding the Board-directed proxy voting policy. We understand from our interviews with PCA that they assisted the Board in developing the proxy voting policy and in retaining Glass Lewis to vote the proxies. The fact that proxy voting has been delegated to a third party firm, rather than relying on investment managers or staff, should be noted in the IPS. Staff informed us that a direction letter was sent to all managers and is now incorporated into all new manager contracts.

Although a third party has the disadvantage of somewhat greater cost, it also has the virtue of consuming less staff time when proxy voting is not delegated to the investment managers. The work involved in tracking a fund's equity holdings and collecting the correct proxies is substantial. Specialized research is required to evaluate proxy resolutions and to reach an appropriate decision on how individual votes should be cast. Since corporate annual meetings tend to cluster in the second calendar quarter of each year, a huge volume of information floods through the system in a short amount of time and the decisions required are all time-sensitive. Organizing and supervising the work of internal staff has the usual management risks. Use of an external specialist creates the need for oversight and regular operational review, however, these risks are manageable and well within the ability of most large funds. Best practices for large pension funds have developed in a direction that combines some participation by internal fund staff with outside sources of research, proxy tracking and the mechanics of voting.

Task Area 3e Recommendation 14

The Board should specify in the IPS which party has been delegated the responsibility of voting proxies and how they will be monitored.

b. Securities Lending Policy

Principles

The IPS should indicate whether a pension fund is allowed to participate in a securities lending program, as well as the broad parameters of the program, e.g., collateral should have a market value of 102% for U.S. securities (105% for international securities) and be marked to market daily. The IPS should reference separate guidelines for the investment of securities lending collateral.

Risks

The absence of criteria for securities lending increases the risk of the Board's either not employing a lending program, allowing participation in a sub-optimal securities lending program, or not adequately structuring or monitoring whatever they do adopt in that regard. Inadequate structure or monitoring in turn may produce undue risk or sacrifice available returns.

Observed Conditions

The IPS does not address securities lending. We believe that the IPS should include whether or not the Plan participates in a securities lending program, and if so, the broad parameters of the program, e.g., collateral should have a market value of 102% for U.S. securities and be marked to market daily. More IFS discussion of securities lending can be found in Section 3j-Securities Lending Program and Fees.

Task Area 3e Recommendation 15

The Board should include a discussion of securities lending in the IPS, including the broad parameters of the program.

c. Brokerage Policy

Principles

The IPS should acknowledge that brokerage commissions are a plan expense and that, as such, the Board will monitor them, if necessary, with the assistance of an outside investment consultant. The IPS should indicate external managers are obligated to seek best execution (i.e., best trade based on share price, commission, available research, etc.) on all trades. Ideally, the IPS should also specify policies on soft-dollar, directed brokerage and/or commission recapture arrangements, which constitute plan assets, if any, and it should establish a process by which the board members will monitor the fund's investment manager brokerage commission activity and

practices.² These are important issues regardless of whether assets are managed externally or internally.

Risks

By not documenting any brokerage policies in the IPS, the Board risks incurring unnecessary trading costs or managers not operating in accordance with their wishes.

Observed Conditions

The WPERP IPS does not include a separate section on brokerage and/or trading policies and practices. However, Section III. Investment Management Policy does include the following language, "Investment managers under contract with the Board shall have discretion to prudently establish and execute transactions with securities broker/dealer(s) as a manager may select. The investment managers shall obtain best execution with respect to every portfolio transaction. The following transactions will be prohibited: short sales; selling on margin; "prohibited transactions" as defined under the Employee Retirement Income Security Act (ERISA); and, transactions that involve a broker acting as a "principal," where such broker is also the investment manager who is making the transaction. Authorized transactions shall be those specifically outlined in writing by the Board."

The IPS does not address whether or not the Plan uses soft dollars or participates in a commission recapture program³ and does not require managers to report on their brokerage activity and transaction costs. We advise that the IPS require investment managers to submit periodic reports on brokerage activity and transactions costs to staff and/or stipulate that an external firm will be used for trade execution monitoring and measurement. We were informed by staff that they did a full review of transaction costs in 2007.

Task Area 3e Recommendation 16

WPERP should expand the IPS to include a section on brokerage and trading and define how transactions costs such as brokerage commissions should be monitored.

² "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*, November 13, 1997.

³ As noted earlier, we understand that participation in a commission recapture program is under review.

d. Securities Litigation

Principles

Securities class action litigation affects investment returns and an organized approach to securities class action litigation can potentially recoup material value by affording the opportunity to recover losses resulting from the wrongful actions of a company in which pension fund assets are or were invested. An IPS should also specify whether or not the system considers legal claims to be plan assets; the Department of Labor (DOL) views securities class action claims as plan assets. Since the claims are plan assets, 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 realize on claims.⁴ DOL's reasoning was based on common law trust principles. The trustees' duties extend to actively monitoring situations where "the activities of the plan alone, or together with other shareholders, are likely to enhance the value of the plan's investment, after taking into account the costs involved."⁵ This analysis is critical because pursuing securities litigation as an active plaintiff, either by separate lawsuit or by serving as a lead plaintiff, imposes fiduciary responsibility to other class members (in the case of lead plaintiff status) and requires significant resources in terms of time, expenses, and effort.

Although public pension funds are not subject to ERISA, most are governed by fiduciary standards that are similar, if not identical, to ERISA principles. It is probable that courts will take ERISA principles into account when construing whether public pension fund board members have an affirmative duty regarding securities class action claims. Consequently, it is advisable for public pension fund board members 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, a Board should adopt a formal securities class action litigation policy. The policy should (a) acknowledge that securities class action claims, arising out of misdeeds which caused losses to the pension fund, are plan assets and therefore the board members have a fiduciary duty to take reasonable, cost-effective, steps to identify, analyze, pursue, and collect securities class action claims; (b) identify the objectives of the board in pursuing securities litigation; (c) set forth the evaluation and monitoring process that will be used; (d) identify a minimum loss threshold; and (e) define the roles and authority of the key parties in the process.

⁴ DOL *amicus* brief submitted in *Bragdon v. Telxon Corp.* 98 Civ. 2876 (N.D. Ohio April 28, 1999).

⁵ Interpretive Bulletins Relating to ERISA, 59 Fed. Reg. 38,860, 38,860-61(1994).

Risks

Not documenting any securities class action litigation policies in the IPS would put the Board at risk of not participating in class action law suits and receiving compensation owed to it.

Observed Conditions

WPERP's IPS does not reference a policy regarding securities litigation. See further discussion of securities litigation in Task 2a.

e. Private Equity, Real Estate and Real Return Policies

Principles

Assets that are relatively illiquid and not traded on an exchange that provides objective, readily ascertainable prices are often known as "appraised assets." Such assets – including real estate, real return and private equity – pose special risks, distinct from publicly traded securities.

Risks

Because of these special risks, investors in appraised and otherwise less liquid assets should adopt distinct investment policies and procedures to help structure and manage their portfolios of private and alternative investments.

Observed Conditions

As noted above, the WPERP IPS appropriately includes separate documents which comprise distinct and detailed policies for private equity, real estate, and real return (draft – new asset class).

f. Investment Policy Review Policy and Process

Principles

To ensure that the Board and staff are aware of the IPS and to ensure that an IPS remains current, the industry standard requires a periodic (at least annual) review of the IPS.

Risks

Over time, the IPS may not reflect the Board's actual policies and goals. Out-of-date language could lead to confusion regarding the investment policy.

Observed Conditions

The City Charter Section 1160(d)(1) states "At least annually, the board shall review the (IPS) and change or reaffirm it. After the annual review, the board shall forward the statement to the Mayor and Council for informational purposes." Section II. Policies and Procedures includes the statement that "The Board will review the Investment Policy Statement for any amendments in January." The cover page of the IPS shows the all of the revision dates since the document was first adopted by the Board in February 2003. The IPS has undergone 17 revisions up through and including the current document, dated May 22, 2008, but only one of those was in January. While it is important to keep a requirement to review the IPS annually, the Board may want to consider eliminating the reference to January.

3f. Compliance with Investment Guidelines and Monitoring

Principles

New information continuously enters the financial markets and a market somewhere in the world is always open. Security prices can fluctuate rapidly and significant amounts of volatility or “noise” cloud our ability to determine true or “intrinsic” investment value. Faced with this uncertainty, it is by no means an easy matter to separate the contribution made by an investment manager’s style, skill and luck. Institutional investors must employ sophisticated techniques to control and monitor the performance of their investment managers to unravel the interplay of risk, returns, and costs in the portfolios they hold.

Regardless of the size or complexity of a fund’s investment program, thorough and comprehensive monitoring of investment managers is widely considered to be essential. Many institutional investors rely on their general investment consultant to perform much of this task, with the Board receiving periodic reports on manager performance. Others have fund staff deeply involved in the process. Some combination of staff and consultant review is the approach most commonly pursued by major funds. No matter who performs the monitoring function, these are the fundamentals:

- **Investment performance:** Track holdings; account for cash flows and transactions; calculate periodic investment rates of return; compare returns to appropriate benchmarks, and rank in a universe of peer managers.
- **Investment risks:** Based on portfolio holdings, evaluate portfolio characteristics such as price/earnings, price/book, dividend yield, earnings growth ratios (for equity) and maturity, duration, yield, convexity (for fixed income); observe how portfolio holdings are distributed among sectors and industries; calculate measures of volatility for the portfolio; compare characteristics, diversification and volatility to that of an appropriate benchmark and manager peer group. Estimate the role of investment style in the manager’s returns (if relevant to the investment structure of the fund). Apply sophisticated portfolio analytic systems to estimate the risk of the portfolio on a forward looking basis (such as estimated tracking error).
- **Compliance:** Compare individual holdings within a portfolio to the guidelines set for the manager to determine if there are any holdings that lie outside of the permitted securities for the account. Confirm that the account is consistent with any portfolio-wide requirements established by the guidelines. Identify any variances and investigate further. Transactions and portfolios should be analyzed

to determine whether pre- or post-trade compliance is preferred. Managers should have tools to provide the preferred method.

- **Periodic, in-depth review of managers:** Review long-term performance in light of the risks incurred by the manager; estimate the sources of return in a manager's portfolio and compare to the fund's expectations (attribution). Meet with the manager's key personnel to discuss results and strategy; make site visit if possible. Confirm organizational details, such as key investment personnel, sufficiency of resources, growth of business, trading and proxy practices.

Best practices require investment performance reporting to be done by someone that is independent of the investment managers. The regular quarterly performance report (routinely provided by the consultant) should clearly and concisely summarize the essential factors, which should be analyzed and interpreted for the Board (by a combination of the consultant and fund staff), culminating in a recommendation about whether to retain or replace a manager. Effective monitoring has two benefits: it helps the fund fiduciary make good decisions, and it also signals to the manager that the fund is serious about performance and compliance.

Best practices also include regular checks of the extent to which investment managers comply with the guidelines given to the managers.

Risks

Regular, comprehensive portfolio and investment manager monitoring is essential to prudent management of a fund's assets. The absence of clear reports that provide sufficient information to monitor managers can put a Board at risk for not making sound decisions about investment performance, manager skill and diversification.

Insufficient guidelines and infrequent guideline monitoring opens the possibility of excessive portfolio risk, prohibited investment positions, and inadequate performance.

Observed Conditions

Monitoring Policies

WPERP IPS sections "Policies and Procedures", "Investment Management Policy" and "General Investment Objectives and Guidelines," spell out many key requirements for monitoring and retaining investment managers, such as some performance monitoring targets and a quarterly Board review of investments. The IPS also includes factors to analyze before deciding to terminate a manager, such as manager failure to comply with guidelines, failure to achieve performance objectives or deviation from stated investment philosophy.

The staff and general consultant are identified in the IPS as the parties responsible for monitoring guideline compliance, but we understand that staff actually performs the ongoing activity. The IPS does not spell out the investment manager guideline compliance monitoring process. We believe that these activities need to be documented and included in a policy.

Monitoring Practices

The Board receives a monthly report from staff and a quarterly performance report prepared by PCA, based upon performance measurement data supplied by the Custodian. The General Consultant and staff review WPERP's quarterly performance with the Board.

We understand that, in practice, staff has responsibility for monitoring each investment manager's adherence to their investment guidelines. WPERP uses the custodian bank's (BNY Mellon) Dashboard portfolio monitoring software to flag guideline violations. The system emails a weekly report which flags any violations for public market accounts. We understand that at least one staff member has been assigned responsibility for monitoring and acting on the violation for each asset class. During our interviews, it was noted that some of the compliance criteria is not monitored via Dashboard and in those situations manual reports are completed by the respective staff member.

Task Area 3f Recommendation 1

WPERP's IPS should reference a written policy for monitoring investment manager guideline compliance. The policy should specify all of the procedures, including identifying responsible parties and detailing a method to document monitoring activity.

1. Investment Manager Guidelines

Principles

Pension fund "best practices" generally indicate that to manage investment risk properly at the individual manager level separate customized investment guidelines should be developed and provided to each investment manager. Guidelines are essential for monitoring, measuring and analyzing portfolio performance, risk, and structure relative to the objectives.

Such guidelines are typically drafted by a fund's investment consultant and/or staff and incorporated into the manager's contract, in order to hold the manager legally responsible to comply. Investment managers should be allowed to provide input into the draft guidelines to assure they are appropriate without unduly limiting the manager's ability to manage according to its style and earn a rate of return at or above the appropriate benchmark.

Guidelines should define the style of investment management employed by the manager and identify specific metrics (such as performance expectations as well as other portfolio characteristics) by which the fiduciaries (staff and/or Board) can determine whether the manager is doing what the manager was hired to do. Overall equity and fixed income guidelines should generally include, among other items:

- Investment strategy of the portfolio;
- Investment objectives, including the style specific performance benchmark and other expectations regarding performance (e.g., perform in the top half of a designated universe);
- Limits on the amount that any manager can hold of the securities of a single corporate issuer (typically 5% for other than activist investors);
- Limits on the percentage portfolio weight in any one security (again, other than for activist investors);
- A requirement that the portfolio's holdings within industry sectors be limited to an amount specified in writing, pursuant to a system of industry classification to be agreed upon between the fund and each equity manager;
- Expectations regarding certain portfolio characteristics (e.g., capitalization);
- Maximum amount allowed in cash and/or whether the manager can equitize cash;
- Whether, and the extent to which, hedging is allowed in international portfolios;
- Prohibitions on use of certain securities, such as certain types of derivatives;
- Prohibitions on margin transactions or any borrowing of money;
- Any trading directions, including requirement for best execution;
- Fiduciary standard of care;
- Proxy voting directions (e.g., whether the investment manager should vote them, reporting requirements, etc.);
- Action required for breach of guidelines;

- Requirement to maintain fiduciary liability insurance (often in the contract);
- Communication and reporting requirements (including requirement to report organizational changes at the firm or material changes in investment philosophy or strategy); and
- Acknowledgement that the manager uses the Global Investment Performance Standards (GIPS) when calculating investment performance returns.

In most cases, these principles apply equally to internal investment managers.

Risks

Inadequate guidelines could potentially allow an investment manager to invest assets in accordance with a strategy other than that it was engaged to pursue, possibly causing the portfolio to take on different risk and structural characteristics than desired by a fund and result in misunderstanding by the Board, staff, investment consultant and investment manager.

Observed Conditions

WPERP's IPS includes high level guidelines per asset class and sub strategy (e.g., Equities: Large Cap Value, Large Cap Growth). Currently, individual asset managers do not have specific guidelines for their specific mandates. Given the nuances of each manager's investment strategy, IFS believes it's appropriate to have specific guidelines for each manager, as the manager skill set and risk profile vary from strategy to strategy.

IFS reviewed a sample of guidelines which covered a few of the Fund's asset classes. The structure of the guidelines is very similar, except for the necessary subtleties attributable to the asset classes' specific investment style.

The guidelines appropriately contain each of the following sections:

- Portfolio Component Definition: defines the industry sectors and market capitalization, relative to a benchmark, that the manager is expected to invest their assets;
- Portfolio Guidelines: maximum allocations to cash and permissible investments are defined in this Section, maximum allocations to any individual security are defined as well;

- Portfolio Characteristics: presents general characteristics expected of the portfolio; these are appropriately calibrated relative to benchmark characteristics; and
- Performance Objectives: states the expected outperformance of the manager relative to the benchmark.

In general, we found that the guidelines contained most of the essential elements; however we found that the guidelines would be improved with the addition of:

- Communication and Reporting requirements of the managers, including language addressing compliance violations;
- A direct statement of the applicable fiduciary standard of care;
- Proxy direction (e.g., whether the investment manager should vote them);
- Performance objectives could also address volatility: e.g., in terms of tracking error or in terms of standard deviation of returns compared to that of the index;
- Language stating the manager will use the GIPS standards when calculating investment performance returns; and
- A reference to the relevant peer group the mandate may be measured against.

IFS was notified by staff that the recommendations above are included in the investment manager contracts, but IFS believes these elements should be included in separate stand-alone guidelines for each of the managers. IFS did not review any investment manager contracts verifying that they included the language listed in the section above.

Task Area 3f Recommendation 2

The Board should, with assistance from its Consultant, develop individual investment manager guidelines for each of its portfolios. Additionally, manager guidelines should explicitly state the fiduciary standard of care and to include proxy voting policy direction. Language pertaining to GIPS standards and volatility should also be considered in the investment manager guidelines.

3g. Investment Management Structure

Overview

“Investment management structure” relates to the following:

- The allocation of fund assets to various styles within an asset class and any biases that may exist (e.g., in terms of capitalization or value vs. growth); thus, it is separate and distinct from asset allocation;
- The number of managers used and whether they are invested in separate or pooled/commingled accounts;
- The use of active and passive strategies; and
- The use of internal versus external asset management.

Principles

Generally, the proper allocation to various investment managers is guided by the Policy Benchmark for the asset class in question.

- For example, if a fund's equity policy benchmark is the Wilshire 5000 Index, a fund's manager allocations would typically be done in such a way that the overall exposure to different “styles” would be roughly similar to the Wilshire 5000 Index.
 - Thus, if the Wilshire 5000 Index consisted of 80% large cap stocks and 20% small to mid cap stocks, a benchmark driven investment structure would have roughly those same percentage allocations.
 - Similarly, if the Wilshire 5000 Index consisted of 60% growth stocks and 40% value stocks, a benchmark driven investment structure would have roughly those same percentage allocations.

“Best practices” suggest that a fund should use enough investment managers to achieve proper diversification in the asset classes in which it has chosen to invest. Generally, a fund should seek a mix of equity, fixed income and other managers, (separate accounts and/or commingled funds) with complementary styles (as opposed to duplicative styles):

- Complementary styles increase overall diversification;
- Duplicative styles can create administrative burdens, increase investment management costs and potentially detract from overall diversification; and
- The number of managers required should be tied to the asset allocation.

Generally, a fund should have the number and variety of investment managers necessary to achieve the fund's stated investment objective and to control risk while incurring reasonable costs.

Risks

An investment structure which is significantly different from the policy benchmark introduces the risk of a "bias" or "bet" both to and away from another style within that benchmark.

Too few or too many managers can be problematic. Having too few managers can cause a fund to bear unnecessary risks, such as lack of diversification and organizational risk (i.e., if a fund has a large amount of assets invested with one organization and that manager has problems). On the other hand, too many managers can result in higher overall investment management fees; multiple managers with similar styles can actually cause a fund to lose the benefits of active management by becoming too index like overall; and a large number of managers increases the complexity of due diligence and monitoring. Using too many managers also may unnecessarily increase custody fees and transaction costs.

Observed Conditions

Total Fund

We compare the number of managers used by WPERP to the average number of managers used by public funds over \$5 billion and by all funds, as reported in the 2006 Greenwich Associates survey, in Table 3g-i below. Given this survey information, the number of managers employed by WPERP appears to be slightly below what other Funds of similar size are implementing. We discuss each asset class separately in the narrative below.

Table 3g-i: Number of Investment Managers			
Asset Class	WPERP	2006 Greenwich Associates Survey Public Funds over \$5 billion	2006 Greenwich Associates Survey All Funds
U.S. Stocks	8	7.7	5.3
International Stocks	5	6.0	3.0
Fixed Income	4	5.1	2.9
Total	17	18.9	11.2

1. Domestic Equity Structure

Background

Most large institutional investors seek to structure and maintain a broadly diversified domestic equity portfolio. The Wilshire 5000 Index and the Russell 3000 Index are the two most commonly used broad market policy indices for domestic equity. The Wilshire 5000 and Russell 3000 Indices represent approximately 100% and 98% of the entire U.S. equity market capitalization. S&P also publishes the S&P 1500 Index which is not quite as inclusive as the Wilshire and Russell Indices. More broadly diversified equity portfolios generally offer less volatility of returns than portfolios “concentrated” in one style or capitalization.

Principles

Institutional investors should seek to structure a broadly diversified domestic equity portfolio in an effort to maximize expected return while lowering risk.

Risks

An investment structure which is significantly different from the equity policy benchmark introduces the risk of a “bias” or “bet” both to and away from another style within that benchmark:

- An “overweight” to any one style (e.g., overweight to large-cap or growth) must also include an “underweight” in another style (e.g., underweight to small cap or to value) relative to the overall equity benchmark.
- The result of the above is a “bet” that the overweight style will outperform the underweight styles.

Historical analysis suggests that styles come into and out of favor over time, with no one style consistently outperforming others.

- Therefore, a bias to any style can introduce added “risk” (i.e., likelihood of performance that varies significantly from the policy benchmark).
- Thus, a “style neutral” approach is often sought.

Observed Conditions

WPERP has a diversified domestic equity program. The portfolio has a mild bias (1%) toward large cap managers when compared to the broad market and does not appear to have any dedicated mid-cap managers, although some small cap and large cap managers have the tendency to “drift” into the mid-cap space. The large cap portion of the portfolio appears to be very closely split between value and growth by dollar allocation, but the overall portfolio takes a slight growth bias due to the underlying holdings of certain managers. The domestic equity structure is outlined in the table below.

Table 3g-ii: Domestic Equity Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
BlackRock	Russell 1000 Index - Core	20.2%	46.3%
MFS	Large Cap Value	5.3%	12.3%
T Rowe Price	Large Cap Value	4.9%	11.3%
Fred Alger	Large Cap Growth	5.3%	12.2%
INTECH	Large Cap Growth	4.7%	10.8%
Total Large Cap			92.8%
Earnest Partners	Small Cap Value	1.7%	3.8%
Northpointe	Small Cap Growth	0.7%	1.6%
Paradigm	Small Cap Growth	0.8%	1.7%
Total Small/Mid Cap			7.2%
Total Domestic Equity		43.6%	100.0%

We analyzed each equity manager’s holdings in order to verify the true equity investment style of each manager. The analytical tool we used is a “holdings-based” style analysis that assigns a range of growth-value and large-small metric scores to each stock held in each portfolio and for the portfolio as a whole based on the specific characteristics of each stock (Please see the Exhibit D for our holdings-based analysis as of December 31, 2007.) As can be seen in the style map, the total domestic equity composite plots fairly close to the Russell 3000

Index, with a slight growth bias. This growth bias is a result of Fred Alger positioning themselves as a fairly aggressive growth manager, relative to its benchmark.

To analyze this asset class further, we compared the total combined equity portfolio to the Russell 3000 Index (the Policy benchmark) in terms of style and capitalization, using WPERP's equity holdings as of December 31, 2007, and show them in the bar graphs and tables below:

Graph 3g-i

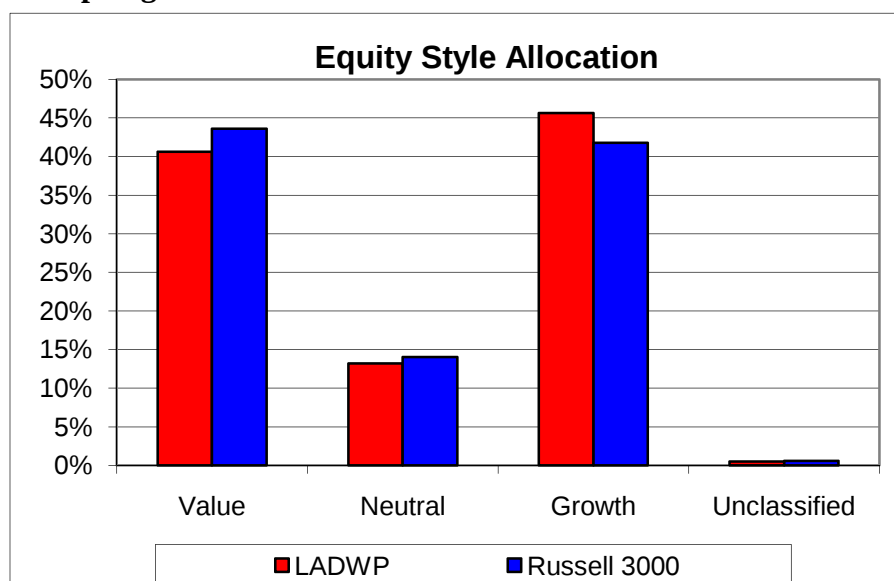


Table 3g-iii: Domestic Equity Style Comparison

	WPERP	Russell 3000
Value	40.6%	43.6%
Neutral	13.2%	14.0%
Growth	45.7%	41.8%
Unclassified	0.5%	0.6%

As shown in the graph and table above, from a value-growth perspective, the total domestic equity portfolio exhibits a slight growth bias relative to the Russell 3000. This growth bias, as mentioned before, appears to be attributable to Fred Alger taking a fairly aggressive growth position, along with the Fund's two large cap value managers (MFS and T. Rowe Price) having a slight growth bias relative to their benchmark, the Russell 1000 Value. When evaluating the equity portfolio on a holdings basis, the domestic equity composite is generally in line with

the Russell 3000. While the Fund is slightly overweighted to mid cap stocks (1.6%), this position is offset by the underweight in small cap stocks (2.7%). The overweight in mid cap stocks appear to be attributable to manager positions and not the Fund's strategic decision to overweight this particular capitalization. Specifically, the slight overweight to mid cap appears to be attributable to Earnest Partners, who has a measurable mid cap core bias, relative to its small cap value benchmark. We believe that it is useful to perform this type of analysis as a "reality check" to confirm that the managers and investment structure are doing what they are supposed to be doing.

Graph 3g-ii

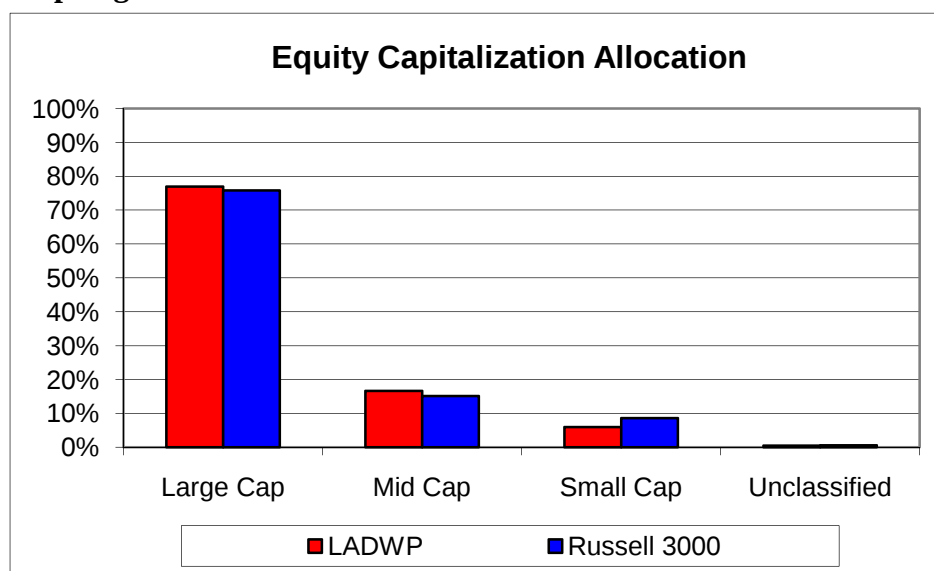
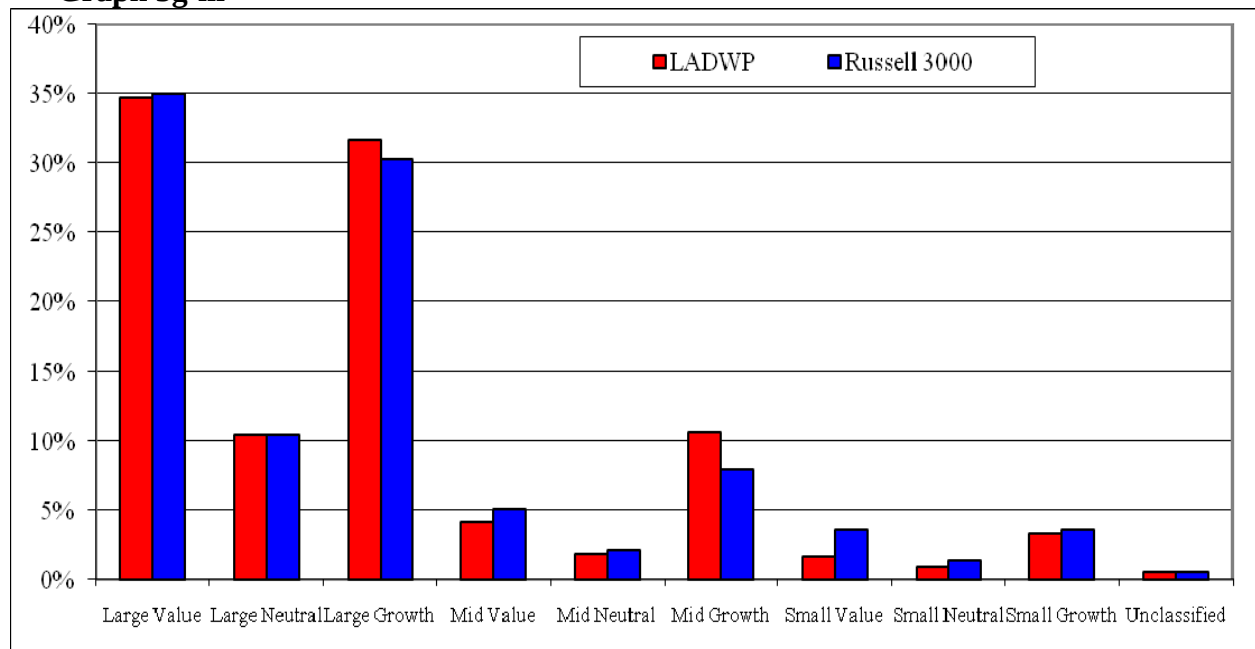


Table 3g-iv: Domestic Equity Capitalization Comparison

	WPERP	Russell 3000
Large Cap	76.9%	75.8%
Mid Cap	16.7%	15.1%
Small Cap	5.9%	8.6%
Unclassified	0.5%	0.6%

Total Equity Allocation

Graph 3g-iii



We also reviewed the Domestic Equity Structure Review prepared by PCA in January 2007 and the Recommendations in February 2008. In PCA's Review report, they discussed how large vs. small and value vs. growth factors could have a significant impact on performance. They detailed the historical change the portfolio underwent from having three managers with no explicit benchmarks to the Fund's current diversified structure with target allocations very similar to the Russell 3000 Index. In the Domestic Equity Structure Review and Recommendation Report, PCA recommends a move from 50% passively managed and 50% actively managed, to 30% passively managed and 70% actively managed. One of the concerns (that may have been addressed during the presentations) is that this new structure could lead to higher tracking error and increased fees, although this risk has the potential to be compensated with higher overall returns.

The table below shows the summary total domestic equity characteristics as calculated by IFS' performance measurement system, Wilshire CO-OP, based on the underlying equity holdings as of December 31, 2007. This analysis confirms that the composite portfolio is not drastically different from the policy benchmark (Russell 3000) and is very close in a few areas, i.e., Price/Earnings and Beta exposure.

Table 3g-v: Domestic Equity Portfolio Characteristics Summary 12/31/2007						
	Market Cap (\$ BB)	P/E	5 Year EPS	Price/Book	Dividend Yield	Beta
Total Domestic Equity	84.6	18.7x	16.7	2.8x	1.63	1.06
Russell 3000 Index	88.7	18.6x	15.2	2.7x	1.8	1.06

2. International Equity Structure

Principles

International equity exposure provides increased return opportunities and reduces total risk by diversifying the equity program. Additionally, investing beyond developed international equity markets into emerging markets expands the opportunity set even further. Although emerging markets have historically been more volatile, their addition to a pension fund can improve its overall risk/return prospects.

Risks

Funds that exclude international equity exposure risk missing certain return opportunities and the benefits of risk reduction through diversification.

Observed Conditions

In the table below, we outline WPERP's international equity structure as of December 31, 2007.

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Table 3g-vi: International Equity Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
INVESCO	Developed Markets	6.6%	31.5%
The Boston Company	Developed Markets	5.1%	24.5%
Pyramis	Developed Markets	6.3%	30.1%
Total Developed Markets			86.1%
The Boston Company	Emerging Markets	1.4%	6.5%
T Rowe Price	Emerging Markets	1.5%	7.3%
Total Emerging Markets			13.9%
Total International Equity		20.8%	100.0%

WPERP appears to have a developed market bias when compared to the broad international equity market (as represented by the MSCI ACWI ex-US). WPERP's weight of 14% in emerging markets is slightly lower than the MSCI ACWI ex-US weight of approximately 19%, which includes most, but not all, emerging markets. IFS learned in interviews that the international equity allocation was recently updated, with a new target of 80% Developed Markets and 20% Emerging Markets. This new policy is now in line with the broad market and IFS concurs with the new target. IFS noted that the Fund currently does not have any passive exposure in its International Equity allocation. We believe that passive management can be a cost effective method of managing a core portion of the developed market portfolio, but it is less frequently used in international equity portfolios than in domestic equity portfolios.

The table below shows the summary total international equity characteristics as calculated based on portfolio composites from Wilshire Compass (not actual WPERP holding data). This analysis confirms that the composite portfolio has quite similar characteristics as the MSCI ACWI ex-US, with a slightly higher market cap, mostly likely due to the underweight in emerging markets, which typically has smaller companies.

Table 3g-vii: International Equity Portfolio Characteristics Summary 12/31/2007						
	Market Cap (BB)	P/E	5 Year EPS	Price/Book	Dividend Yield	Debt/Equity
Total Intl Equity	65.0	15.8x	22.1	2.3x	2.6	0.72
MSCI ACWI ex-US	59.5	15.7x	22.2	2.4x	2.6	0.90

3. Fixed Income Structure

Principles

A well formulated fixed income structure includes diversified exposure by sector, credit, and maturity. Increasingly, pension funds have expanded their investments beyond the domestic core fixed income market to include dollar denominated international fixed income, high yield debt as well as other types of securities (e.g., bank loans).

Risks

An undiversified fixed income portfolio could expose a pension fund to unnecessary risks.

Observed Conditions

In Table 3g-viii below, we outline WPERP's fixed income structure as of December 31, 2007.

Table 3g-viii: Fixed Income Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
ING	Core Fixed Income	14.9%	44.6%
Wells	Core Fixed Income	15.1%	45.0%
Total Core Fixed Income			89.7%
Loomis	High Yield	1.8%	5.4%
Wells	High Yield	1.7%	5.0%
Total High Yield			10.3%
Total Fixed Income		33.4%	100.0%

As can be seen in the above table, the majority of WPERP's fixed income exposure is to a core (investment grade) mandate, with a 10% allocation to high yield (below investment grade). This allocation to core fixed income and high yield accounts for about 92% of the Lehman Universal Index (86.6% Lehman Aggregate / 5.4% Lehman High Yield). The other 8% of the index is comprised of eurodollar bonds, dollar denominated emerging market debt, 144A securities and commercial mortgage backed securities. IFS has found that many institutional investors have further diversified their core fixed income exposures by moving into core "plus" mandates. Core "plus" mandates include securities outside of the traditional investment grade benchmark. One of areas outside of the core benchmark is high yield, which the system already

has made an allocation. Other core “plus” sectors include non-dollar debt and emerging market bonds. WPERP’s initial decision to invest mainly in core fixed income has helped the portfolio over the short term as the credit crisis of 2007-2008 has created a difficult environment for the “plus” sector securities. Over the long term, IFS believes having an allocation to the “plus” sectors allows a Fund the opportunity to earn a higher rate of return over the long term.

Task Area 3g Recommendation 1

WPERP should consider allocating a portion of the core fixed income to a core “plus” mandate.

4. Real Estate

Principles

There are several different investment vehicles available for investment in equity real estate:

- publicly traded REITs,
- limited partnerships (open-end as well as closed-end funds) and
- direct investment through separate accounts.

A well diversified real estate structure includes diversified exposure by geographic region and property type. A real estate program can also pursue different strategies such as:

- *Core*: a more conservative strategy generally invested in fully developed, fully leased properties that provide a bond-like return and a degree of inflation protection.
- *Value-add*: a slightly riskier strategy where the properties tend to be those that can significantly benefit from upgrading, such as combinations of physical renovation and improvement as well as aggressive leasing activities. Increased value is generated through capitalization of the higher rent rolls.
- *Opportunistic*: these investments tend to be more developmentally oriented and thus riskier than core or than value-add. Typical investments include land development or redevelopment, conversion to different use, major rebuilding and similar investments that add value to a property prior to achieving a capitalized rent roll.

Risks

Real estate investments are much more illiquid (except in the form of REITs) than the publicly traded asset classes. Non-core real estate funds often have multi-year lock-ups so are more illiquid than core funds. Open-end real estate funds may also not be immediately liquid.

Real estate valuation data is generally appraisal based (appraisals are generally performed annually or bi-annually with quarterly updates) so that current true market values are not readily available.

Observed Conditions

Table 3g-ix: Real Estate Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
PRISA	Core Real Estate	0.8%	88.4%
PRISA II	Core Real Estate	0.1%	11.6%
JP Morgan Strategic	Core Real Estate	0.0%	0.0%
Total Real Estate		0.86%	100.0%

As of December 31, 2007, the target allocation for real estate was 4% of the total Fund, whereas the fund had only invested 0.9%. The new long-term target allocation for real estate is 5%, with a current target of 2%. IFS learned in interviews that the goal was to fund the real estate allocation over a few years. Given the liquidity constraints of the markets and the amount WPERP is investing, IFS agrees with the timing of the funding. Currently, the Fund is invested in 3 open-end commingled real estate Funds. IFS typically sees funds of this size investing in closed end funds or limited partnerships that are diversified among core, value add and opportunistic real estate products. Many funds also use REITS as a method to gain access to real estate equity more quickly and/or to supplement a portion of the core portfolio. IFS also learned in these interviews that the Board has recently hired Courtland to serve as the Fund's real estate consultant. IFS did not meet with Courtland to discuss their investment plan for WPERP, but it is our understanding that Courtland's services will be utilized to assist the Fund in investing in limited partnerships.

Task Area 3g Recommendation 2

WPERP should discuss with Courtland the pros and cons of investing in core, value add, and opportunistic real estate. WPERP should discuss with Courtland the possibility of direct investments and publicly traded REITS in both the US and International markets.

5. Alternative Investments – Private Equity

Principles

Alternative investments (e.g., private equity) have become a common component of diversified institutional portfolios and are typically structured as limited partnerships. The fund is a limited partner and the organizer/manager is a general partner, who typically has a stake in the investment.

Alternative investments can also be pursued through fund-of-funds managers, who create portfolios of different partnerships on behalf of investors. This reduces the extent of investor research and due diligence, but adds an additional layer of fees.

Risks

Innovative or non-traditional investment strategies may have higher individual variability, liquidity, and investment risks than traditional publicly traded stocks and bonds, and therefore need a higher level of scrutiny and should be monitored regularly.

Observed Conditions

Table 3g-x: Private Equity Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
Lexington Capital	Fund of Funds	0.1%	41.3%
Landmark Equity Partners	Fund of Funds	0.2%	58.7%
Total Private Equity		0.3%	100.0%

As of December 31, 2007, 0.3% of the Total Fund was invested in private equity with a target weight of 4%. The target allocation for 2008-2009 is 1% and increases to 5% by 2012. Similar to real estate, WPERP has decided to fund its allocation to private equity over time due to the liquidity constraints of the market and the goal of creating a broadly diversified portfolio. The initial investments into Private Equity have been through a fund of funds structure, with the fund manager making the investment decisions as to what underlying funds it will allocate its resources. It is our understanding that the Board initially required that any private equity investments were made through fund of funds vehicles, but has recently adopted a policy to allow up to 50% of the portfolio in direct partnerships. IFS has found that most public funds of WPERP's size, typically invest in direct partnerships and believes this to be a positive step forward. In our interviews with staff and PCA, IFS learned that the Fund's target allocation to

private equity is to look like the broad market, with about 60-70% in Buyouts, 10-15% in Venture Capital, and 10-15% in Special Situation funds.

6. Hedge Fund of Funds

Table 3g-xi: Hedge Fund of Funds Structure as of December 31, 2007			
Manager	Product Style	% of Total Fund	% of Asset Class
Aetos Capital	Fund of Funds	0.5%	48.1%
PAAMCO	Fund of Funds	0.5%	51.9%
Total Hedge Fund of Funds		1.0%	100.0%

As of December 31, 20007, 1.0% of the Total Fund was invested in hedge fund of funds, matching its target allocation. The initial investment into hedge funds has been through a fund of funds structure, with the fund manager selecting the underlying hedge funds within the portfolio. The objective of this mandate is an absolute return strategy, where the managers try to earn a positive rate of return each year. This differs from the majority of the portfolio, which is typically a relative return strategy and is just trying to outperforming the benchmark, regardless of whether it is positive or negative. IFS has learned that the fund recently adopted a new asset allocation and has now pooled Hedge Fund of Funds into the Real Return asset class with a current allocation of 2% and a long-term allocation target of 7%. IFS finds that to be an appropriate allocation based on the unique characteristics of hedge fund of funds.

7. Use of Active vs. Passive

Background

The debate among investment academics, practitioners and investors regarding whether active or passive portfolio investing is more effective has raged unsettled since the concept first arose. It is unlikely that a provable conclusion will ever be reached, but the question, when juxtaposed against particular portfolio objectives and risk preferences, is a valid one. The concept of passive investing was created as a result of the development of indexes – sets of securities assembled for the purpose of generating a standard measure of market performance. Passive investing is the practice of creating and maintaining a portfolio that duplicates or replicates a given index. Changes in mix and relative weights of securities in the portfolio are made only when the same changes are made in the index. Active investing is any investment strategy in which securities are selected in an attempt to achieve a higher investment return than the benchmark/index.

The debate centers on whether active management can achieve a more attractive long term net return after costs than passive management. Passive management is clearly capable of achieving a return very close to the return of an index, with a very small degree of deviation

(tracking error) from the index, as long as the index is investable. Also, because security selection in an index is achieved by the manager at essentially no cost, and because management of the portfolio can be largely automated, fees on index investing are significantly lower than fees on active investing in the same market.

Principles

Empirical research suggests that for developed, “efficient” markets, passive investing makes sense. Efficiency is the concept that market information disseminates so quickly that, in the absence of illegal insider information, no investor can achieve a greater than market return consistently over time. This leads to the premise that investing in such markets is a “zero-sum” game wherein for every winner, who beats the market, there must also be a loser. Research suggests that, over the long term, after investment-related fees and transaction costs are paid, the majority of investment managers are unlikely to provide added value over a passive portfolio. Nevertheless, many institutional investors still believe they can identify investment managers, or develop a team internally, with the active management skills necessary to provide above-benchmark performance.

The case for passive management includes the following arguments:

- Markets are inherently efficient. In an efficient market, prices adjust to their fair value almost immediately, so it is nearly impossible to invest in mispriced securities;
- While active managers can outperform the market at some times, no active manager consistently outperforms the market forever. Active management requires vigilance to replace managers before they turn bad and lose whatever gains they have achieved, which is an impossible task; and
- Even where managers can achieve a rate of return higher than the market, the higher fees and trading costs of active management can consume the over performance.

The case for active management includes the following arguments:

- Markets are irrational, not efficient. Astute research can identify securities that are mispriced due to investors in the market who act emotionally;
- Discipline in identifying, buying and selling securities unemotionally can lead to higher returns than can be achieved by merely duplicating the index;

- Passive management can not reduce the volatility of returns, since by definition it matches the volatility of the market. Active management offers the opportunity to reduce risk as well as increase it in pursuit of higher return;
- Passive management may not achieve the index return, since trading costs and frictional cash in the portfolio (that are not in the index) diminish the results. Additional activity such as securities lending or derivative use, which increase costs, is needed to make up for the shortfall; and
- Indexes are restructured either periodically (e.g., Russell) or continually (S&P) to reflect changes in security characteristics or existence. The process for recomposing indexes creates trading costs. More critically, the coordinated demand to buy securities being put into an index and to sell securities being taken out of an index affects prices adversely, while disguising the effect within the index return.

Risks

As discussed above, additional cost and investment management risk is inherent with active management strategies over passive strategies. Using all passive management, however, would not allow an investor to achieve above market returns.

Observed Conditions

As can be seen in the table below, use of passive management for a portion of domestic equities is common (suggesting that many funds believe that the domestic equity markets are fairly efficient), whereas it is less widespread for international equities. WPERP does not use passive management in the international equity space, whereas its peers tend to have over a quarter of their allocation in a passive strategy.

Task Area 3g Recommendation 3

WPERP should consider indexing a portion of their international equity allocation when conducting their next international equity asset class review.

Table 3g-xii: Active vs. Passive Equity Management						
	% of Domestic Equities			% of International Equities		
	WPERP	Greenwich 2006 Survey		WPERP	Greenwich 2006 Survey	
	12/31/2007	Public Over \$5 Billion	Total Funds	12/31/07	Public Over \$5 Billion	Total Funds
Passive	46.3%	55.3%	41.1%	0.0%	26.6%	20.3%
Active	53.7%	44.7%	58.9%	100.0%	73.4%	79.7%

While survey data was not available for passive fixed income management, we believe that it can be a reasonable method of attaining exposure to the core U.S. bond market at a low cost. However, we believe that at least the majority of a fixed income portfolio should be actively managed. WPERP currently does not use passive management for its fixed income portfolio.

There is no one correct amount of assets that should be actively or passively managed. However, passive exposure can be achieved at very low cost (in many cases, less than five basis points). Incorporating the use of some passive management can help reduce overall fees and the total costs of the Fund's investment program.

8. Internal vs. External Management

Principles

In determining whether and to what extent a public fund's assets are better managed internally (hiring employees to operate an investment operation) or externally (hiring professional investment management companies), several general considerations are essential. These include legal, cost, continuity and investment performance. We discuss each of these below as well as other advantages and disadvantages of internal management.

- **Legal** – does applicable law prohibit hiring external managers, prohibit managing assets in house, or prohibit certain essential structures such as incentive compensation?
- **Cost** – what is the relative cost for the particular asset class and overall, given the size of the portfolios? For example, passive management is less expensive to manage both internally and externally, the costs should be weighed.

- **Continuity** – is the System able to retain experienced investment managers in-house? High turnover creates substantial investment risk for an internally managed portfolio.
- **Value achieved** – what is the relative return? Have the internal portfolio managers beaten their benchmarks? How does their performance compare to their peers?

a. Advantages of Internal Management

There are several advantages to managing assets internally. These include:

- Internal management can be less costly. External managers must compensate well to attract and retain highly qualified professionals. In addition, they must cover overhead costs for facilities as well as earn a profit. As a result management fees are relatively high when compared to internal management costs. Although public pension funds are not usually able to compensate their investment staff as well as external managers, many employees choose a career in government deliberately for lifestyle or other reasons. In addition, public pension funds do not have marketing expenses and are not profit driven.
- There can be greater control over the investment process and compliance with guidelines. Monitoring compliance with external manager guidelines may be complex, and often can be done only after the fact, sometimes weeks after. Understanding the investment process may also be difficult.
- There can be greater control over trading and brokerage usage.
- At least for certain types of assets and strategies, the performance of external managers (net of all fees and expenses) is often disappointing relative to index returns. Internal management can reasonably be expected to do as well for these strategies, at least if properly structured and administered.

In addition, cost considerations may differ for a very large fund versus a smaller fund. As the value of fund assets increases, the possibilities of enjoying substantial economies of scale from internal management also increase. These economies may include:

- greater clout in negotiating and controlling transactions costs;
- lower unit costs for acquiring and maintaining investment hardware and software; and

- staffing costs and related matters.

b. Advantages of External Management

On the other hand, external management also has its advantages. Given the limited resources often faced by many public pension funds, their ability to attract and retain qualified professional investment staff with the skills necessary to manage assets is typically frustrated. These include:

- Lower compensation at public funds may lead to higher turnover, especially among the most qualified professionals. Proven investment managers can command large compensation packages in the private sector and be lured away from public funds.
- The pension fund must still pay the many costs of investment management firms that are fixed or largely fixed, requiring a sizable asset base to maintain cost competitiveness. These include salaries, travel costs and support systems: successful internal asset management requires sufficient securities processing (which is both costly and sophisticated), order management/routing systems, trade entry systems and overall investment accounting systems. At external firms, these costs are generally offset by the economy of scales successful firms enjoy through growing their book of business and attracting large amounts of assets under management.
- Staff needs are significant to manage portfolios and to operate the above mentioned systems, particularly for asset classes requiring considerable hands on management such as directly owned real estate and/or hedge funds.
- Greater direct control by the Board over the internal investment process may expose the Board to greater fiduciary risk as well as create the potential for political interference. Effectively controlling an internal asset management department requires significant internal discipline and organization, including proper separation of functions and internal controls, e.g., portfolio management versus measurement and evaluation, and portfolio management (front office) versus accounting and settlement (back office). Each of these functions requires specialized skill sets that may be difficult to attract given current restrictions with some government hiring practices. Tighter ethical controls may also be needed for concerns such as personal trading policies.
- All asset classes, sub classes, types of securities, and geographic locations can be covered by external management.

- Replacement of a poorly performing external manager, or one whose firm structure, focus or staffing has changed, is relatively easy, and bears little risk of wrongful discharge suits, whereas it can be difficult to terminate an internal investment manager.
- Most investment managers are subject to regulation and oversight by the SEC and various security exchanges.
- An external manager relationship can be clearly and precisely crafted through a commercial contract with the manager.

The vast majority of assets managed internally by public pension funds appear to be publicly traded domestic stocks and bonds – relatively traditional and straightforward assets, traded in relatively efficient markets. By contrast, strategies or assets that require more esoteric expertise or research, with substantial prospects of materially outperforming (or underperforming) the relevant benchmarks often are better managed externally. One example would be a portfolio of equities of companies in emerging international markets, which may require unusual research, including foreign travel. Another example would be a portfolio of equities of fast-growing, newly formed companies with low capitalization, where very prompt, specialized information and delicate trading strategies may be essential to success.

Risks

The cost of a capable, in-house staff may be prohibitive, especially in instances requiring an expensive research process or costly external services such as market pricing and statistical systems. Another possible hazard of internal management is homogenization, i.e., the dominance of a single investment discipline running across all parts of the fund. By contrast, outside management by distinct firms may help diversify a fund's overall investment program through a true diversity of investment disciplines.

Observed Conditions

As of 2008, WPERP uses external investment managers for all of its asset management. Given the current size and background of staff, IFS finds the use of external asset managers as an appropriate structure.

3h. Custody Relationships and Fees

Principles

A fundamental function of the banking system for many years has been the custody of securities. Often this is combined with a trust responsibility, which is a legal and fiduciary relationship. Regardless of whether trusteeship is involved, custody is an operational and financial function.

The custodian's basic responsibility is to effect receipt and delivery of securities traded by the investment managers, to collect income on those securities, and to maintain accounting records of all holdings and activities.

Large, complex institutional investors actively invest in a variety of financial instruments in many markets around the world. They need to custody their portfolios in banks providing global master trust and custody services. Investment activities cannot be accomplished within legally required time limits without maintaining an institutional trustee or custodian. The distinction is legal, not just operational.

Master trust and custody banks provide a wide range of operational and recordkeeping services in addition to the basics. They can manage multiple investment entities (for example separate related pension plans) through a combined set of investment accounts without violating the legal separation between the entities. Such master trust and custody banks become global when they have the direct and/or indirect capability of providing custody services in many countries linked electronically and consolidated into a single reporting system.

Pension master trust and custody is a service business provided by a limited number of banks, which requires highly complex and developed systems, and thus significant continual investments in hardware, software, communications systems and personnel. As the need to automate the process has increased, dozens of major regional banks have stopped offering pension master trust and custody services and have limited themselves to the low volume, limited reporting needs of local personal and corporate trust clients.

Modern global markets consist of many types of securities, electronic depositories, straight-through and near straight-through processing (essentially same day). The need for real-time, trade date portfolio information and a wide range of sophisticated analytics demand that custody banks to have very complex, sophisticated systems to support the custody operation.

Master trust and custody banks that have the capabilities to provide the comprehensive range of functions and services necessitated by large sophisticated institutional investors are referred to in the industry as the "top tier" custodians. With the completion of the merger

between Mellon and Bank of New York in July 2007 and the announcement in early 2008 that Citibank was exiting the U.S. custody business, only about four U.S. banks are generally alluded to as the “top tier” global custodians¹ because they have made the strategic decision and investment of capital to develop and maintain a competitive position in pension master trust and custody market and attract the volume necessary to support it. There may be an equal number of foreign banks in this category.

Custody is largely a network of highly automated, tightly controlled communications and reporting systems. The custody relationship involves not only electronic links, but interpersonal operating relationships among the fund, the investment managers, the brokers, and the governmental and private agencies that hold securities. These operational relationships must be working flawlessly to avoid trade fails and other loss of value.

Changing custodians requires a transition that is an enormously complex task. Even moving from one top tier custody bank to another, where both have highly sophisticated recordkeeping systems, is a daunting task. Additionally, the visible and hidden costs of transitioning from one custodian to another are easily hundreds of thousands of dollars. For these reasons, most institutional investors change custodians very infrequently unless there is a material reason that compels change.

The custodian possesses an incomparable amount of detailed information regarding a fund's assets and investments. In an appropriate control environment this information is verified, reconciled, and audited. As such the custodian's files are an excellent source of a wide range of portfolio controls and analytics that can assist investment staff's to manage their activities efficiently.

Risks

Timely and accurate completion of the fundamental tasks of securities clearance, income collection, valuation and reporting is absolutely essential to managing the investment operation of a complex portfolio and understanding the dynamics of risk and return that affect it over time.

If the fundamental custody functions are not timely and accurate, not only is financial value reduced, but elements of control are lost. Through various regulatory requirements, funds

¹ March 2008 survey of R&M Consulting rated Global and North American custody banks based on client and asset manager satisfaction. The four U.S. banks providing full custody to pension fund clients ranked as follows North American banks): Bank of New York Mellon (#1), State Street (#3), Northern Trust (#4), JPMorgan Chase (#6). The other banks provide specialty services only. R&M Consulting in Surrey, England in their 2008 survey of overall results rated Bank of New York Mellon #5 (#1 of North American banks). Northern Trust, JPMorgan Chase, and State Street followed with global rankings of #7, #9, and #11 respectively.

need to measure and report their assets, income, and other results. Timely and accurate valuation, measurement, and reporting are essential to meeting these requirements.

The secondary or supplemental services now available from or through custody banks offer additional means to add value and reduce operational and portfolio risk. The common thread of these services is their basis in the portfolio data fundamental to the custody function.

These secondary services tend to reflect opportunity costs. While not every available product and service is cost effective for every fund, most funds can add some degree of additional financial value by using certain processes.

Not having such services available, having inadequate or ineffective services, and/or not evaluating and where beneficial using them may lead to foregone income or acceptance of excess risk.

Certain data resident in the custody records may be critical. Information on securities held and traded over a many year historical period may be necessary to make claims under class action lawsuits brought on behalf of investors. Systems within custody to identify and retrieve such records in precise detail are needed to enable the Fund to maximize the value of such claims. This becomes particularly complex when a prior custodian held assets during the claim period. Commonly such data is not available to successor custody banks and is no longer available through any automated mechanism.

Observed Conditions

WPERP staff indicated they contracted with Mellon Bank about five years ago, having switched from Bank of New York. The current contract, which is specifically with Mellon Trust of California, is dated January 1, 2005. The contract has at various times been amended, including extensions such that its term now runs through December 31, 2010.

As a secondary step to the merger between Bank of New York and Mellon, the several distinct legal entities providing custody services are likely to be consolidated. This may lead to the assignment of the existing contract or perhaps the development of a new contract with another affiliated entity of the holding company. Other than form, such a change should have no effect on the account operations.

The contract form used consists of the basic custody agreement plus several secondary contracts contained in exhibits. The bulk of the basic custody agreement covers the various duties and responsibilities of a custodian, most of which are standard throughout the industry. It also includes the several provisions required by California law. The notable difference is the reversal of indemnification, where the custodian indemnifies the City, the WPERP and others. Standard custody contracts usually call for the client to indemnify the bank.

The exhibits largely cover a number of financial and reporting services that WPERP has contracted to receive from Mellon, many of which are derived from or integrate with the basic custody operations. Examples are Workbench, Mellon's internet-based interactive reporting and transactions system that forms the core of their custody communications, performance measurement and analytics, and access to Burgiss' Private i software for managing and controlling private equity partnership investments. The complete list of services is in contract Exhibit E which also includes the detailed pricing.

Price negotiation for custody services among large public funds has often become a process of securing the lowest possible cost for the largest number of services. WPERP negotiated an extremely favorable price structure in 2005, and obtained significantly more services for the same fee in the 2008 renewal. A flat fee of \$100,000 per year includes almost the entire range of basic and supplemental services available through BNY Mellon, including several (e.g. Private i, Proxy Edge) that BNY Mellon obtains from third party vendors on a fee basis. While the pricing requires all securities lending to be done through BNY Mellon, the revenue split is quite favorable to WPERP as well.

With the consolidation occurring in the custody industry, the willingness of banks to provide services at levels that may in some cases be below incremental cost may be waning. Meanwhile, WPERP can enjoy a bargain pricing arrangement for these necessary services.

Cash Management

One aspect of custody management is the investment of residual cash. This process is designed to assure that cash not otherwise invested is swept into an interest-bearing vehicle under almost any circumstances. Typically this process includes otherwise uninvested cash in manager accounts, and can therefore include substantial amounts. BNY Mellon provides a multi-tiered structure to accomplish this.

Clients can select from three commingled investment vehicles managed by BNY Mellon or an affiliate; set up a separately managed account following the client's own guidelines; or invest in one of several available affiliated Dreyfus money market mutual funds.

All money for which BNY Mellon has received notification of availability by 1:00 p.m. prevailing Eastern Time is invested in the primary investment vehicle.

Funds that miss that cut-off but for which notification is received by 6:00 p.m. are invested in a Late Money Deposit Account.

Only money for which no notification is received until after 6:00 p.m. but which good funds are received the same day is held overnight in a non-interest bearing demand deposit

account. In practice this rarely occurs unless there is an error on the part of an outside fiduciary, who might be required to provide compensation.

BNY Mellon's three commingled institutional cash accounts consist of a Short Term Investment Fund (STIF), an Enhanced STIF (Super STIF), and the Boston Company Pooled Employee Active Cash Fund (ACF). Each of these follows progressively more aggressive investment guidelines seeking higher returns. All are managed by Standish Mellon Asset Management, a BNY Mellon subsidiary.

WPERP's custody contract does not specify which STIF is to be used for investment of cash. WPERP initially provided information as of December 31, 2007 on the ACF. WPERP indicated the short term investment vehicle is the STIF and provided information on this collective trust as of June 30, 2008. A December 3, 2004 document was also provided at this time specifying the cash investment vehicle is STIF8, an obsolete reference.

WPERP custody contract specifies a fee of 6.5 basis points for STIF assets, down from 8 basis points prior to the contract extension. WPERP advises that this fee is instead of, and not in addition to, the standard fee schedule in the STIF disclosure documents. IFS cannot determine from these observations whether the selection has been changed at any point.

Given the heightened volatility of cash management investments and funds and the credit concerns contributing to that volatility, we believe that a thorough review of the WPERP's STIF selection and guidelines is worthwhile. A detailed review, analysis of returns and risks, including credit, downgrade and default risks in addition to volatility risks, coupled with a recommendation from Staff and/or the Consultant to the Board is appropriate given recent market events.

Task Area 3h Recommendation 1

Management should perform a comprehensive evaluation of the guidelines, risks, and returns of the currently utilized STIF and of the regularly available alternatives, including separately managed accounts using custom guidelines, in order to allow the Board to reaffirm or modify its selection of the cash investment vehicle.

Regardless of which STIF vehicle is selected from an investment and risk standpoint, it is important that the selection is clearly documented. This does not appear to be the case at present. While market forces and changes in risk and return relationships might result in a need or desire to alter the selection quickly, this authority can be included by establishing a procedure through which an alternative selection can be made within the contract provision.

It is also a best practice to incorporate the investment guidelines applying to the selected fund or funds, in detail and not merely by reference. In this way, the bank will need to notify WPERP if those guidelines are changed.

Task Area 3h Recommendation 2

The selected fund or funds should be formally designated in an amendment to the custody contract, with the investment restrictions and guidelines attached. In addition, a formal policy should be developed defining and specifying authority to changes the STIF vehicle in response to significant changes in money markets and their commensurate risks.

Other Services

As noted above, WPERP obtains through the custody arrangement a wide set of services related to or deriving from the basic custody and accounting functions. Several of these are highly valuable, or potentially so. Other services appear to be of limited need and use, and may be included only because they do not carry any additional fee under the arrangement WPERP negotiated.

We understand the set of services was reviewed during the contract extension process. Based on the pricing exhibit to the contract extension it appears WPERP is using – or at least has contracted to be able to use – most if not all the services available in global custody.

Of the unused services some may be unnecessary entirely, some may have a value but are not currently incorporated into the measurement and control processes, and some may be redundant with services that are or can be provided by the consultant under its contract. Among the listed services that might fall into this category are:

- Trade cost measurement;
- Daily performance measurement;
- Security level performance; and
- Monthly and daily analytics.

On the other side of the ledger, some particularly valuable services are used actively. These include:

- Private i and Private Exchange (added to Private i in 2008) – Private i is a widely used, leading system provided by the Burgiss Group. It is designed to monitor and measure performance of private equity and similar limited partnership investments. Through an add-on component, Private Informant, it also tracks the

partnerships' underlying holdings. Private Exchange is an interface to move data from the BNY Mellon Institutional Accounting System into Private I; and

- Investment Monitoring. This system is designed to identify trades and conditions in actively managed portfolios that violate the portfolio or fund guidelines. Guideline provisions are translated into "rules" that can be tested against portfolio holdings and trades as they are entered into the system, usually between trade date and settlement date. Notification of violations can then be investigated and confirmed, with corrective action taken where necessary.

It may be true that including availability of the unused services costs WPERP nothing, given the low fixed fee compensation arrangement. It may also be true that dropping unused – and even some of the used – services would still not allow the custody bank to manage the account for a lower fee. Nevertheless, recognizing that competitive developments in the industry may at some point in the near future change the custody banks' ability to provide full services at nominal fee levels, it is worth the effort to analyze the various services against the WPERP' needs and to modify the contract accordingly. This analysis may also identify needs for services not currently being addressed.

Task Area 3h Recommendation 3

We recommend that WPERP undertake a review of all contractual custody services available and evaluate whether and how they are being or may be used, adjusting policies and/or the contract accordingly.

Book of Record Issues

One consequence of changing custody banks is a possible discontinuity of data records. Often the custody bank is designated the Official Book of Record, which is the case with WPERP. In addition to being merely the definitive source of information on the portfolios, the Official Book of Record is the source for identifying and substantiating claims based on the fund holding or having held certain securities or entered transactions in a particular security at a particular time. This most frequently becomes relevant when a class action against a portfolio company is pursued.

In a typical move from one custody bank to another, certain records are moved and others are not. For example, historical asset values and performance rates are entered into the new system, but detailed holdings data (security, cost, purchase date, etc.) are not. The issue is most often driven by the cost of capturing, storing, and retrieving thousands of records. When this occurs it is typical to arrange with the prior custody bank retention and search of the records. However, with no active account, there is often no trigger to search dormant accounts for activity meeting the criteria for class inclusion.

WPERP staff is not certain the status of historical holdings and transactions data. Since the former custody bank is Bank of New York, who is now merged into Mellon, they are hopeful the data can be reconnected.

Task Area 3h Recommendation 4

We recommend WPERP review with its custodian the status and accessibility of data from earlier Bank of New York records and ascertain the process that is pursued to scour both current and archived records in securities class action settlement situations.

3i. Securities Lending Program and Fees

Principles

Lending securities held in a long term portfolio has become a common practice among large institutional funds to generate incremental income at close to zero risk. Brokers and investors need securities to facilitate trading, to undertake short sales, and for various other purposes.

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.

Borrowers pay for the right to use the securities. In this aspect, the agent and the lender are a team. They split the revenue according to an agreed upon ratio that does not affect the terms of the loan itself.

The intermediary is most often an agent for the lenders arranging loans with unaffiliated borrowers. Certain of these firms also borrow securities for their own account and will enter an arrangement with a lender on a principal basis, in which all loans are to the intermediary. In many agency arrangements, the agent can lend to itself, but does not do so exclusively.

The market for lending securities has become reasonably standard, especially between the borrower and the lender's agent. There are standard agreements available that cover the majority of the terms of the loan. All such loans are collateralized, and most of the conditions regarding collateral fall within standard limits, including the types of collateral acceptable (principally cash or government securities) and the ratio of collateral value to value of the loaned securities.

In all securities lending arrangements collateral has to be posted against the loaned securities. Standard terms in the industry are for the borrower to post collateral against domestic securities worth 102% of the value of the borrowed securities and against foreign securities of 105%. This collateral ratio is marked to market daily and maintained through adjustments in the amount of collateral.

Borrowers pay for loaned securities in one of two ways, depending on the type of collateral posted.

When collateral is securities, the borrower pays an agreed upon fee to the agent and keeps the earnings on the collateral. In these situations the revenue rate is known and the risk of collateral loss of value is borne by the borrower.

When collateral is cash, the agent invests the cash and keeps the earnings, paying the borrower a rebate at an agreed upon rate. In these situations the borrower's cost is known, the revenue is affected by the rate earned on the collateral, and the risk of collateral loss of value is borne by the lender. The bulk of securities loans are collateralized with cash.

The net revenue from each loan after it is closed is split between the agent and the borrower.

Aspects of securities lending arrangements that vary fall into two categories: terms of each loan and terms of the agency agreement between the lender and the agent.

Loan terms vary security by security, driven by supply and demand, as to the rate paid directly or indirectly by the borrower. Securities in high demand and with limited supply earn a higher fee (securities collateral) or pay a lower rebate (cash collateral) than securities in ample supply. Thus, this aspect varies loan by loan and is driven by the composition of the portfolio and the market reach and skill of the agent.

A securities lending program is structured around two fundamental agreements or sets of agreements:

- A securities lending agency agreement, sometimes titled securities lending authorization agreement between the lender (owner of the securities) and the lending agent (intermediary). This agreement typically includes as specific provisions, secondary agreements, or exhibits terms regarding the investment of collateral, authorized borrowers, authorization or prohibition of loans to affiliates of the agent, specifics regarding foreign securities lending, operating restrictions, and the like; and
- A Master Securities Borrowing Agreement which is a standard form of borrowing agreement (or set of agreements based on the domicile of the borrower) between the agent and the borrower. This document generally follows industry standards for the terms of securities loans excluding those particular to each loan: security, price conditions, term. Those are negotiated on a case by case basis.

Terms of the agency agreement apply to the program as a whole, and largely are driven by the composition of the portfolio, the resulting expected volume of loans, and the negotiating ability of the partners. The most important terms in this regard are the split of revenue between the lender and the agent and the degree the agent takes financial responsibility for whatever might go wrong.

Terms of any securities lending agency agreement are a matter of negotiation. Typically achievable terms provide that the agent is responsible for covering any loss resulting from a borrower default, because the agent is fully in control of the credit process and the setting of credit limits. Typically the lender and the agent share the risk of a collateral shortfall resulting from collateral investments in the same ratio as they share revenues.

Most lending agents are trust and custody banks. Often the lender's custody bank acts as agent on these programs. A number of other financial firms, including commercial banks, brokers, and investment managers will also serve as agent in third party securities lending programs. These are called third party programs because there are three parties involved in the lender side of the transaction. Rather than the custody bank managing a lending program directly, feeding off its real time portfolio accounting system, an outside bank or other financial institution acts as agent managing the program.

The chief disadvantage of a third party program is complexity, with resulting increased costs and risk of transactional problems. The custody bank has to facilitate the loan by supplying portfolio information to the agent and by communicating with the agent on delivery and receipt of securities going on and off loan. The custody bank incurs additional costs not offset by reductions in cost the agent incurs. The extra step in communicating can lead to errors, especially when a loan has to be called because the manager sold the security.

Risks

The chief financial risk to the lender of securities lies in the separate processes of maintaining and reinvesting collateral.

Maintaining collateral is the process of keeping collateral at the ratio specified in the Securities Lending Agreement between the borrower and the agent. The standard ratio is 102% for domestic securities and 105% for foreign securities when the collateral is in a different currency than the security is priced, but sometimes this varies.

Borrower defaults are seldom the cause of program losses. If the borrower defaults on the loan and fails to return the borrowed securities, the agent uses the collateral to replace the security or otherwise return the security's value to the lender. Often the agent bank will indemnify the lender against a borrower default, except to the extent the loss was a result of insufficient collateral value.

The risk is that the collateral is insufficient to cover replacing the securities. Borrowers are required to deliver additional collateral if the ratio of value between the borrowed security and the collateral drops below a specified level, and can recover excess collateral if it rises above the necessary amount. Collateral coverage changes occur differently based on the type of collateral.

Within the guidelines of allowable collateral, the borrower selects what type of collateral to post.

Securities Lending Agreements specify not just the initial and ongoing ratio the borrower has to maintain, but the timing and process to maintain it. This is an area where risks occur. The agent determines the ratio daily and follows a specified procedure to adjust the collateral when the ratio falls below the floor. However, not all details how this is effectuated are standard in the industry.

Trigger Point: The ratio is permitted to fluctuate before a call for more collateral is made. A common structure sets the ratio at 102%, but does not call for the 102% ratio to be restored until the ratio drops below 100%.

Timing of Collateral Call: Valuation is normally close of business exercise. The collateral ratio is typically checked at the open of business using the prior day's close and only then is the borrower given notice to post additional collateral. Given that markets are evolving into 24 hour a day systems, the values may have incurred additional changes in either direction in the interim.

Timing of Replenishment: The borrower is given a period of time after notice to deliver additional collateral. The standard time is one business day. Again, values may have incurred additional changes in either direction in the interim.

These factors are set in and controlled by automated mark to market systems and monitored by lending agent management through exception reports.

While it is possible to demand different loan terms on a program, they can affect the volume of securities loaned, because most borrowers prefer the standard terms. This risk is mitigated to a large extent by imposing credit standards and volume limits on borrowers, to reduce the likelihood the borrower will default.

The process for maintaining the collateral's value depends on the type of collateral.

- With securities collateral both the borrowed security value and the collateral value change day to day. The changes may be in the same direction or opposite directions. The borrower is responsible for the value of both. The collateral security and the borrowed security are marked to market, and the borrower is responsible for posting additional collateral if changes in value of either result in a shortfall.

- With cash collateral only the value of the borrowed security changes from day to day. The agent and lender are responsible for protecting the value of the cash it invests. The borrower is not responsible if the investments made with the cash collateral lose value, and only marks to market changes in value of the borrowed security.

When collateral is securities, the borrower receives the income on the securities and rebates a fixed amount to the agent/lender. The agent/lender income in this arrangement is known, and the risk of changes in the rate earned on the collateral is borne by the borrower.

When the collateral is cash, the agent bank or other investment manager invests the cash to earn a return. The agent pays the borrower an agreed rate, and the agent/lender keep whatever the cash earns in excess of that amount. If the cash earns less than the amount paid the borrower, the loan loses money. If the cash investments drop in value, the loan loses that amount as well.

This risk is best controlled by investing conservatively, such that the collateral portfolio does not take too much duration (i.e. interest rate) or default risk. While doing so is tempting to try to increase securities lending income, the downside can be considerable. In these situations, the loss is not contingent on borrower default.

This risk can also be controlled from the lender's position by negotiating responsibility for losses between the lender and the agent. Standard terms put the risk of loss of collateral value on the lender, even if the agent invests the funds according to its own guidelines. In such situations it is possible to negotiate agent responsibility, but that may result in a less favorable split of the net income. Large lenders often select the commingled collateral investment vehicle or require collateral to be separately invested according to the lender's own guidelines. This latter structure is common among large public fund lenders.

There are a few other areas of what might be better described as operating concerns than risks.

- Default on trades selling securities on loan: Securities lending is transparent to investment managers, so they often sell securities on loan. Such securities must be recalled in time to complete delivery. Major securities lending banks have sophisticated processes in place to handle this common occurrence. In most cases the agent is able to substitute a loan of the same securities from another lender, so the borrower's position is not disrupted. When this is not possible the agent terminates the loan. Fails can and occasionally do occur, but they are rare.
- Treatment of securities over record date for proxy voting: Investors may have a significant interest in the subjects being voted on at a shareholders' meeting.

When a security is on loan, the lender is not the holder of record, so the lender does not have the proxy vote. The borrower does. Lenders will recall securities in order to vote the proxy. At best this cuts off securities lending revenue; if the interest in the subject is particularly critical and widespread (such as a dissident slate of directors) many lenders may recall loans at the same time, affecting the market for that security. On the other side of the ledger, investors will sometimes seek to borrow securities over record date for the purpose of voting those shares. This situation can result in a cost to those for whom the vote is important and an opportunity to make a loan at very large spreads for those who own the security but do not have a compelling desire to vote it.

Observed Conditions

WPERP entered into a Securities Lending Authorization Agreement with Mellon Bank, N.A. on March 1, 2005. This was 60 days after the effective date of the custody agreement with Mellon Trust of California, a subsidiary on Mellon Bank, N.A. The agreement provides Mellon will be the exclusive lending agent for the lendable assets of the plan, which is consistent with the pricing requirements of the custody agreement.

The agreement requires Mellon to acknowledge itself as a fiduciary equivalent to a fiduciary under ERISA and to conduct the program in accordance with ERISA and its regulations. Public funds are not subject to ERISA. This provision adds a degree of discipline and establishes a level of conservative practice to the program. ERISA, for example, prohibits loans of securities to parties in interest and their affiliates. Thus if an investment manager for the plan is affiliated with a broker, that broker may not borrow from the plan. Such a provision probably does not result in a material reduction in loaned assets. Loans to such borrowers are routinely rotated to other lenders in the agent bank's system of allocating loans; however, other borrowers may be rotated to WPERP because they are conflicted with other lenders. It is possible that there is a marginal negative effect; however, this would be impossible to identify and measure.

The agreement provides a somewhat stronger indemnification to WPERP than is usually found in such agreements with respect to collateral shortfalls. The indemnification distinguishes between collateral shortfalls that result from the collateral not generating sufficient income to pay the entire rebate to the borrower and collateral shortfalls that result from losses of principal value. The former is shared pro rata with the agent in proportion to each share of net revenue, unless the shortfall resulted from the lending agent's failure to comply with the investment guidelines in the commingled cash collateral pool. In the typical situation the agent shares only to the point where the net revenue is zero, and any loss is for the lender to absorb. Principal losses are for the lender's account, which is typical. In both cases the agent is responsible for its negligence and willful misconduct. However, the agent is responsible for failure to comply with

the provisions of the agreement including the Investment Guidelines. This latter point is stronger than what is often found in securities lending agreements.

WPERP invests its cash collateral in one of Mellon's commingled cash collateral investment accounts, the Boston Company, Inc. Pooled Employee ASL Short Term Fund. The investment guidelines for this fund are included in an exhibit to the agreement, and changes require a thirty day notice to the lender. This fund follows guidelines that are typical of a moderately aggressive money market fund. It has not reported losses that resulted in a reduction of its carrying value below the one dollar required value prior to the September 2006 credit crisis. At this writing a portion of the collateral has priced sufficiently below its cost as to lower the collateral below par. This situation is not solely limited to Mellon.

As an example of readily available alternatives, Mellon offers an Employee ASL Short Term II Fund that is very similar but additionally prohibits investment in structured investment vehicles, auction rate securities, and collateralized debt obligations. While this clearly reflects the subject of the recent credit crisis, there are other provisions tightening credit standards. There are a number of other alternatives available for investment of cash collateral.

WPERP made its evaluation of cash collateral risk prior to the current situation. Given the problems that have developed in the market, the overall risk/return relationship in a loan program may have changed. It is appropriate to conduct a new evaluation of the set of available cash collateral vehicles in light of either the recent credit crisis or the choices that may have become available as a result of the BNY Mellon merger. In the typical array of choices are funds with differing credit and liquidity requirements, and thus resulting rates of return as well as illiquidity and value risks. Such an exercise to either confirm the current choice or consider a different one would be appropriate.

Task Area 3i Recommendation 1

We recommend WPERP staff and/or its consultant review the guidelines, returns, liquidity, and other risks of the various pooled collateral funds offered by Mellon relative to the volume and volatility of securities on loan such that WPERP can make an affirmative decision how much collateral investment risk they want to take.

Monitoring and Controls

WPERP has established a detailed and intensive procedure for monitoring the compliance of the program with its various sets of requirements. The program also monitors program consistency. Monitoring is done by accessing reports through Workbench and manually checking them against guidelines.

- Sufficiency of collateral and authorized borrowers are monitored twice weekly.
- These are also checked in greater detail monthly, as are the revenue sharing calculations.
- Composition of the collateral pool is verified monthly.
- Holdings and earnings reports are printed and filed.
- Trend of volumes is tracked and significant month to month changes are investigated.

While all these compliance checks cover areas of concern over the program risk, it is not fully clear that the program as conducted is appropriate for the actual practice of the lending program. First, while discrepancies are investigated, explanations received, and incidents logged, it is not clear how discrepancies lead to management reporting and corrective action.

The intensity and frequency of verification can be a function of the number of discrepancies found in the past. If frequent and/or significant situations have been discovered, the situation needs to be discussed with the lending agent. If there are almost no problems, then less frequent but more random checking suffices.

If Mellon manages borrower collateral as a pool with each borrower, the collateral coverage checks become almost meaningless. In such a situation, which is common when cash collateral is invested in a commingled fund, the borrower posts collateral in the aggregate for all outstanding loans. Adjustments are made only when the aggregate pool of collateral falls below the threshold for the aggregate of all loans. Opposite value changes tend to offset each other. This system benefits all parties:

- There are fewer calls for more collateral or to return excess collateral, so there is less monitoring and fewer transactions.
- Collateral adjustments can be made together with collateral settlement for current transactions on a net basis.
- The risk of an individual loan falling short of collateral is diminished, because the collateral is fungible.
- The built in one-day delay in receiving additional collateral is mitigated.

Verifying the income split and crediting is a worthwhile exercise, but one that largely meets an auditing and accounting control than an investment and risk control. It is appropriate this be continued.

Monitoring the compliance of the cash collateral pool is also a valuable and worthwhile endeavor. While Mellon has not incurred losses in cash collateral pools during the recent credit crisis, other lending agents have. Spot checking collateral investment is a traditional and somewhat effective audit practice. Another approach that is worthwhile is to require the agent bank to certify compliance periodically and to disclose any violations of guidelines, even if no losses were incurred. Annually or semi-annually is an appropriate frequency, unless and until a history of violations is discovered.

Task Area 3i Recommendation 2

WPERP staff should review the history of compliance violations and revise the scope and frequency of monitoring consistent with cost effectiveness. The procedure should be expanded to provide a mechanism and timing for reporting serious violations to management and the Board and to take appropriate corrective action.

A more difficult subject to monitor is the volume of lending activity relative to the market. Securities borrowing is largely driven by demand, with lenders and lending agents actions designed to achieve attractive market share. Whether a lending agent is doing so successfully can be measured only relative to the overall market.

The borrowing market varies significantly by type of security, and also across time and economic conditions. Volumes vary and rebate or demand spreads change over time and with individual securities. This macro condition then interacts with the agent bank's market access and ability to negotiate loans and attractive pricing, and then with the loan allocation algorithm covering all the bank's lenders. The result is, a simple measure of lending revenue, even when tracked across time, is not a particularly accurate measure whether the program is achieving an attractive return.

We are aware of one program managed by an independent consulting firm, Astec Consultants, which provides data against which an individual program can be compared. Astec collects detailed securities lending data from a number of lenders, agent banks, and borrowers and develops distributions of volumes and rates. Their clients are mostly agent banks monitoring their performance and large lenders monitoring their agent banks. Some limited information is available without a fee to suppliers of data. More detailed measures require a subscription.

While the measures are not precise, they give indications whether a particular program is performing well or poorly against peers. Tracked over time, this can give valuable insight for managing the program and evaluating the lending agent.

Task Area 3i Recommendation 3

WPERP staff should consider the value and cost of limited and full participation in the Astec program.

Task Area 4 – Benefits Administration

4a. Actuarial Methods

Principles

Reviewing the Actuarial Assumptions and Methods the actuary uses in developing the actuarial report is critical to ensuring that the actuary is using sound actuarial principles. An actuary is responsible for advising public pension system's about the contributions needed to adequately fund the pension plan as of today as well as into the future. The actuary must make assumptions and use actuarial methods to predict events that may not occur until 20 or more years into the future. To this end, the actuary relies on assumptions and methods that are reasonable and follow sound actuarial principles. The actuary's decision is based in part on past plan experience, related plans of similar demographics and practical experience on future developments. A major actuarial tool for predicting the future is looking at past plan experience to determine the future. To this end many actuaries conduct experience studies to determine how well their assumptions are tracking to actual experiences.

An actuary's role in determining the well being of a pension plan cannot be understated. In the majority of cases in which a pension plan is poorly funded, an actuary was not performing his or her job adequately. A review of another actuary's findings, therefore, performs an important service to the actuary's client by explaining and clarifying complex technical concepts that can be critical to understanding the actuarial principles used, and when necessary criticizing the prior actuary's work and suggesting appropriate changes. Actuaries may differ in their conclusions even when applying reasonable assumptions and appropriate methods, and a difference of opinion between actuaries is not, in and of itself, proof that an actuary has failed to meet professional standards. However, an actuary providing a review should use *Applicable Actuarial Standards of Practice*, the *Qualification Standards for Prescribed Statements of Actuarial Opinion*, and the *Code of Professional Conduct*. In particular, the reviewing actuary should act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the client and public at whole, and should take reasonable steps to ensure that the expert review is not used to mislead the client to the reviewing actuary's gain.

The reviewing actuary should be alert to the possibility of conflict of interest, and should address any real or apparent conflict of interest in accordance with Precept 7 of the *Code of Professional Conduct*. Finally the reviewing actuary must also look at the relationship between the actuary and client and factor in whether the client is following the actuary's recommendations. If the actuary is providing sound recommendations that the client ignores then the quality of work the actuary provides is beyond reproach. However, the issue of the client's

confidence in the actuary remains and will present a different problem that is outside the scope of this assignment.

Risks

Failure on the part of the actuary to use sound actuarial principles on setting assumptions and actuarial methods can have dire consequences on public pension plans. In some cases, it can lead to dissolving the pension plan and a resulting loss of retirement benefits to existing retirees and promised future retirees (actives). In most public pension plans it is more likely that the city would bear the cost of funding a severely underfunded plan. This bailout can result in higher taxes or diminished services as monies may need to be diverted from critical service areas to be put into the pension plan. Numerous public pension plans across the country are critically underfunded and are putting a burden on cities to pay for the shortfall in the pension plans. Some see the analogy of the dot-com boom and subsequent bust to public pension plans.

State legislatures have been increasing pension benefits over the last few years during a rising stock market. During the shift, many cities have ended up on the states' watch list of underfunded plans. Even plans that were at one time adequately funded can quickly become unfunded in a short period of time.

Average employees who work over 30 years in a lifetime have a reasonable concern that their retirement benefits may not be available or could be severely reduced when they are ready to retire.

Most employees do not realize that future pension benefits are not guaranteed and that their benefits can be frozen at any time if the plans continue to be underfunded.

The actuary's role is to preserve the wellness of pension plans and the reviewing actuary's role is to critique the findings and reinforce that the actuarial standards are being upheld.

Observed Conditions

The actuary for the Department of Water and Power Employees' Retirement Plan (WPERP) has performed annual valuations each year as per statutory and accounting requirements. The actuary has also performed experience studies which measured the actual economic and demographic experience of WPERP every five years, with the most recent study dated June 30, 2006. These studies are now being done on a three year cycle. The studies measure the experience for the measurement period and make recommendations based on that study to adjust the assumptions and methods for the annual valuation as needed.

- The last study was performed by the Segal Company, the prior actuary for WPERP. As of the July 1, 2007 valuation, Buck Consultants was installed as the actuary for WPERP. As of June 2008, the Segal Company was re-installed as the actuary for WPERP. Both firms are well known national actuarial firms with excellent reputations.
- Oversight of WPERP and the hiring of the actuary are the responsibility of the Board of Administration of WPERP.(“the Board”).
- As a result of the last study, various changes were recommended for both economic and demographic assumptions. The Retirement Board adopted the changes for the July 1, 2007 valuation and Buck Consultants ran the 2007 valuation using those changes.

Experience Losses continue for WPERP.

- Over the last six annual valuations, WPERP has generated actuarial losses in five of the six years.
- In particular, there were experience losses in all of the fiscal years from 2002 to 2006, with only the 2001 fiscal year generating an experience gain. Investment losses comprised much of the overall experience losses. Due to the nature of the actuarial value of assets method, the unrecognized portions of those investment losses will continue to filter through the asset values used in calculating the contributions to the plan through the next five years.
- Analysis by the actuary has indicated that the majority of the last six years also generated demographic experience losses. The changes in the demographic assumptions made as of the July 1, 2007 valuation are expected to produce a more accurate estimate of future experience and thus limit the magnitude of future demographic experience gains or losses.

Examination of the assumptions used in WPERP would indicate that the individual assumptions used appear reasonable.

- All of the demographic assumptions appear to be reasonable for the type of plan being valued. All of the meaningful provisions of WPERP appear to be valued with appropriate levels of incidence.

- The economic assumptions also appear reasonable. Items like the salary increase assumption are closely monitored and have been adjusted as part of the experience study.

The consistent policy of doing experience studies on a routine cycle is in keeping with best practices for pension plans of this size.

- The recommendations from the study tend to be weighted choices, striking a balance between just moving the assumptions to fit the data exactly and leaving the assumptions being measured unchanged. This is a prudent policy, since some data variations may simply be random and not the establishment of a new trend.
- Assumptions with smaller probability, such as disability were measured but not recommended to be changed because the action occurred too infrequently to render any conclusion.
- Based on the contract with Buck Consultants, the next experience study is scheduled to accelerate the cycle from five years to three. The next full experience study would be due to be performed as of June 30, 2009, using data for the past three years from July 1, 2007 through June 30, 2009 as its basis. We strongly urge that this cycle be continued by the Board, in order to continuously monitor the actions of WPERP.

The investment return assumption remaining at 8% as of the July 1, 2007 valuation appears to be an appropriate move given the investment losses earlier in the decade and the uncertainty in the financial markets over the last couple of years. Keeping the 8% level was recommended by the prior actuary in their last experience study, and was supported with appropriate analysis.

The mortality table was updated from the 1983 Group Annuity Mortality Table to the 1994 Group Annuity Mortality Table. The updated mortality will more accurately reflect expanded life expectancies, especially for male participants.

The other major decrements for active participants, namely retirement and turnover, were also updated based on WPERP's experience.

The assumption of future service purchase for current active participants was changed in the current valuation as a result of the recommendation in the experience study and is a special case.

- The assumption was changed to uniformly assume all participants will purchase 0.15 years of service, instead of a proportion of participants (30% of those with less than 10 years of service and 41.25% of those with 10 years of service or more) assumed to purchase 4.0 years of service.
- The five year experience of WPERP indicated that the overall percentages overstated the amount of service that was being purchase.
- The change in the future service purchase assumption will not affect the ultimate cost of WPERP, but it will change the incidence of when the cost of the provision is recognized.
- The effect will be to pay for the expected future service purchases on a more current basis rather than to spread the cost into the unfunded actuarial accrued liability and thus have the cost amortized over a longer period of time.

The primary actuarial methods adopted by the Retirement Board and used in the valuation would be considered reasonable.

- The entry age normal cost method is a conservative method that projects out anticipated pay and service increases in the future and tries to fund the contributions for a participant over a level percentage of pay over the participant's working lifetime. As such, it will put more money into a plan earlier for any participant than other cost methods, such as traditional or projected unit credit. The entry age method is still chosen fairly often for government plans.
- The actuarial value of assets methods does not immediately recognize the entire aspect of unrecognized gains and losses in any one year, but spreads each year's impact over the next five valuations. The use of such a method is intended to smooth out the excessive fluctuations in asset values that in turn can create wild variations in contribution levels from year to year. The method chosen by the actuary is a reasonable one and one that is chosen for similar plans of all sizes.

Based upon our analysis, the rules set forth in Statements 25 and 27 of the Governmental Accounting Standards Board (GASB) appear to have been adhered to.

Task Area 4a Recommendation 1

Although, as mentioned above, the pension plan is considered well funded at 92%, WPERP should continue to commission the experience studies every three years to justify the assumptions. In addition, the Department WPERP needs to make sure they continue making the required contributions so funded levels

Task Area 4a Recommendation 1

remain at an accepted percent. The required contribution amount is specified in the Plan and will be annually determined by actuarial valuations. A minimum required contribution is also specified in the Plan at 110 percent of employee contributions, although the annual required contribution amounts are expected to remain well above the minimum contribution amounts in the future, because of the current funded status and actuarial methods being used.

1. Funded Status and Contribution Policy

Principles

A review of the adequacy of an actuary's Actuarial Assumptions and Methods is an important activity for public pension systems in helping management to explain and clarify complex technical concepts. It enables management to better understand the used actuarial principles and, when appropriate, justify and suggest changes to the current actuary's work. The review determines whether a public pension fund's actuary performed the valuation in compliance with the American Academy of Actuaries (AAA) professional standards.

The AAA professional standards guide an actuary to develop reasonable liability and contribution amounts to adequately fund a public pension plan. The prescribed standards vary based on several factors, including selection of interest rates, cost methods and asset allocation techniques. An actuary also takes into consideration a public pension fund's market conditions, employee demographics and funded status in determining the appropriate assumptions and methods to use in the valuation process.

The AAA professional standards require an actuary to document the rationale for the selection of the actuarial assumptions and methods used in the valuation process. The documentation provides a useful record to show how changing assumptions/methods will affect the valuation results. It also enables a public pension fund to easily validate the work performed by the current actuary.

The AAA professional standards also require an actuary to compare actual plan experience to expected experience based on the assumptions used each year. An actuary is also required to develop a gain or loss analysis to quantify the effect of actual experience versus the expectation used.

Finally, the professional standards require an actuary to determine the funded status of a public pension plan. The actuary determines the ratio of assets of the plan to the liabilities of the plan. The ratio also impacts the actuarial assumptions and methods used.

Risks

Failure on the part of the actuary to use sound actuarial principles on the setting of assumptions and actuarial methods can have dire consequences on public pension plans. In some cases, it can lead to dissolving the pension plan and a resulting loss of retirement benefits to existing retirees and promised future retirees (actives). In most public pension plans it is more likely that the sponsoring government would bear the cost of funding a severely underfunded plan. This bailout can result in higher taxes or diminished services as monies may need to be diverted from critical service areas to be put into the pension plan. Numerous public pension plans across the country are critically underfunded and are putting a burden on cities to pay for the shortfall in the pension plans.

Many legislatures increased pension benefits during periods of rising markets. During the ensuing economic downshift, many sponsors have ended up on the watch list of underfunded plans. Even plans that were at one time adequately funded can become underfunded in a short period of time.

Average employees who work over 30 years in a lifetime have a reasonable concern that their retirement benefits may not be available or could be severely reduced when they are ready to retire.

Observed Conditions

We would consider the overall funded status of WPERP as good.

- The Plan has a funded ratio of 92% as of July 1, 2007, as it was at the prior valuation date of July 1, 2006, and only slightly lower than the 94% ratio for 2005. This ratio is based on the actuarial value of assets divided by the actuarial liability.
- The actuarial value of assets is a smoothed version of the asset values over the last few years, and it currently is lower than the current market value of assets, due to deferred unrecognized investment gains on a market value basis in the last several years. Therefore, the funded ratio will tend to modestly improve over the next few years due to this factor alone.
- The actuarial liability is based on the entry age normal cost method. As mentioned in the previous section, this method funds ahead for anticipated increases in pay and anticipated future service, in order to pay for the entire active lifetime of a participant in a more level manner as a percentage of compensation. The liability

under this method is a larger number than the present value of benefits only accrued to date for participants.

- The net result is that WPERP is currently 92% funded on a conservative actuarial basis, with the asset value used for this measure having an upward trend due to unrealized gains in past years that will be realized during the next five years. (This ignores any investment experience gains or losses that may come about in the next few years.) We would conclude that the funded status of the plan is in good shape for now.

Contribution levels decreased slightly as a percentage of compensation and slightly increased as a dollar amount from 2006 to 2007.

- Investment losses have kept contributions at higher levels and will continue to effect contributions in the future until the five year spreading period for such losses runs its course for several of the prior year losses.
- If assumptions were to be met perfectly over the next few years, the contribution level for WPERP would probably tick downward slightly on a percentage of pay basis, based on the cost and asset methods employed.
- Annual contributions remain well above the mandated 110 percent of employee contributions level and are expected to remain well above that level indefinitely, due to the chosen methods and the funded status of WPERP.

4b. Benefit Payment Testing

Principles

WPERP provides a defined benefit pension based upon final pay and years of service. Eligibility is based on a combination of age and years of service.

Employees are eligible to retire under the following conditions:

- Attaining age 60 with five years of service preceding retirement and were a contributing member for at least four out of five years immediately preceding retirement.
- Attaining age 55 with 10 out of 12 years of service preceding retirement and were a contributing member for at least four out of five years immediately preceding retirement.
- 30 years of continuous service, and were a contributing member for at least four out of five years immediately preceding retirement.
- Receiving Permanent Total Disability benefits from the plan regardless of age.

Upon retirement WPERP provides them with a retirement benefit based on the following formula:

- 2.1% per year of service (not to exceed 100%) of the average of the highest 26 successive payroll periods.

Or, if they have at least 30 years of service and are at least age 55.

- 2.3% per year of service (not to exceed 100%) of the average of the highest 26 successive payroll periods.

WPERP also provides a cost of living adjustment (COLA) which increases the retirement benefits annually. The provisions of the COLA are based on changes to the Los Angeles Consumer Price Index to a maximum of 3% per year. Excess above the 3% is banked and can be used in the future.

WPERP uses a retirement system called RAP. The WPERP retirement staff manually calculates the life only retirement benefit and enters the benefit into RAP. RAP then calculates the optional forms as well as applies the COLA adjustment annually.

Risks

For most employees a retirement benefit represents the majority of their income after retirement. There are expectations of receiving a benefit that they have planned their future around. WPERP has to provide an accurate benefit so that their employees can continue with a lifestyle that they have planned on. In addition WPERP has to continue to employ the correct COLA so that the retirees can keep up with inflation. In the event that WPERP provides the employees with a benefit that is too big, they have the option of making the retiree pay back the excess benefit which may prove to be a burden on the employee. Conversely if WPERP has provided a benefit that is too small, then they have to refund the underpayments to all affected employees which can be a huge and unplanned amount. Both the retirees and WPERP suffer whenever an error is made in the retirement benefit calculations, and it is critical that these benefits are done correctly.

Observed Conditions

We reviewed 20 sample calculations provided by WPERP. Included in the sample calculations were three Qualified Domestic Relations Orders (QDROs), six early retirement calculations and 11 calculations with service buybacks. Seven of the records contained service prior to 1980 using the old method of calculating service (monthly codes versus pay periods). Fifteen of the 20 sample records contained spousal information, and calculations of the optional option forms of retirement were verified. All 20 calculations contained a COLA calculation. This sample provided us with a cross sample of scenarios from which we were able to adequately test the validity of WPERP's retirement calculations.

In the course of our review of the sample calculations, we observed the following:

- The Summary Plan Descriptions were well written and contained all the necessary information to perform the review.
- Ancillary Administrative materials were also available from WPERP and also contained the information needed.
- The files containing the data to perform the calculations were well documented and contained the necessary information to perform the calculations.
- There was a detailed checklist document that contained a sign off of all processes during the calculation of the retirement benefit.

Our review showed that the Retirement staff accurately calculated the retirement benefits for the sample employees. The calculations followed the plan document in each case. The benefits were correctly entered into the RAP system and the optional forms, administrative (COLA) and court imposed rules (QDRO's) were correctly followed thereafter.

The employee data is contained mainly in a paper format and can be easily lost in the event of a fire, flood or earthquake.

WPERP's calculation process is mainly a manual process. The certification of the service component is quite complicated and uses a process of monthly codes (Pre 12/31/1980) and pay periods codes thereafter. In addition, the employees can buy back service for the 26 weeks of department service that they initially were not credited with, service for other Governmental or City departments, or previously withdrawn contributions. WPERP has kept very detailed records showing the buyback transactions, and allows a complete audit trail of the calculations. Also WPERP has several layers of signoffs to compensate for the mainly manual process to ensure accuracy.

WPERP also uses a program called "Splitting DROs" that calculates the Qualified Domestic Relations Orders calculations. In addition there is a "Ret Calc" program that has been developed to process some of the retirement calculations. However, during the testing process, the majority of calculations were not processes that used Ret Calc. They were completed manually.

WPERP is also in the process of implementing a scanning process to replace the reliance on paper files. As of the review date the process has not been implemented.

WPERP is currently in the process of implementing a new retirement calculation system called PenFax, which will replace the current RAP system and process the retirements in an automated manner. If the system performs as expected, then WPERP will replace the manual process currently in place.

In discussions and interacting with the WPERP's staff members, they communicate effectively with one another during the retirement calculation process. The staff members routinely ask more senior members for their opinions on various calculations, and answers were provided immediately or in the immediate future. This method seems to work well for WPERP in the absence of an automated calculation system which would be the best practice method.

Task Area 4b Recommendation 1

WPERP staff should scan in member data to reduce paper use. Benefit calculations should be automated to the extent possible.

4c. Disability Section

Principles

Assessing the adequacy of a public pension system's disability and death claim application review procedure helps to ensure prompt and accurate delivery of participant and/or beneficiary benefits. The assessment should take into account a city's applicable rules and regulations which govern the determination of applicants' disability retirement benefits and/or claimants death benefits. A public pension system's participants must believe that the review procedures are fair and objective when they apply for retirement disability, and the same applies to death benefit claims. Additionally, pension systems want to ensure disability applicants are unable to work, while at the same time, they do not want to overburden them with administrative paperwork dependent upon their medical conditions/impairments at the time. And, in the case of death benefits, a pension system needs to ensure the claimant is the legal beneficiary.

It is also important for a public pension system's disability/death review procedures to include the gathering of as much relevant information as possible in order to provide decision makers with the necessary information to render an impartial disability, retirement and/or death claim decision based upon available documented evidence/legal records. Not having procedures in place to gather comprehensive medical records and other documentation to validate an applicant's claim would be considered inadequate for disability, retirement and/or death benefit determination purposes. Also, a public pension system needs to gather the evidence/documents to help protect and safeguard funds' assets from unwarranted claims.

To help ensure disability/death claims are processed appropriately, public pension systems have to train all parties involved in the application/claims review process to understand their roles and responsibilities. Firstly, the staff who administers the application review process must be trained to understand applicable government mandated rules and regulations. The training of disability/death staff is usually on-the-job training, since there are no formal courses available in the subject area.

In order to help mitigate errors and misjudgments, there should be written documentation of the rules and procedures for disability/ death staff to follow. The documentation of rules are usually contained in city codes and charters which typically enables public pension systems to develop step-by-step procedures for staff to follow in processing disability applications/death claims.

Additionally, a quality assurance process is essential to help ensure disability applicants/death claimants receive every benefit they are entitled to. An effective quality assurance process involves checking both the basis of the disability retirement benefit/death claim determination, as

well as the accuracy of benefit calculations. It also entails the validation of the documented evidence used in making disability/death claim determination decisions.

Further, an effective disability/death review process must be responsive to the needs of both disability applicants and death claimants. It must include tracking and reporting systems so applicants/claimants may know the processing status of their claims. Not only should the process be responsive to disability applicants/death claimants, having reporting and communications systems in place are essential elements to help keep management and Board members informed about the adequacy of an effective disability application review process.

Risks

An inadequate disability application/death claim review procedure exposes an organization to bias and discrimination charges from those applicants/claimants whose claims are denied. It may also create applicant/staff morale problems. And, it may result in higher benefit expenses for an organization.

Observed Conditions

The City Charter provides the Board of Administration (the Board) with oversight and administration of the Disability Fund and the Death Benefit Fund to pay "monies" to persons who, in all material respects, meet the Plan's eligibility and qualification requirements. Section 1106 of the City Charter established the powers and duties of the Board, while Section 1188(a) created the Disability Fund and Death Benefit Fund.

The Board may delegate authority to a Committee to make findings of fact in the administration of disability and death benefits. The final decisions of whether a member is disabled and unable to work and for what period of time is made by the Board based on all available medical evidence, including recommendation of the Medical Consultant and/or his/her designated staff physician. The Board is only informed but not involved in death claim determination.

WPERP has a Disability and Death Section which consists of seven authorized staff of whom five are directly involved in processing the Disability Notice/Claim Form. The Section is headed by a Management Analyst who reports to the Assistant Retirement Plan Manager. The processing of Claims Form is assigned to two Senior Clerk Typists using WPERP's Disability Claim Processing System (DCPS) which is an automated database used by staff to open, track and close disability claims.

WPERP has approximately 250 members on disability per pay period. Of the filed claim forms, approximately 95% of them are approved for disability payment.

WPERP's Disability Unit processes three basic types of disability claims.

- **Temporary Disability (TD)** – Means impairment of mind or body (including pregnancy, childbirth and/or related complications) that is ***not work-related*** nor compensable under any system of worker's compensation, which renders the member wholly and continuously unable to perform the duties of their position subsequent to the ***first 10 workdays following inception of disability and not exceeding 50 weeks***.
- **Extended Temporary Disability (ETD)** – Same as TD except is for an additional ***52-week period*** immediately following a Temporary Disability that has existed uninterrupted for 52 weeks and the member does not qualify for Permanent Total Disability.
- **Permanent Total Disability (PTD)** – The condition must render the member wholly and continuously unable to engage in ***any gainful occupation whatsoever, and:***
 - Condition must be reasonably certain to continue for life; and
 - Rebuttable presumption during continuance when preceded by 50 weeks of Temporary Disability and any period up to 52 weeks of Extended Temporary Disability.

Also, the Disability Unit processes the following work-related injury benefits¹:

- **Contingent Disability Benefits (CD)** – When a member has a right to benefits but the Board is not certain if the disability is work-related, CD benefits are provided to the member for reasonable living expenses until a determination is made.
- **Supplemental Payments for Industrial Disability (Industrial Disability)** – These payments supplement Workers' Compensation (WC) temporary disability benefits when WC benefits are less than the TD, ETD, or PTD benefits the member would receive if the injury were not work-related.

WPERP's disability benefit determination process is more complicated than those typically found in the market because of the different types of disability benefits available to

¹ LACERS and LAFPPS do not process work related disabilities.

members. The processing of disability claim forms require the staff to become familiar with the disability benefits available to members based upon the type of disability being requested.

The Disability Unit has a manual which aids staff in learning how to process disability claim forms. The DCPS includes references to applicable WPERP provisions and contains step-by-step procedures along with examples of completed forms for staff use in processing disability claims. Our review indicates the DCPS is comprehensive and serves as an excellent reference resource for Disability Section staff, along with the Disability Desktop Procedures. There are more than sample forms, calculation work schedule forms and types of correspondence included in the DCPS as reference resource materials. Although there are procedures in place, many of the examples in the DCPS deal with DTDS which are the most infrequent disability claims.

In addition to the DCPS resource, the Disability Unit has a peer review quality assurance process in place to help ensure that the disability benefit determination recommendations are in compliance with the member's type of disability, years of service and charter case load. The clerks make the initial benefit determination. Then, they are submitted to the Assistant Retirement Plan Manager, as well as the General Manager for their review and feedback. Once the peer review is completed recommendations are then submitted to the Benefits Committee of the Board for approval.

The DWP Business Unit notifies the Disability Section and authorizes the WPERP to commence the processing of disability claim forms after a member has been absent 11 days. Also, the member must provide the Disability Section with a Certificate of Disability (COD) which is completed by his/her licensed/treating physician, chiropractor. The COD certifies, as well as contains, the diagnosis, the cause(s) of the disability and the member's expected return to work date.

The Disability Section utilizes the DCPS to open a disability claim file and submits the completed claim file to the Medical Consultant who recommends whether the member is disabled or not disabled in accordance with the Plan requirements. The Medical Consultant renders a recommendation on the basis of the following:

- Review of treating physician's reports, including the COD;
- Review of other relevant medical/non-medical reports and/or records;
- Actual medical examination of claimant;
- Review of medical publications and professional expertise; and
- Review of medical reports and records by other physicians, surgeons or other medical or mental health providers to whom the claimant may be referred.

In addition, the DWP's Internal Audit Division conducted an audit of WPERP'S Temporary, Extended and Supplemental Disability Claims and Payments from July 1, 2005 to

June 30, 2007. The audit was conducted to determine if payments for the covered disability claims were proper and adhered to the Plan, as well as to verify that the claims were filed according to proper procedures and were documented, and to determine the internal controls were sufficiently adequate for both manual and automated processing of claims and payments. According to a memo dated April 4, 2008, the Internal Auditors of the DWP concluded that the WPERP had correctly, properly approved and remitted reasonable temporary disability payments. They also noted that the WPERP's disability payments were in alignment with industry statistics reported by the International Society of Certified Employee Benefits.

WPERP has a thorough review process for determining disability retirement benefit recommendations to the Benefit Committee of the Board. The process includes the collection of medical records and, if applicable, Workers' Compensation to determine the type of disability. It also includes interfacing with medical liaisons to identify job availability for claimants based on their diagnosed impairment level. And, the Disability staff works with the Business Unit in cases where the Medical Consultant determines that a member may be disabled, but able to work in a light duty capacity with specific work restrictions.

WPERP does not have a policy and procedures which address the confidentiality of Administrative Files for disability applicants. As such, WPERP is not in compliance with California Government Code, Chapter 3, Section 6254 which deals with records exempt from disclosure requirements.

However, WPERP does have established procedures to protect the privacy of medical records in the Disability Section. The medical records of applicants are securely locked in file cabinets or office when they are not in use. Also, all staff in the Disability Section are designated to handle disability claimants' medical records. Regardless of whether WPERP is required under Health Insurance Portability and Accountability Act (HIPAA) to protect the privacy of medical information, it is "best practice" to safeguard personnel information, especially medical records.

WPERP's standard for Permanent Total Disability (PTD) requires members to be wholly and continuously unable to engage in any gainful occupation whatsoever, and the condition must be reasonably certain to continue for life. The PTD standard is more restrictive than the City's other disability plans and the typical standards applying to work within the employer's organization. As a result, there are fewer PTD recommendations at the WPERP which means after two years of disability payments, disabled employees must return to work and/or terminate their LADPW employment.

However, members have the right to appeal a denied PTD claim. The Benefits Committee handles all PTD appeals. And, in most cases, the Benefits Committee will reverse the denial and approve the PTD claim. Also, the WPERP reserves the right to re-examine a disabled member to determine whether or not the condition exists to warrant a continuation of the PTD payment.

WPERP's Death Unit has two employees who are involved in counseling and processing death benefit claims. One employee is classified as a Senior Clerk Typist and the other employee is a Clerk Typist. They process between 30 and 40 death claims per month.

The Death Unit is responsible for identifying and communicating with designated beneficiaries once they receive notification of a member's death. Specifically, the employees in the Unit explain to the beneficiaries the actions they need to take in order to initiate the processing of a death claim which generally takes between 1 and 1½ months. Once the Death Unit receives an official death certificate, it only takes two weeks to process a death claim payment.

WPERP has a training manual which describes how to handle and process death claims and to determine death benefits. The employees in the Death Unit perform all calculations for both surviving and eligible spouses and reviews the calculations for dependent children. And, there is a peer review process in place for reviewing all calculations.

On-the-job-training is a primary method used to train new employees in the Unit. According to the Senior Clerk Typist, who was trained by an employee who occupied the position for 30 years, it takes approximately three months to become proficient in performing the work.

Currently, the payroll processing for death claims is split between the Death and Retirement Units dependent upon the beneficiary. The annuity death benefits are paid by the Retirement Division, while DWP's Accounts Payable processes checks for one-time payments only. In the future, WPERP anticipates death claims will be processed using the new pension system.

Task Area 4c Recommendations 1-8

Management should consider ways to back up the staff in the Disability/Death Section, given the limited staff resources. For example, WPERP could cross train employees in other sections to substitute for unplanned absences and position vacancies.

Management should establish specific matrices to begin assessing the efficiency and productivity of the Disability/Death Section.

Management should explore the feasibility of automating disability payments as part of future enhancements to the new pension system coming online.

Management should adopt a privacy/safe policy which deals with disclosure of protected employee information.

Task Area 4c Recommendations 1-8

Management should establish an orientation program to train the Benefit Committee on how to assess the materials contained in the disability packages provided them.

Management should review and potentially consider revising the current PTD standard and/or extend the time for extended disability.

Management should consider printing all death payment checks rather than utilizing DWP's Accounts Payable Unit in the future.

Management should consider increasing the size of the Disability staff.

4d. Reasonableness of Calculations and Actuarial Methods Used for Projecting Future Retiree Health Benefits

1. Evaluate The Reasonableness of Calculations and Actuarial Methods Used For Projecting Future Retiree Health Benefits

Major steps are:

- Review of information and documents received;
- Analysis of demographic actuarial assumptions (i.e., those assumptions used to project the number of employees and dependents who will become eligible for benefits, and the length of time they will receive benefits);
- Analysis of health-specific assumptions (i.e., medical claim costs, medical trend, plan elected, etc.);
- Review of the June 30, 2006 actuarial valuation with regard to reasonableness of methods and calculations, compliance with actuarial guidelines, and compliance with GASB No. 43 and 45 standards; and
- Use of Cheiron's proprietary H-scan projection modeling software to project the future payout streams under alternative investment and/or healthcare trend scenarios.

2. Review of Information and Documents Received

Cheiron requested the following information and documents from the Los Angeles Department of Water and Power (the Department):

- The two most recent actuarial valuation reports of the Retirement Benefits and Other Postemployment Benefits of the Department;
- Most recent experience study report covering demographic assumptions;
- Most recent experience study report and back-up covering health-specific assumptions;

- Summary plan description or other description of the plan and the various options available to the retirees;
- Plan document covering the benefit plans; and
- Information on the financial operation of the Department contracts with health benefit providers, e.g., insured or self-insured arrangement, dividend arrangements, etc.

All of the information and documents itemized above that were available have been provided, with some additional explanation, as follows. We didn't receive any experience study on health-specific assumptions or information on the financial operation of the Department contracts with health benefit providers. Our understanding of the plan provisions are based on information in the 2006-2007 Options Guide provided to us and the Summary of Plan Provisions in the 2006 Actuarial Valuation Report.

We have reviewed all of the documents, reports, and other information provided. These form the basis, in conjunction with our H-scan projection model, of our conclusions in this report.

3. Analysis of Demographic Actuarial Assumptions

Background

An actuarial valuation of Other Postemployment Benefits (OPEB), or of a retirement plan, is based on four major factors, (i) the actuarial assumptions used to project future benefit payments under the plan, (ii) the actuarial cost method used to allocate required costs or contributions to different periods, (iii) the plan provisions, i.e., the specific eligibility and benefit provisions that give rise to future benefit payments, and (iv) the participant data for all active employees, retirees and survivors, and terminated employees not yet receiving benefits. The actuarial assumptions can be divided into two segments, demographic assumptions and health-specific assumptions. Demographic assumptions are those relating to turnover (how many employees will terminate employment each year), disability (how many employees will become disabled and leave employment and, possibly, become eligible for benefits by virtue of their disablement), retirement (how many employees and at what ages will they retire), mortality (how many employees will die before retirement and, after retirement, how long will they live and receive benefits under the plan). Typically, demographic assumptions are the same for a retirement plan and a retiree medical plan covering the same population, and experience studies analyzing demographic assumptions are done for the retirement plan.

That is the case here, and we have received and reviewed the most recent Actuarial Experience Study for the period July 1, 2001 through June 30, 2006 prepared by The Segal Company, the plan actuary at that time. This experience study covers the time from July 1, 2001 through June 30, 2006. The Segal experience study also covers economic assumptions (inflation, investment return).

4. Summary of Experience Study

The report states that, "This study was undertaken in order to review the economic and demographic assumptions and to compare the actual experience with that expected under the current assumptions during the five year experience period from July 1, 2001 to June 30, 2006. The study was performed in accordance with Actuarial Standard of Practice (ASOP) No. 27, "Selection of Economic Assumptions for Measuring Pension Obligations" and ASOP No. 35, "Selection of Demographic and other Non-economic Assumptions for Measuring Pension Obligations". Based on the study's results and expected near-term experience, Segal recommended various changes in actuarial assumptions.

Segal recommended changes for the following major actuarial assumption categories:

Inflation – Future increases in the cost-of-living index which drives investment returns and active member salary increases, as well as COLA increases to retired employees. Segal reduced the rate from 4.00% to 3.75%.

Individual Salary Increases – Increases in the salary of a member between the date of the valuation to the date of separation from active service. This assumption has three components:

- Inflationary salary increases;
- Real across the board salary increases; and
- Promotional and merit increases.

Segal reduced the current inflationary salary increase from 4.00% to 3.75% and maintained the real across the board salary increase at 0.50%. In addition to the combined inflationary and real across the board salary increases of 4.25%, a change was recommended in the promotional and merit increases that ranged from 5% in the first year of employment to 1% with five or more years of service.

Retirement Rates – The probability of retirement at each age at which participants are eligible to retire. For active members, Segal changed the current retirement rates as shown in the actuarial assumptions section of the 2006 report.

Mortality Rates – The probability of dying at each age. Mortality rates are used to project life expectancies. Segal changed the pre-retirement, post-retirement and disabled mortality assumptions to the 1994 Group Annuity Mortality Tables for males and females, with no age adjustments.

Termination Rates – The probability of leaving employment at each age. Segal changed the current male and female total termination rates as shown in the actuarial assumptions section of the 2006 report.

Observed Conditions

In general, the changes in demographic assumptions appear reasonable based on the experience during the five-year period July 1, 2001 through June 30, 2006. We have the following comments on the recommended assumptions and the justification presented in the experience study report:

Inflation and investment return – In general these are areas where there is considerable room for judgment, and for a range of expert opinions. Economists, investment managers, and investment consultants generally come to somewhat different conclusions as to the future inflation, future real returns by asset class, and the risk inherent in various asset classes.

The recommended 8.00% net investment return assumption change was made in the 2006 valuation and appears to be reasonable. However, we note that the real rate of return assumption (investment less inflation) 4.25%, changed from 4.0%, has become more aggressive.

Salary increases – This is generally not applicable to the OPEB valuation, except with regard to amortization of the Unfunded Actuarial Accrued Liability. The salary increase assumption is composed of three parts, inflation, real growth, and merit/longevity. The experience study stated that the actual promotional and merit increases were higher during the initial years of employment. For the 2006 valuation, the salary scale assumption was changed, as recommended by Segal, to include the following components: 3.75% inflation, 0.50% productivity, and a service-related merit/longevity increase ranging from 5.00% in first year of employment to 1.00% with 5 or more years of service. The sum of the inflation and productivity components equal to 4.25%, is used for the “payroll growth” assumption to amortize the OPEB unfunded liability as a level percent of increasing payroll.

Retirement rates – Experience during the five-year period showed more retirements than expected for almost all ages except for age 50 for members with more than 30 years of service. Actual retirements at age 50 were significantly less than expected. The experience study stated that for age group 50-54, the proposed rates are lower than the prior and actual rates to reflect the cessation of the early retirement window that provided unreduced benefits to members

with 30 years of service. Based on the experience study and the expected plan changes, the proposed assumed rate of retirement appears to be reasonable.

Marriage and election of coverage – The experience study stated “Based on the experience for the members who retired during the last five years, about 97% of the male members and 87% of the female members were married at retirement”. An increase in marriage assumption to 90% for males and 75% for females was recommended in the study. However, no experience data is provided with regard to marital status and election of coverage. The assumption at the time of the study was 85% of active male members and 60% of the female members would be married at the time of retirement. The marital status assumption used in 2005 and 2006 valuation of health benefits is: 68% of male employees and 25% of the female employees are assumed to be married with coverage. Although an increase in marriage assumption for retirement was recommended, no change has been made for these assumptions in the 2006 OPEB valuation. The liability for a married retiree where the spouse is covered can be more than twice the liability for a single retiree; thus, it merits additional review. In the 2005 and 2006 valuations, an assumption that female spouses are four years younger than their husbands is included; whereas the experience study recommendation is to change this to three years.

Task Area 4d Recommendation 1

Data on marital status at retirement and age difference of spouses should be examined to see if changes need to be made to OPEB valuation. This can be a more significant factor in an OPEB valuation than in a retirement valuation.

Mortality – The healthy lives experience study indicates that retirees are living longer than the assumed life expectancy on the assumed 1983 Group Annuity Mortality Table (1983 GAM). Segal's recommendation was to change the mortality table to more recent 1994 Group Mortality Table (1994 GAM). The proposed 1994 GAM table is more conservative and provides a slight margin for improvements in life expectancy. It may be more appropriate to consider a table which includes future expected improvement, or even a generational table which automatically incorporates expected improvements in life expectancy.

The same 1994 Group Annuity Mortality Table was recommended for disabled members because there were a minimal number of disabled members compared to the total number of pensioners receiving the retirement benefits.

Task Area 4d Recommendation 2

WPERP should consider a mortality table reflecting expected future improvements in longevity such as a generational mortality table that “automatically” projects future improvement.

Termination rates – Experience during the five year period showed fewer terminations than projected by the assumed rates at earlier ages and higher rates at later ages. A change in termination rate was recommended to match the actual experience. The proposed assumption change was incorporated in the 2006 valuation and appears to be reasonable.

Disability rates – Experience during the five-year period showed that the actual number of disabilities was very close to expected under the prior assumptions. Therefore, no change was recommended to the disability rates. In our opinion, the current assumption is reasonable.

As stated above, we believe that the experience study generally reflects an appropriate analysis in accordance with guidelines of the Actuarial Standard of Practice (ASOP) No. 27, "Selection of Economic Assumptions for Measuring Pension Obligation" and ASOP No. 35, "Selection of Demographic and Other Non-economic Assumptions for Measuring Pension Obligation". The recommended assumptions appear to be generally reasonable in the aggregate. Two areas that should be considered or where further data would be beneficial to additional analysis are mentioned above.

5. Analysis of Health-Specific Assumptions

Background

Demographic and economic (non-health-specific) assumptions were reviewed in Segal's five-year experience study report and in the preceding section of this report. These assumptions will generally be the same for a given population that is covered by both a retirement plan and a retiree medical plan. Health-specific assumptions are generally medical claim costs, medical inflation (trend), and plan coverage and elections.

Medical claim cost assumptions are related to the specific plan of benefits provided, and the providers that are contracted to provide those benefits under the plan. Medical inflation (trend) assumptions are related to these factors, but are also related to national and regional trends on medical inflation.

6. Experience Study with Regard to Health-Specific Assumptions

There are three assumptions that are health specific. They are:

- Healthcare Trend;
- Per Capita Health Care Cost; and
- Participation Rate.

Since no experience study has been done related to these assumptions, we cannot comment on the assumptions in comparison to the plan's experience. However, our analysis/observations on these assumptions compared to other healthcare plans are given below.

Other demographic and economic assumptions are the same as used for the retirement plan.

Observed Conditions

In general, the assumptions used for the 2006 actuarial valuation do not appear unreasonable. However, while the starting point of the health care trend assumption appears reasonable, we believe that the grading of health trends down by 0.5% per year to an ultimate rate of 5.0% is toward the more optimistic range of reasonable assumptions.

Task Area 4d Recommendation 3

We recommend that the Department considers the impact of a higher trend scenario on the cost of the plan. For example, changing the first year trend rate to 10.0%, grading down to an ultimate rate of 5.5% in 15 years would result in an increase in liabilities and cost.

Based on the information provided, per capita health care cost and participation rate appears to be reasonable.

7. Review of June 30, 2006 Actuarial Valuation Report

Background

An actuarial valuation of the Department Other Post-employment Benefits (OPEB) is done annually as of June 30. We received and reviewed the valuation reports as of June 30, 2004, and June 30, 2006 prepared by Segal. We did not receive a report for the June 30, 2005 valuation, if one was done. Our review concentrated on the June 30, 2006 OPEB actuarial valuation report, although we did review the June 30, 2004 report. Our comments, however, are solely with regard to the 2006 OPEB valuation.

As stated in the report, the valuation was prepared in accordance with the requirements of the Governmental Accounting Standards Board (GASB), specifically GASB No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, and GASB No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Essentially, GASB No. 43 covers requirements for OPEB accounting by plans and GASB No. 45 covers requirements for OPEB accounting by employers sponsoring those plans.

In addition, the report states that the valuation has been prepared in accordance with generally accepted actuarial principles and practices.

8. Summary of Actuarial Valuation Report

The highlights of the report can be summarized as follows:

- The annual required contribution (ARC) decreased from the prior year from \$107.4 million to \$75.2 million (both adjusted for interest for contributions at the end of each pay period). As a percentage of payroll, the contribution decreased from 17.6% to 11.8%. Note that the prior year saw an increase from 15.9% of payroll to 17.6%. The decrease was primarily the result of the revised actuarial assumptions in 2006, including the discount rate and retirement rates.
- The Department has elected early compliance with GASB No. 43 effective with the 2003/2004 plan year.
- Summary of Participant Data on page 11 showed relatively small increases from the prior year, about 2% for retirees and surviving spouses and about 1% for active employees.
- A large contribution of \$697 million made in plan year ending June 30, 2006 will decrease the future annual required contributions by a significant amount.

In general, the actuarial valuation appears to be completed in accordance with generally accepted actuarial principles and procedures, and in accordance with the requirements of GASB Nos. 43 and 45. However, there are a number of areas where additional information is needed to confirm the methodology. These are covered in the next section.

Observed Conditions

As mentioned above, the actuarial valuation appears to be prepared using methods and assumptions that are reasonable and meet the applicable requirements. However, there are certain areas where the actual description of the methodology could be interpreted multiple ways. In addition, the clarity and completeness of the report could be enhanced as follows:

- The 2006 report shows the Annual Required Contributions developed in two ways: (i) throughout the year as a percentage of pay, and (ii) at the end of the year with interest to the end of the year. The development of the Annual Required Contributions in two different ways without explanation may confuse the reader.

Task Area 4d Recommendation 4

For development of the Annual Required Contribution, we recommend the WPERP use the time period that closely matches the timing of actual contributions paid.

- The amortization method used in the 2006 report is “Closed, level percent of pay” and the remaining amortization period is 29 years as of June 30, 2006.

Task Area 4d Recommendation 5

Clarify the remaining amortization period on page 10 of the report. The label describing the 30-year amortization can be confusing.

- The monthly subsidies effective June 30, 2006 by age and service shown in the report are for ages 55 through 65. There is no information about the subsidy for retirees who are over 65 or who are Medicare eligible. We did not receive any document that specifies the table shown in the report. However, we did receive excerpts from the City Charter on the retiree health plan, which has the medical plan subsidies for Medicare eligible retirees and the retirees who are NOT Medicare eligible. We have no reason to believe that the retiree health benefits are not valued correctly.

Also, according to the excerpts of the Charter we received on the health benefit, retired employees are also eligible for the reimbursement of Medicare Part B premium.

Based on information provided by WPERP staff, retirees and spouses who are age 65 and older are required to enroll in and pay monthly premiums for Medicare Part B if they wish to continue health coverage with the Department. Retirees may be eligible for full or partial reimbursement of their Medicare Part B premiums if the maximum subsidy earned by the retiree is higher than the subsidy amount paid to the health care provider on his/her behalf.

The actuarial firm may have valued Medicare Part B premium reimbursement benefit as a part of monthly medical subsidy.

Task Area 4d Recommendation 6

Exhibit III, Summary of Plan Provision section of the report, should include a description of the Part B premium benefit.

- In the summary of participant data, it is not clear whether dependents of retirees are included in the inactive counts or not. It will be very useful to have the information on the dependents separately if it is included with retirees, or add the information, if not included anywhere. Dependents information is useful to determine if the marital status assumption is reasonable.

Task Area 4d Recommendation 7

Future actuarial valuation reports should show (as regards page 11 of the 2006 report) covered dependents separately from retirees and surviving spouses.

9. H-scan Projections Under Alternative Scenarios

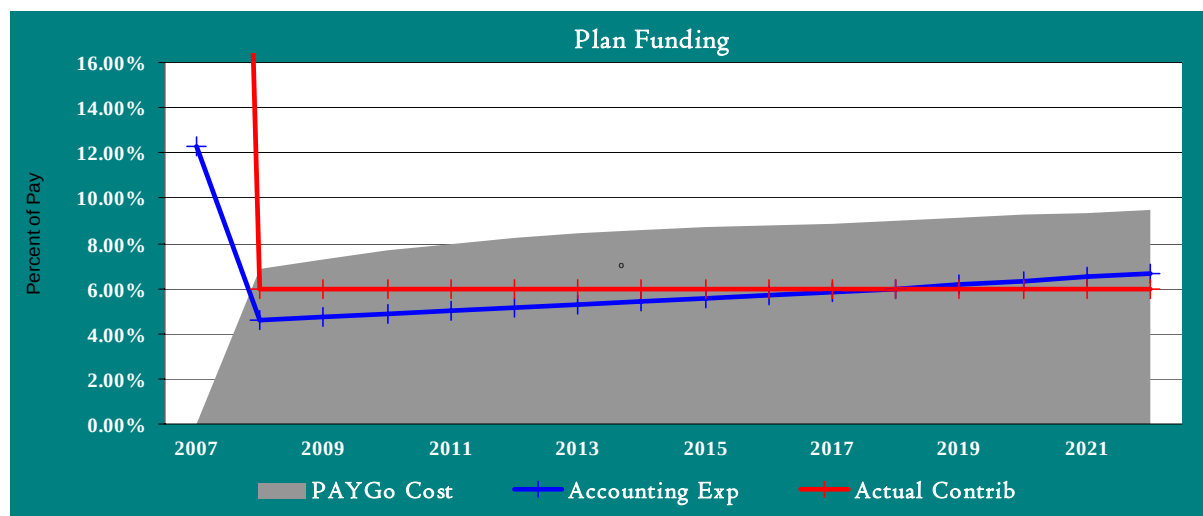
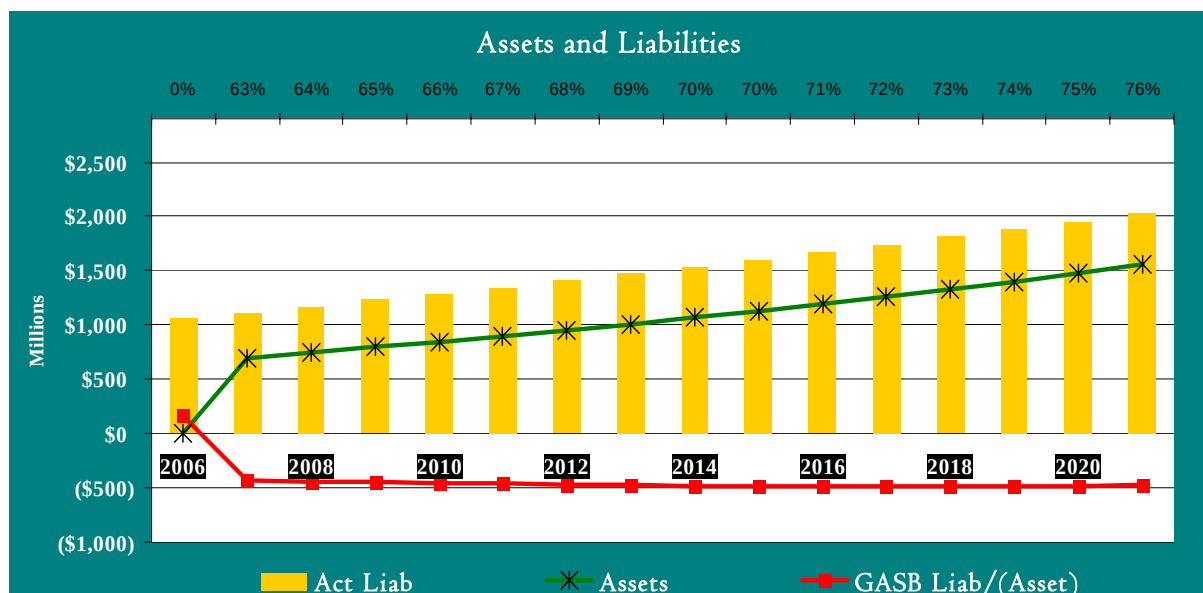
An actuarial valuation typically presents results for one year. Although inherent in the valuation is a projection of the population and benefit payouts for 75 years or more, the basic results (annual required contribution and funded ratio) are shown for the valuation year. It is useful to examine projected results for a number of years under different economic scenarios. Projections provide valuable information as to the future results, and how experience better or worse than assumed can affect those results. Thereby, allowing Trustees to make better informed decisions and better position the Fund to absorb adverse experience.

We have projected valuation results using our H-scan projection model for 15 years. Since we were missing some significant pieces of information as described above, we made some assumptions about both the contribution policy and the projected benefit payments (described below under comments). We went ahead and made these assumptions to illustrate the importance of doing future projections. We show four different scenarios for the one of the most critical variables that the Fund is dependent upon because of the pension bond funding arrangement. In addition to a baseline projection using 2006 valuation report assumptions, we have projected results using the following scenarios:

- Investment return of 6.0%;
- Investment return of 10.0%; and
- Medical inflation at 10.0% the first year, grading down to 5.5% over 15 years.

For each of these scenarios, we have assumed that the Department will contribute 6% of pay, which is approximately the ongoing actuarial required contribution under the current assumptions.

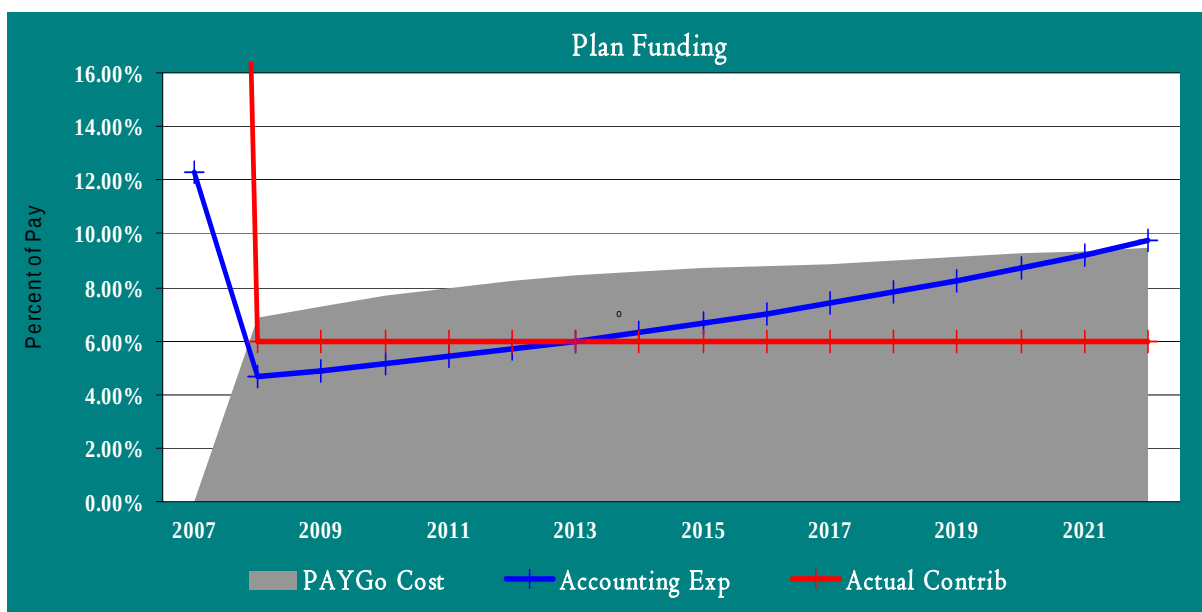
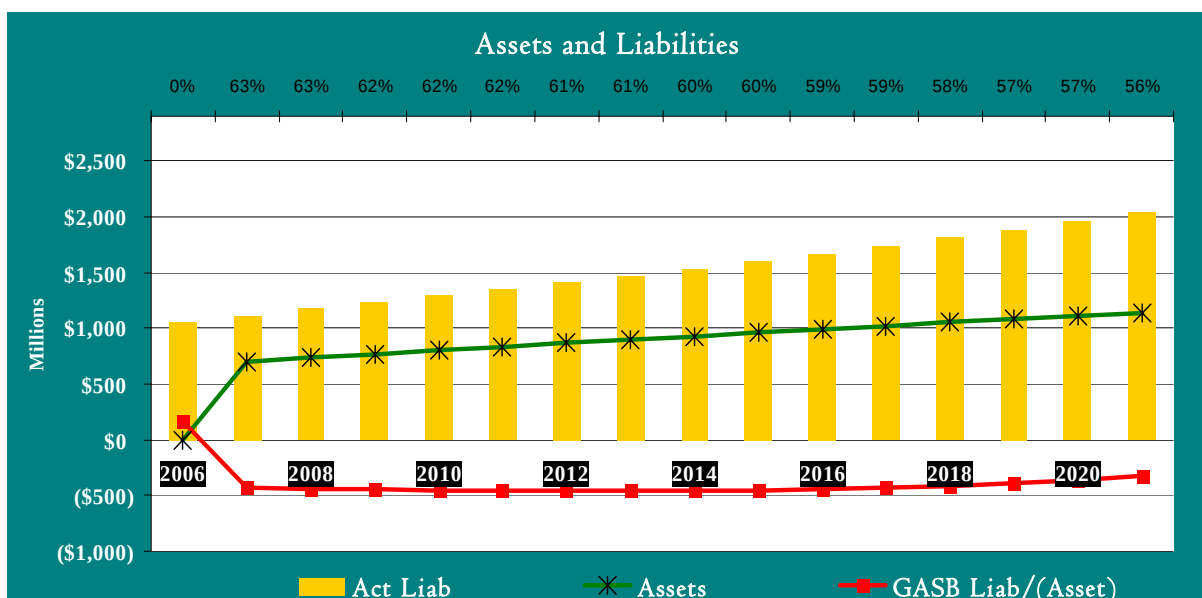
These results, depicted graphically on the next several pages, present experience under both positive and negative scenarios.



Baseline

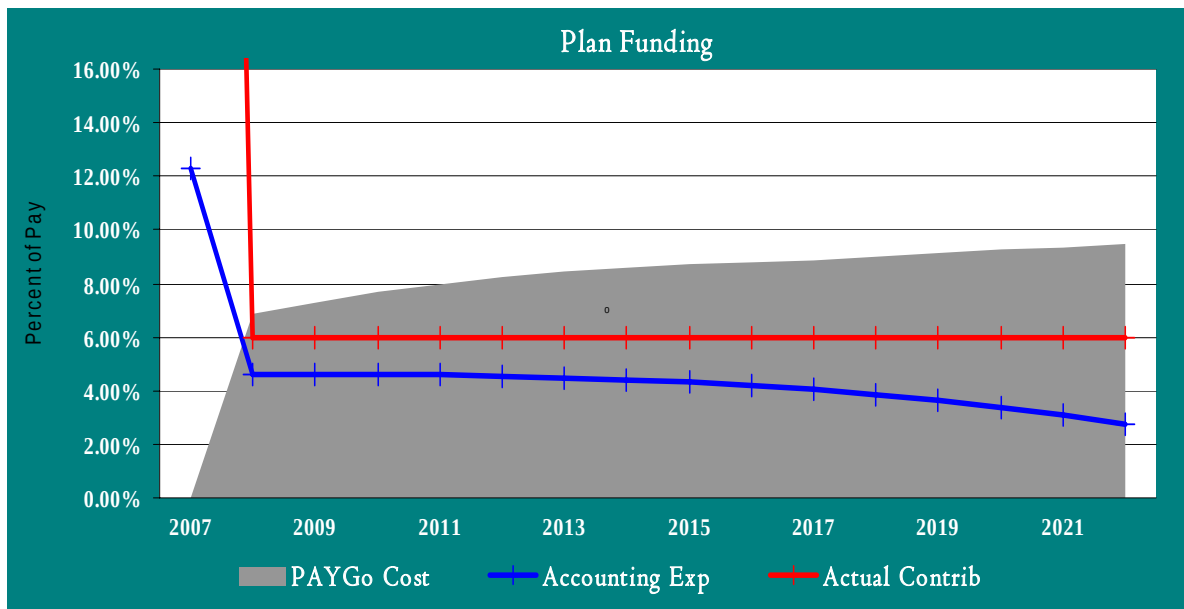
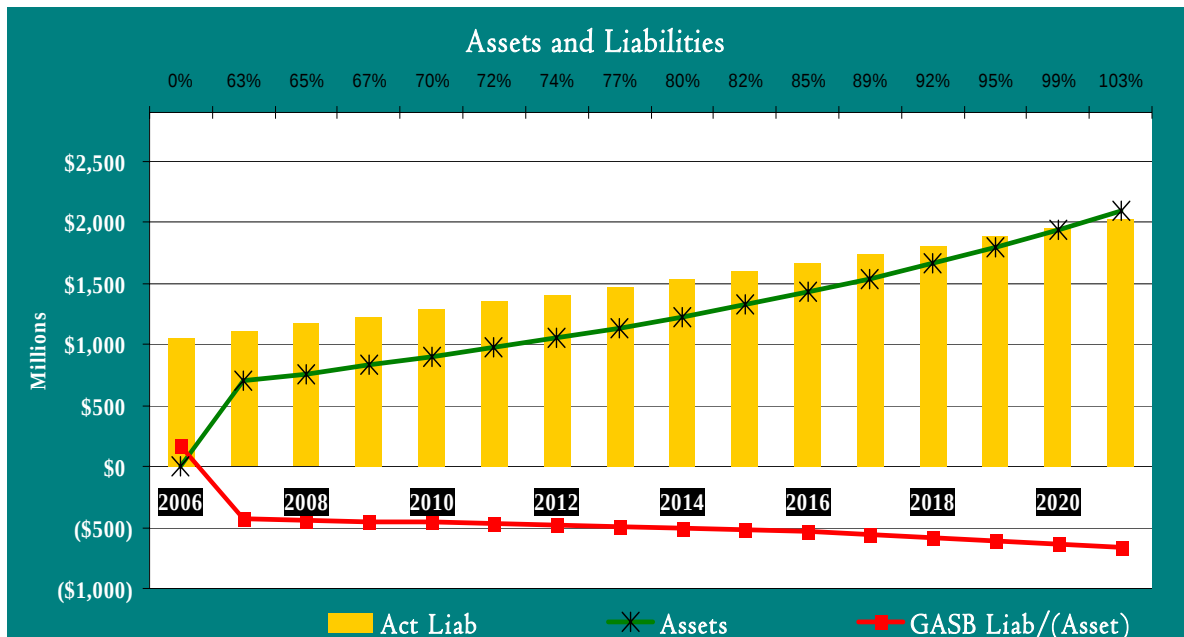
This is the “baseline” scenario, using the assumptions used for the June 30, 2006 actuarial valuation of the plan, including an investment return assumption of 8%. The first year shows the 2006 valuation results, the funded ratio of 0% (based on market value of assets) as there were no assets on June 30, 2006, and annual required contribution (ARC, equal to service cost plus amortization of the Unfunded Actuarial Accrued Liability) as a percent of payroll equal to 12.2%

of payroll. A large contribution of \$676 million was made in the 2006-2007 plan year that increased the funded ratio to 63% and ARC to 4.6% of the payroll in 2007. The ARC and funded ratios are projected to increase to 6.5% and 76% respectively by 2021. Actual contributions start at about 106% of payroll in 2006 and are expected to be at 6.0% for the next 15 years.



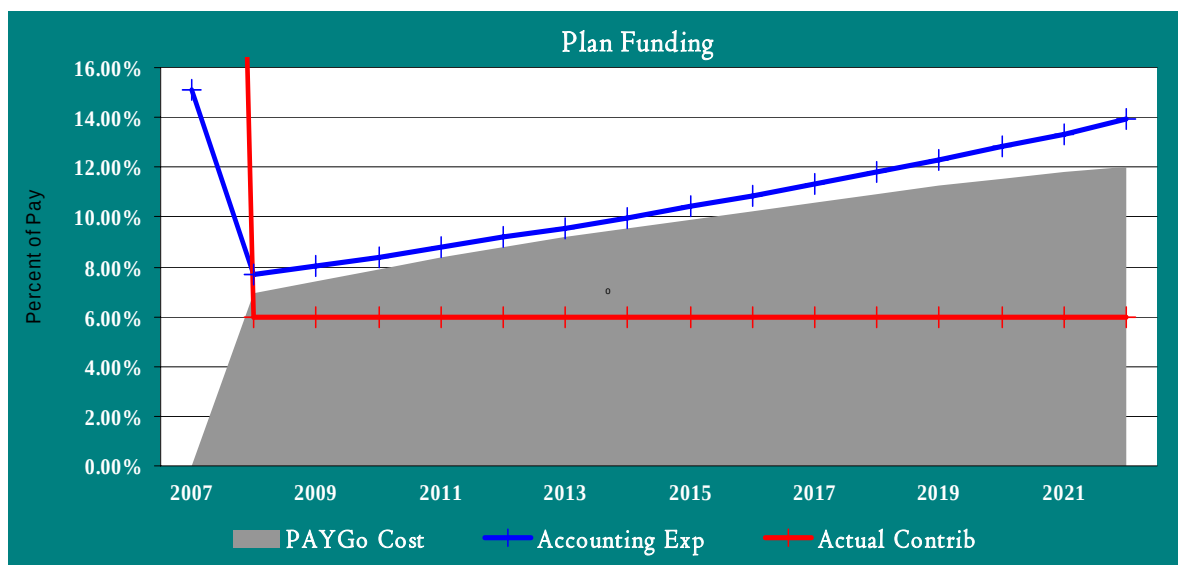
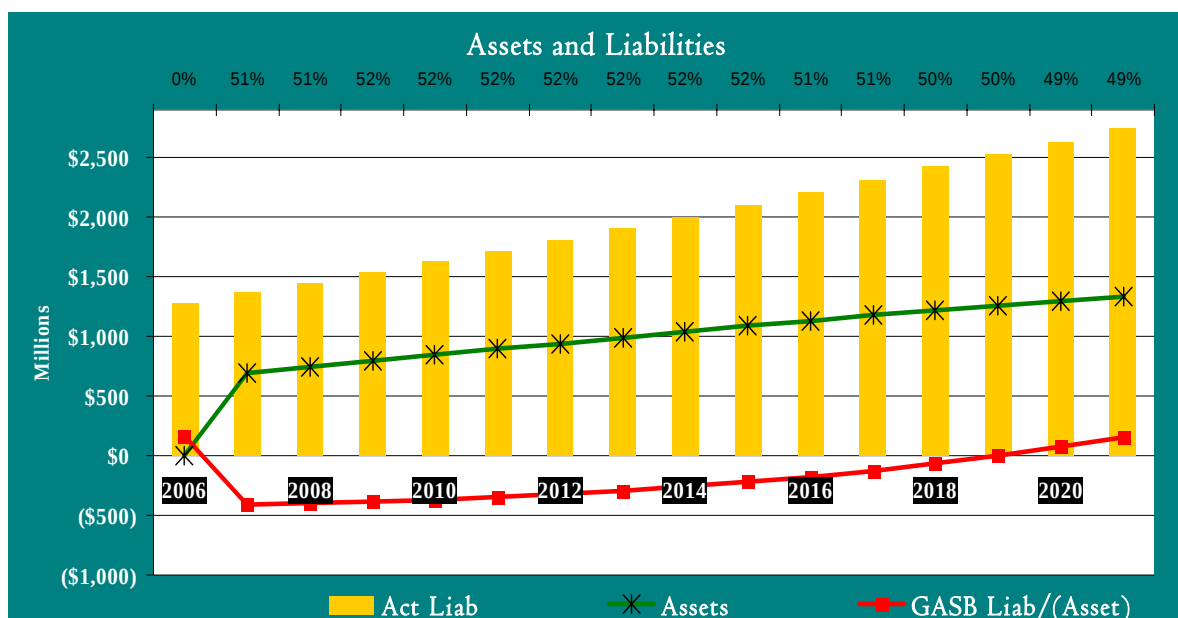
Investment Return = 6.0%

Using an investment return of 6.0% instead of the assumed 8.0%, the funded ratio decreased to 56% after 15 years, and the annual required contribution is at almost 10.0% of payroll.



Investment Return = 10.0%

Using an investment return of 10.0%, the funded ratio increased to 103% after 15 years and the annual required contribution is at about 3.1%.



Medical Inflation Grades to Ultimate Rate of 5.5% Over 15 Years

Based on medical inflation at 10% the first year, grading down to 5.5% in 15 years, the funded ratio decreases to 49% and the annual required contribution is at 14.0% of payroll.

Task Area 5 – Administration

5a. Investment Costs

1. Costs for Investment Managers

Principles

Investment manager fees are determined as a part of the search and hiring process. Most investment managers maintain set fee schedules, typically with break points applying lower fee rates to assets above particular levels. This results in lower average fees for larger accounts. While the explicit fee tables may be negotiable, often they are not if only because other clients may have negotiated fee provisions providing for parity with similar clients (e.g., a “most favored nation” clause). In addition, fees can vary significantly by the capitalization size (e.g., small cap accounts are generally more expensive than large cap accounts) or the style of the account.

Competitiveness of fee schedules is a complex matter. Data is predominately available only from surveys or inquiries of other managers either obtained directly or through an investment consultant who maintains such data. This research can generate a range in which similar managers set their fees, but cannot identify the one “right” fee. At best it can identify outliers and give comfort that the fee is competitive. Ultimately, though, the goal is to achieve a net return, so a savings from lower fees could be more than offset by poorer returns.

Partnership fees for private equity, real estate, oil and gas and hedge fund limited partnerships are generally not negotiable for a fund, unless the fund is able to negotiate some sort of side letter agreement. Certain strategies are more labor intensive than others and private equity is typically considered to be very labor intensive. It is not unusual for the fee schedule to be reduced in the later years of the partnership. Most partnerships also have some form of carried interest where the General Partner will receive a certain percentage of profits (typically 20%) after some agreed to preferred return is earned by the Limited Partners.

a. A Note on Performance Fees

Performance fees are common, perhaps universal, in alternative asset structures such as hedge funds, private equity and private real estate. They are less common for managers following strategies investing in long-only positions in publicly traded securities. There are several reasons why performance fees are not commonly used in these strategies. Among the common criticisms are:

- Performance fees do not succeed in “incenting” managers to generate better returns (and may only encourage greater risk-taking on the manager’s part);
- Managers are already motivated to earn superior returns under a traditional percentage of assets fee because as the market value of an account grows, the manager’s total revenue from the account increases;
- Performance fees are more complicated to negotiate, to calculate and to monitor;
- Performance fee structures in practice prove not to be robust or sustainable (generally because either party may prefer to “drop out” during the term of the agreement if its effect is perceived to be adverse);
- The structure of these fees is rarely symmetrical (managers are typically rewarded for producing an excess return, but not as often penalized for underperformance and rarely to the same degree); and
- The appropriate reward for strong performance is the continuation of the business relationship, while the ultimate penalty for weak performance is the termination of the manager’s services.

An effective performance fee should carefully define the period over which returns are calculated. The formula should link performance over multiple periods (as opposed to individual years) so that the investor is not paying a performance bonus for one good year when a manager’s returns in other years failed to meet expectations. Techniques to accomplish this requirement include the use of a “high water mark” whereby a manager is rewarded only if performance over the entire life of the contract exceeds expectations (and not for temporary bursts of outperformance followed by periods of underperformance). Alternatively, payment of a performance bonus could be made contingent on the manager meeting expectations over rolling periods, requiring sustained success, rather than episodic or short lived success.

The question as to whether performance fees for traditional investment approaches are financially beneficial remains open. Consideration of such a structure should be undertaken not only when a manager is hired, but periodically during the manager’s tenure to reconfirm that the fee structure – whether or not the performance component was triggered – is on a net basis beneficial.

Risks

A system that does not monitor its asset management fees risks paying higher than necessary investment management program costs and reducing its overall net return.

Observed Conditions

We reviewed several WPERP manager fee schedules against broad market surveys and found the fees to be within reasonable expected ranges. We note that hiring fewer managers and placing more assets with them will generally result in lower fees, although fee alone may not be the determinate for the number of managers to employ (see Section 3g–Investment Structure).

Table 5a-i	WPERP External Management (cost in basis points) as reported by WPERP to CEM	Third Party Survey: Median Published Fees* (cost in basis points)	2006 Greenwich Associates Survey Fees Paid to Outside Mgrs: Public Funds over \$5 billion
Domestic Equity: Large Cap Passive	.8	6.0	2.4**
Domestic Equity: Large Cap Active	34.5	42.0	33.4
Domestic Equity: Small Cap Active	66.0	63.0	#
International Equity: Active	36.6	70.0	40.8
Emerging Market Equity: Active	92.4	100.0	60.6
Domestic Fixed Income: Active	11.4	21.0	18.2
Fixed Income: High Yield	48.6	#	#
Active Real Estate	66.0	#	#
Hedge Fund of Funds	87.5 Base (7.5% of Profits)	#	#
Private Equity	85.3	#	#

* "Casey , Quirk & Acito Institutional Product Review", December 31, 2003

** 2006 data

data points not surveyed

As detailed above, WPERP generally paid less for external management than the published fees reported by the third party survey and the Greenwich Associates Survey. The Casey, Quirk & Acito survey reports published fees, which are frequently higher than actual, negotiated fees, but the Greenwich Associates survey reports are based upon actual account data.

The one asset class listed in the table above where WPERP paid significantly more than the Greenwich Survey peer group is emerging market active equity. The emerging market active equity fee differential compared to the peers of the Greenwich Survey is significant, but less than the Casey, Quirk & Acito survey. IFS learned in interviews that going forward WPERP intends to increase its allocation to emerging markets. This increase in assets may lower the overall fees paid if assets are given to the Fund's current managers, due to the graduated fee schedule

It is difficult to compare real estate fees since they include many different types of fees such as asset management fees, property acquisition fees, incentive fees and property management fees. Here too, fees will vary by fund strategy type and stage. WPERP's weighted average of 66 basis points is lower than what IFS typically sees in core real estate funds. This weighted average fee does not include performance fees for a couple of the mandates, which can significantly raise the overall fees paid. Additionally, given the potential restructuring that may occur under Courtland, IFS would expect fees to increase going forward.

It is also difficult to compare fees for the alternative asset managers in private equity and hedge fund of funds. IFS has found hedge fund of funds to charge a base fee between 80-150 basis points with some charging incentive fees of 10-20% of profits above a risk free rate. The current Fund of Hedge Fund manager's base fees are within this range and on the lower end of the incentive fees. The investments in the private equity fund of funds average 85.3 basis points. IFS has found the fee structure to vary widely depending on the underlying type of investments. IFS has found some managers that charge a flat fee along with others that charge a base plus a percentage of profits. The current fee structure for the private equity fund of funds appears to be reasonable.

Overall, WPERP fees paid to WPERP investment managers appear reasonable. However, please see Section 2.j on Opportunities for Enhanced Efficiency and Effectiveness. When considered together, the members of the three City pension funds spend significantly more than would be necessary if the three City pension departments were consolidated.

b. Cost for the General Investment Consultant

Principles

The majority of public pension funds and public investment entities utilize an investment consultant. Although the investment consultant's role varies from fund to fund, the role typically includes advising on investment policy and guidelines, assistance with asset allocation, evaluating additional investment strategies and types of assets, selection and monitoring of investment managers and measuring and evaluating risk and return for the overall portfolio, each asset class and each investment account.

The level of reliance on the investment consultant also varies from fund to fund. The consultant's role, responsibilities and reporting lines of authority should be defined contractually.

Consultants provide a variety of information that helps directors, Board members, and staff make better investment decisions. If there are gaps in that information, the fund's leaders may be unable to make effective and successful decisions. Good investment consulting advice requires consultants with broad and deep experience in the areas of capital markets behavior; asset allocation theory and practice; investment strategies, processes and techniques; brokerage practices; custody services; investment performance measurement; pension fund governance; and presentation skills.

Risks

A fund without a consultant operates in an isolated environment without the third party vetting provided by a consultant or their competitive intelligence from direct experience with other funds. A fund without a consultant must develop its own research and services and does not access the cost savings that a consultant provides for services developed for and supplied to its many customers (performance reports, research on investment issues, etc.).

Observed Conditions

As of December 31, 2007, WPERP used one investment consultant as its General Consultant, Real Estate Consultant, and Alternatives Consultant. IFS has learned that WPERP recently hired Courtland as a real estate consultant and now uses PCA for General Consulting and Private Equity consulting. The services to be provided by PCA and fee levels are specified in the contracts, with fees fixed in dollar terms and covering all services.

Per each contract, annual fees paid for these consultants are:

- PCA (general consulting) - \$269,300;
- PCA (private equity) - \$329,300; and
- Courtland (real estate) - \$190,000.

Greenwich Associates 2006 Survey indicates that public pension funds with over \$5 billion in assets used an average number of 1.6 consultants. Going forward, WPERP will be comparable to other funds of its size, given the hiring of Courtland. In our experience many funds involved with real estate and private equity use specialized consultants in addition to a general investment consultant, especially when they invest directly in limited partnerships (rather than fund-of-funds).

The 2006 Greenwich Associates report shows investment consulting fees for public funds with over \$5 billion in assets paid an average of \$344,000 in 2006 or 0.3 basis points on total assets for each consultant. Based on a 0.3 basis point scale, PCA's fee appears slightly above average, but given the scope of work in PCA's contract, IFS finds this to be a competitive fee. PCA also serves as the Fund's private equity consultant. IFS has found private equity consulting fees to vary depending on the type of investment structure. Based on IFS' experience, consultants who have discretion to make direct investments into private equity investments may charge from approximately \$900,000 to \$1,800,000 for their consulting services, whereas consultants who recommend fund of fund structures charge significantly less (\$300,000 - \$400,000). When considering the consulting services PCA provides for private equity, these fees seem to be in line with the industry averages. Courtland was recently hired as the Fund's real estate consultant. IFS has found that real estate consultants typically charge about \$225,000 for accounts the size of this plan. Based on that number, WPERP appears to be paying a lower than average fee for this service.

Overall the consulting expense WPERP incurs seems reasonable. Consulting services, even more than investment management services, are sufficiently unique for each provider and each client that there is no feasible means to determine their reasonableness in absolute terms. All current consulting contracts are for terms not exceeding three years. This is a reasonable interval for revisiting the quality and cost of investment consultants.

5b. Appropriateness of Administrative Costs

Our focus in analyzing other costs is on the reasonableness of the cost compared to other public funds with similar characteristics. In particular, we think it makes sense to compare WPERP to LAFPPS and LACERS because of the similarities between the pension Departments and the relevance to City and pension department management.

Analysis of expenses cannot be done in a vacuum and we discourage the readers of this report from taking liberties with the figures in Table 5b-ii, below. For example, Line 23, Custody is typically a significant cost for a public fund. Our detailed analysis in Task Area 3h above of the WPERP custody relationship with BNY/Mellon Bank explains the general nature of custody in relation to the specifics of the WPERP custody arrangement. Often custody is paid through income from a fund's securities on loan as is the case for LACERS and LAFPPS. However, WPERP pays for custody directly. The cost of custody for WPERP is \$143,222 for the calendar year 2007. This cost is reasonable to high at approximately 1.9 basis points compared to the universe average of 1.05 basis points for funds in the \$5 to \$10 billion range.

Another example where comparisons are not exactly 'apples-to-apples' is in administrative costs and benefits paid. The three Departments have very different benefit plans and membership, i.e., utility personnel, versus safety personnel, versus general employees. For example, LAFPPS has a multi-tiered structure and administers a Deferred Retirement Option Plan ("DROP") plan. Their more complex structure can explain why their Total Administrative Cost per member is greater than LACERS and WPERP, but because LAFPPS assets are larger, its Total Administrative Costs in basis points is still favorable when compared to the average of its peer group (please see Table 5b-ii below). The simpler benefit structure and smaller asset pool at WPERP can also partially explain why its other costs are lower than LAFPPS and LACERS. Considering that WPERP also administers a complex disability benefit and requires calculations under both Defined Benefit and money-purchase formulas would indicate operating at high level of efficiency on the part of WPERP. On a per retiree/beneficiary basis, WPERP's benefits paid are about 25% less than LAFPPS' benefits and about 18% more than LACERS'. Police and fire funds compensate safety personnel at higher levels to encourage employment in dangerous jobs and incur higher retirement costs.

Further, while attempts are made by analytical measurement firms to create an objective cost driver or relationship base, e.g., Average Assets or Number of Members, the application of these drivers and interpretation of their relationship to cost and, ultimately, their usefulness, is subjective. Also, many of these administrative costs are so small relative to the asset pool that the rule of thumb commonly applied is that they are less than one basis point of average assets. Legal, Audit, Custody and Actuarial costs are all under one basis point of average assets.

Table 5b-i: Administrative and Other Costs Analysis							
Line		June 30, 2005	June 30, 2006	June 30, 2007	WPERP Average	LAFPPS Average ¹	LACERS Average
1	Beginning Assets (\$mil.)	6,039.86	6,255.92	6,576.52	-	11,390.98	8,201.10
2	Ending Assets (\$mil.)	6,255.92	6,576.52	8,127.13	-	12,495.76	9,293.48
3	Average Assets (\$mil.)	6,147.89	6,416.22	7,361.82	6,641.98	11,943.37	8,747.29
4	Investment Earnings (\$mil.)	425.72	516.48	1,073.19	671.80	1,189.76	1,042.39
5	Simple Return on Avg. Assets*	8.27%	8.05%	14.58%	10.11%	9.96%	11.92%
6	Investment Management Cost (\$mil.)	10.20	14.450742	17.397363	14.02	34.28	18.66
7	External Investment Management Cost (bps)	-	-	-	21.11bps	28.53 bps	21.66 bps
8	Ratio of Inv Earnings to Benefits Paid	-	-	-	1.95:1	1.96:1	2.23:1
9	Number of Pensioners and Beneficiaries	9,252	8,807	8,783	8,941	11,781	14,343
10	Active Members	9,364	9,407	9,528	9,433	12,736	27,755
11	Total Members	18,616	18,214	18,311	18,380	24,517	42,098
12	Benefits Paid (\$mil.)	329.104	344.949	357.427	343.83	606.45	467.11
13	Benefit Paid Per P/B	-	-	-	\$38,455	\$51,474	\$32,553
14	Admin. Cost (\$mil.)	3.459	4.024	4.254(e)	3.91	9.43	11.36
15	Tot Admin. Cost in Bps	-	-	-	5.81	7.93	13.05
16	Tot Admin. Cost/Member	-	-	-	\$213	\$385	\$270
17	Personnel Cost per Member	-	-	-	\$160	\$269	\$182
18	Department Positions Filled (varies during the year)	44	46	48	46	85	111
19	Personnel Cost per Position			\$63,077	\$63,805	\$78,626	\$69,270
20	Personnel % of Total Admin. Cost			74.13%	75.0%	69.9%	67.6%
21	Legal Cost per Member	insig	insig	insig	insig	\$20.09	\$14.49
	One Basis Point Equivalent on Avg. Assets				\$664,198	\$1,194,300	\$874,700
	Administrative Cost Breakdown (rounded):	2005	2006	2007	WPERP Average	LAFPPS Average	LACERS Average
22	Legal	4,816	-	-	1,605	492,519	611,000
23	Custody (Cal. Yr. for WPERP only)	126,657	135,998	143,222	135,292	0	0
24	Audit	24,500	26,000	94,000	48,167	80,000	85,333
25	Actuarial	68,000	54,000	54,000	58,667	80,400	148,333
26	Personnel related	2,760,133	2,891,199	3,153,829(e)	2,935,054	6,592,524	7,680,667
27	All other admin. costs	474,816	916,637	809,408	733,620	2,188,227	2,832,830
28	Total	3,458,922	4,023,834	4,254,459	3,912,405	9,433,669	11,358,163

¹ The average for LACERS and LAFPPS is for the three years ended June 2006.

Observed Conditions

Taken at face value alone, WPERP's costs compare favorably to the other LA funds and to a group of peers. However, because of the differences and complexities of the pension Departments' programs, face value comparisons are not a basis for drawing conclusions.

A commonly used measure of the reasonableness of Total Administrative Costs for a public fund is the cost at comparable sized funds relative to assets managed as measured in basis points. Using published financial information at year end (2006²), Table 5b-ii provides the comparison:

Table 5b-ii

Fund	Admin. Exp. (\$Mil)	Assets (\$Bil)	Basis Points
Kansas PERS	7.719	15.916	4.85
WPERP	3.296	6.416	5.14
OK TRS	4.425	8.797	5.03
Arkansas TRS	5.992	10.112	5.93
ID PERS	7.308	10.809	6.76
LAFPPS	9.617	13.946	6.90
IN TRF	6.726	9.093	7.40
NM PERA	10.207	12.875	7.93
ME ERS	9.535	9.582	9.95
LACERS	12.207	9.074	13.45
OH School Employees	18.900	11.176	16.91
OH Police & Fire	15.029	8.560	17.56
LASERS	16.042	8.130	19.73
Average	9.77	10.346	9.44

Perhaps most significant is the fact that WPERP has a lower overall administrative cost structure than any fund except KPERS. There is a good side and perhaps a not so good side to this observation. While WPERP is almost the lowest of the group of 13 similar sized funds, there may be justification to increase its overall administrative cost structure. The question of 'where' to increase is relative to the Department's programs, mission and objectives and cannot be determined in a vacuum. WPERP could increase administrative cost spending by \$2 million annually and still be at the average of this group of pension funds. (We are not recommending that.)

Personnel and total administrative costs for WPERP are also notably the lowest of the three LA pension departments. This may indicate understaffing and perhaps, as a result, a lower level of service to members. It is assumed generally that administrative cost expenditures usually translate directly to the level and quality of service provided to members. The overall level of

² 2006 provides a better comparison than using 2007 because of the Retiree health fund established at WPERP in 2007 and because the peer fund figures are from 2006.

cost almost certainly derives from a pension fund's philosophy on the delivery of services and on the economic environment and constraints within which it operates. Perhaps WPERP needs to increase its resources to provide service enhancements to its members, although it has only about 44% of the number of members in LACERS and 76% of the number belonging to LAFPPS.

There's no simple answer when it comes to determining the appropriate level of administrative costs and the cost structure; and mathematical averages of what other comparable funds spend serve only as benchmarks. Given that personnel costs comprise about 75% of WPERP's total administrative expenses (compared to about 2/3 at the other pension departments), one may deduce that WPERP may need to spend more on other-than-personnel resources such as professional services, tools and systems.

In conclusion, while we observe that there may be some justification for WPERP to increase certain administrative expenses; this should be explored in keeping with several other related areas of discussion and recommendations in our report. Increased costs of services must be evaluated in terms of the expected increase in the level and quality of services and investment risk and returns.

Task Area 5b Recommendation 1

The current cost of WPERP's administrative expense in raw dollars is well below the average for similar sized funds and should be reviewed by the Board in conjunction with a plan to review its quality of service and areas for service improvements.

* * * *

Exhibit A

Exhibit A

Summary of Recommendations

Set forth below are summaries of all the recommendations from the Report. They are listed in the order they appear. The Task Area of each recommendation or related series of recommendations is set forth below as well, for ease of reference.

Number	Recommendation	Page
Task 1a: Governance Standards		
1	<i>So as not to conflict with the Board's plenary authority, WPERP, supported by the Department of Water and Power, should seek, through legislation, an amendment to Section 1106 of the City Charter to add the establishment and final approval of the budget as one of the specific powers and duties of the WPERP Board. In the interim, we recommend that the Board of Administration seek clarification and document that the Department of Administration's budget is submitted to DWP solely for "information" purposes and may not be modified.</i>	26
2	<i>The Retirement Plan, supported by the Department of Water and Power, should seek through appropriate legislative processes, an amendment to the City Charter to, at a minimum, authorize the pension board to have ultimate decision-making authority (1) to appoint the Retirement Plan Manager and Retirement Plan staff; (2) to terminate the Retirement Plan Administrator; and (3) to set the Retirement Plan Manager's compensation at the level it deems appropriate, and set the pay schedule for the retirement Plan's staff.</i>	28
3	<i>We recommend that the Retirement Plan seek authorization to obtain one or more exempt positions, at a minimum for the Retirement Plan Manager and the CIO positions, to afford the Plan more flexibility in attracting and retaining qualified investment professionals.</i>	28
4	<i>The Department of Water and Power, supported by the Retirement Plan, should seek through appropriate legislative processes, an amendment to the Brown Act to explicitly exclude from its coverage, individual or specific investments (e.g., information related to private equity investments, information that could result in front running, etc.) so that this legal interpretation will be embedded permanently in law.</i>	29
Task 1b: Fiduciary Liability Insurance		
1	<i>The City Attorney directly or through an appropriate expert should evaluate and opine on the extent the indemnity clause applies to protect the Board of Administration and staff in situations of fiduciary breach and other situations applicable to matters covered by the professional liability policies.</i>	34

Number	Recommendation	Page
2	<i>The Department's insurance staff should confer with WPERP investment staff and the City Attorney to evaluate the desired level of both indemnified and insured protection to be afforded by the various external non-manager fiduciaries, the cost of added protection in terms of fees or other factors, and decide in each case whether to amend existing requirements by specifying levels or methods to determine levels.</i>	34
3	<i>The Department's insurance staff, city attorney, and possibly the insurance broker and/or others should hold a closed training session for Board members to educate them on the totality of protections and exposures applicable to their service to WPERP, including clear descriptions when and how protection is limited.</i>	35
Task 2a: Board Governance – Policies, Practices & Procedures		
1	<i>We recommend that the Board of Administration support legislation requiring that one or more of the Board members be a person with investment, finance or accounting expertise.</i>	42
2	<i>We recommend that the Board consider the advisability of seeking legislative authority to allow ex officio members to designate a representative to attend board meetings in their stead, if and when necessary.</i>	42
3	<i>The Board should evaluate the Retirement Plan Manager annually and adopt a formal evaluation process that sets forth the process, guidelines and criteria that will be used by the Board in its annual review and evaluation of the Retirement Plan Manager.</i>	42
4	<i>The Board of Administration should institutionalize a board self-evaluation process and commit to performing a board self-evaluation annually. We encourage full board participation in the self-evaluation process. The Board of Administration should conduct the board self-evaluation immediately prior to conducting its annual review of the Retirement Plan Manager.</i>	43
5	<i>The WPERP Board should consider holding an annual off-site board meeting(s) to discuss long-range issues that affect and have an impact on the pension fund, to discuss strategic planning initiatives and to review and discuss any other issues that the Board deems appropriate. In addition, the Board should include educational training sessions at the annual off-site meeting(s).</i>	44
6	<i>We recommend that the Board of Administration create charters describing the roles and responsibilities for each of its three committees and any committees established in the future so that the Board's expectations are documented and clearly understood by committee members. We also recommend the committees report to the Board monthly as required by the plan documents.</i>	45
7	<i>The Board should create one or more formal delegations of authority to the Retirement Plan Manager. The delegation should include, at a minimum, responsibility for: (1) managing the day-to-day administration of the pension fund; (2) employing, supervising, monitoring, and evaluating senior managers and staff, as delegated, (3) providing services to beneficiaries; (4) budgeting; (5) governmental affairs/media relations; and (6) employee training and development.</i>	46

Number	Recommendation	Page
8	<i>We recommend that all committee recommendations be reported to the Board in the form of a formal motion or resolution. We further recommend that each committee charter contain a requirement that all committee recommendations to the Board be done through formal motion or resolution.</i>	46
9	<i>We recommend that the Board revisit the work done by Cortex (assuming it is documented) and, to the extent appropriate, use those materials as a starting point for developing written documentation to form a comprehensive governance framework.</i>	50
10	<i>We recommend that the Board of Administration, with the assistance of staff and the consultants, if necessary, develop a Governance Statement for the Plan. The Governance Statement should be a detailed document that clearly defines the specific authority, roles and responsibilities of and among the Board of Administration, the Water and Power Board of Commissioners, and the General Manager of the Department of Water and Power and describe who has authority over whom and who is responsible for what and when. The Governance Statement should identify the roles and responsibilities of key staff (including the Chief Investment Officer and the pension fund's portfolio managers) and the pension fund's service providers (including the general investment consultant and legal counsel).</i> <i>The Governance Statement should also incorporate goals and objectives for the Retirement Plan Manager, which will add clarity to the role of the Retirement Plan Manager among the Board, the staff and the Department of Water and Power. Finally, the Governance Statement should include written delegations and limitations of authority, which we discuss in more detail in Section 2a.3. Board Delegations.</i>	50
11	<i>Once the Governance Document is completed, we recommend that the Board hold a general educational training session on its governance policies, procedures and practices.</i>	50
12	<i>We recommend that the Board, in conjunction with the City Attorney and/or fiduciary counsel, (1) collect and review all of the Board of Administration's' investment-related governance policies and procedures; (2) adopt a Standard Operating Procedures Manual that consolidates in a single location, the fund's internal investment-related policies, procedures, determine what revisions need to be made and revise the documents accordingly; (3) determine where new policies are required, and (4) develop appropriate new policies and procedures.</i>	50
13	<i>To facilitate monitoring and oversight of the Board's investment-related policies and procedures, the Board's Governance Policies should include the dates of adoption, provisions for review of each policy or procedure, with frequency of review dates (e.g., this policy shall be reviewed no less than every three years) and include the dates of any subsequent amendments of the Policies.</i>	50

Number	Recommendation	Page
14	<i>We recommend that the CIO (or designee) develop day-do-day functional position descriptions for each investment position. Functional position descriptions that describe in detail the daily, weekly, monthly and annual duties and responsibilities of each member of the retirement system staff will increase job efficiency and accountability. The current civil service "duties" statements can be used as a starting point for this process.</i>	51
15	<i>The Board of Administration should develop and adopt a Strategic Plan that covers the fund's goals and objectives for the one year, three year and five year periods, at a minimum. Also, among other things, the Strategic Plan should include a mission statement, the Board's set of core values, the Board's goals and objectives and timelines for completion of its goals and objectives. In addition, annual strategic plans should be developed for each asset class. In response to our draft report, staff indicated that short and medium term goals have been developed.</i>	52
16	<i>The Board should ask the City Attorney to update the May 10, 2000 memorandum and distribute it to the Board members.</i>	54
17	<i>We recommend that staff work with the City Attorney (and outside counsel, if appropriate) to develop a "new member" orientation handbook. At a minimum, the handbook should include relevant laws, rules and regulations relating to the pension fund; relevant board policies and procedures, including the proposed Ethics Policy; Board Charters and Delegations; the budget and the Annual Report. Key staff and the City Attorney should also set aside time to meet with new board members and address any questions they may have regarding membership on the board.</i>	55
18	<i>The Board should periodically hold compulsory educational sessions (for current and new trustees) for the purpose of becoming more knowledgeable about the governing documents applicable to the administration of the pension fund and the investment of pension fund assets, including but not limited to the provisions of Proposition 162, the City Charter, as amended, the Brown Act, the Board's Investment Policy Statement, and any reporting and disclosure requirement applicable to the Board. In response to our draft report, staff indicates that some training is provided by the consultant and the retirement plan manager and that fiduciary training is provided.</i>	55
19	<i>We recommend that staff work with the City Attorney and fiduciary counsel to develop a formal new member and a formal continuing education program for board members. The program should include a fiduciary training component. In response to our draft report, staff indicates that Board members have a training schedule and budget.</i>	55
20	<i>The Board should direct staff to develop, in conjunction with the Board's general investment consultant, more educational seminars on investment strategies and products and risk management, as directed by the Board. In response to our draft report, staff indicates that educational seminars on investment strategies and products and risk management are provided to the Board; however, as noted</i>	55

Number	Recommendation	Page
	<i>above, the Board is not satisfied with the current level of training and we recommend that the educational program be enhanced.</i>	
21	<i>We recommend that the Board of Administration adopt a Travel and Education Policy that includes written travel guidelines and approval requirements, which is consistent with best practices. The policy also should include provisions for conference pre-approval and Board of Administration members should be required to present a report regarding the subject matter of the conference following attendance. To facilitate the ability to monitor the Board's and staff compliance with the rules regarding travel, and the members' ability to select appropriate conferences for their knowledge level, the Board of Administration should prepare a list of "pre-approved" conferences and identify the educational level of the conference (e.g., fundamental, intermediate, advanced).</i>	55
22	<i>We recommend that the Board require that staff prepare an annual Travel and Education Report for the Board of Administration's review that summarizes Board member travel for the year. The Travel and Education Report should include: the number of board member(s) and staff that attended, the names of the attendees, and the total amount of expenses incurred in connection with participation at each conference. We recommend that the Board also consider limiting the number of conferences an individual trustee can attend in a given year and allowing members to attend more than the maximum number of conferences only with the approval of the Board. The current report entitled "Management Audit: Board Members' Attendance to Investment Seminars and Conferences and Educational Presentations – September 2006–March 2008 is a good starting point and should be broadened to include the costs (including fees and expenses) associated with each conference. As mentioned earlier, all costs relating to attendance and participation in conferences and seminars should be pre-approved by the Board. (Costs and fees could also be recorded in a separate document, such as a board resolution.) We also recommend that the staff prepare an annual report of Board and staff attendance at educational seminars, conferences and internal/external presentations for the Board's review.</i>	56
23	<i>We recommend that the City Attorney provide clarity on the issue of when and under what circumstances a Board of Administration member may accept reimbursement of travel and related expenses from a third party. Following resolution of this issue, reimbursement provisions should be incorporated into the Travel Policy. The Board should make the establishment of a policy addressing the permissibility and specific criteria associated with third party payment (or reimbursement) of Board member and staff travel a priority. It is our understanding that this issue is under review by the City Attorney.</i>	56
24	<i>The Education and Travel Policy should require investment professionals to participate in both internal and external continuing education and training relevant to their particular area or an area in which they may be crossed trained. We also encourage retirement system staff to maximize internal training and</i>	56

Number	Recommendation	Page
	<i>sharing of information through, for example, brown bag lunch sessions and attendance at approved conferences or programs.</i>	
25	<i>The Education and Training Policy should clarify what educational opportunities are available to retirement system staff and the reimbursement policy.</i>	56
26	<i>The Board of Administration should review the Staff Education and Travel Policy in light of Recommendations 17-25 above.</i>	57
27	<i>We recommend that the Board adopt a formal, tailored Ethics Policy and ensure that both board members and staff receive Ethics training relating to the new Policy. (This training should be in addition to any training that is done in connection with the City's Ethics Code.) The Ethics Policy should describe Board member and staff relationships and/or actions that may give rise to actual or perceived conflicts of interest. The Policy should also clarify the legal and regulatory framework in which the Board is operating with respect to conflicts of interest, starting with the Political Reform Act of 1974 and the Government Code and related regulations; define and clarify terms used in the Policy, clearly delineate prohibited activities; include annual reporting and disclosure requirements; and include an oversight and monitoring protocol.</i>	60
28	<i>The Board of Administration should, with the assistance of the City Attorney, develop a comprehensive conflict of interest and disclosure policy for its service providers and incorporate an annual certification requirement into the policy.¹ The Board of Administration may also wish to clarify in the policy whether the City's lobbying laws apply to service providers.</i>	60
29	<i>With respect to the conflict of interest and disclosure policy for service providers, we recommend that the Pension Board require that consultants disclose, at a minimum, any personal or business relationships with members of the Board or administrative staff of the retirement system; and personal or business relationships (monetary or otherwise) with the fund's managers or consultants. The Policy should also require that consultants disclose in the RFP or other solicitation any payments for placement services to any person, firm or entity with respect to the contracting opportunity. These requirements are a very good starting point for a more comprehensive policy.</i>	60
30	<i>The Board of Administration should establish a formal written securities litigation policy that memorializes the Board's philosophy and policy considerations regarding all aspects of the securities litigation case review, evaluation and on-going monitoring of potential cases. The policy should include procedures for filing proofs of claim, monitoring securities litigation claims, and managing the claims collection process, which should include periodic auditing of claims collections. Finally, the policy should also include a protocol for determining whether or not to opt out of a securities litigation case.</i>	64

¹ Sample conflict of interest protocols for third-party consultants, sample guidelines for internal review of conflicts, sample guidelines relating to provisions (for inclusion in contracts and requests for proposals) and sample disclosure forms for third-party investment consultants and managers are provided at Exhibit B.

Number	Recommendation	Page
Task 2b: Organizational Structure		
1	<i>WPERP benefits management should identify roles and assign responsibility for establishing appropriate procedures within for protecting the privacy and security of member records and data. If the role currently exists, communicate to the organization, along with current policy on privacy and security.</i>	71
2	<i>WPERP benefits management should identify roles and assign responsibility for monitoring and ensuring compliance with regulations and laws that apply to WPERP (such as data privacy and protection). If the role currently exists, communicate to the organization.</i>	71
3	<i>WPERP benefits management should identify roles and assign responsibility for the development, regular revision and maintenance of a business continuity plan for WPERP. If the role currently exists, communicate to the organization.</i>	71
4	<i>WPERP benefits management should consider establishing a Call Center as a single contact point for members if call volume justifies it.</i>	71
5	<i>WPERP benefits management should ensure that the consultant engaged to revise workflows has a scope that includes reviewing the organizational structure and work distribution that will maximize efficiency and service levels post Penfax implementation.</i>	71
6	<i>WPERP benefits management should continue to evolve the web site as a source of benefit, counseling, and self-service resources.</i>	71
Task 2c: Organizational Efficiency and Effectiveness		
1	<i>Management should develop an assessment tool for measuring the effectiveness of group, individual, and self-service counseling tools.</i>	79
2	<i>Management should consider developing "Important Fact" checklists for use in counseling sessions to alert members in writing <u>of the potential impact of specific decisions</u> they are making that can impact their benefits or the benefits of their survivors or partners to minimize member confusion. Maintain a signed copy of the checklist in the member's file.</i>	79
3	<i>Management should clarify the status of the Penfax implementation, including who will have responsibility for end user training and support responsibilities, and communicate current project to the organization.</i>	79
4	<i>Management should establish transaction cost and other performance metrics to measure organizational efficiency.</i>	79
5	<i>Management should consider subscribing to CEM Administrative Benchmark Data to acquire comparative efficiency data.</i>	79
6	<i>Management should establish internal and member based instruments for assessing quality of service delivery, and monitor and track trends over time.</i>	79

Number	Recommendation	Page
7	Management should establish service delivery metrics and track and monitor service delivery performance over time, including department and individual efficiency and error rates in order to improve benefits administration efficiency and effectiveness.	79
8	Management should assign a strong project manager to the process documentation project; set firm deadlines; and bring this project to completion. This will help WPERP capture institutional knowledge and provide a baseline for maintaining stable operations.	79
9	Management should develop a long term staffing plan that identifies likely retirement dates of key personnel, and institutes a program to capture the institutional knowledge of these long-term employees.	80
10	Management should develop a formal cross-training program to ensure that there is a designated backup employee with the skills and training to fill any critical gaps caused by normal or unexpected turnover or absences to the extent that this would not conflict with MOU provisions.	80
11	Management should establish formal goals and measures and metrics for each section that will capture the timeliness, accuracy, cost, and resource utilization for each key service provided.	80
12	Management should review whether Penfax will fill the role of a department wide case/transaction tracking system to track status, manage time to completion and backlogs, and minimize the number of places/systems where member data is stored and consider a supplemental tracking system if appropriate.	80
13	Management should prepare a department wide inventory of ad hoc spreadsheets, databases, and manual tracking systems and logs and review for backup, security and access control, and develop a plan for minimizing the number of ad hoc systems required for benefits administration. Ensure that each system is documented and backed up, and develop life cycle management plans where appropriate.	80
14	Management should develop a business continuity plan for benefits administration and the systems that support it with a regular update schedule, and communicate roles, responsibilities, and communications methods to all employees.	80
15	Management should develop a physical and electronic data security plan for benefits administration and member data.	80
16	Management should develop a specific privacy protection plan and processes to ensure that WPERP complies with applicable HIPAA and other privacy regulations.	80
17	Management should consider conducting an end to end review of benefits administration processes upon completing the current process documentation process to identify opportunities for improving efficiency and effectiveness.	80

Number	Recommendation	Page
18	Management should establish an internal quality assurance process that includes both internal self assessment and external (i.e., internal audit) assessment of each section's functions.	80
19	Management should establish performance goals and metrics for each Section Head that include both transactions-based and long term project goals and metrics, and develop a system of accountability that encourages completing both short term and long term goals.	80
20	Management should consider the addition of two to three staff positions that can provide long term project support to the sections for projects such as process documentation, scanning, and development of training programs.	81
21	Management should consider establishing a first level call center to handle routine inquiries from members. (This recommendation has also been noted under Organization Structure and is repeated here because of its potential impact on efficiency and effectiveness.)	81
Task 2d: Staff Adequacy		
1	Management should evaluate the active employee count needed to effectively process current work volumes and determine a "minimum filled" position count needed to operate effectively.	83
2	Management should consider establishing a Benefits Specialist or similar position to provide a career track within the Department to assist in retaining seasoned employees.	83
3	Management should consider developing a multi-year projection of expected transaction workloads to develop a long term staffing plan, based on examining age and time in service of current active members to estimate future workloads.	83
4	Management should consider developing a contingency plan for covering the duties of section heads and other key benefits administration personnel during temporary vacancies or while replacements are being recruited.	83
5	Management should consider creating "bench" positions of one to two benefits specialists, senior clerk typists, and other positions that typically have vacancies so that you will have "swing" personnel on staff to fill vacancies as they occur or support sections during peak demand or special transaction project periods.	83
Task 2e: Use and Sufficiency of Resources		
1	Management should consider developing formal skills and knowledge based training programs for new hires with a design objective to reduce the time from hire to effectiveness.	85
2	Management should consider establishing training in duties and processes of multiple sections for select employees to increase WPERP flexibility in assigning personnel across section boundaries to help in backlog or special project situations.	85

Number	Recommendation	Page
3	Management should clarify roles, responsibilities, and duties required of benefits administration personnel in the event of a business disruption and ensure personnel are aware of how communications will occur in such an event.	85
Task 2f: Use of Investment Consultants and Provision of Contractual Services		
1	The Board should consider expanding PCA's contract to include specific, periodic review, analysis and advice on the quality and effectiveness of, and if appropriate, selection of securities lending services; and brokerage services (e.g., assistance with commission recapture programs, trade execution measurement services, etc.).	91
2	The Board should include an annual or bi-annual asset allocation review as a specific task in the consultant's contract.	91
3	The Board should clarify the investment consultant's involvement in the compliance monitoring process in their contract and in the IPS.	91
4	The Board should review WPERP's retainer consultant at regular intervals (e.g., annually) through a formalized process on its timeliness, depth of research, understandability of their material, and their overall availability.	92
5	The Board should organize and document its periodic review of the consultant to include checking all contractual deliverables and services to ensure that the consultant performed on all requirements.	93
6	The Board should include the requirement that the consultant submit at least annually a certification regarding conflicts of interest, and that the consultant must provide notification as soon as a conflict arises.	97
7	The Board should continue to employ a private equity specialist to provide a comprehensive range of alternative investments advisory services.	100
8	The Board should continue to employ a real estate specialist to assist the Board and staff with developing and implementing the real estate portfolio.	103
Task 2g – Use of Legal Counsel		
1	The Board of Administration should seek authority to hire its own internal legal counsel, who should report to the Pension Fund Manager. The autonomy we contemplate would include the authority to decide to use the City Attorney for certain issues that do not raise potential conflicts, and as to which familiarity with California law would render reliance on the City Attorney prudent.	108
2	Prior to hiring its own attorney, the Board should evaluate the responsibilities and legal skill sets required and then evaluate the economics of hiring an in-house lawyer versus the shared expense cost of maintaining the current arrangement.	108
3	If the Board hires its own attorney, the Board should establish in its Governance Documents the scope and limits of that attorney's authority, as well as the relationship between any in-house attorneys the Board of Administration may hire and the City Attorney's Office.	108

Number	Recommendation	Page
4	<i>The Board should work with the City Attorney to develop and institutionalize, in advance, a process that will be invoked in the event a potential conflict of interest arises.</i>	108
5	<i>The Board and staff should request a meeting with the City Attorney's Office to discuss how to enhance the overall effectiveness of the services delivered by the City Attorney's Office.</i>	108
6	<i>The Board should seek the cooperation of the City Attorney's Office to establish procedures to ensure that the Board plays an integral role in determining the number of attorneys and the level of expertise of attorneys assigned to provide legal support to the pension fund.</i>	108
7	<i>Under the current structure, the Board of Administration should have more autonomy in determining when there is a need for outside legal assistance and, if a need arises, the Board should be allowed to participate in the process for selecting a law firm(s) to provide those services.</i>	109
8	<i>The Board of Administration and the City Attorney should execute a formal memorandum of understanding which specifically identifies the process for selecting and terminating outside counsel. This process should also be incorporated into the Board's Governance Documents.</i>	109
9	<i>If the current structure is maintained, the Board's Governance Policies should be revised to clearly define the role and responsibilities of the City Attorney assigned to the Board of Administration.</i>	109
10	<i>The Board should direct the City Attorney to develop a model investment contract to improve efficiency and streamline the contract review process. A number of public pension funds make use of model contracts for this very reason.</i>	110
11	<i>The Board should conduct a legal compliance review with the City Attorney's Office. Alternatively, the Board of Administration should consider establishing an internal compliance function and hire a staff to perform such responsibilities.</i>	110
Task 2h: Skill Sets and Position Descriptions		
1	<i>Management should develop job descriptions to communicate specific job duties and responsibilities to employees. The descriptions should also, at a minimum, contain the skills, knowledge, and abilities included in classification requirements.</i>	112
2	<i>Management should develop and conduct annual performance evaluations to identify and assess staff contributions and to discuss employee development needs and opportunities.</i>	112
Task 2i: Span of Control		
1	<i>Management should consider reducing the number of direct reports reporting to the Retirement Plan Manager. Typical retirement organizations have only the Assistant Retirement Plan Managers (plus, possibly, an administrative assistant) reporting to the Retirement Plan Manager to maximize the RPM's ability to focus on long term and strategic issues. (However the current reporting ratio is not excessive.)</i>	115

Number	Recommendation	Page
2	Management should consider an organization structure that has the existing Assistant Retirement Plan Manager Positions assume some of the direct report responsibilities currently reporting to the Retirement Plan Manager if the incumbents have the required skills to assume those responsibilities. This will enable the Retirement Plan Manager to focus more on strategic and long term issues.	115
3	Management should consider establishing a formal or informal team structure within sections when their size approaches a 1:10 or greater supervisor: staff ratio.	115
Task 2j: Opportunities for Enhanced Efficiency and Effectiveness		
1	With the primary objective of creating cost savings through new economies of scale, the City should consider, through appropriate legislative and administrative processes, consolidation of all aspects of WPERP's benefits administration and investment program into LACERS. Consistent with our prior management audit reports on LACERS and LAFPPS, the City and the Departments should ultimately consider combining the investment and benefits programs of all three pension Departments to maximize the savings from efficiencies and economies of scale.	119
Task 3b: Appropriateness of Investment Performance Benchmarks		
1	Going forward, if WPERP decides to make any changes to its asset class benchmarks, a subsequent change should be made to the Total Fund Policy Index as well.	137
Task 3c: Asset Allocation, Diversification, Risk and Return		
1	The Board should consider adopting the requirement to conduct a complete asset liability study every five to ten years and formally review asset allocation annually, with asset allocation studies conducted as needed. Additionally, WPERP does not participate in the R.V. Kuhns Public Fund Universe Analysis Report. The Board should consider providing data on the Plan to RV Kuhns in order to participate in this valuable analytical tool. There is no cost.	141
2	The Board should continue to ensure that its members have access to and are satisfied with ongoing training on investment issues such as asset allocation and risk metrics.	155
3	The Board should consider working with the General Consultant to develop and implement an annual risk budget for the Total Fund and each asset class.	155
Task 3d: Asset Allocation Process and Re-Balancing Process		
1	WPERP should consider adopting a SMART Rebalancing® strategy to rebalance the asset allocation.	162
Task 3e: Investment Policy Statement (IPS) and Guidelines		
1	We recommend that the Board consider rearranging the IPS so that it flows more clearly.	165

Number	Recommendation	Page
2	<i>We recommend that the Board include a distinct section on the mission and purpose of WPERP.</i>	166
3	<i>The Board should include in the IPS "meeting or exceeding the actuarial rate over the long-term" as an additional long-term investment objective.</i>	167
4	<i>The Board should include in the IPS an objective "to achieve total returns in excess of the policy index" as an additional long-term investment objective.</i>	167
5	<i>The Board should insert a discussion on risk in the IPS to describe and clarify the Board's risk tolerance, including reference to the WPERP's time horizon, liquidity needs, etc.</i>	170
6	<i>The IPS should acknowledge WPERP's level of risk with some discussion of how its risk level was developed, and include specific guidelines on how to identify and measure risk.</i>	170
7	<i>The Board should consider developing a detailed practical risk management policy/procedure document.</i>	170
8	<i>Roles and responsibilities for key parties (e.g., Board, staff, and various service providers) should be more completely documented in a separate section in the Investment Policy Statement.</i>	171
9	<i>The Board should specify in the Investment Policy Statement the timeframe for performing analysis and executing a new asset allocation and/or asset liability study (e.g., review asset allocation annually and conduct a formal study at least every five years).</i>	172
10	<i>The Board should conform the rebalancing language in the asset allocation and rebalancing sections of the IPS.</i>	173
11	<i>The Board should consider designating an Asset Allocation Benchmark as an additional Total Plan evaluation tool and document the Policy Benchmark and Asset Allocation Benchmark in the IPS.</i>	175
12	<i>The Board should outline the critical manager selection items in the manager search policy in the IPS or create a separate manager search policy document and reference it in the IPS.</i>	176
13	<i>The Board should develop custom guidelines for each applicable investment manager or account.</i>	177
14	<i>The Board should specify in the IPS which party has been delegated the responsibility of voting proxies and how they will be monitored.</i>	180
15	<i>The Board should include a discussion of securities lending in the IPS, including the broad parameters of the program.</i>	181
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2	<i>The Board should, with assistance from its Consultant, develop individual investment manager guidelines for each of its portfolios. Additionally, manager guidelines should explicitly state the fiduciary standard of care and to include proxy voting policy direction. Language pertaining to GIPS standards and volatility should also be considered in the investment manager guidelines.</i>	191
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4	<i>Management should adopt a privacy/safe policy which deals with disclosure of protected employee information.</i>	246
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5	Clarify the remaining amortization period on page 10 of the report. The label describing the 30-year amortization can be confusing.	256
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Exhibit B

California Public Employees' Retirement System
CONSULTANT CONFLICT OF INTEREST PROTOCOL
(Effective June 13, 2005)

This Protocol shall be effective immediately upon adoption, and supersedes all previous policies and protocols on this subject. However, this Protocol does not supersede and is meant to supplement any applicable provisions of state or federal law, including the Political Reform Act (Cal. Gov. Code sec. 87200 et seq.) and Government Code sections 20152.5 and 20153.

I. STRATEGIC OBJECTIVES AND PURPOSE

The Board of Administration of the California Public Employees' Retirement System (CalPERS) has a constitutional duty to administer the System in accordance with its fiduciary responsibility to CalPERS' participants and beneficiaries. In administering its investment programs, CalPERS has determined it is appropriate to retain Consultants to facilitate the implementation of its investment programs. These Consultants provide CalPERS with technical expertise and advice in specialized areas. In addition to serving CalPERS, CalPERS' Consultants may have economic or personal interests that may not be fully aligned with CalPERS' interests. The purposes of this Protocol are (1) to assure that the information and advice CalPERS receives from its Consultants is impartial; (2) to outline a system whereby Consultants disclose to CalPERS those circumstances that may create actual, potential or perceived Conflicts of Interest; and (3) to set forth a process for CalPERS to evaluate the disclosures to determine whether assignments should be precluded.

II. DEFINITIONS

The following definitions apply to terms as used in this Protocol:

- A. "Conflict of Interest" or "Conflict" includes those circumstances that create an actual conflict with the Consultant's duty (consistent with fiduciary standards of care) to provide investment advice that is aligned solely with the best interests of CalPERS' plan participants and beneficiaries. A Conflict exists when a Consultant knows or has reason to know that he or she, his or her spouse, or a close relative, domestic partner or other significant personal or business relationship of the Consultant, has a financial or other interest that is likely to bias the Consultant's evaluation of or advice with respect to a transaction or assignment on behalf of CalPERS.
- B. "Consultant" refers to individuals or firms, and includes Key Personnel of Consultant firms, who are contractually retained or have been appointed to a pool by CalPERS to provide investment advice to CalPERS but who do not exercise investment discretion.

- C. "Disclosable Interest" is any interest or circumstance that may give rise to an actual, potential or perceived Conflict including, without limitation, the Disclosable Interests described in Section III.A.
- D. "Key Personnel" refers to those persons identified by the Consultant who will exercise a significant role in providing to CalPERS the services required under an assignment or contract.
- E. "Staff" refers to CalPERS Investment Office staff.

III. DISCLOSURE RESPONSIBILITIES OF CONSULTANTS

- A. In its response to a Request for Proposal ("RFP"), Consultant shall generally identify in writing the circumstances and nature of all Disclosable Interests.

The following examples illustrate Disclosable Interests that a Consultant should disclose to CalPERS. This list is not exhaustive of the situations that may constitute a Disclosable Interest:

- The Consultant has an existing or reasonably expected financial relationship with a placement agent who also serves as a placement agent for an investment opportunity that the Consultant knows or has reason to know is under consideration by the CalPERS Investment Office.
- The Consultant is engaged or compensated by another person or entity in connection with an investment or capital commitment by CalPERS while engaged by CalPERS on the same matter.
- The Consultant recommends its own proprietary products and services, including, e.g., indices and benchmarks, screening tools, or investment related software, even if there is no direct financial gain to Consultant from CalPERS use of the proprietary products or services.
- The Consultant enters into a business arrangement that is competitive with CalPERS' interests in a specific assignment or transaction under consideration by the Investment Office.
- The Consultant accepts revenues, soft dollars or non-cash, in-kind benefits or perquisites from investment managers or acts as a securities broker that is engaged by CalPERS.

- B. In addition, at the time of a specific assignment Consultant shall generally identify in writing to CalPERS Staff identified in the contract:
- The circumstances and nature of all Disclosable Interests that exist pertinent to the specific assignment, recommendation, advice or other service.
 - Whether and under what circumstances the Disclosable Interest is likely to give rise to an actual Conflict.
 - Suggestions of ways to handle or manage the circumstances of the Disclosable Interest in order to prevent the Disclosable Interest from resulting in an actual Conflict.

The disclosures required under this paragraph must be made prior to the time Consultant provides the services that give rise to the Disclosable Interest.

- C. Once a Disclosable Interest has been disclosed, the Consultant will promptly update CalPERS in writing of any changes in circumstances that affect the Disclosable Interest.
- D. In following this Protocol, Consultants are to consider the spirit as well as the literal expression of this policy, by taking ongoing responsibility for scrutinizing their activities and transactions for Disclosable Interests and making appropriate disclosures. In cases where the Consultant is unsure whether a Disclosable Interest exists, the situation or circumstances should be disclosed.

IV. PROTOCOL FOLLOWING DISCLOSURES

- A. Staff shall review all information presented by Consultants in accordance with Section III above and may request additional information, if warranted. If upon review of the information provided, Staff desires additional information, the Consultant will promptly provide the additional information requested.
- B. Staff, and if appropriate the CalPERS Legal Office, will analyze each Disclosable Interest to determine:
- Whether an actual Conflict currently exists, in which case, the assignment will be precluded.
 - If an actual Conflict does not currently exist, how likely it is that the Disclosable Interest will in the future give rise to an actual Conflict; and
 - If an actual Conflict does not currently exist, whether there are any ways of handling or managing the circumstances of the Disclosable Interest in order to prevent the Disclosable Interest from resulting in an actual Conflict in the future. In addition, Staff will analyze on a case-by-case basis whether the Disclosable Interest is of a level of severity (either by itself

or in combination with other Disclosable Interests) which warrants consideration or action by the Investment Committee. Otherwise, Staff will instruct the Consultant of any additional action it deems necessary or appropriate to handle or manage the Disclosable Interest so that it does not give rise to an actual Conflict.

- C. In all instances, Staff shall document its conclusions made in Section IV.B., above.

V. PROACTIVE RESPONSIBILITIES OF STAFF

- A. Whenever appropriate, and at a minimum once per year, Staff will review with each of its Consultants all Disclosable Interests, to discuss their on-going and cumulative effect.
- B. Staff shall annually or, as needed, provide to the Investment Committee a summary of the types of Disclosable Interests disclosed by the Consultants in the prior year and the actions taken by Staff in response to the Disclosable Interests.
- C. This Protocol shall be incorporated and included as an attachment to all RFPs and contracts between CalPERS and Consultants.



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: PO-INV1-001

Audience: Investment

Purpose

The Retirement Board has a statutory and fiduciary duty to manage the School Employees Retirement System (SERS) assets in the interests of its participants. To further this duty the Board has determined that investment service providers, including but not limited to, consultants, managers, and agents who do or seek to do business with SERS should act in the best interests of SERS when providing services to SERS. This policy provides guidelines on assuring that information, advice, and services provided to SERS by an investment service provider are not impaired by conflicts of interest.

Policy

Any investment service provider shall:

1. Comply with all applicable federal and state law or regulations, and with all applicable professional codes and/or regulations;
2. Have established ethics and conflicts of interest policies and procedures, and proper internal compliance controls in place;
3. Disclose any actual or potential conflict of interest at the earliest opportunity to SERS;
4. Disclose any investigation of, or litigation involving, its operations to SERS as permitted by law; and,
5. Provide annual or other periodic disclosures as required by SERS.

The [Executive Director] [Director of Investments] and such staff as the Executive Director designates shall be responsible for implementing this policy as appropriate.

SERS shall not select, nor continue to contract with, any investment service provider who does not meet the standards of this policy or violates this policy or procedures related to it. The [Executive Director][Director of Investments] shall report to the Retirement Board any information indicating that an investment service provider is substantially out of compliance with this policy.

Definitions

1. "Conflict of interest" means a direct or indirect pecuniary interest or a relationship (without regard to whether the relationship is personal, private, commercial, or business) with a third party, and the interest or relationship could diminish the investment service provider's independence of judgment in the performance of their responsibilities to SERS.
2. "Investment service provider" means an entity or person, other than a Retirement Board member or SERS employee, who provides investment advice to SERS intended to affect or form a basis for investment or fund management decisions by SERS, including but not limited to (a) investment consultants, (b) money or investment managers, (c) broker agents, (d) security lending agents, and (e) master record keepers.

Related Documents and Information

Statutes: R.C. 3309.15

Rules: ---

Policies:

Procedures: ☐ No ☒ Yes

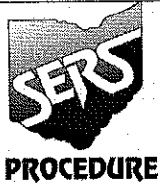
Ownership Area: Board

Co-Ownership Area(s): Investment; Legal

Functional Category: 1-Service Providers

Effective Dates:

Certified By:



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: PR-INV1-001-003

Audience: Investment

Purpose

This procedure provides guidelines with regard to disclosure, and resolution, of conflicts of interest by investment service providers.

Procedure

1. Investment Staff Responsibilities

Investment staff shall:

- a. advise an investment service provider of SERS' policies and procedures with regard to conflicts of interest;
- b. develop disclosure reporting forms for investment service providers;
- c. review such forms and other disclosures made by such providers; and,
- d. act on such disclosures as necessary.

2. Reporting

Providers shall file any disclosure reports as required. Annual disclosure reports shall be due by [January 31st] of each year and returned to SERS' Internal Auditor. All reports shall be reviewed by the Internal Auditor and the Director of Investments.

3. Resolution

When staff receives or obtains information indicating that a provider may, or does, have a conflict of interest, staff shall confirm with the provider as to whether there is a conflict and how the provider intends to manage such conflict. If the conflict can be avoided or minimized, staff shall document the event and no further action is necessary.

If the conflict cannot be avoided or minimized, staff shall report the event to the [Board][Executive Director] with its recommendation on eliminating the conflict, including and up to terminating the provider.

Pending a resolution of the conflict, a provider shall not be permitted to act on behalf of SERS with regard to the transaction or services in which there is a conflict of interest.

If a provider is in material non-compliance with the Board's policy and procedures on investment service provider conflicts of interest, staff shall report such non-compliance to the Board.

The Board shall review and act on any reports by staff of material conflicts and/or non-compliance, including and up to termination of the provider.

Definitions

None.

Related Documents and Information

Statutes: R.C. 3309.15
Rules: ---
Policy: PO-INV1-001, Investment Service Provider Conflicts of Interest
Practices: ☐ No ☐ Yes
Forms: ☐ No ☒ Yes
Ownership Area: Investment
Co-Ownership Area(s):
Functional Category: 1-Service Providers
Effective Dates:
Certified By:



INVESTMENT SERVICE PROVIDERS CONFLICTS OF INTEREST

Number: PR-INV1-001-001

Audience: Investment

Purpose

This procedure provides guidelines as to conflicts of interest provisions to be included in requests for proposals, requests for information, or other solicitations for investment service providers.

Procedure

Any solicitation for investment service providers shall include, but not limited to, the following.

1. A section titled "Representations and Warranties." This section shall include, but not limited to, the following.

Representations and Warranties

All respondents are required to submit an executed copy of the following Representations and Warranties as an attachment to the cover letter described in Section [designate section] of this [insert RFP, RFI, or other description of solicitation]:

- A. Respondent warrants that it will not delegate its fiduciary responsibilities.
- B. Respondent warrants that it has completed, obtained, and performed all registrations, filings, approvals, authorizations, consents or examinations required by a government or governmental authorities.
- C. Respondent warrants that it meets all of the minimum qualifications applicable to the firm under this [insert RFP, RFI, or other description of solicitation] as follows:

[List each minimum criterion specified in Section [designate section] and specifically describe how your firm meets such minimum qualifications. Failure to do so may be cause for disqualification.]

[Insert the listed criterion.]

- D. Respondent warrants that it has not paid and will not pay, has not given and will not give, any remuneration or thing of value directly or indirectly to SERS or any of its board members, officers, employees, or agents, or any third party except as disclosed to SERS with its response to this [RFP, RFI, or other description of solicitation], or otherwise, including, but not limited to, a finder's fee, cash solicitation fee, or a fee for consulting, lobbying or otherwise.

E. Respondent warrants that it has established ethics and conflicts of interest policies and procedures, and proper internal compliance controls are in place.

2. A questionnaire titled "Firm Experience and General Description" which among any other questions shall include, but not be limited to, the following subsection of questions.

Code of Conduct

[For Investment Consultant]

1. List all services your firm, its principals, or any affiliate provide that generate revenues for the firm and indicate the applicable percent of your firm's total revenue during the last three years.

	20xx	20xx	20xx
Revenues from Consulting with Plan Sponsors	____%	____%	____%
Revenues from Money Management activities	____%	____%	____%
Revenues from Services to Money Managers	____%	____%	____%
Revenues from Services to Plan Sponsors	____%	____%	____%

Did these services produce 100% of your firm's revenue during the reporting period? If not, provide information regarding differences.

2. Does your firm, its principals, or any affiliate, own any part of a money management firm, broker-dealer, or other organization that sells services to institutional investors and/or SEC registered investment advisors? If so, identify the firm(s) and describe the relationship.

3. Is your firm owned, in whole or in part, by a money management firm or firms? Has your firm received loans from any money management firms, their subsidiaries, or principals? Do you manage money for your parent or affiliate? Does your parent or affiliate manage money for your firm? If so, explain.

4. Does your firm, its principals or any affiliate have any strategic alliance with any broker or investment management firm? If yes, please disclose with whom and describe the nature of the alliance.

5. Do you offer a broker/dealer facility to sponsor clients to pay for or offset your fees? Are there additional services you offer plan sponsors through your broker/dealer? What conversion ratio ranges are clients paying when using directed brokerage to satisfy your fees?

6. If your firm receives soft dollar revenues from investment managers not related to client direction through an affiliate broker, what conversion ratio is utilized? Identify any such amounts received, specifically by firm.

7. Has your firm, its principals or any affiliate ever: (a) been the focus of a non-routine Securities and Exchange Commission (SEC) inquiry or investigation or a similar inquiry or investigation from any similar federal, state or self regulatory body or organization, (b) been a party to any litigation concerning fiduciary responsibility or other investment related matters, or (c) submitted a claim to your errors & omission, fiduciary liability and/or fidelity bond insurance carrier(s)? If yes to any, please provide details.

8. What percentage of your clients pay their consulting fees through soft dollar arrangements?

9. Do you keep a record of all manager recommendations made to plan sponsor clients? What percentage of manager turnover occurs during a normal year?

a. How are consultants' recommendations to clients reviewed and monitored by your organization?

b. Does your firm adhere to a level of consistency in consultant recommendations?

10. For the year ended _____, please complete the attached worksheet (FM-INV1-001-001-001 Investment Consultant Worksheet) with specific information related to amounts your firm, its principals, or any affiliate received from each of SERS's money managers, identifying all revenues resulting from both direct payments and gross directed brokerage.

11. Does your firm have a written code of conduct or set of standards for professional behavior? If so, attach a copy and state how are they monitored and enforced?

12. Has your firm adopted the CFA Code of Ethics and Standards of Professional Conduct? If so, how is employee compliance monitored?

13. How does your firm identify and manage conflicts of interest?

14. Within the last five years, has your firm or an officer or principal been involved in litigation or other legal proceedings relating to your investment consulting assignments? If so, please provide an explanation and indicate the current status or disposition.

[For a service provider other than an Investment Consultant]

1. List all services your firm, its principals, or any affiliate provide that generate revenues for the firm and indicate the applicable percent of your firm's total revenue during the last three years.

	20xx	20xx	20xx
Revenues from Consulting with Plan Sponsors	____%	____%	____%
Revenues from Money Management activities	____%	____%	____%
Revenues from Services to Money Managers	____%	____%	____%
Revenues from Services to Plan Sponsors	____%	____%	____%

Did these services produce 100% of your firm's revenue during the reporting period? If not, provide information regarding differences.

2. Does your firm, its principals, or any affiliate, own any part of an investment consulting firm or an affiliate of such firm, broker-dealer, or other organization that sells services to institutional investors and/or SEC registered investment advisors? If so, identify the firm(s) and describe the relationship.

3. Is your firm owned by, in whole or in part, by an investment consulting firm or an affiliate of such firm? Has your firm received loans from any consulting firms, their subsidiaries, or principals? Do you manage money for your parent or affiliate? Does

your parent or affiliate manage money for your firm? If so, explain.

4. Does your firm, its principals or any affiliate have any strategic alliance with any broker or investment consulting firm? If yes, please disclose with whom and describe the nature of the alliance.

5. Do you offer a broker/dealer facility to sponsor clients to pay for or offset your fees? Are there additional services you offer plan sponsors through your broker/dealer? What conversion ratio ranges are clients paying when using directed brokerage to satisfy your fees?

6. Has an investment consulting firm received any compensation from your firm (either cash or commissions) in the past year? This includes commissions of any sort resulting from trades initiated by your firm which were executed by an affiliated broker/dealer of the consulting firm or through a brokerage relationship in which the consulting firm receives the net proceeds of the trade. Provide information regarding the dollar amounts, if any, associated with trading activity for calendar 20XX/the year ended _____, 20XX. For cash payments, provide the list of services received and amounts. For commissions, provide the amounts for client directed brokerage commissions, and non-client directed brokerage commissions.

6. Has your firm, its principals or any affiliate ever (a) been the focus of a non-routine Securities and Exchange Commission (SEC) inquiry or investigation or a similar inquiry or investigation from any similar federal, state or self regulatory body or organization, (b) been a party to any litigation concerning fiduciary responsibility or other investment related matters, or (c) submitted a claim to your errors & omission, fiduciary liability and/or fidelity bond insurance carrier(s)? If yes to any, please provide details.

7. Does your firm have a written code of conduct or set of standards for professional behavior? If so, attach a copy and state how are they monitored and enforced?

8. Has your firm adopted the CFA Code of Ethics and Standards of Professional Conduct? If so, how is employee compliance monitored?

9. How does your firm identify and manage conflicts of interest?

10. Within the last five years, has your firm or an officer or principal been involved in litigation or other legal proceedings relating to your investment assignments? If so, please provide an explanation and indicate the current status or disposition.

3. This procedure shall not limit the form or content of any solicitation document for an investment service provider in any other manner.

Definitions

None.

Related Documents and Information

Statutes: R.C. 3309.15

Rules: ---

Policy: PO-INV1-001, Investment Service Providers Conflicts of Interest

Practices: ☐ No ☐ Yes

Forms: ☐ No ☒ Yes

Ownership Area: Investment

Co-Ownership Area(s):

Functional Category: 1-Service Providers

Effective Dates:

Certified By:



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: PR-INV1-001-002

Audience: Investment

Purpose

This procedure provides guidelines as to conflicts of interest provisions to be included in contracts or agreements with investment service providers.

Procedure

Any contract or agreement entered into with any investment service provider shall include, but not limited to, a "Conflict of Interest" provision and a "Representations and Warranties" provision.

1. A "Conflict of Interest" provision shall include, but not be limited to, the following language.

Investment activities should be conducted in a manner consistent with the Code of Ethics and Standards of Professional Conduct adopted by the CFA Institute. No personnel of [provider] who exercises any functions or responsibilities in connection with the review or approval of the undertaking or carrying out of any work under this Agreement shall prior to the completion of said work voluntarily acquire any personal interest, direct or indirect, which is incompatible, or in conflict with the discharge and fulfillment of such person's functions and responsibilities with respect to the work under this Agreement.

Any such person who acquires an incompatible or conflicting personal interest, prior to, or on or after the effective date of this Agreement, or who involuntarily acquires any such incompatible or conflicting personal interest, shall promptly disclose his or her interest to SERS in writing. Thereafter, such person shall not participate in any action affecting the work under this Agreement, unless SERS shall determine that in the light of the personal interest disclosed, such person's participation in any such action would not be contrary to SERS' interest.

[Provider] shall disclose any conflicts of interest as warranted and required under this Agreement, and provide any other information concerning any conflict of interest as requested by SERS.

2. The "Representations and Warranties" section shall include, but not limited to, the following provisions as applicable:

- a. It is a "fiduciary" as defined in Section 3(21)(A) of ERISA and Section 3309.01(U), Ohio Revised Code, with respect to the System, and will not delegate its fiduciary responsibilities.

- b. It maintains fiduciary liability insurance or other policy of insurance against errors and omissions and other potential liabilities which it may incur for breach of any of its responsibilities hereunder at a level agreed to by the parties herein. Upon execution

of this Agreement and annually thereafter, [Provider] shall provide written evidence that such policy is maintained.

c. It will comply with all requirements which any federal, state, local, foreign or international law or regulation may impose with respect to the subject matter of, or transactions contemplated by, this Agreement (hereinafter referred to as "Legal Requirements") and will promptly cooperate with, and furnish such information to, SERS regarding the Legal Requirements and compliance therewith.

d. To the extent permitted by applicable law, [Provider] shall promptly advise SERS in writing of any extraordinary investigation, examination, complaint, disciplinary action or other proceeding relating to or affecting its ability to perform its duties under this Agreement or involving any of its personnel who performed services for SERS in the twenty-four (24) preceding months (hereinafter referred to as "Investigation"), which Investigation is commenced by any of the following: the Securities and Exchange Commission of the United States, the New York Stock Exchange, the American Stock Exchange, the National Association of Securities Dealers, any Attorney General or any regulatory agency of any state of the United States, any United States government department or agency, or any governmental agency regulating securities of any country in which [Provider] is doing business. Except as otherwise required by law, SERS shall maintain the confidentiality of all such information until the investigating entity makes the information public.

e. It has received a copy of Ohio Laws governing ethical behavior, understands that the provisions apply to persons doing or seeking to do business with System, and agrees to act in accordance with the requirements of such provisions.

f. It will comply with all applicable laws, including but not limited to applicable reporting requirements contained in Sections 101.90 et seq. of the Ohio Revised Code (Joint Legislative Ethics Committee) and the laws contained in Chapter 102 of the Ohio Revised Code (Ohio Ethics Commission) governing ethical behavior, understands that such provisions apply to persons doing or seeking to do business with SERS, and agrees to act in accordance with the requirements of such provisions.

g. It has not paid and will not pay, has not given and will not give, any remuneration or thing of value directly or indirectly to SERS or any of its board members, officers, employees, or agents, or any third party (except as disclosed to SERS prior to execution of this Agreement) in any of the engagements of this Agreement or otherwise, including, but not limited to a finder's fee, cash solicitation fee, or a fee for consulting, lobbying or otherwise.

h. It has established ethics and conflicts of interest policies and procedures, and proper internal compliance controls are in place.

[Additional provisions for investment consultant]

i. Its affiliated entities contract for management services with investment managers. Such investment manager may be evaluated by [consultant] clients. If a [consultant] entity has contracted with such investment manager for discretionary management for a [consultant] product or account, the calculation of [consultant]'s investment fee payable to such manager is not affected/reduced by the fact that the investment manager has been favorably recommended by [consultant] for evaluation by [consultant] clients or has contracted with clients. [Consultant] will confirm this

representation not less than annually and, upon SERS's written request, prior to any investment manager search by SERS.

j. [Consultant] receives revenue for certain commission recapture services provided to clients. [Consultant]'s commission recapture program is voluntary. [Consultant] will confirm this representation not less than annually.

k. Through an affiliated entity, [consultant] administers soft dollar programs for certain investment managers. [Consultant] will provide information on fees earned by [consultant] from an investment manager for SERS from the soft dollar program not less than quarterly.

l. [Consultant]'s manager research group and consulting teams do not have access to revenue information from other services of [consultant], nor is such revenue a factor in their ranking determinations or recommendations. [Consultant] will confirm this representation not less than annually and, upon SERS's written request, prior to any investment manager search by SERS.

m. In liquid asset classes, [consultant]'s procedures provide that final notifications of investment manager rank changes is provided to [consultant]'s internal portfolio management teams and [consultant]'s internal consulting group concurrently, provided however, that all recipients may not receive the message at the same time. [Consultant]'s consulting group distributes such information to clients as soon as reasonably practicable. Upon reasonable request, [consultant] will provide SERS with documentation indicating the delivery timing of such notices with respect to any specific manager employed or considered by SERS provided such request is within a one year period of SERS's employment or consideration. [Consultant]'s internal portfolio management team are not prohibited from taking action with respect to a particular manager based on his or her own opinions and irrespective of the [consultant] opinion on the particular manager.

n. In illiquid asset classes such as real estate, [consultant]'s procedures may vary depending on nature of the manager information included in consulting services offered, and also structure, requirements and capacity constraints of the managers covered and the products they offer. In some cases, information on managers may be communicated to [consultant]'s internal portfolio managers before consulting clients. Upon reasonable request, [consultant] will provide SERS with documentation indicating the delivery timing of such notices with respect to any specific manager employed or considered by SERS provided such request is within a one year period of SERS's employment or consideration.

o. [Consultant]'s evaluation of investment managers, including rank changes of such managers, does not include a consideration of potential transition management revenue. [Consultant] will confirm this representation not less than annually and, upon SERS's written request, prior to any investment manager search by SERS.

p. [Consultant] does not charge, and will not accept, compensation from investment managers to be included in [consultant]'s manager research database or in consulting recommendations. Further, investment managers are not required to purchase any [consultant] or [consultant] affiliates' products or services to be included in [consultant]'s manager research database or in consulting

recommendations. The sole criterion for [consultant]'s manager research recommendations is whether the investment manager has investment products that [consultant]'s manager research analysts believe are likely to achieve superior investment results. [Consultant] manager research professionals are personally evaluated based on the quality of their recommendations. Evaluations are subject to extensive documentation requirements and peer review. [Consultant] will confirm these representations not less than annually and, upon SERS's written request, prior to any investment manager search by SERS.

q. [Consultant] associates serving in a consulting capacity are not registered with any [consultant] broker-dealer, and [consultant] does not compensate consultants for referrals or pay commissions to consultants for any new business, whether consulting business or otherwise.

r. [Consultant] will complete and deliver to SERS a required disclosure for investment consultants form (FM INV1-001-003-001 Required Annual Disclosure for Investment Consultants) in substantially the same format as set forth in the Schedule attached hereto, as modified by SERS from time to time, not less than annually and, upon SERS's written request, prior to any investment manager search by SERS.

s. [Consultant] shall disclose in writing to SERS the managers used in [Consultant's] funds when [Consultant's] manager research group issues a report on a manager.

t. Prior to the performance of a specific assignment for, or providing advice or a recommendation to, SERS, [consultant] shall disclose in writing to SERS all interests or circumstances that may give rise to an actual, potential or perceived conflict of interest, and, thereafter, shall update SERS in writing of any changes in circumstances affecting the matter disclosed.

[Additional provisions for investment managers]

i. [Manager] pays for certain commission recapture services provided to clients by [consultant]. This commission recapture program is voluntary. [Manager] will confirm this representation not less than annually.

j. [Manager] does not pay compensation to [consultant] to be included in [consultant]'s manager research database or in consulting recommendations. Further, investment manager is not required to purchase any [consultant] or [consultant] affiliates' products or services to be included in [consultant]'s manager research database or in consulting recommendations. [Manager] will confirm these representations not less than annually and, upon SERS's written request.

k. [Manager] will complete and deliver to SERS a required disclosure for investment manager's form (FM INV1-001-003-002 Required Annual Disclosure for Investment Managers) in substantially the same format as set forth in the Schedule attached hereto, as modified by SERS from time to time, not less than annually and, upon SERS's written request.

l. [Manager] shall disclose in writing to SERS all interests or circumstances that may give rise to an actual, potential or perceived conflict of interest, and, thereafter, shall update SERS in writing of any changes in circumstances affecting the matter disclosed.

Definitions

None.

Related Documents and Information

Statutes: R.C. 3309.15
Rules: ---
Policy: PO-INV1-001, Investment Service Provider Conflicts of Interest
Practices: ☐ No ☐ Yes
Forms: ☐ No ☒ Yes
Ownership Area: Investment
Co-Ownership Area(s):
Functional Category: 1-Service Providers
Effective Dates:
Certified By:



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: F-INV1-001-003-002

Audience: Investment

Purpose

To provide required disclosures to the System by an investment service provider who is an investment manager or money manager.

Form

REQUIRED ANNUAL DISCLOSURE FOR INVESTMENT MANAGERS

Complete and return this form to: Internal Auditor
The School Employees Retirement System
300 East Broad Street, Suite 100
Columbus, Ohio 43215

A. CONFLICTS

1. Please list all services your firm, its principals, or any affiliate provide that generate revenues for the firm and indicate the applicable percent of your firm's total revenue during the last year, 200xx.

Revenues from Consulting with Plan Sponsors	_____ %
Revenues from Money Management activities	_____ %
Revenues from Services to Money Managers	_____ %
Revenues from Services to Plan Sponsors	_____ %

Did these services produce 100% of your firm's revenue during the reporting period? If not, provide information regarding differences.

2. Does your firm, its principals, or any affiliate, own any part of an investment consulting firm or an affiliate of such firm, broker-dealer, or other organization that sells services to institutional investors and/or SEC registered investment advisors? If so, identify the firm(s) and describe the relationship.

3. Is your firm owned by, in whole or in part, by an investment consulting firm or an affiliate of such firm? Has your firm received loans from any consulting firms, their subsidiaries, or principals? Do you manage money for your parent or affiliate? Does your parent or affiliate manage money for your firm? If so, explain.

4. Does your firm, its principals or any affiliate have any strategic alliance with any broker or investment consulting firm? If yes, please disclose with whom and describe the nature of the alliance.

5. Do you offer a broker/dealer facility to sponsor clients to pay for or offset your fees? Are there additional services you offer plan sponsors through your broker/dealer? What conversion ratio ranges are clients paying when using directed brokerage to satisfy your fees?

6. Has an investment consulting firm received any compensation from your firm (either cash or commissions) in the past year? This includes commissions of any sort resulting from trades initiated by your firm which were executed by an affiliated broker/dealer of the consulting firm or through a brokerage relationship in which the consulting firm receives the net proceeds of the trade. Provide information regarding the dollar amounts, if any, associated with trading activity for calendar 20XX/the year ended _____, 20XX. For cash payments, provide the list of services received and amounts. For commissions, provide the amounts for client directed brokerage commissions, and non-client directed brokerage commissions.

6. Within the last year has your firm, its principals or any affiliate (a) been the focus of a non-routine Securities and Exchange Commission (SEC) inquiry or investigation or a similar inquiry or investigation from any similar federal, state or self regulatory body or organization, (b) been a party to any litigation concerning fiduciary responsibility or other investment related matters, or (c) submitted a claim to your errors & omission, fiduciary liability and/or fidelity bond insurance carrier(s)? If yes to any, please provide details.

10. Within the last year, has your firm or an officer or principal been involved in litigation or other legal proceedings relating to your investment assignments? If so, please provide an explanation and indicate the current status or disposition.

11. Has your firm or any officer, principal or employee given any remuneration or anything of value directly or indirectly to SERS or any of its board members, officers or employees? If yes, identify the recipient and remuneration or thing of value.

12. Has [consultant] received any compensation from your firm (either cash or commissions) in the past year? This includes commissions of any sort resulting from trades initiated by your firm which were executed by an affiliated broker/dealer (referred to as "Agent" of the consulting firm) or through a brokerage relationship in which [consultant] receives the net proceeds of the trade. Please provide information regarding the dollar amounts, if any, associated with trading activity for calendar 20XX/the year ended _____, 20XX).

a. Cash Payments:

List services received and cost:

_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____

b. Client Directed Brokerage

Identify the total directed brokerage

commissions resulting from trades through [consultant] or its agent for accounts in which you have a specific letter of direction from a plan sponsor and the percent of your total commissions.

\$ _____
_____ %

Provide a separate list of the plan sponsors which have directed you to trade through [consultant] or its agents.

c. Non-Client Directed Brokerage

Identify the total gross brokerage commissions resulting from trades through [consultant] or its agent for accounts in which you do not have a specific letter of direction from a plan sponsor and the percent of your total commissions.

\$ _____
_____ %

What services were received for the non-directed trades? Please list each service and the gross commission amount paid for each service.

\$	_____
\$	_____
\$	_____
\$	_____
\$	_____
\$	_____

What conversion rate are you credited with towards payment for the preceding services?

Question b. = _____ %

Question c. = _____ %

d. Do the itemized listings in questions a., b. and c. reflect all compensation [consultant] or its agent received from your firm over the last year. If no, please detail payments not covered in questions a., b. and c.

13. If any officer, principal or employee of your firm, or any agent for your firm has registered as a Retirement System Lobbyist per Section 101.92 of the Ohio Revised Code, attach copies of of registration forms filed during the last year.

B. REPRESENTATIONS

The firm is, and for the last year has been, in compliance with all Representations and Warranties contained in its Agreement with SERS.

C. ATTESTATION

I hereby attest that all information submitted for _____, its principals and affiliates is accurate and complete. As a Registered Investment Advisor/NASD member firm/subscriber to the CFA Code of Ethics and Standards of Professional Conduct, I am familiar with the issues and standards of disclosure and confirm that our responses to the previous questions contain no material omission or misrepresentation by or on behalf of the firm.

Submitted by: _____

Print Name:

Title:

Date:

Definitions

None.

Related Documents and Information

Procedures: PR-INV1-001-002
Practices: ☐ No ☐ Yes
Ownership Area: Investment
Co-Ownership Area(s):
Functional Category: 1-Service Providers
Effective Dates:
Certified By:



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: F-INV1-001-003-001

Audience: Investment

Purpose

To provide required disclosures to the System by an investment service provider who is an investment consultant responding to a solicitation.

Form

REQUIRED DISCLOSURE FOR INVESTMENT SERVICE PROVIDER

Complete and return this form with your response to the [request for proposal, request for information or other designated title of solicitation].

Money Management
Firm Name

Cash	Brokerage	Cash	Brokerage	Cash	Brokerage	Cash	Brokerage

Client Directed
Payments

Products Purchased
by Money Managers

Performance Measurement							
Marketing/Strategic Placement							
Educational Conferences							
Software							
Style Analysis							

Non-Product Related
Manager Payments

--	--	--	--	--	--	--	--

Grand Total							
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Definitions

None.

Related Documents and Information

Procedures: PR-INV1-001-001
Practices: ☐ No ☐ Yes
Ownership Area: Investment
Co-Ownership Area(s):
Functional Category: 1-Service Providers
Effective Dates:
Certified By:



INVESTMENT SERVICE PROVIDER CONFLICTS OF INTEREST

Number: F-INV1-001-003-001

Audience: Investment

Purpose

To provide required disclosures to the System by an investment service provider who is an investment consultant.

Form

REQUIRED ANNUAL DISCLOSURE FOR INVESTMENT CONSULTANTS

Complete and return this form to: Internal Auditor
The School Employees Retirement System
300 East Broad Street, Suite 100
Columbus, Ohio 43215

A. CONFLICTS

1. List all services your firm, its principals, or any affiliate provide that generate revenues for the firm and indicate the applicable percent of your firm's total revenue during the last year, 20xx.

Revenues from Consulting with Plan Sponsors _____%

Revenues from Money Management activities _____%

Revenues from Services to Money Managers _____%

Revenues from Services to Plan Sponsors _____%

Did these services produce 100% of your firm's revenue during the reporting period? If not, provide information regarding differences.

2. Does your firm, its principals, or any affiliate, own any part of a money management firm, broker-dealer, or other organization that sells services to institutional investors and/or SEC registered investment advisors? If so, identify the firm(s) and describe the relationship.

3. Is your firm owned by, in whole or in part, by a money management firm or firms? Has your firm received loans from any money management firms, their subsidiaries, or principals? Do you manage money for your parent or affiliate? Does your parent or affiliate manage money for your firm? If so, explain.

4. Does your firm, its principals or any affiliate have any strategic alliance with any broker or investment management firm? If yes, please disclose with whom and describe the nature of the alliance.

-
5. Do you offer a broker/dealer facility to sponsor clients to pay for or offset your fees? Are there additional services you offer plan sponsors through your broker/dealer? What conversion ratio ranges are clients paying when using directed brokerage to satisfy your fees?
6. If your firm receives soft dollar revenues from investment managers not related to client direction through an affiliate broker, what conversion ratio is utilized? Identify any such amounts received, specifically by firm.
7. Within the last year has your firm, its principals or any affiliate (a) been the focus of a non-routine Securities and Exchange Commission (SEC) inquiry or investigation or a similar inquiry or investigation from any similar federal, state or self regulatory body or organization, (b) been a party to any litigation concerning fiduciary responsibility or other investment related matters, or (c) submitted a claim to your errors & omission, fiduciary liability and/or fidelity bond insurance carrier(s)? If yes to any, please provide details.
8. What percentage of your clients pay their consulting fees through soft dollar arrangements?
9. What percentage of manager turnover occurred during the last year?
- a. How are consultants' recommendations to clients reviewed and monitored by your organization?
- b. Does your firm adhere to a level of consistency in consultant recommendations?
10. For the year ended _____, please complete the attached worksheet with specific information related to amounts your firm, its principals, or any affiliate received from each of SERS's money managers, identifying all revenues resulting from both direct payments and gross directed brokerage.
11. How does your firm identify and manage conflicts of interest?
12. Within the last year, has your firm or an officer or principal been involved in litigation or other legal proceedings relating to your investment consulting assignments? If so, please provide an explanation and indicate the current status or disposition.
13. Has your firm or any officer, principal or employee given any remuneration or anything of value directly or indirectly to SERS or any of its board members, officers or employees? If yes, identify the recipient and remuneration or thing of value.
14. If any officer, principal or employee of your firm, or any agent for your firm has registered as a Retirement System Lobbyist per Section 101.92 of the Ohio Revised Code, attach copies of of registration forms filed during the last year.

B. REPRESENTATIONS

The firm is, and for the last year has been, in compliance with all Representations and Warranties contained in its Agreement with SERS.

C. ATTESTATION

I hereby attest that all information submitted for _____, its principals and affiliates is accurate and complete. As a Registered Investment Advisor/NASD member firm/subscriber to the CFA Code of Ethics and Standards of Professional Conduct, I am familiar with the issues and standards of disclosure and confirm that our responses to the previous questions contain no material omission or misrepresentation by

or on behalf of the firm.

Submitted by: _____

Print Name:

Title:

Date:

Attachment

Money Management
Firm Name

Cash	Brokerage	Cash	Brokerage	Cash	Brokerage	Cash	Brokerage

Client Directed
Payments

Products Purchased
by Money Managers

Performance Measurement							
Marketing/Strategic Placement							
Educational Conferences							
Software							
Style Analysis							

Non-Product Related
Manager Payments

--	--	--	--	--	--	--	--

Grand Total

--	--	--	--	--	--	--	--

Definitions

None.

Related Documents and Information

Procedures: PR-INV1-001-002

Practices: ☐ No ☐ Yes

Ownership Area: Investment

Co-Ownership Area(s):

Functional Category: 1-Service Providers

Effective Dates:

Certified By:

Exhibit C

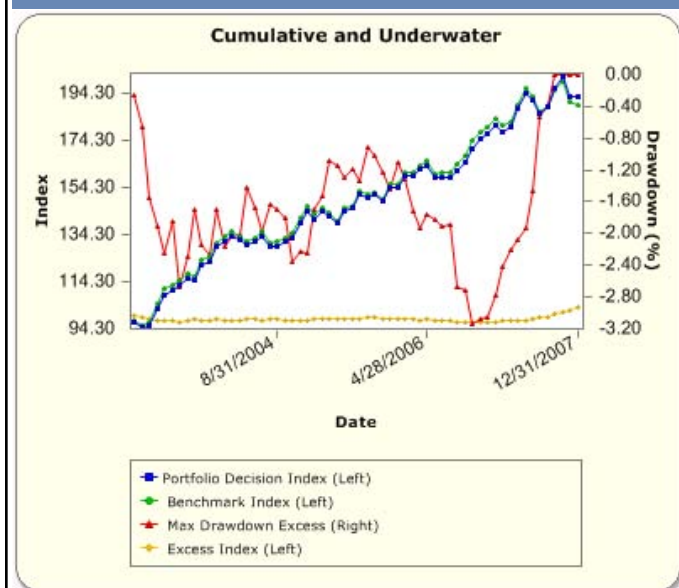
Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Domestic Equity	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Domestic Equity (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water Russell 3000 (Benchmark Allocation - 100.0000%)		

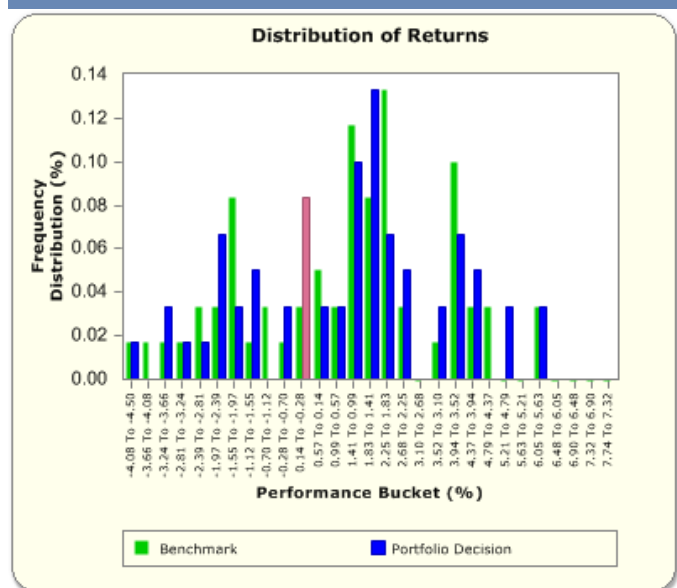
PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	13.63%	9.05%	1.506	89.42%	13.63%	13.63%	13.63%
PD	14.05%	8.85%	1.587	92.97%	14.32%	14.8%	12.18%
Excess	0.42%	1.06%	0.3983	3.54%	0.69%	1.17%	-1.45%

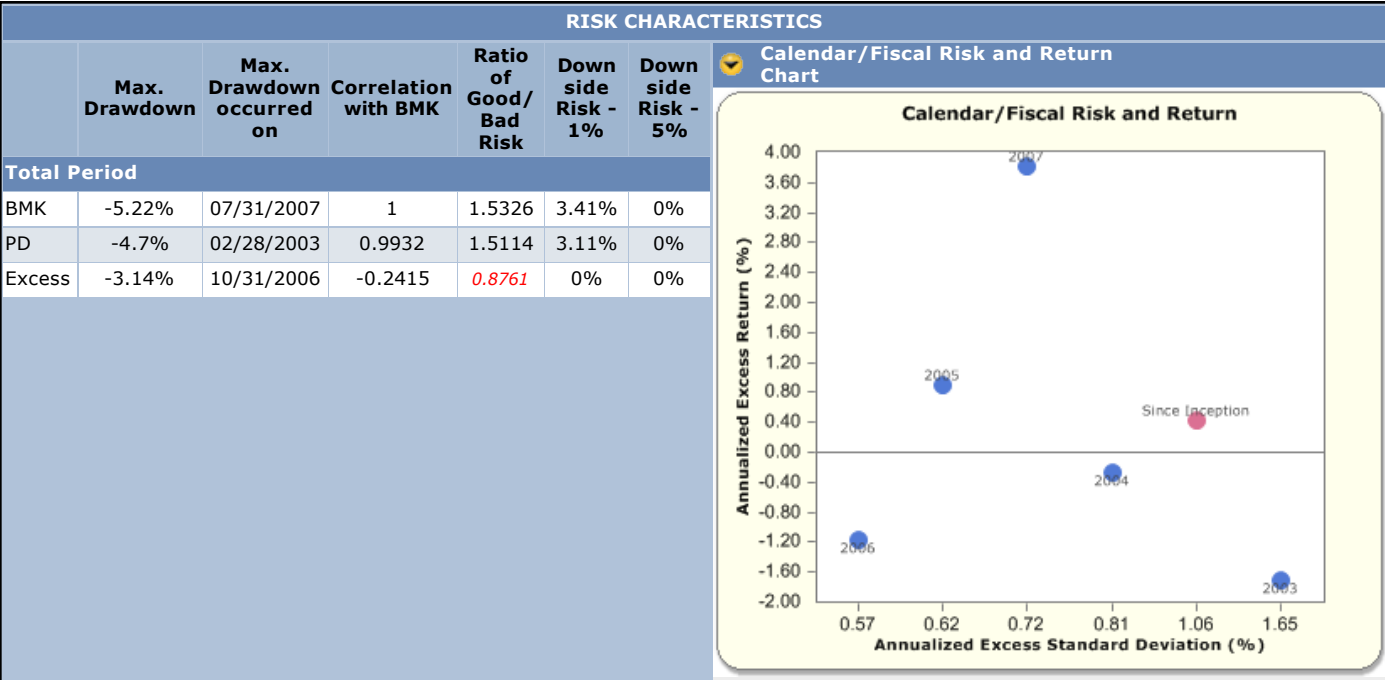
PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	2.45%	-2.05%	9.85%	-4.5%	11/30/2007	6	01/31/2005-06/30/2005	4	6	2
PD	2.43%	-1.9%	9.73%	-4.19%	11/30/2007	5	01/31/2005-05/31/2005	3	6	2
Excess	0.25%	-0.22%	1.18%	-0.93%	03/31/2003	56	01/31/2003-08/31/2007	10	14	5

Cumulative and Underwater Chart



Frequency Distribution Chart

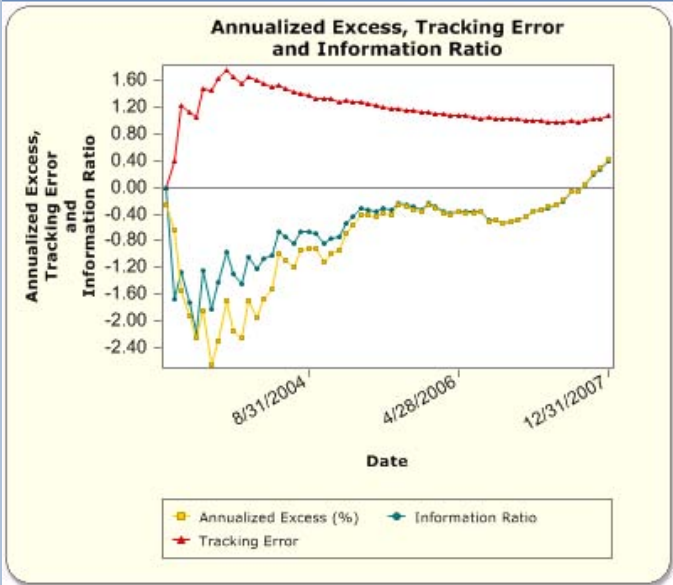




ROLLING CALCULATIONS

	Highest Rolling Cum. Returns	Lowest Rolling Cum. Returns	Highest Rolling Std. Deviation	Lowest Rolling Std. Deviation
Total Period				
BMK	39.64%	4.76%	10.98%	6.14%
PD	38.48%	5.5%	11.08%	6.08%
Excess	3.9%	-2.15%	1.6%	0.53%

Annualized Excess, Tracking Error and Information Ratio Chart



OTHER MEASURES										
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover			
Total Period										
Excess	82.32%	53.33%	0.5826	0.1345	0%	0%	0%			
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover							
Total Period										
BMK	0%		0							
PD	0%		0							
Excess	0%		0							
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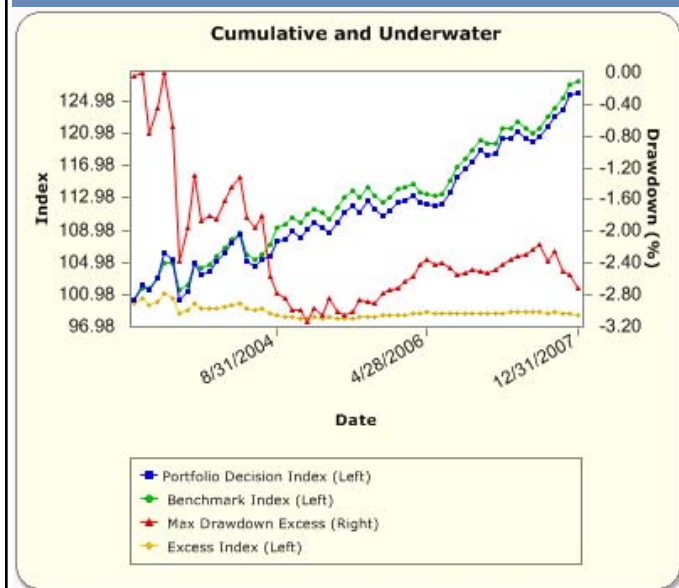
Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Fixed Income	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Fixed Income (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water Lehman Universal (Benchmark Allocation - 100.0000%)		

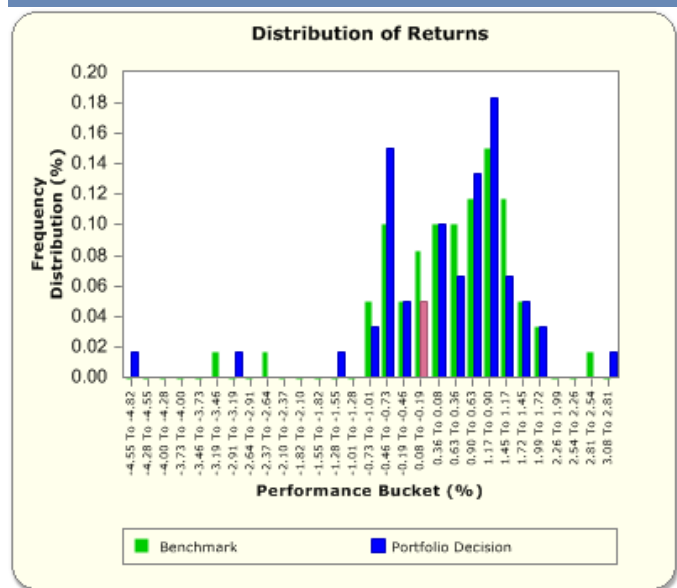
PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	4.99%	3.49%	1.4277	27.56%	4.99%	4.99%	4.99%
PD	4.72%	4.27%	1.1062	25.95%	4.23%	2.97%	0.87%
Excess	-0.27%	1.22%	-0.2184	-1.61%	-0.76%	-2.02%	-4.12%

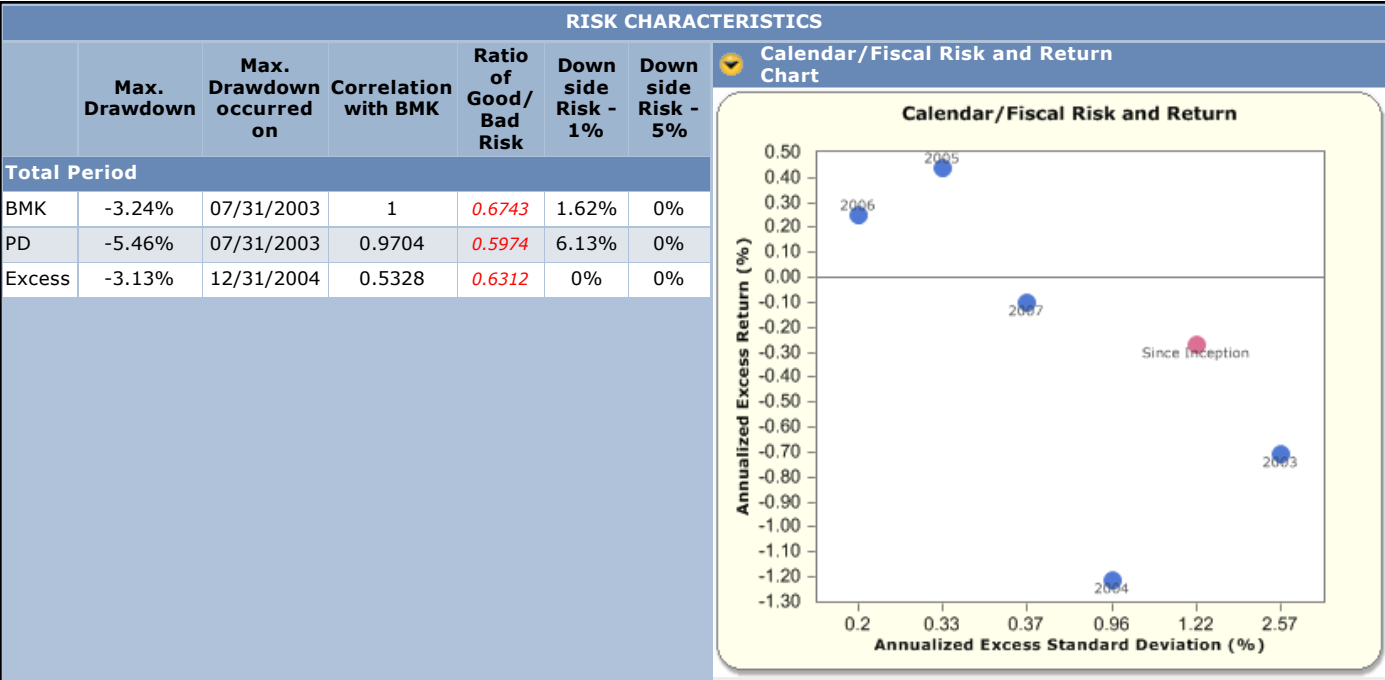
PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	0.9%	-0.82%	4.07%	-3.22%	07/31/2003	5	09/30/2005-01/31/2006	3	6	3
PD	0.98%	-0.97%	5.51%	-4.82%	07/31/2003	7	06/30/2003-12/31/2003	5	6	3
Excess	0.16%	-0.24%	1.77%	-1.6%	07/31/2003	55	06/30/2003-12/31/2007	36	7	6

Cumulative and Underwater Chart



Frequency Distribution Chart

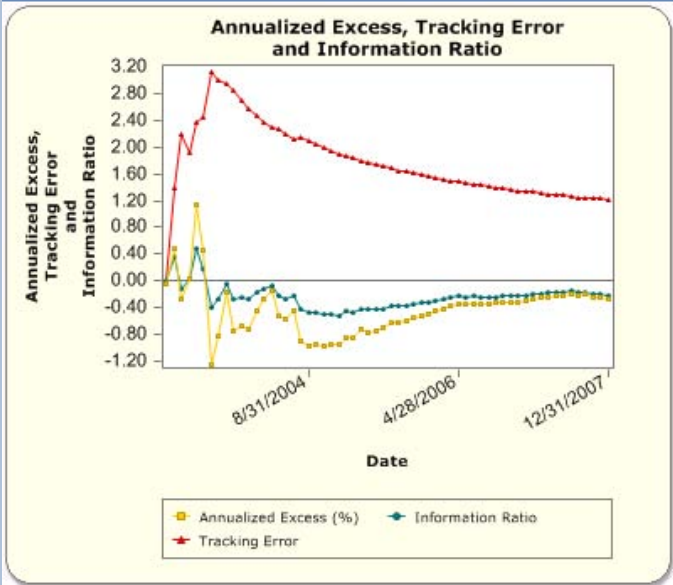




ROLLING CALCULATIONS

	Highest Rolling Cum. Returns	Lowest Rolling Cum. Returns	Highest Rolling Std. Deviation	Lowest Rolling Std. Deviation
Total Period				
BMK	8.11%	0.42%	5.71%	2.4%
PD	7.84%	-0.74%	7.86%	2.29%
Excess	0.62%	-1.81%	2.48%	0.13%

Annualized Excess, Tracking Error and Information Ratio Chart



OTHER MEASURES							
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover
Total Period							
Excess	29.34%	55%	-0.2155	-0.0849	0%	0%	0%
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover				
Total Period							
BMK	0%		0				
PD	0%		0				
Excess	0%		0				

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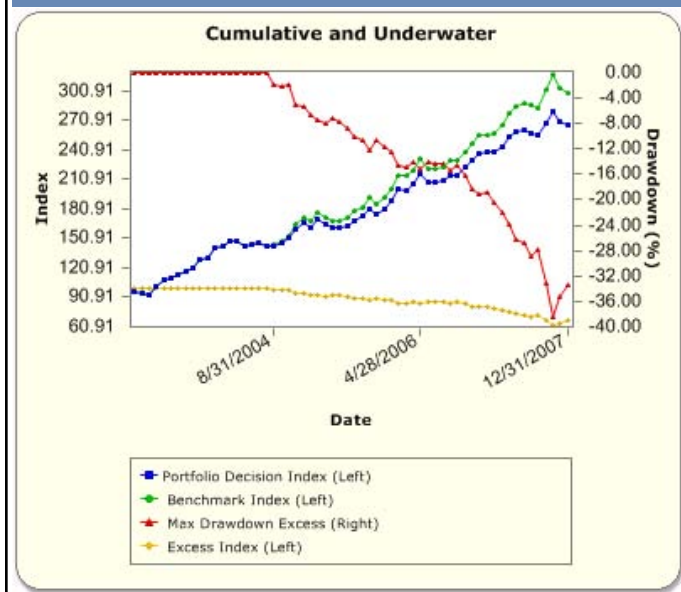
Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/27/2008	Generated On: 08/27/2008
Portfolio Decision Name	International	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Foreign Equity (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water MSCI ACWI ex US (Benchmark Allocation - 100.0000%)		

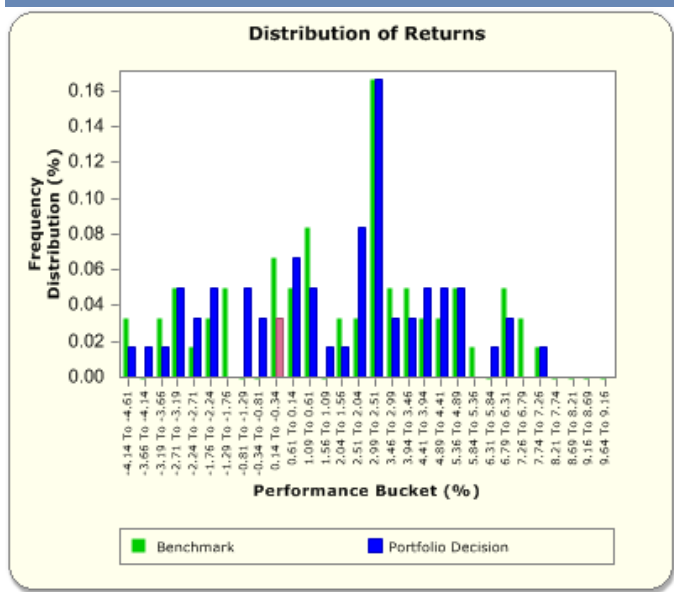
PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	24.52%	11.3%	2.1705	199.32%	24.52%	24.52%	24.52%
PD	21.63%	10.68%	2.0255	166.25%	22.76%	22.3%	N/A
Excess	-2.88%	1.7%	-1.6942	-33.07%	-1.75%	-2.21%	-24.51%

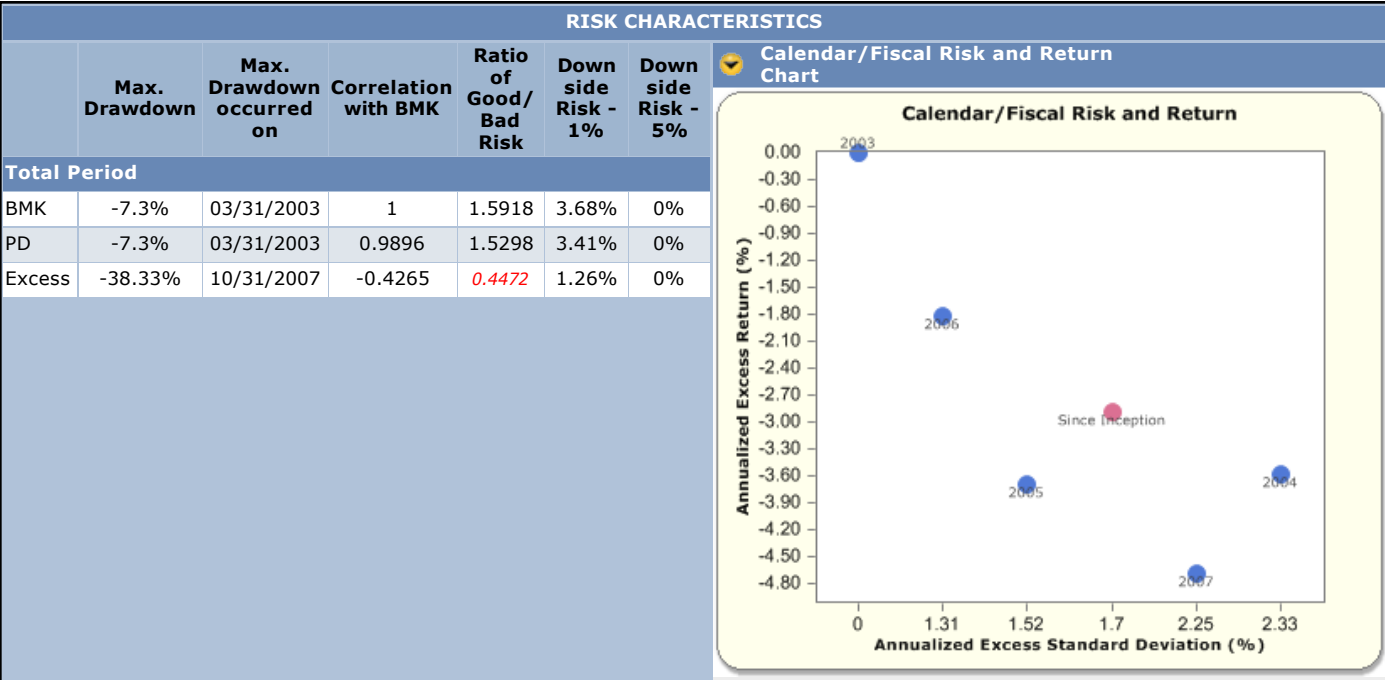
PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	3.42%	-2.3%	12.11%	-4.61%	05/31/2006	5	04/30/2004-08/31/2004	2	12	3
PD	3.29%	-2.04%	11.89%	-4.43%	05/31/2006	6	04/30/2004-09/30/2004	3	12	3
Excess	0.13%	-0.52%	1.07%	-2.02%	11/30/2004	41	08/31/2004-12/31/2007	2	19	6

Cumulative and Underwater Chart



Frequency Distribution Chart

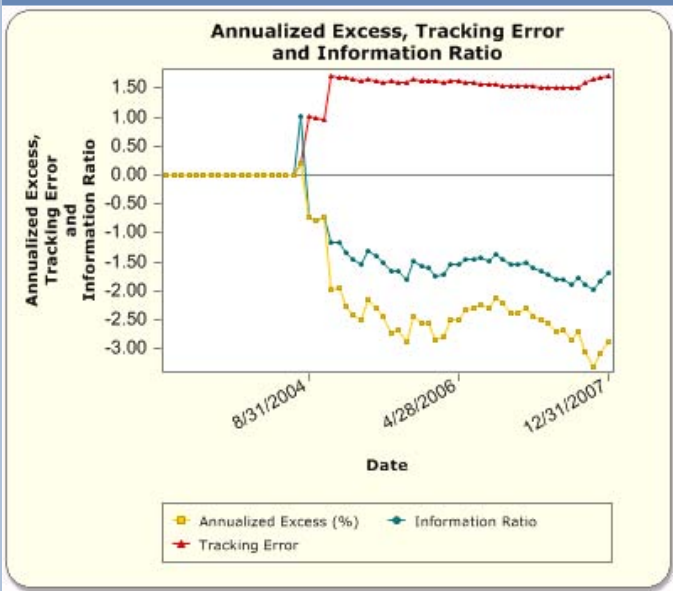




ROLLING CALCULATIONS

	Highest Rolling Cum. Returns	Lowest Rolling Cum. Returns	Highest Rolling Std. Deviation	Lowest Rolling Std. Deviation
Total Period				
BMK	56.81%	13.28%	13.55%	5.66%
PD	56.81%	8.76%	13.55%	5.1%
Excess	0.35%	-8.49%	2.32%	0%

Annualized Excess, Tracking Error and Information Ratio Chart



OTHER MEASURES										
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover			
Total Period										
Excess	0.01%	48.33%	-1.7737	-0.0752	0%	0%	0%			
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover							
Total Period										
BMK	0%		0							
PD	0%		0							
Excess	0%		0							
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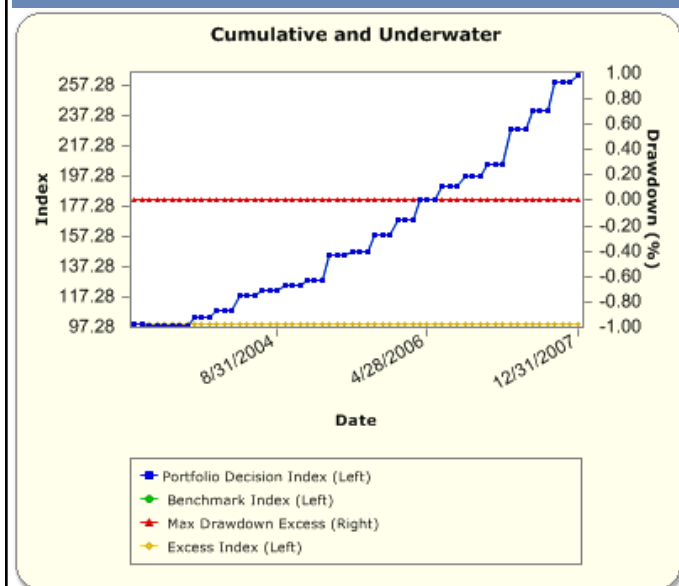
Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Private Equity	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Private Equity (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water Private Equity Composite Benchmark (Benchmark Allocation - 100.0000%)		

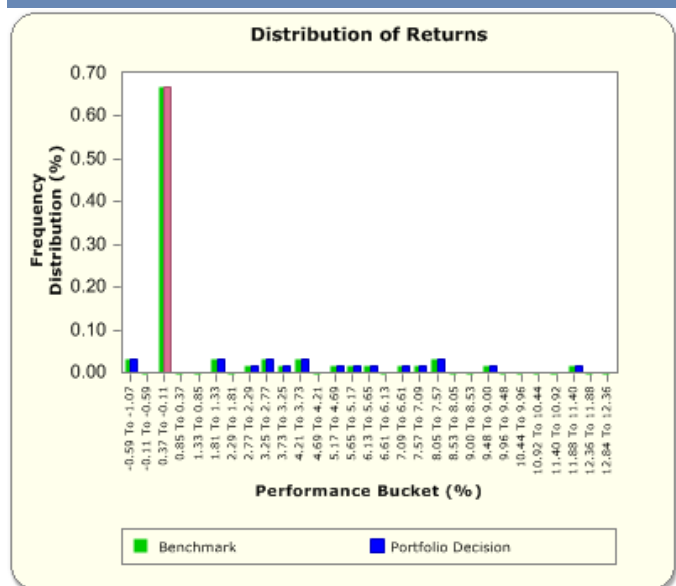
PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	21.44%	11.08%	1.9353	164.16%	21.44%	21.44%	21.44%
PD	21.44%	11.08%	1.9353	164.16%	21.44%	21.13%	10.56%
Excess	0%	0%	0	0%	0%	-0.32%	-10.88%

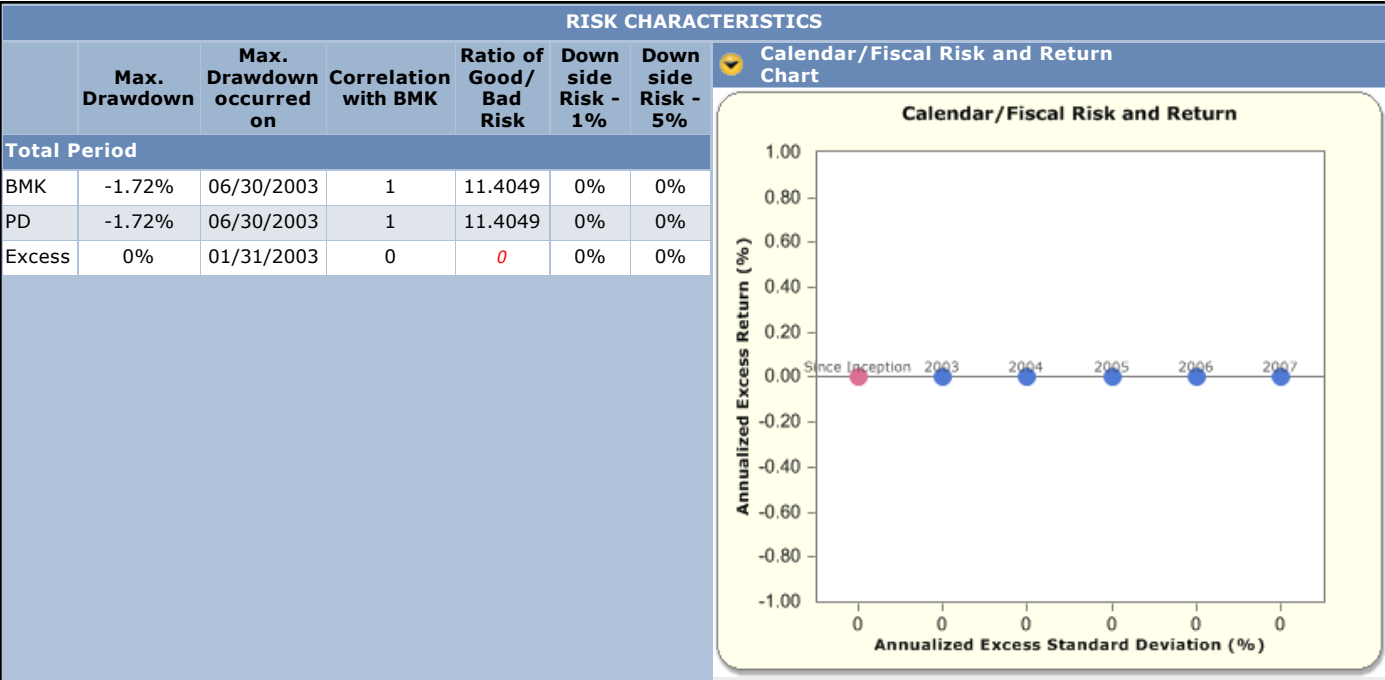
PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	1.77%	-0.87%	8.82%	-1.07%	03/31/2003	6	03/31/2003-08/29/2003	2	54	1
PD	1.77%	-0.87%	8.82%	-1.07%	03/31/2003	6	03/31/2003-08/29/2003	2	54	1
Excess	0%	0%	0%	0%	01/31/2003	0	01/31/2003-01/31/2003	0	60	0

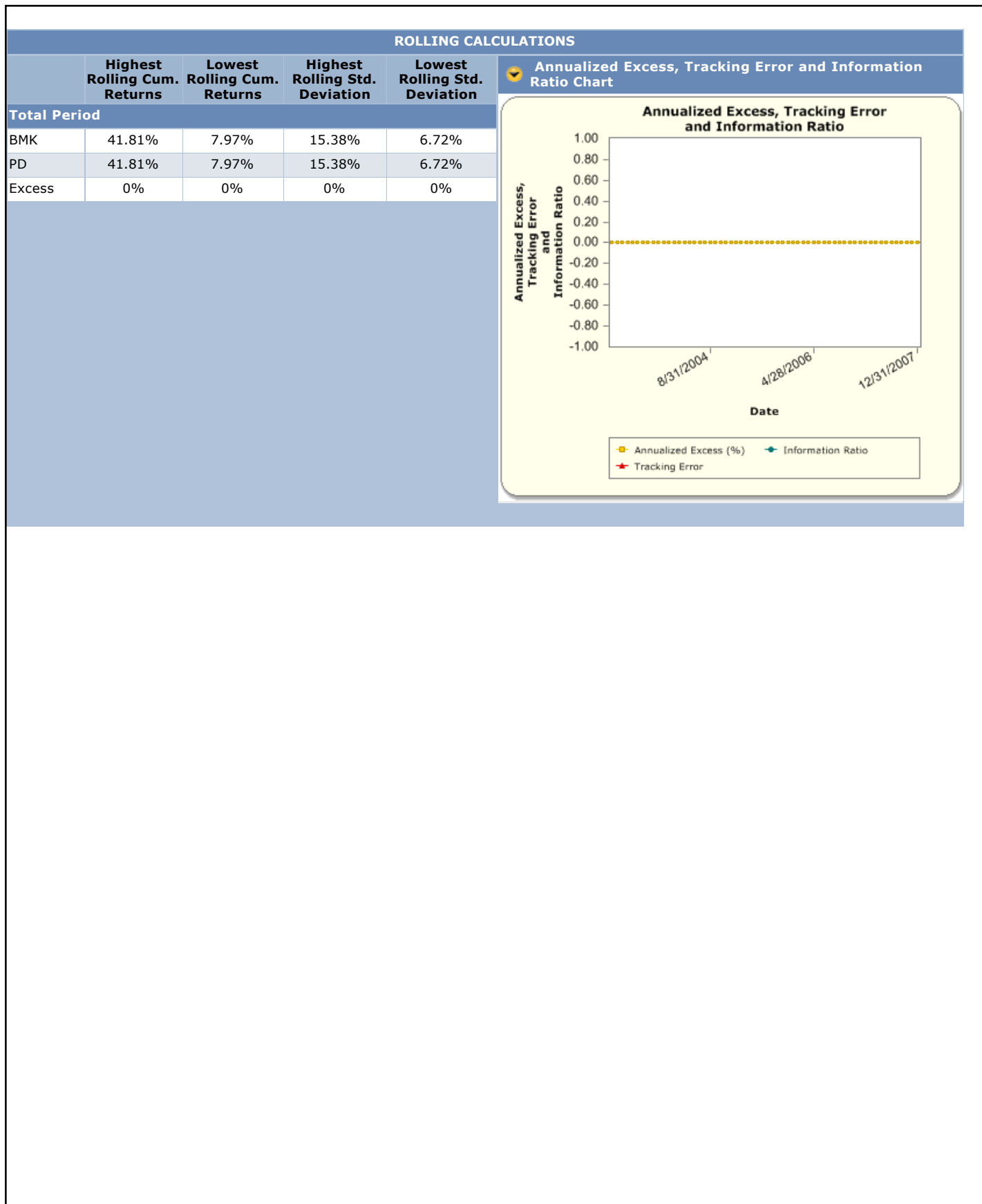
Cumulative and Underwater Chart



Frequency Distribution Chart







OTHER MEASURES										
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover			
Total Period										
Excess	50%	100%	0	0	0%	0%	0%			
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover							
Total Period										
BMK	0%		0							
PD	0%		0							
Excess	0%		0							
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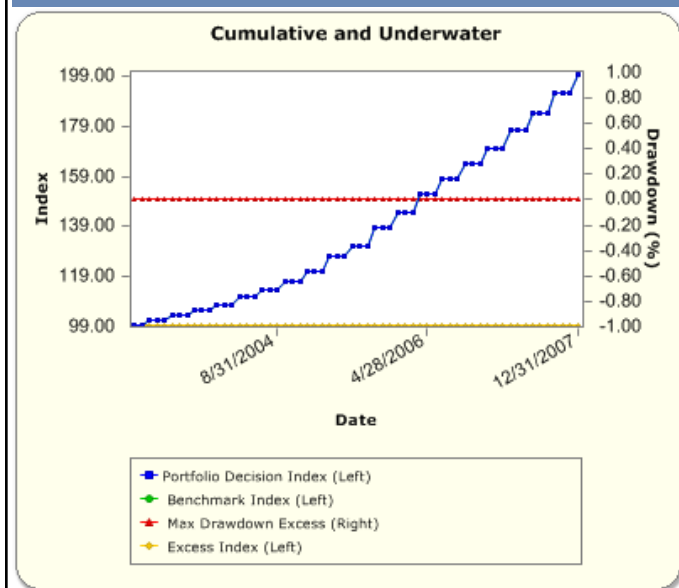
Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Real Estate	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Real Estate (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water NCREIF (Benchmark Allocation - 100.0000%)		

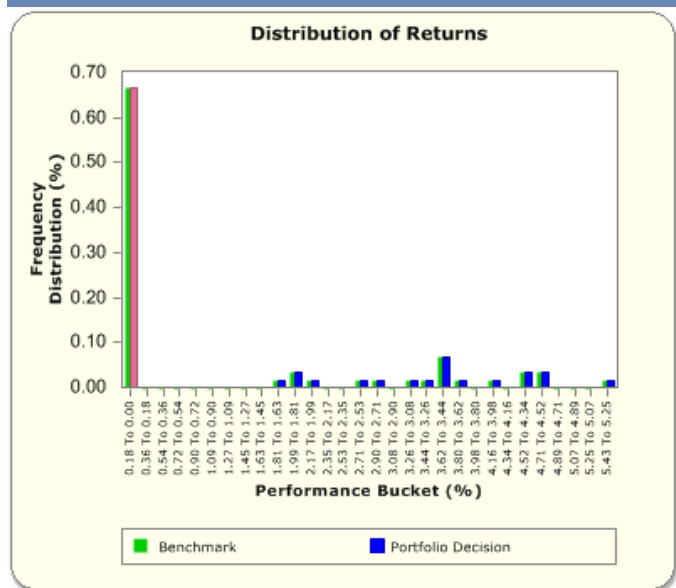
PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	14.79%	6.19%	2.3894	99.3%	14.79%	14.79%	14.79%
PD	14.79%	6.19%	2.3894	99.3%	14.79%	14.12%	7.06%
Excess	0%	0%	0	0%	0%	-0.67%	-7.73%

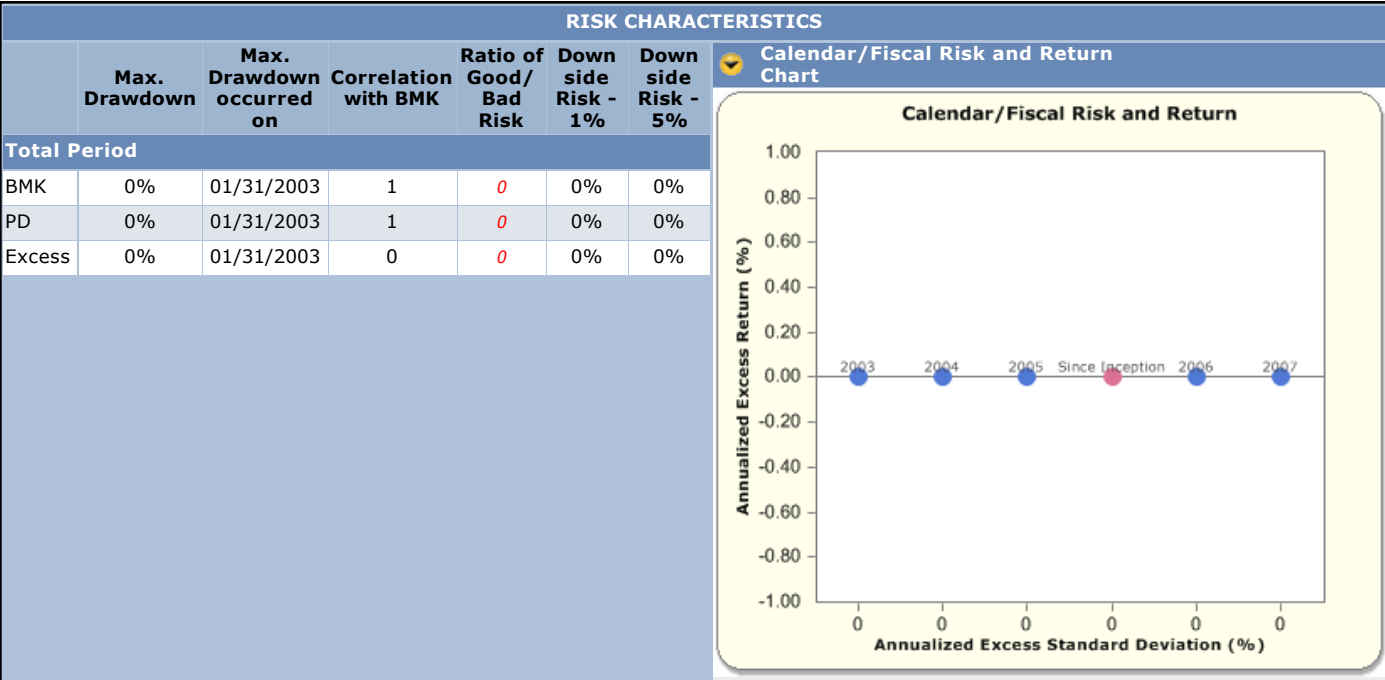
PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	1.17%	0%	4.63%	0%	01/31/2003	0	01/31/2003-01/31/2003	0	60	0
PD	1.17%	0%	4.63%	0%	01/31/2003	0	01/31/2003-01/31/2003	0	60	0
Excess	0%	0%	0%	0%	01/31/2003	0	01/31/2003-01/31/2003	0	60	0

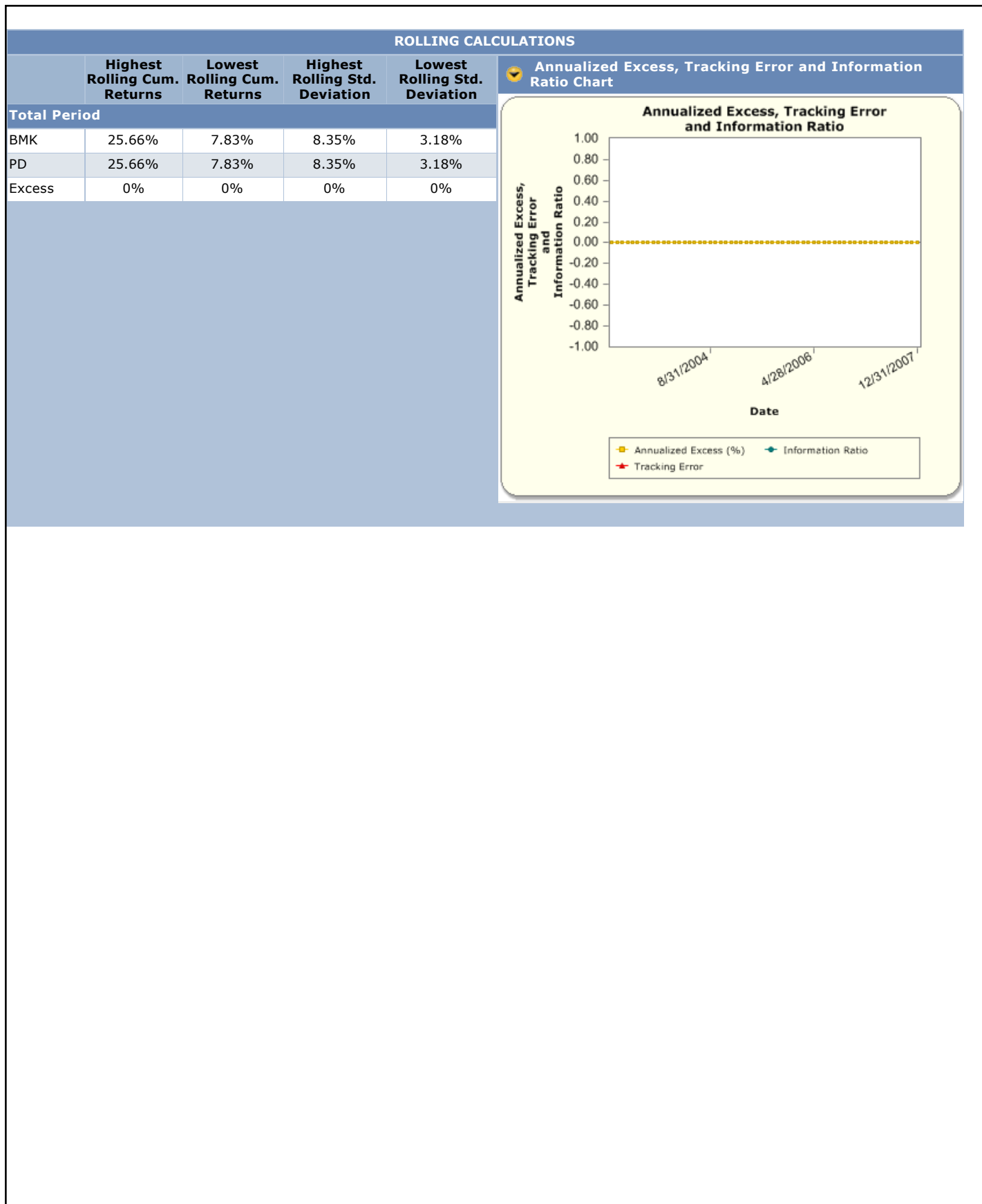
Cumulative and Underwater Chart



Frequency Distribution Chart







OTHER MEASURES							
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover
Total Period							
Excess	50%	100%	0	0	0%	0%	0%
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover				
Total Period							
BMK	0%		0				
PD	0%		0				
Excess	0%		0				

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Portfolio Decision Summary Report - Total Period: Portfolio Decision, Benchmark and Excess Returns

Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Real Return	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Real Return (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): La Water Citigroup 3-Month T-Bill +3% (Benchmark Allocation - 100.0000%)		

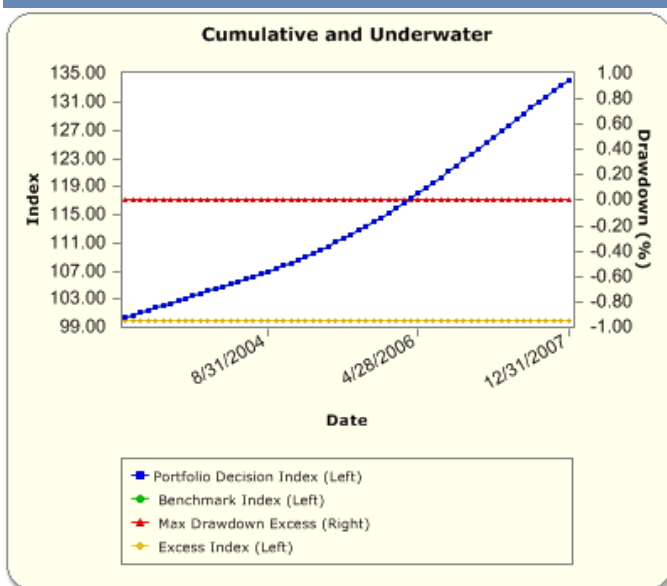
PERFORMANCE SUMMARY

	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	6.04%	0.46%	13.0655	34.1%	6.04%	6.04%	6.04%
PD	6.04%	0.46%	13.0655	34.1%	6.04%	-31.75%	-15.88%
Excess	0%	0%	0	0%	0%	-37.79%	-21.92%

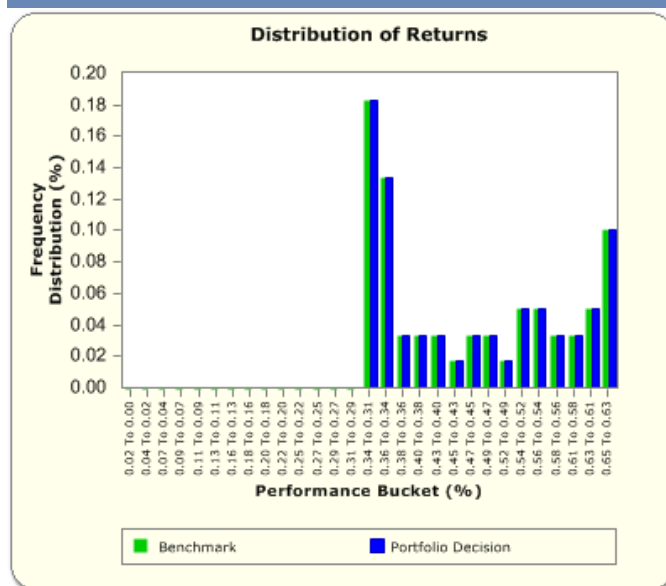
PERFORMANCE DETAILS

	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	0.49%	0%	0.22%	0.32%	02/27/2004	0	01/31/2003-01/31/2003	0	60	0
PD	0.49%	0%	0.22%	0.32%	02/27/2004	0	01/31/2003-01/31/2003	0	60	0
Excess	0%	0%	0%	0%	01/31/2003	0	01/31/2003-01/31/2003	0	60	0

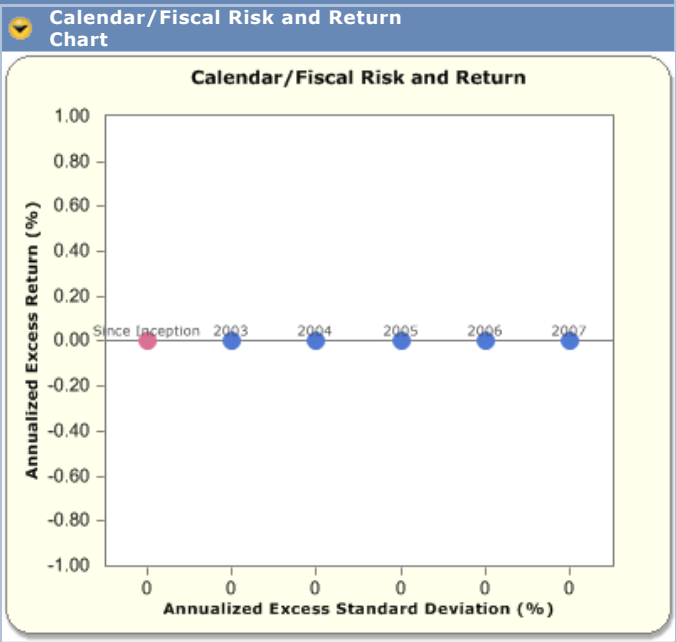
Cumulative and Underwater Chart

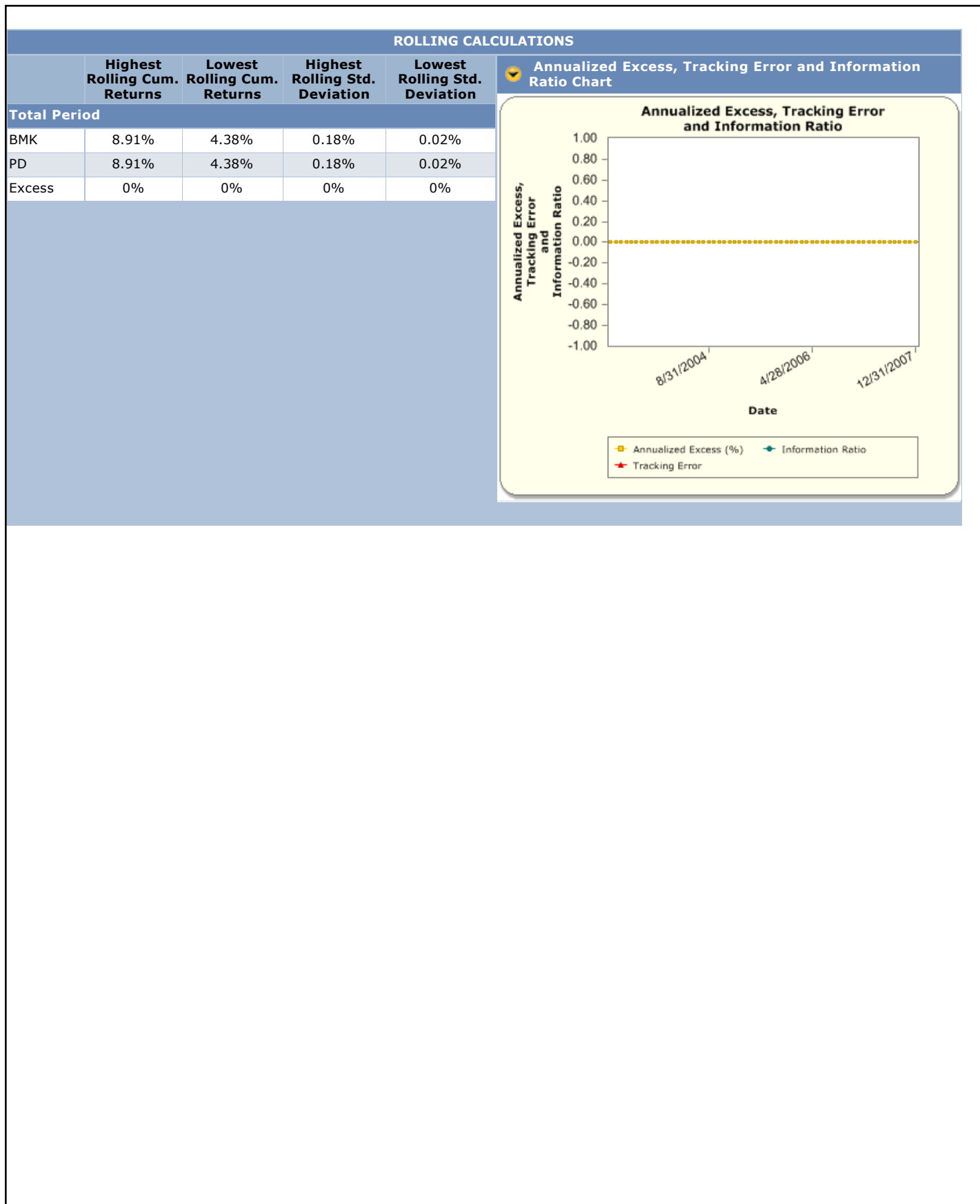


Frequency Distribution Chart



	Max. Drawdown	Max. Drawdown occurred on	Correlation with BMK	Ratio of Good/ Bad Risk	Down side Risk - 1%	Down side Risk - 5%
Total Period						
BMK	0%	01/31/2003	1	<i>0</i>	0%	0%
PD	0%	01/31/2003	1	<i>0</i>	0%	0%
Excess	0%	01/31/2003	0	<i>0</i>	0%	0%





OTHER MEASURES							
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover
Total Period							
Excess	50%	100%	0	0	0%	0%	0%
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover				
Total Period							
BMK	0%		0				
PD	0%		0				
Excess	0%		0				

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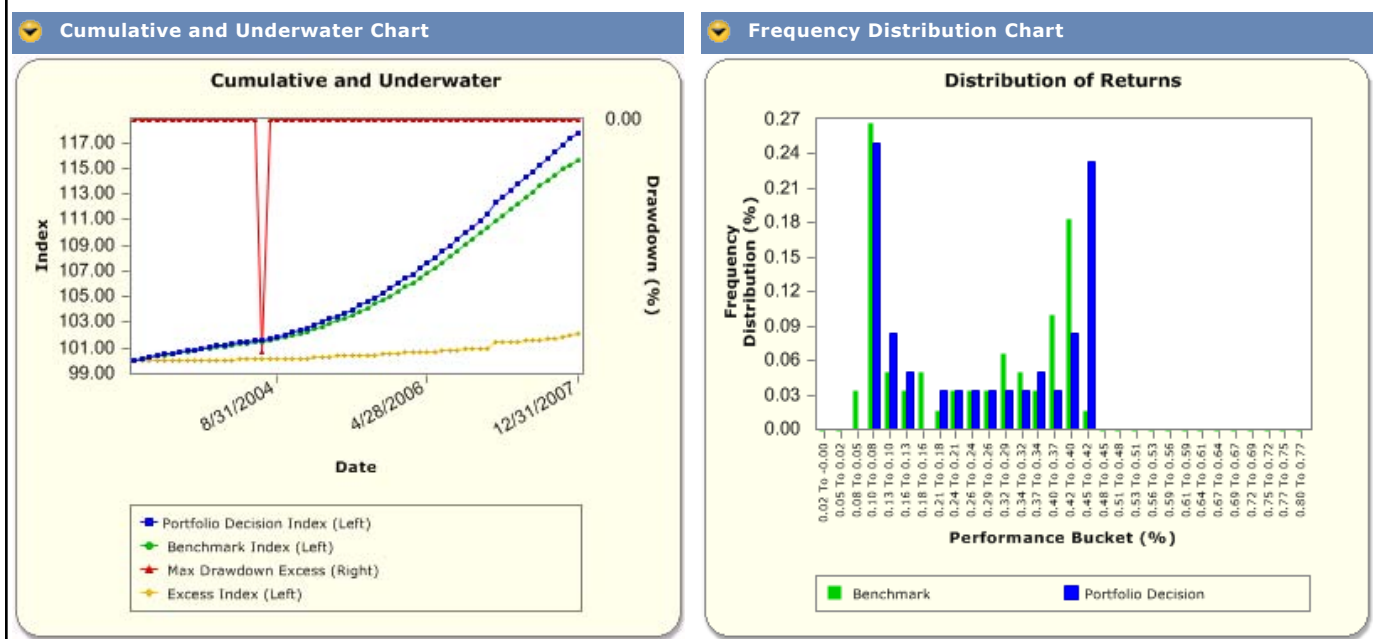


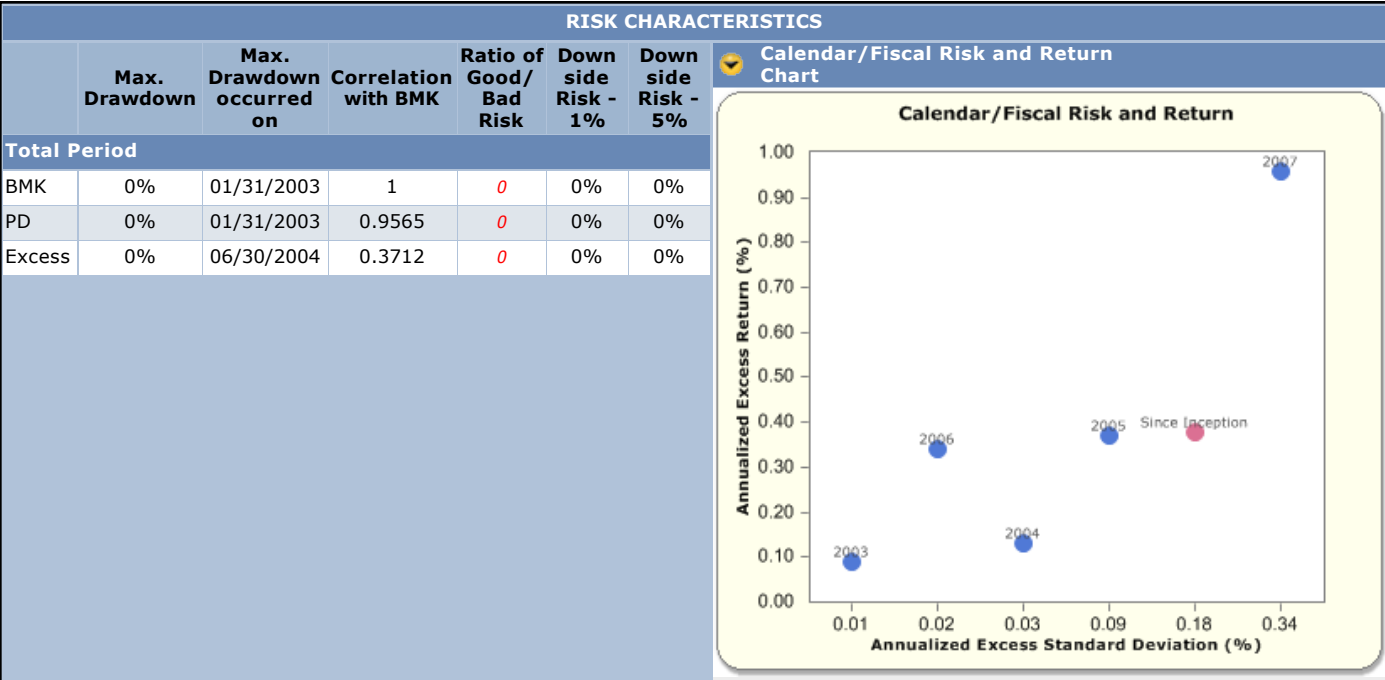
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Portfolio Details		Evaluated On: 08/14/2008	Generated On: 08/25/2008
Portfolio Decision Name	Cash	Currency	USD
Evaluation Start Date	01/01/2003	Evaluation End Date	12/31/2007
Statistics Frequency	Monthly	Reporting Period	Calendar
First Trade Occurrence Date	N/A	Last Trade Occurrence Date	N/A
Portfolio Benchmark List	RolledUp Benchmark(s): LA Water Cash (Benchmark Allocation - 100.0000%)		
	Portfolio Decision Benchmark(s): LA Water Citigroup 3-Month T-Bill (Benchmark Allocation - 100.0000%)		

PERFORMANCE SUMMARY							
	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio	Cumulative Return	M2 Return	M3 Return	SHARAD Return
Total Period							
BMK	2.95%	0.47%	6.2765	15.64%	2.95%	2.95%	2.95%
PD	3.33%	0.56%	5.945	17.77%	3.11%	-5.65%	-5.65%
Excess	0.38%	0.18%	2.1427	2.13%	0.16%	-8.6%	-8.6%

PERFORMANCE DETAILS										
	Average Return when Positive	Average return when Negative	Avg. of Ann. Std Deviation	Worst "Single" Negative Performance	Worst "Single" Negative Performance occurred on	Longest Underperformance	Longest Underperformance occurred on	Recovery Period	Longest winning streak	Longest losing streak
Total Period										
BMK	0.24%	0%	0.22%	0.07%	02/27/2004	0	01/31/2003-01/31/2003	0	60	0
PD	0.27%	0%	0.25%	0.08%	06/30/2004	0	01/31/2003-01/31/2003	0	60	0
Excess	0.03%	0%	0.07%	0%	06/30/2004	1	06/30/2004-06/30/2004	0	42	1

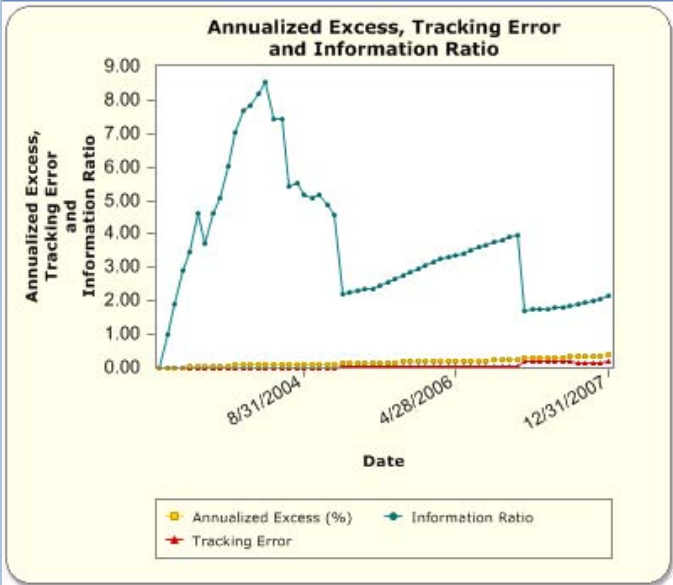




ROLLING CALCULATIONS

	Highest Rolling Cum. Returns	Lowest Rolling Cum. Returns	Highest Rolling Std. Deviation	Lowest Rolling Std. Deviation
Total Period				
BMK	5.49%	1.05%	0.18%	0.02%
PD	6.26%	1.15%	0.39%	0.02%
Excess	1%	0.1%	0.34%	0.01%

Annualized Excess, Tracking Error and Information Ratio Chart



OTHER MEASURES							
	Confidence in Skill	Success Ratio	Sortino Ratio	Calmar Ratio	Total Turnover	Avg. Turnover	Annual Turnover
Total Period							
Excess	100%	98.33%	0	82.6468	0%	0%	0%
	Annualized Return Adjusted for Turnover		Annualized Return/Risk Adjusted for Turnover				
Total Period							
BMK	0%		0				
PD	0%		0				
Excess	0%		0				

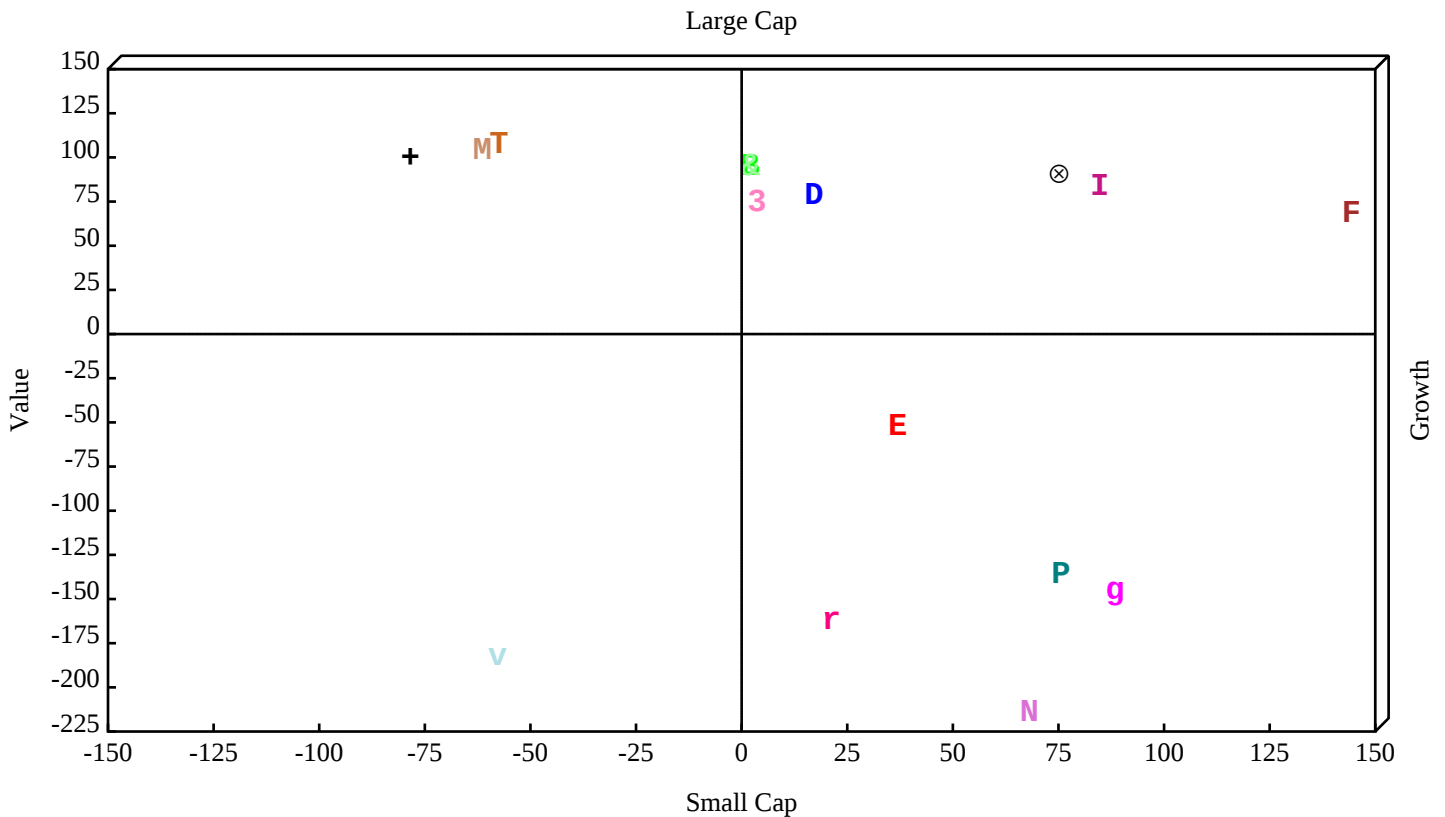
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Exhibit D

LA Dept Water and Power Equity Style Map Quarter Ended 12/31/07



	Growth-Value	Size
D LA Water and Power Domestic Equity	18.35	77.58
B BlackRock	3.31	93.81
E Earnest Partners	38.20	-52.91
F Fred Alger	145.59	67.34
I Intech	86.00	82.43
M MFS	-60.14	103.19
N Northpointe	69.32	-215.09
P Paradigm	76.81	-136.83
T T. Rowe Price	-56.21	106.44
3 Russell 3000	4.83	73.40
r Russell 2000	22.49	-162.92
g Russell 2000 Growth	89.61	-145.75
v Russell 2000 Value	-56.50	-183.14
& Russell 1000	3.31	93.81
⊗ Russell 1000 Growth	76.18	89.42
+ Russell 1000 Value	-77.18	98.65